

Factors That Enhance Health Literacy in Dealing with HIV Stigma: A Scoping Review

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ABSTRACT

Background and Objectives: Efforts to reveal the factors that drive health literacy toward eradicating stigma in people with HIV/AIDS are significant. This study aimed to identify and extract the factors that promote health literacy in eliminating HIV stigma in society.

Materials and Methods: The scoping reviews study was used to map out the evidence for recommendations based on PRISMA-ScR. Systematically search through Scopus, Web of Science (WOS), CINAHL via EBSCOhost, and Springer Link to find articles published during 2017-2022. Studies were selected based on inclusion criteria, focusing on factors that mediate health literacy in eradicating HIV/AIDS stigma.

Results: Twenty-eight articles met the criteria and were used in the review. After reviewing the articles, the factors that promote health literacy in eradicating HIV stigma in society were divided into three main dimensions: personal characteristics, societal and environmental factors, and situational factors regarding the disease, with 16 component factors.

Conclusion: Health literacy impacts reducing social stigma against people with HIV in society. Factors influencing health literacy must be considered to optimize social stigma reduction. The factors mentioned comprise individual traits, knowledge, motivation, social support, information media, awareness of the disease, fear of HIV transmission, perception of the disease, and personal beliefs about HIV disease. Health professionals could use this evidence to promote health literacy to address the social stigma against people living with HIV based on the factors related to health literacy.

Paper Type: Review

Keywords: Information Literacy, Health Education, Stereotyping, Social Inclusion, Social Stigma.

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Introduction

Lack of knowledge and information about the causes, transmission and effects of HIV can lead to confusion about HIV-related information. This lack of clarity and understanding can create significant problems. When accepted by others, this improper understanding is considered wrong (1). In addition, there is no desire to find out the truth about HIV disease, which also worsens the condition, so it develops into fear and antipathy to the virus infection. Sentiments like this are often interpreted biasedly and become acts of discrimination (2).

A psychological-social condition manifests through experience as the target subject of inappropriate assumptions, labelling, change, differentiation, discrimination, and unfair treatment, known as a stigma (3–5). Stigma directed at people with HIV/AIDS continues to exist worldwide and is a social phenomenon with devastating effects. Stigma is a source of negative impacts on health. Stigma has adverse impacts, such as suboptimal delivery of health services, decreased adherence to treatment, depression, and reduced quality of life for patients. (6–8). Stigma against people with HIV manifests in negative behaviour from community groups toward people living with HIV (9).

This stigmatizing behaviour is known as social stigma. Stigma toward people with HIV occurs because people who stigmatize tend not to know exactly about the origin of the disease and how the disease develops (10, 11). Individuals who do not know information about the illness and understand it will create false beliefs about the condition and the

people who suffer from it (12, 13). This condition occurs because the individual has poor health literacy.

The concept of health literacy has a vast complexity that requires greater understanding regarding the context of public health experience (14). Health literacy is how individuals can obtain, process, and understand the health information needed to make the right decisions regarding the disease (15). Arriaga et al. (16) state that health literacy is a competency to access, understand, assess and apply health information to make decisions about health problems. The ability of individual health literacy in HIV determines the extent to which the individual accesses, understands, assesses, and applies HIV information. These skills will be utilised to enhance the comprehensive understanding of the disease to prevent stigmatisation towards individuals with HIV (17, 18). An adequately literate person will try to understand a health condition and beliefs related to a disease in society (19). In this instance, a well-informed person regarding HIV should endeavour to comprehend how to perceive HIV/AIDS to prevent the perpetuation of stigma. Thus, the lack of health literacy related to a disease encourages the emergence of a stigma against HIV infection.

To enhance efforts in reducing HIV stigma, it is essential to gain a comprehensive understanding of health literacy and the factors that promote it. HIV stigma reduction strategies will be optimised when integrating factors that improve health literacy. These factors will complement an individual's knowledge, understanding and judgement of the disease. Factors contributing to literacy

may arise from internal factors within an individual and external factors. Internal factors including personal characteristics such as age, gender, education and location (20–24). External factors refer to sources of influence that originate from outside the individual. These may include social support, interactions with others, and information circulating within the community (21, 22, 25–27).

However, there has been limited investigation into these factors, which are thought to be linked to both health literacy and HIV stigma within the community. For these reasons, we conducted a scoping review to map the research in this field systematically. The study aims to identify the factors that promote health literacy in eliminating HIV stigma in society. The following research question was formulated: What is currently known in the literature regarding the factors facilitating health literacy in eradicating HIV stigma in society?

Materials and Method

This scoping review study was conducted according to the PRISMA-ScR (Preferred Reporting Item for Systematic Reviews and Meta-Analysis Extension for Scoping Reviews) (28). This review aimed to identify and extract the factors that promote health literacy in eradicating HIV stigma in society without considering and evaluating the methodological quality of the included studies. Thus, this study is considered to be a scoping review (29).

We elaborated the PRISMA-ScR guidelines as a guide for preparing this study report by displaying the term "scoping review" in the article's title. The PRISMA-ScR guidelines

offer a structured report outlining the objectives, methods, findings, and conclusions of the scoping review. This enables prompt identification by knowledge users and researchers. Moreover, the PRISMA-ScR guidelines provide guidance on formulating eligibility criteria, information sources, search strategies, data mapping processes, and analysis of findings (28).

Eligibility Criteria

As described in the PRISMA-ScR guidelines, article selection should translate the review's objectives into eligibility criteria (28). Therefore, the selection of articles in this scoping review must meet inclusion criteria based on PCC (participant/population, concept, and context) (30). So, the inclusion criteria for studies to be included in this survey were as follows: (1) studies investigating potential perpetrators of HIV-related stigma and people living with HIV who are stigmatised, (2) studies pointing literacy skills, knowledge, stigma, prejudice, stereotypes, or discrimination within the scope of the HIV/AIDS, (3) studies published in English, (4) studies have a study design including randomized controlled trials, mixed-methods, quasi-experimental, experimental, cross-sectional studies, or qualitative studies, and (5) peer-reviewed journal paper that published between the period 2017-2022 and written in English.

The exclusion criteria were as follows: (1) studies that were conducted on health literacy but had no relation to HIV/AIDS stigma, (2) studies in languages other than English, (3) studies whose full text was not available, (4) conference papers, and (5) paper that published before the period 2017-2022. We restrict eligible studies to the most

recent studies published within the last five years. This criterion aims to disclose current information concerning health literacy and stigma's contextual intricacies, which are subject to change over time. As specific studies demonstrate, outdated research findings can compromise comparability in overviews (31, 32).

Information Sources and Search Strategy

The literature search in this study was carried out systematically from four databases: Scopus, Web of Science (WOS), CINAHL via EBSCOhost, and SpringerLink, to find articles published during 2017-2022. The search for studies about factors that mediate health literacy in eradicating HIV/AIDS stigma was first identified from the Scopus site. Then we placed keywords and related words and extracted them from various sources. We comprehensively searched the above databases using different combinations of keywords and terms. The leading search term was "health literacy", combined using Boolean "AND/OR" with terms related to "stigma". It was later added with the related term "human immunodeficiency virus". The authors identified synonyms for the search terms with the following keywords: "health literacy" OR "health education" OR "information literacy" OR "health information" AND "stigma" OR "social stigma" OR "prejudice" OR "stereotyping" AND "HIV" OR "AIDS". The search is also tailored to the subject area, including nursing, psychology, and social science. The search strategies were drafted by the first author and further refined through team discussion. Article selection was made by collecting articles obtained in a database search. We transferred articles from the investigation to

the bibliography manager program (Mendeley). Duplicates were excluded by the automatic duplication removal process in Mendeley's check for duplicates tool.

Study Selection

Articles were further examined and manually removed if the bibliography manager software has not identified them. This manual selection was performed independently by two reviewers. The article review process was done by applying the eligibility criteria; two reviewers filtered and assessed each article using two stages. In the first stage, the reviewers selected the articles based on the title and abstract. Titles and abstracts were screened to include articles that first referenced health literacy and then had any terms related to stigma response (as listed in the search terms above). The abstracts are then assessed based on predetermined eligibility criteria. Meanwhile, a thorough screening of the full-text articles specified in the first stage was carried out in the second stage. We examined the entire articles during the screening before deciding if the title or abstract needed to provide more information. All disagreements during the screening process between the two reviewers were discussed and resolved until reached a consensus. Further, we consulted a third opinion from the senior reviewer to achieve unanimity when necessary.

Data Extraction and Analysis

After selecting the articles, all data was recorded in a spreadsheet for the purpose of data extraction and charting. All articles were read, and data was extracted by all authors independently, and any discrepancies were discussed and resolved consensually. To ensure accuracy, the same reviewer

abstracted the data. The authors extracted relevant characteristics from a theoretical and methodological perspective. Theoretically and methodologically relevant features of studies comprised the data source, the sample, the methodology utilized, and the primary findings. The extracted data included: the author, year, research subject, study design, exposure, and critical findings.

We did not assess the quality of the studies with the scoping review methodology. A scoping review examines an area of literature more widely regardless of study design or methodological quality to assess the extent, nature, and range of research activity and to identify gaps (33). Likewise, Tricco et al. (28) and Munn et al. (29) stated that scoping review methods are not intended to be used to critically appraise (or assess the risk of bias from) cumulative bodies of evidence. However, to ensure the quality of the review, we evaluated the synthesized findings according to the suitability of the aims and research question, the specified eligibility criteria, and the methodological scope of the reviewed studies.

Results

Search Result

The initial literature search yielded 280 articles based on four electronic databases (Scopus: 145, Web of Science: 4, and CINAHL via EBSCOhost: 113, and SpringerLink: 18). The next stage was identifying and narrowing the articles obtained based on the eligibility criteria. The identification results obtained 236 articles that were eligible for screening. Articles that have duplicates were removed in the process. At the screening stage, papers were filtered based on the title so that 116

articles were obtained, then filtered based on the abstract according to the specified context, and 70 articles were accepted. It was then filtered articles based on the essence and coverage of the discussion in the article, resulting in 59 articles. In the final stage, 31 articles that did not meet the inclusion criteria and study quality eligibility were excluded, and 28 were obtained that met the requirements for further review. Further search results can be seen in Figure 1.

Characteristics of Studies

Most of the research reviewed was quantitative (n=24), and the rest was qualitative (n=2). Four studies applied a mixed-methods design. Eighteen quantitative studies used a cross-sectional design, one used a randomized controlled trial design, two used a post-test experimental design, and one used a quasi-experimental—a few studies (n=10) involved community members who did not have HIV disease. Several studies (n=9) involved HIV-positive people as research subjects, either HIV-positive men or women, male-sex males, and HIV-positive young people. Few studies (n=8) also involved health practitioners in their research, such as nurses, doctors, nursing students, and nurse educators. All studies have a context associated with health literacy, stigma, health education, or health knowledge. The study's characteristics can be seen in Table 1.

Synthesis of Results

After conducting the research, the factors that promote health literacy in eradicating HIV stigma in society were extracted from the studies. The synthesis result of included studies can be seen in Table 2.

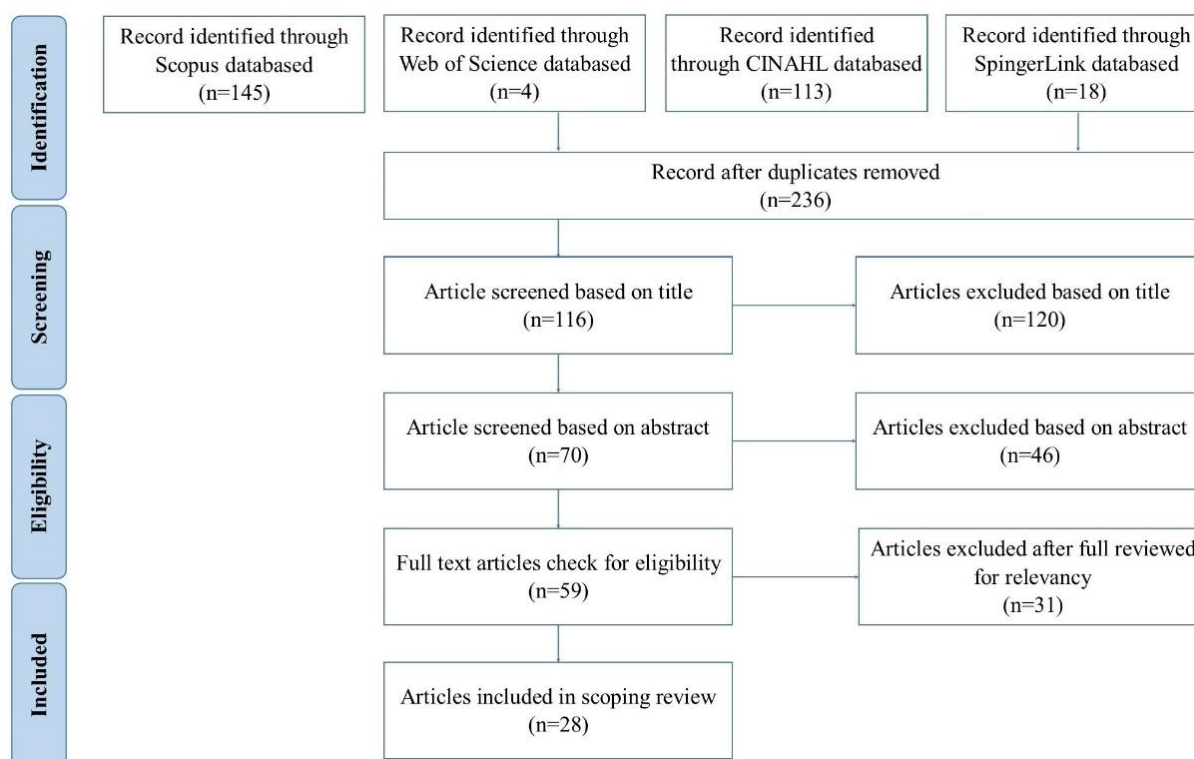


Figure 1. Flow diagram of the literature search and publication selection

Table 1. General characteristics of the studies included in this study

Study	Research method	Research subject
Sianturi et al (34)	Cross-sectional	People with HIV
Akpotor et al (35)	Cross-sectional	Nursing student
Tang et al (36)	Randomized controlled trial	Nursing student
Alemi & Stempel (37)	Cross-sectional	People not infected by HIV
Pitasi et al (38)	Cross-sectional	Adults and adolescents who do not have HIV
Budhwani et al (39)	Mixed methods	Women with HIV-negative status and women with HIV positive
Limbasiya et al (40)	Cross-sectional	Community members who are not infected with HIV/AIDS
Siegel et al (41)	Qualitative	HIV negative partner
Koseoglu Ornek et al (42)	Cross-sectional	Health workers (nurses and doctors)
Shrestha et al (43)	Cross-sectional	Male sex with a man (MSM)
Diress et al (12)	Cross-sectional	People not infected by HIV
Ortiz-Sánchez et al (44)	Cross-sectional (community-based participatory research)	Male sex man with HIV positive
Leyva-Moral et al (45)	Cross-sectional	Nurse Educator
Tavakoli et al (46)	Cross-sectional	Health workers
Mathew et al (47)	Qualitative	Young people with HIV
Thainiyom & Elder (48)	Post-test only experimental	People not infected by HIV
Bozkurt & Bayırlı Turan(49)	Post-test only experimental	Community members who do not have HIV who visit the hospital

Ching et al (50)	Cross-sectional	Healthcare personnel
Govender et al (51)	Cross-sectional	People not infected by HIV
Williams et al (52)	Cross-sectional	People are diagnosed with HIV early
Tran et al (53)	Cross-sectional	People with HIV
Kadengye & Dalal (54)	Cross-sectional	People not infected by HIV
Akpotor et al (55)	Cross-sectional	Nursing student
Maponyane et al (56)	Mixed methods	College student
Ncitakalo et al (57)	Cross-sectional	People with HIV positive
Cook (58)	Mixed methods	Religious activist
Naserirad et al (59)	Quasi-experimental	Young people
Bauermeister et al (60)	Mixed methods	Male sex with a man (MSM)

Table 2. Summaries of the included studies

Author and Years	Exposure	Factors that Mediate Health Literacy to Changes in Stigma
Sianturi et al (34)	Stigma, health literacy, belief in medicine	Support and individual psychological conditions such as anxiety or worry have related to health literacy. Age, gender, occupation, marital status, and education are not associated with health literacy.
Akpotor et al (35)	Stigma (prejudice, stereotype, discrimination)	Perception is the most influence on the formation of stigma. Age, level of education, and knowledge play a role in the construction of stigma.
Tang et al (36)	HIV knowledge, stigma, attitudes towards AIDS risk behaviors	Knowledge and awareness about HIV disease and its transmission mediate changes in attitudes towards HIV and AIDS-related stigma among young people.
Alemi & Stempel (37)	Knowledge of HIV prevention and transmission, stigma against people living with HIV	The public stigma is influenced by age, gender, place of residence, education level, and knowledge about HIV prevention and transmission. HIV stigma is also closely related to the myths in society.
Pitasi et al (38)	Perceptions of prejudice and discrimination, stigma	Age related to stigma. Adolescents are known to be more afraid of HIV transmission than adults.
Budhwani et al (39)	Health literacy, stigma	Interaction or communication affects the improvement of health outcomes and health literacy. Health literacy significantly impacts quality interactions between health workers and clients.
Limbasiya et al (40)	Stigma against people with HIV	Gender, education level, and occupation impact stigma.
Siegel et al (41)	Stigma experience	Support from the community can help overcome the stigma against HIV.
Koseoglu-Ornek et al (42)	Stigma against patients with HIV	Stigma occurs driven by fear factors, age, education level, occupation, and work experience.
Shrestha et al (43)	Risky sexual behavior, social support, depressive symptoms, interpersonal violence	Factors related to seeking health information include age, an education level (especially college graduates), HIV testing status, sexual relationship status, and online sexual experience seeking information.
Diress et al (12)	Discriminatory attitude	Domicile, education level, access to media, and knowledge have affected the discriminatory attitude toward people living with HIV in the community.
Ortiz-Sánchez et al (44)	Knowledge of sexual health, stigma; men's sex with men	Sexual health knowledge is related to education level, employment status, income, and sexual orientation.
Leyva-Moral et al (45)	Knowledge of sexual health and stigma	Culture, religion, and education influence inadequate knowledge about HIV and HIV-related attitudes.
Tavakoli et al (46)	Stigma against HIV	Stigma is influenced by experience working with HIV-positive people, exposure to information about HIV, and working experience.

Author and Years	Exposure	Factors that Mediate Health Literacy to Changes in Stigma
Mathew et al (47)	Stigma against HIV	Experiences and beliefs related to HIV stigma are related to family, work, education, and community factors.
Thainiyom & Elder (48)	Stigma against people living with HIV, behavioral intentions to discriminate, HIV knowledge, behavioral intentions to test HIV	Gender significantly correlates with stigmatizing attitudes toward people with HIV.
Bozkurt & Bayırlı Turan (49)	Knowledge, stigma	Gender and education level correlates with HIV/AIDS stigma.
Ching et al (50)	Work experience, HIV knowledge, attitude toward people living with HIV	Knowledge, profession, experience caring for HIV-positive people, gender, and having HIV-positive relatives are predictors of stigmatized attitudes toward people with HIV
Govender et al (51)	Cultural beliefs, behaviors and attitudes, AIDS knowledge, and stigma	Cultural beliefs, age, gender, race, education, occupation, and marriage were significantly associated with knowledge and attitudes toward HIV-related stigmatization.
Williams et al (52)	Experiences of HIV-related stigma and discrimination, support, and perceptions	Perception of stigma, the experience of stigma, and social support are predictors of involvement in health education and impact on reducing stigma related to HIV.
Tran et al(53)	Stigma and discrimination	Cultural factors and social values directly impact stigma and discrimination related to HIV.
Kadengye & Dalal (54)	Intolerant attitudes and practices, knowledge of HIV transmission	Gender, age, place of residence, education, and knowledge of HIV have implications for social tolerance and stigma of HIV.
Akpotor et al (55)	HIV stigma, knowledge about HIV	Education level and knowledge about HIV directly affect the stigmatization of HIV.
Maponyane et al (56)	Beliefs, attitudes, and knowledge about HIV	The stigmatization attitude related to HIV is influenced by inadequate knowledge, beliefs, attitudes, and behavior factors.
Ncitakalo et al (57)	Stigmatizing attitudes toward HIV	Knowledge and myths about the disease are related to HIV-related stigma.
Cook (58)	Health literacy and HIV stigma	Knowledge and beliefs affect health literacy and have implications for HIV stigma and discrimination changes.
Naserirad et al (59)	HIV-related health literacy, knowledge, risk perception about HIV	HIV/AIDS education has been associated with modifications in knowledge, literacy, and risk perception of HIV illness.
Bauermeister et al(60)	Perceived HIV stigma, sexual prejudice, health information	Disease information and disease-related experiences drive HIV-related prejudice and stigma.

To better understand the factors that drive health literacy to reduce the incidence of HIV stigma, we illustrate in Figure 2. The factors that promote health literacy in eradicating HIV stigma in society were divided into three main dimensions: personal characteristics, societal and environmental factors, and situational factors regarding the disease, with 16 component factors.

Personal Factors

Personal factors were defined as the specific background of an individual's life and living environments, such as age, sex, education, marital status, and occupation (61). Personal factors have a close relationship with health literacy and have even been found in several studies to be a factor that determines the stigmatization of people with HIV. Ten studies reveal that age,

gender, occupation, marital status, education, employment status, and place of residence affect health literacy, impacting public stigma (34,35,60,37,40,42–

44,54,55,59). Although two studies stated that personal factors were not directly related to health literacy, they mediate factors in changing the social stigma (34, 35).

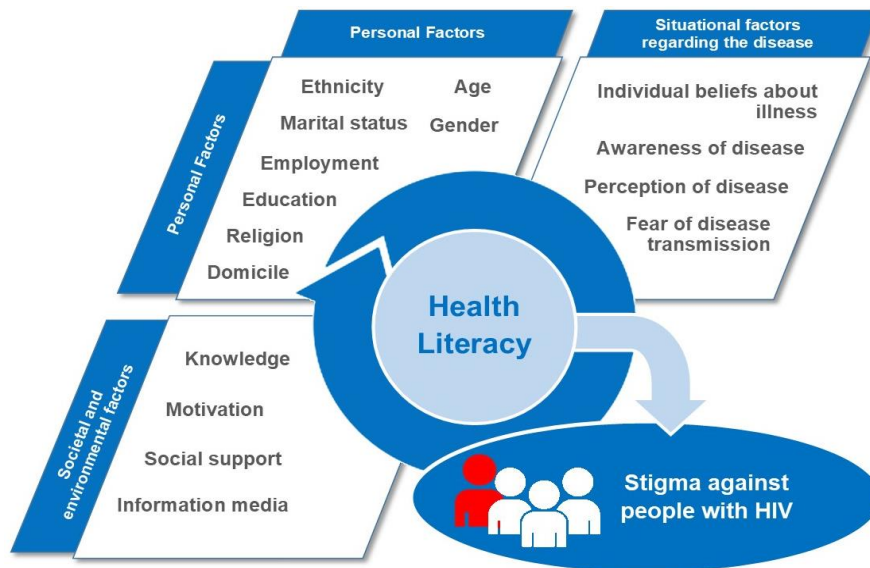


Figure 2. The factors that promote health literacy in eradicating HIV stigma in society

Societal and Environmental Factors

Eleven studies revealed that health literacy is based on information and knowledge about the disease (12, 35, 54, 36–38, 45–47, 50, 53). Eight studies showed that adequate knowledge about HIV can reduce prejudice, stereotypes, stigmatizing attitudes, and discrimination (35–37, 41, 42, 47, 50, 54). Health literacy related to the disease is also interpreted as how a person communicates and understands disease or social problems that impact the condition (39). Three studies stated that health literacy is the ability to be confident in receiving and understanding health information obtained so that it affects health (34, 39, 41). Three studies reveal that information and knowledge underlie health literacy (12, 35, 42).

Five studies revealed that health literacy was closely related to the emergence of

stigma against people with HIV; this is triggered by the adequacy of health information about HIV and the motivation to find the truth about the disease (40, 42, 48, 49). Stigma against people with HIV is also closely related to the myths that develop in society (37, 57). In addition, four studies reveal that social support impacts health literacy (34, 41, 52, 53).

Situational Factors Regarding the Disease

Individual attitudes and beliefs related to HIV disease also affect stigma formation. Six studies stated that aspects of attitudes and thoughts related to the disease would determine how to behave toward people who suffer from the disease, and choosing the stigmatization attitude towards HIV affects the formation of stigma (35, 45, 51, 52, 56, 58). Proper perceptions toward illness

can reduce prejudice, stereotypes, stigmatizing attitudes, and discrimination against HIV (35–37, 41, 42, 47, 50, 54, 60).

Beliefs about the illness with cultural and religious backgrounds also affect HIV-related health knowledge (45, 51). Two other studies found that psychological factors such as anxiety and worry about disease transmission significantly affect literacy (34, 42). Seven studies also found that awareness about the disease determines a person's level of health literacy, which is related to the emergence of stigma in people with HIV (12, 35, 54, 36–38, 45–47, 50, 53)

Discussion

The synthesis of the reviewed articles was illustrated in the link between factors that promote health literacy in eradicating HIV stigma, as shown in Figure 2. The concept of health literacy is related to the emergence of stigma problems in HIV (40, 42, 48, 49). Health literacy is essential for everyone and impacts optimal health (34). Someone with adequate health literacy can manage his health, family, and community (18, 62). Health literacy is the ability to collect information to be used appropriately. Health literacy becomes information and knowledge for applying health education skills to impact behaviour (35, 42). Health literacy related to HIV stigma cannot be separated from the factors that mediate it. Individual factors influence health literacy in realizing disease information and knowledge (34). Personal factors influencing health literacy include age, gender, ethnicity/race, religion, education, marital status, occupation, and domicile (34, 35, 37, 40, 42, 44, 54, 55).

Characteristics of age, gender, and education affect health literacy, especially in information-seeking skills, and impact the emergence of stigma against people with HIV (40, 43, 48, 49). Age, education level, and online health information-seeking experience affect a person's health literacy, especially at a young age. This health literacy ability will also determine how the individual perceives information on the disease (43). Younger generations fear HIV transmission, which causes stigma (38). Stigma against HIV was higher among women and higher levels of education (40). However, it differs from other studies, which show a strong stigma among the male sex with low levels of education (49). For health workers, the experience of working with people with HIV is also closely related to the emergence of stigma (46, 50). Health workers with less than ten years of work experience or without exposure to information will create a more substantial stigma (46).

The stigma related to HIV primarily arises from inadequate information and how to apply the knowledge that is understood, assessed, and perceived appropriately (35). As in health literacy, information is fundamental to shaping one's health literacy competence (35–38, 47, 53). Information or knowledge about how HIV/AIDS can be transmitted is an essential predictor of discriminatory attitudes toward people living with HIV/AIDS (40, 42, 48–50). Moreover, knowledge is an important aspect that determines attitudes and beliefs regarding a person's illness in dealing with the problem of HIV. Attitudes and beliefs related to disease determine caring behaviour toward HIV positive (45). Understanding HIV transmission

impacts involvement in risky behaviour and the emergence of intolerance toward people with HIV (54).

Although knowledge is fundamental to health literacy, misconceptions may cause stigma. This misconception occurs due to the influence of each individual's perception of the disease (35, 55–57). Therefore, to prevent this misconception, it is necessary to cultivate good health literacy (42, 50). Information that can eliminate misconceptions about HIV includes facts about the disease, prevention, transmission of disease, sexual practices, and HIV treatment (37, 41, 43, 44, 52). Information planting must also be accompanied by efforts to improve attitudes, beliefs, and supportive behaviour toward people with HIV (45). Adequate health literacy with support from correct information reduces stigma and discrimination against people living with HIV (12, 45, 55).

Understanding HIV and how to interact with people who may have the disease can be influenced by an individual's HIV knowledge, personal views and beliefs. This can lead to different attitudes towards groups seen as distinct or separate from oneself (35–38, 45, 47, 51, 53). Personal awareness of the disease will determine a person's attitude toward an infection. If his attitude is positive, the desire to correct the stigma related to HIV/AIDS may occur (12, 36, 38, 46, 53). Furthermore, the stigma associated with HIV is inextricably linked to strong beliefs about the disease. Still, most of these beliefs related to HIV are considered wrong (51, 56). Under certain conditions, a person's health literacy can affect a person's thoughts about the disease. Health literacy and disease-related beliefs

have a reciprocal relationship (58). Anxiety and fear of transmitting HIV disease also significantly affect health literacy (34, 42).

Information media is one component that builds quality information and impacts health literacy and stigma changes (12). Mass media with positive messages and images will also foster a positive attitude toward HIV/AIDS in society (53). Information media is how a person uses tools or means to obtain information. Information media about health is significant in increasing health knowledge (63). The provision of data using the media aims to educate, entertain, and integrate non-stigma messages into the information media to have a positive impact (64).

Health literacy also includes motivation and skills to access, understand, assess and apply health information (16). In some studies, motivation is considered a factor influencing health promotion behaviour and health literacy to impact health outcomes (65, 66). In some studies, motivation affects health promotion behaviour and health literacy to impact health outcomes (67, 68). As stated by Miller et al. (68), prejudice from people who are not motivated to control bias can create an environment that interferes with the well-being of people with HIV.

Social support as a factor from outside the individual also has a relationship with health literacy (34, 41, 52). This social support affects individuals in applying knowledge and attitudes toward the existence of HIV disease in the community (34, 41). Individuals who get social support from family, community, or society will more or less influence the surrounding environment on how to behave towards people with HIV (47, 52). Tran et al. (53) state that factors influencing stigma

emergence includes community, family, health care system, and HIV isolation status. Cultural factors and social values also directly impact stigma and discrimination related to HIV. The social issues arising from the community's stigmatization of individuals with HIV negatively impacts overall HIV prevention and treatment efforts (38).

The findings of this study have implications for formulating communal strategies and interventions to mitigate the societal stigma of HIV. Stigma reduction strategies are implemented by enhancing health literacy grounded on contributing factors. Health literacy strategies based on personal, societal, and situational factors concerning HIV will result in a more optimistic perspective of people living with HIV. This personal factor-based intervention invites society to understand people with HIV as individuals no different from the rest of the community. Social factors support enhancing health literacy interventions targeting knowledge, motivation, and social and informational support. Meanwhile, an HIV-related situational-based literacy intervention strengthens the belief in HIV disease interpretation and perception more positively. Therefore, health literacy intervention strategies that consider these factors have significant potential to reduce social stigma associated with HIV in society.

Study Limitations and Strengths: This review systematically outlines the peer-reviewed literature on the factors that promote health literacy in eradicating HIV stigma in society. Our study has formulated these factors' findings into three comprising factors groups that enhance health literacy. The evidence can offer a more focused

perspective to internalise the findings as baseline data for developing a strategy to reduce HIV stigma. However, this study also has limitations in that the literature analysed was a wide range of studies, and the level of evidence obtained was not the highest. Books, grey literature, or other sources providing more in-depth information on the review context were not included in this scoping review. Scoping reviews does not require critical appraisal or assessment of potential bias, but it is possible to undertake such evaluations to mitigate bias in forthcoming studies.

Conclusions

Implementing a health literacy strategy, which impacts reducing HIV stigma, must refer to various factors influencing health literacy and the stigma against HIV. These factors include individual characteristics, knowledge, motivation, social support, information media, and disease awareness, fear of disease transmission, disease perception, and personal beliefs about HIV disease. Having a summary of the literature in this review, health professionals can review current evidence and play their role in promoting health literacy to address the issue of social stigma against people living with HIV based on the factors related to health literacy.

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Conflicts of interests: The authors declare that they have no competing interests.

Consent for publication: Not applicable.

Ethical approval and consent to participate: Not applicable.

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