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Health literacy and impact on health outcomes, barriers and gaps: Systematic review

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ABSTRACT

Health literacy is a public issue and plays a crucial role in improving health outcomes by empowering individuals to make informed decisions, effectively manage diseases, and utilise healthcare services appropriately. The aim of the systematic review is to examine current literature on health literacy and impact on health outcomes as well as the barriers hindering health literacy, gaps and possible suggestions to improve health literacy in Nigeria and its applications across the globe. A systematic review was performed according to Arksey and O'Malley's methodological framework and followed PRISMA reporting flowchart. Most of the studies were designed to assess the impact of health literacy on health outcomes in Nigeria, covering various health issues such as HIV, tuberculosis, reproductive health, hypertension and diabetes. Most of the studies demonstrated a positive link between health literacy and improved health outcomes. Health literacy has the potential to promote behaviour change, disease-related knowledge and improve health outcomes in different population groups.

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Introduction

Health literacy is a public health issue. The Shanghai Declaration on health promotion, adopted at the 9th Global Conference on Health Promotion to support sustainable development goals (SDGs), identified health literacy as a principal driver to obtain sustainable development (WHO 2021). It highlights that sustainable development needs health education, ability of a person to gain access to and understand and use information in a manner that promote and maintain good health for personal, families and community benefits. Health literacy depends on the disposition of the community, health services and availability of health literacy to individuals via their social networks and health literacy has been recognised as a social determinant of health as an independent factor (Ewards et al., 2015). Pelikan et al (2018) reported that comprehensive health literacy is a direct determinant of health and that it has the potential to improve health and reduce health inequities.

WHO (2021) observed that health literacy is crucial to achieving social, economic and environmental aims of the 2030 agenda for sustainable development. It has been stated that adequate health literacy could impact on SDGs by assisting in reducing inequalities and increase health systems responsiveness (Budhathoki et al., 2017). On the other hand, Murthy (2014) observed that low health literacy leads to poor health outcomes and health inequalities and that certain population groups such as women, people in rural areas and immigrants could experience higher incidence of communicable and non-communicable diseases. Health literacy is defined as the capacity to read, understand, comprehend, interpret and to act on health information as well as the ability to source and analyse health information and use it to prevent diseases and improve health outcomes (Malik et al., 2002; Schillinger et al., 2017).

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For this review, Nigeria is selected as a low-income country. SDG-3 (ensure healthy lives and promote wellbeing for all at all ages) would be examined as a focus in the SDG goals with a primary focus on the impact of health literacy on health outcomes, barriers to health literacy, gaps and approaches to improve health literacy in Nigeria.

Sustainable Development Goal 3 (SDG 3) aims to ensure healthy lives and promote well-being for all at all ages by 2030. Achieving this goal requires access to health information and healthcare. It also requires that people understand, appraise and effectively use health information to make informed health decisions, and this is where health literacy plays a critical role. Health literacy is a basic enabler of SDG 3. By empowering individuals with the knowledge and skills to manage their health, people can make faster and more equitable progress toward universal health and well-being by 2030 in Nigeria.

The SDG-3 of the United Nation's Sustainable Development Goals (SDG) incorporates 13 targets that involves pressing health issues worldwide and health literacy has been associated with achieving good health in individuals, families and community and its improvement in developing countries such as Nigeria could assist in the achievement of SDG-3. SDG-3 reflects the importance of good health in all aspects of humankind, as good health is a vital prerequisite for the development of any society (Menabde, 2017; Popoola, 2019). This is seen in the placement of health in the 2030 agenda for sustainable development (United Nations, 2015). Accordingly, WHO has placed health literacy as one of the three principal pillars for achieving sustainable development and health equity in the Shanghai Declaration on Health Promotion (Trezona et al., 2018). According to Popoola (2019), low literacy rates in developing countries such as Nigeria are a key barrier to the success of health programmes and that increased access to health information and knowledge (key components of health literacy) is an important pillar of sustainable development.

WHO advocates for universal health coverage to ensure that every citizen of a nation has equal access to health services. Although Nigeria has made some progress in this area, poor or low health literacy is still a problem in Nigeria and could affect achieving SDG 3 in Nigeria by 2030. Nigeria has an overall adult literacy rate of 62%, depicting a main problem for health literacy. Health literacy includes the ability to read, understand and act on health information. This involves possessing skills such as reading and comprehending health information, listening, analysing information, decoding instructions, making decisions, reading health issues and having conceptual knowledge on health and being able to apply these skills to health decisions for the improvement of the health status of the individual (Olabanji, 2023). Sadly, reports show that most Nigerians lack these skills and cannot make relevant decisions about their health needs (Adekoya-Cole et al., 2015). A report by Ekoko (2020) among women in Nigeria shows that most of the participants had inadequate functional literacy and poor health literacy in terms of communication and critical literacy competencies. Low health literacy has negatively impacted on the health outcomes in Nigeria, making life expectancy, infant mortality and maternal mortality a major public health concern in Nigeria (WHO, 2014; Bello et al., 2023). The disease preventing attitudes and the acceptance of the practice of preventive medicine is reported low among Nigerian population and that most Nigerians are not making appropriate health decisions due to low health literacy (Atulomah et al., 2010; 2012). Individuals and families with low health literacy lack knowledge about their health including the nature and cause of diseases, affecting individuals in understanding the relationship between lifestyle factors such as diet, exercise and different health outcomes (Itasanmi et al., 2022).

Strategies that would enable the Nigerian government to enhance health literacy for achieving SDG 3 by 2030 include incorporating health education into school curricula; training of health providers to communicate clearly and effectively in local language through pictures and drama; leveraging digital health tools to adequately disseminate easy-to-understand health information; engaging communities via local health workers and peer education and by designing health materials that are culturally and linguistically sensitive (Olabanji, 2023; Ekoko, 2020).

It is important to note that improving health literacy in Nigeria directly supports the targets of SDG 3 in the following way: Educated mothers are more likely to seek prenatal care, understand vaccination schedules, and practice proper hygiene and nutrition which could lead to reduction in maternal and child mortality (Bello et al., 2022).

Accurate understanding of diseases such as HIV, tuberculosis and diabetes would lead to better prevention, adherence to treatment, and reduction of stigma as health literacy promotes behaviour change such as quitting smoking which is key to preventing noncommunicable diseases (Olabanji, 2023). Health education is essential as it improves equity by empowering vulnerable groups who usually face greater health literacy challenges (Kuyinu et al., 2020; WHO, 2021).

The theoretical conceptual framework shows that health literacy plays a vital role in improving the quality of human health and that various factors such as education, cognitive development, culture and environment affect health literacy, and that efforts to improve people's knowledge , understanding and capacity to act should be directed at changing personal lifestyle and that health literacy could raise the awareness of the social, economic and environmental determinants of health. It should therefore be directed at promoting individual and collective action (International Union for Health Promotion and Education, 2023). It shows that achievement of higher levels of health literacy among larger population would have social benefits and encourages people to communicate in a manner that invite interaction, participation and critical analysis. It is represented in Figure 1 below:

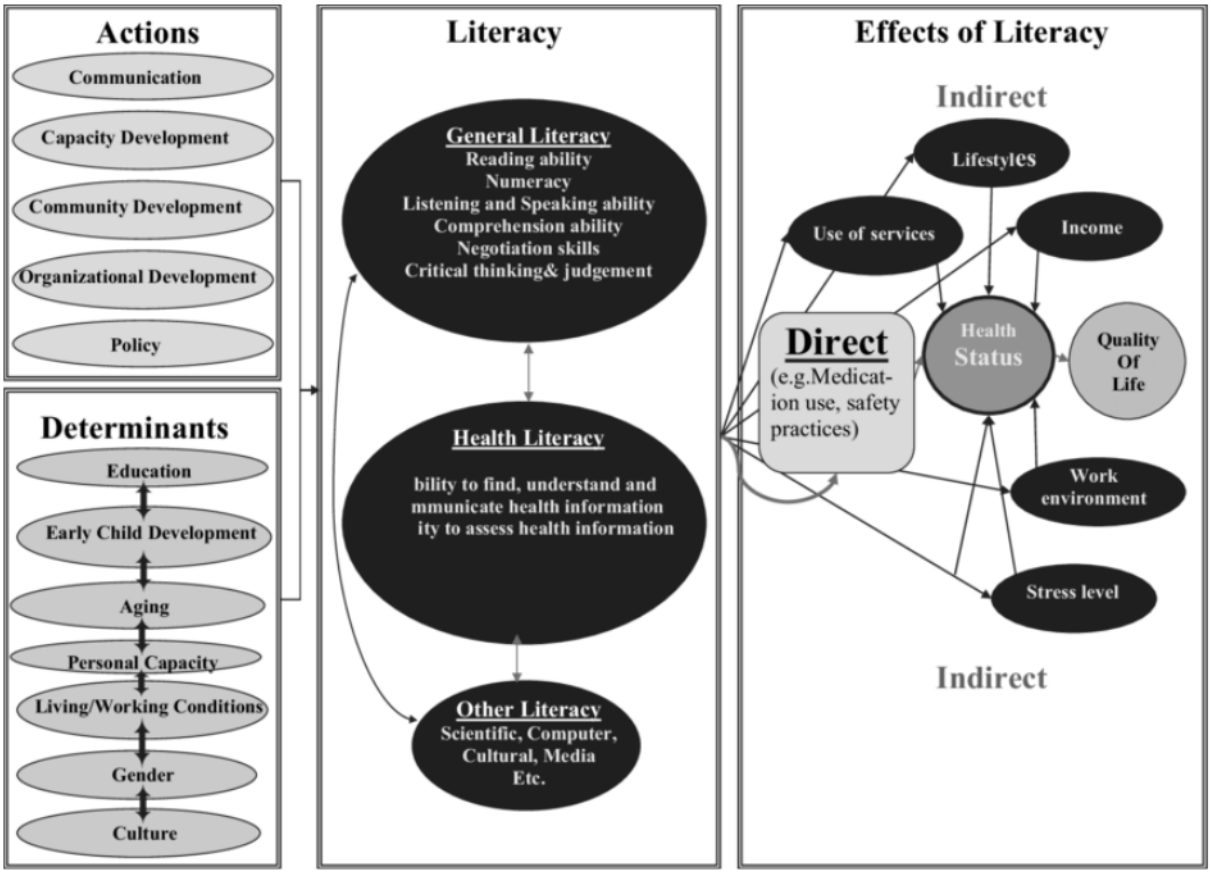

Figure 1: Theoretical conceptual framework of Health Literacy (2023 International Union for Health Promotion and Education, 2023).

This study aims to identify published studies that examine health literacy, its impact on health outcomes, barriers and gaps in health literacy in Nigeria. *Objectives of the systematic review*

i. To identify studies that examine health literacy on health outcomes in Nigeria.
ii. To identify studies on barriers to health literacy in Nigeria.
iii. To highlight the gaps in health literacy in Nigeria and make suggestions to improve health literacy.

This is to identify the existing literature on health literacy and its impact on health outcomes, barriers and gaps in Nigeria. Also, to synthesize available literature that would help to identify knowledge gaps and research priorities and suggest ways to improve health literacy in Nigeria.

Research questions of the paper:

i. What are the impacts of health literacy on health outcomes in Nigeria?
ii. What are the barriers hindering health literacy in Nigeria?
iii. What are the gaps in health literacy in Nigeria?
iv. What are possible suggestions to improve health literacy in Nigeria?

Scope of the systematic review

It covers health literacy and its impact on health outcomes, barriers, gaps and possible suggestions to improve health literacy in Nigeria. It covers both review and original articles on health literacy that were conducted in Nigeria between 2020 and 2025.

The rationale for formulating research questions is to provide a clear, focused direction for the study. It clarifies the purpose of the research, guides the research design and methodology, helps to identify specific variables and concepts, ensures relevance and originality, allowing for critical thinking and forming the basis for hypothesis and objectives.

Research and Methodology

Study design

The Arksey and O'Malley's framework and Joanna Brigs Institute methodology was adopted incorporating PRISMA (Arksey & O'Malley, 2005; McGovan et al., 2020) and the steps followed are shown below:

Identification and development of research questions

Preliminary online search was performed via various databases to develop research questions, focusing on health literacy and its relationship to achieving SDG3, its impact, barriers and gaps. Afterwards, research objectives were developed to identify the role of health literacy in meeting SDG-3, impact of health literacy on health outcomes, barriers associated with health literacy, gaps and possible suggestions for improvement. The research questions are stated above.

Identification of relevant studies

The systematic review was performed using published review and original articles according to Prisma reporting template and the Arksey and O'Malley framework (Arksey & O'Malley, 2005; Page et al., 2021). A search of published articles published between 2020 and 2025 on the topic using Google Scholar, PubMed and Scopus were used for systematic review and retrieved articles were read to identify additional articles.

Search strategy

The researcher performed the task in determining the search terms. Key words/phrases such as sustainable development goals, health literacy, impact of health literacy, barriers to health literacy and gaps and suggestions to improve health literacy were applied to search for published articles, using Google Scholar and other databases. Advanced search and normal search strategies were adopted using combination of keywords to increase the chances of retrieving additional articles. Retrieved articles were screened by titles, abstract, design types and population groups.

Setting

The review focused on health literacy, its impact on health outcomes, barriers and gaps on studies conducted in Nigeria.

Study selection

The researcher reviewed articles according to titles, abstracts, population groups, year and impact to ensure compliance with set criteria for inclusion in the review. Only studies that met the inclusion criteria were included in the review. Duplicate articles were removed. Preferred reporting items for systematic reviews and meta-analyses (PRISMA) flowchart template was used to perform the article selection process (Figure 2).

Data extraction

Data extraction was done and the researcher thoroughly reviewed each article and extracted article based on health literacy impact, population group, barriers, gaps and possible suggestions for improvement.

Data synthesis

A narrative synthesis was adopted to summarize the existing articles on the topic. The review provided a thematic overview of the findings that focused on the topic. The studies were summarized, interpreted and reported using a standard tool to add to the body of knowledge in the field. Gaps in the existing studies were identified to be able to make relevant suggestions about future research on the topic.

Inclusion criteria

Population: Covers mostly adult male and female (18-70 years old).

Concept: Health literacy and impact on health outcomes, barriers and gaps.

Context: Mostly studies conducted in Nigeria.

Types of studies: Qualitative, quantitative and mixed method were covered: review and original published studies.

Language: Only studies published in English.

Exclusion criteria

Studies that excluded health literacy and impacts.

Studies conducted in other African and developed countries.

Studies published in other languages.

Findings and Discussion

The focus of this systematic review is the impact of health literacy on health outcomes, barriers and gaps in health literacy in Nigeria. The ten studies included in this review focused on health literacy in varied population groups (included male and female of different tribes) in Nigeria. One (Shoyemi et al., 2024) of the ten studies is a review study that examined the impact of health literacy on health

outcomes. The health outcomes range from hypertension to tuberculosis. The sample size ranges from 120 to 1831 and adopted different study design in conducting the studies (Table 1). The impact of health literacy was assessed in the nine research studies which measured individuals perceived skills at obtaining, appraising and using health information to solve health problems. The studies differ in overall quality. The strength of the studies included well-defined objectives, study design, description of sample features and conclusions that reflect the study outcomes. Limitation of each study was stated and included small sample and mostly non-randomised sample. Prisma flowchart of studies included in the systematic review is depicted in Figure 2 below while relevant studies included in the review are depicted in Table 1.

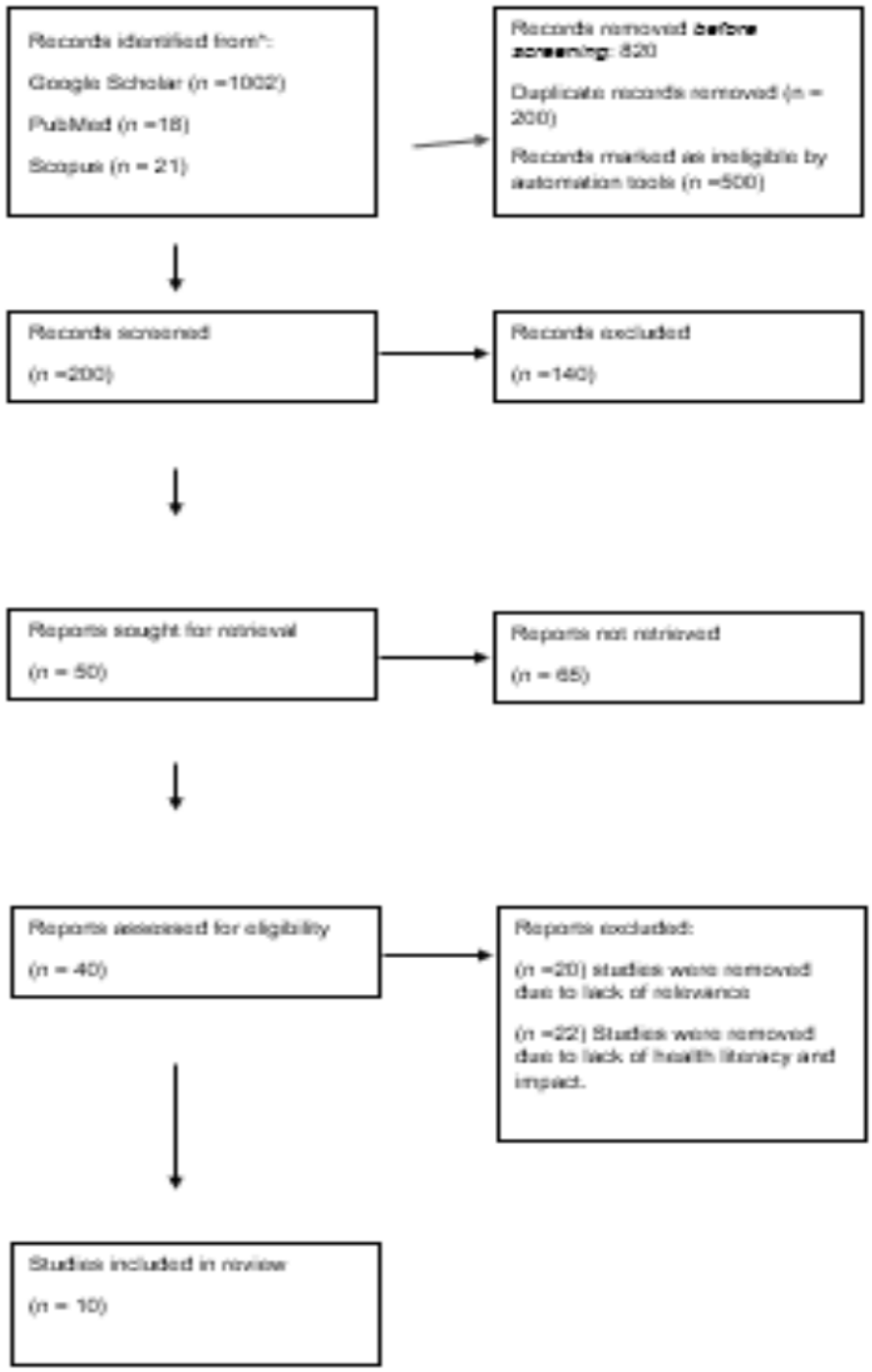

Figure 2: Prisma Flowchart of studies included in the systematic review.

Tabel 1: Relevant studies included in the systematic review

Authors	Impact	Population Group	Study Design	Year
Ubogun et al	Health literacy improved patients' attitude	Hypertensive patients (n=120)	Quantitative Cross sectional study	2023
Olorunfemi	Shows relationship between health literacy and adherence to medication	Diabetic patients (n=180)	Quantitative correlational study	2023
Kever et al	Adherence to medication was associated with health literacy	HIV patients (n=396)	Quantitative cross-sectional	2023
Osu et al	Shows relations between health literacy and reproductive health and lifestyle modification	Reproductive health of female teachers (n=180)	Explanatory concurrent mixed method	2025
Itasanmi et al	Health literacy shows positive impact on contraceptive knowledge and use	Contractive knowledge and attitude among adult Nigerians (n=426)	Descriptive cross sectional	2023
Adewole et al	Health promoting behaviour among adolescents is related to health literacy.	Obese and non-obese participants (n=150)		2021
Bello et al	Significant association between maternal health literacy and utilisation of healthcare services.	Newly delivered mothers on utilisation pof health services (n=185)	Cross section descriptive study	2022
Shoyemi et al	Health literacy and its impact on health outcomes	Different population groups	Review	2024
Kuyinu et al	Adequate health literacy was associated with having knowledge of a frequently prescribed antibiotic	Adult male and female in Lagos (n=1831)	Descriptive cross sectional	2020
Olayemi	Health information literacy influenced health-related quality of life of TB patients	TB patients (n=310)	Survey design	2023

Discussion

This discussion focuses on impact of health literacy on health outcomes in Nigeria, barriers to health literacy, gaps in health literacy and possible suggestions to improve health literacy.

Impact of health literacy on health outcomes

Reports have documented that health literacy is rapidly growing as emerging field that involves understanding, communication, assessment and analysis of health information for health promotion and good health care system (Shoyemi et al., 2024; Olayemi & Abolarinwa, 2021). It has been observed that health literacy impact on health outcomes through poor health decisions and knowledge that result into smoking, lack of physical activity, poor diet and increased morbidity and mortality (Moses et al., 2021). On the other hand, adequate health literacy has been shown to have positive impact on health outcomes. For instance, Ubogun et al (2023) reported that adequate health literacy helped hypertensive patients to demonstrate positive attitude towards their health. Hypertension is a chronic disease which remain a global health problem, increasing health care cost and reducing quality of life of people. To a achieve its adequate control and prevent negative health outcomes, patients' education and active participation is required and this is the core focus of health literacy (Mourouti et al., 2022).

In a study Olorunfemi (2023) found a link between medication adherence and health literacy. Health-literate individuals are more likely to engage in preventive health measures, make informed decisions about treatments, and comply with medical advice. This can lead to better management of chronic conditions like hypertension (Ubogun et al., 2023), diabetes (Olorunfemi, 2023), tuberculosis (Olayemi, 2023) and HIV/AIDS (Kever et al., 2023), which are prevalent in Nigeria (Ubogun et al., 2023; Kever et al., 2023; Adegbye and Abiola, 2016).

Nigeria faces significant health disparities, particularly between rural and urban areas (Bello et al., 2022). People with higher health literacy can access information and healthcare services more effectively, reducing the health gap between different populations. For instance, health literacy can enable individuals in rural areas to seek appropriate care for preventable diseases, which is often hindered by limited access to healthcare professionals (Bello et al., 2022; Itasanmi et al., 2023; Dipeolu and Akinyemi, 2018). In Nigeria, maternal and child mortality rates remain high. Studies have shown that mothers with higher health literacy levels are more likely to seek prenatal care, immunize their children, and adopt healthier behaviours, thereby improving health outcomes for both mothers and children (Bello et al., 2022). Health literacy can improve individuals' understanding of how to prevent the spread of infectious diseases, such as malaria, cholera, and tuberculosis, which are prevalent in Nigeria. Also, individuals with better health literacy are more likely to adhere to treatment regimens, which is crucial in the management of conditions like HIV/AIDS (WHO, 2020). Chronic

diseases, such as cardiovascular diseases and diabetes, are on the rise in Nigeria. Health literacy enables patients to understand their conditions, follow prescribed treatment plans, and make lifestyle changes that can prevent disease progression, thus improving long-term health outcomes (WHO, 2020).

The relationship between health literacy, reproductive health and contraceptive knowledge and use has been documented. In a study involving 426 participants, Itasanmi et al (2023), reported positive attitude towards contraceptive knowledge, contraception and contraceptive use among Nigerian population. Maintaining good health is a vital part of life and includes not only seeking medical assistance but having the required knowledge and understanding to prevent health problems, safeguard well-being and properly manage health problems. Therefore, the basis for making informed health decisions and positively impacting a person's quality of life lies in a person's health literacy skills (WHO, 2023). Reproductive health plays an important role in affecting the health and wellbeing of individuals, families and communities. To increase the contraceptive prevalence rate, the Nigerian government partnered with international development partners to launch the 2030 FP Commitment in 2021 with the aim to increase access to quality family planning that will drive family planning knowledge thereby improving health literacy among Nigerian population and subsequently improving health outcomes (Akomolafe and Opeke, 2019).

In a study conducted in Nigeria (Adewole et al.,2021) reported that there is a significant relationship between health-promoting behaviour and health literacy among obese and non-obese adolescent Nigerians. Health literacy and health promotion are key factors that promote good health outcomes and ensure positive developmental growth especially in adolescents (Adewole et al., 2021). Overweight and obesity have become epidemic among adolescents in both developed and developing countries. This is because obesity can affect immediate health of this population group, their educational attainment and quality of life (WHO, 2018). Also, health promoting behaviour is viewed as appropriate means to control and prevent morbidity and mortality among adolescents (Chasse, 2017) and that about 60% of individual's health and quality of life depends on their lifestyle and health behaviour.

A study by Olayemi (2023) examined the influence of health information literacy on health-related quality of life of TB patients in Lagos, Nigeria and reported that health information literacy influenced health-related quality of life of tuberculosis patients. With over 170, 000 deaths per year, Nigeria is ranked a high TB burden country and highest in Africa (Adeyeye et al., 2014). Therefore, health information can be used as a measure of intervention during treatment of patients. This is because patient with adequate literacy can better understand and interpret health information received from care givers. Health literacy thus offers the possibility of reduced stay in the hospital, health complications and mortality rates. This agrees with the report by Olayemi and Abolarinwa (2021) that TB patients acknowledged the need for health information to improve their health conditions.

Barriers to health literacy

In Nigeria, there are various barriers that hinder the improvement of health literacy among its population. These barriers are multifaceted, arising from social, economic, cultural and institutional factors (National Population Commission, 2021).

Low education level: A significant percentage of Nigeria's population has low literacy rates, especially in rural areas. According to the National Population Commission (2021), the literacy rate in Nigeria stands at 62%, and there are substantial gaps between urban and rural areas, hindering individuals' ability to understand health information, especially when it is complex or presented in English.

Limited access to health information: Access to reliable health information is limited, especially in rural and remote areas. Many Nigerians rely on traditional medicine and community-based health services, which may not provide accurate or scientifically correct health information. This lack of access to health services and information prevents people from becoming health literate (Uzochukwu and Onwujekwe, 2004).

Language barriers: Nigeria is a multilingual country with over 500 languages. Health information is mainly provided in English language, which may not be easily understood by majority of the population. This language barrier hinders effective communication between healthcare providers and patients (Okeke and Ukwuoma, 2020).

Cultural belief and traditions: Cultural beliefs and traditions can affect how health information is received and understood. In Nigeria, majority of people still prefer traditional healing practices and may view modern medicine with suspicion. This cultural resistance to formal health education creates barriers in the spread of accurate health information (Iliyasu et al., 2012; Shoyemi et al.,2024).

Economic barriers: Poverty remains a significant barrier to health literacy in Nigeria. Majority of the people are unable to afford healthcare services, thus limiting their exposure to health education programmes. Also, lower-income individuals may lack the resources to access information, such as books, internet access, or healthcare services (Bello et al., 2022; Olamijuwon and Ayodele, 2018).

Inadequate public health education: There is a lack of effective and widespread public health education campaigns in Nigeria. When public health messages are delivered, they are often not culturally sensitive or accessible to the average Nigerian. This makes it hard for people to understand key health issues such as sanitation and disease prevention (Gidado and Sulaiman, 2017).

Gender inequality: In some parts of Nigeria, gender inequality affects women's access to health information. Societal and religious practices do prevent women from seeking health information or making health decisions, reducing women's health literacy and

limiting their ability to make informed decisions about their own health (Kuyinu et al., 2020; Itasanmi et al., 2023; Shoyemi et al.,22024).

Weak health policies: Health policies in Nigeria do not adequately focus on improving health literacy. The absence of integrated policies that promote education in health and wellness leaves gaps in the understanding of key health issues (Shoyemi et al.,22024; Agho and Okafor, 2017).

Gaps in improving health Literacy in Nigeria

In Nigeria, significant gaps do exist in addressing health literacy effectively. These gaps are related to various challenges such as socio-economic barriers, inadequate infrastructure, cultural issues, and limited policy attention. Identified key gaps are discussed below:

Limited integration of health literacy into national policies: Health literacy is not adequately integrated into Nigeria's health policies. While health policies focus on disease prevention, treatment, and healthcare access, there is insufficient emphasis on improving health literacy as a tool for empowering individuals to make informed health decisions (Shoyemi et al., 2024; Agho and Okafor, 2017).

Inadequate health education programmes: Although health education programmes exist, they are often poorly funded, and not broad enough to reach the entire population. Most programmes are mainly in urban areas, and rural populations are not adequately covered (Kever et al., 2023; Gidado and Sulaiman, 2017).

Poverty and economic challenges: Economic constraints prevent many Nigerians from accessing health services and health education. Lack of funds for transportation, consultation fees, and health-related resources means that even if health literacy programmes are available, they are often inaccessible to the poor members of the society (Bello et al., 2022; Olamijuwon and Ayodele, 2018).

Limited access to technology: While technology offers a promising solution for disseminating health information, access to digital platforms remains a challenge to large portion of the Nigerian population. Rural communities lack reliable internet access or smartphones to benefit from health apps, online resources, and social media health campaigns (Adebayo and Oladipo, 2020).

Lack of trained health literacy professionals: There is a shortage of professionals trained in health literacy. Most healthcare workers lack the skills to assess and improve the health literacy levels of their patients. Also, many public health educators do not have adequate training in communicating complex health information in an understandable manner to clients (Olanrewaju and Adebayo, 2019).

Suggestions on improving health in Nigeria

Improving health literacy in Nigeria requires addressing the barriers comprehensively. Strategies should include investing in education, improving access to accurate and culturally relevant health information, using local languages, and addressing economic and infrastructural challenges. Health literacy is a key determinant of health outcomes, and overcoming these barriers is critical for improving the well-being of the Nigerian population. The following are suggestions that could improve health literacy in Nigeria and the world at large.

Health literacy needs to be a core component of Nigeria’s national health policies. Policies should address the need for health education, including campaigns on disease prevention, physical activity, nutrition, and healthy behaviours (Palumbo et al., 2017; Bello et al 202).

Health literacy programmes should specifically target women and girls, addressing barriers such as gender inequality, limited autonomy, and unequal access to education and healthcare. Promoting gender equality within health education is essential in improving health literacy in this population groups (Olayemi et al., 2022).

Health literacy initiatives should place emphasis on preventive health measures, including hygiene, and healthy lifestyle practices; these can significantly reduce the burden of diseases and promote long-term well-being (Uzochukwu and Onwujekwe, (2004).

There is a need for urgent and aggressive campaigns to counter misinformation on social platforms such as Facebook and internet. The campaigns should aim to educate the public on how to critically evaluate health information and consult trusted health professionals (Moses et al., 2021).

The curriculum for healthcare professionals should include training on health literacy and public health educators should receive specialised training in clear communication and effective health education strategies (Shoyemi et al., 2024).

Concerted efforts should be made to ensure that digital health information is accessible through various channels and investments in broadband infrastructure should be made to improve access to online resources (Bella-Awusah et al., 2014).

To improve health literacy, healthcare should be made affordable, and health education initiatives should be subsidised for low-income groups. Public-private partnerships should be encouraged to help create affordable resources for rural communities (Akande and Owoyemi, 2009).

Health literacy initiatives should incorporate culturally sensitive content, respect traditional practices while promoting scientifically correct health information. (Ofotokun et al., 2010).

There is an urgent need to implement nationwide, well-funded health education programmes that are accessible to both urban and rural populations and the programmes should focus on basic health literacy and the prevention of diseases (Asekun-Olarinmoye and Amusan, 2008).

Health information should be translated into major local languages and health communication should be relevant and tailored to the literacy levels of different tribes and regions (Bolarinwa et al., 2019).

Conclusion

Health literacy plays a crucial role in improving health outcomes by empowering individuals to make informed decisions, effectively manage diseases, and utilise healthcare services appropriately. In Nigeria, low levels of health literacy significantly hinder progress toward achieving SDG3, which aims to ensure healthy lives and promote well-being for all at all ages by 2030. Key barriers include widespread poverty, limited access to quality education, cultural beliefs, inadequate health infrastructure, and insufficient health communication strategies tailored to diverse populations. These challenges create gaps in awareness, preventive care, and timely treatment, thereby contributing to poor health indicators such as high maternal and child mortality rates, infectious disease prevalence, and non-communicable disease burdens. Addressing these barriers through targeted health education, community engagement, improved health systems, and policies that prioritise inclusive health literacy would be vital for Nigeria's progress toward SDG3 and overall sustainable development.

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Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.
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References

Adebayo, A. A., & Adeoye, A. O. (2021). Gender and health literacy in Nigeria: The challenges for women's health. Women's Health Journal, 14(2), 142–149.

Adebayo, S. O., & Oladipo, A. S. (2020). Social media and health misinformation in Nigeria. International Journal of Health Education, 59(3), 210–218.

Adegboye, A. R., & Abiola, M. (2016). Health literacy and its relationship with health outcomes in Nigeria. International Journal of Public Health, 61(4), 449–455.

Adekoya-Cole, T. O., Akinmokun, O. I., Enweluzo, G. O., Badmus, O. O., & Alabi, E. O. (2015). Poor health literacy in Nigeria: Causes, consequences and measures to improve it. Nigerian Quarterly Journal of Hospital Medicine, 25(2), 112–117.

Adewole, K. O., Ogunfowokan, A. A., & Olodu, M. (2021). Influence of health literacy on health promoting behavior of adolescents with and without obesity. International Journal of Africa Nursing Sciences, 15, 1–7.

Adeyeye, O. O., Ogunleye, O. O., Coker, A., Kuyinu, Y., & Bamisile, R. T. (2014). Factors influencing quality of life and predictors of low quality of life scores in patients on treatment for pulmonary tuberculosis: A cross-sectional study. Journal of Public Health in Africa, 5(2), 366.

Agho, A. O., & Okafor, F. A. (2017). Health policy and health literacy in Nigeria: A critical review. International Journal of Public Health, 62(4), 473–480.

Akande, J. O., & Owoyemi, T. M. (2007). Healthcare seeking behaviour in Anyigba, North-central Nigeria. Research Journal of Medical Sciences, 3(2), 47–51.

Akomolafe, M., & Opeke, R. (2019). Health information in everyday life: A study of pregnant women in Ekiti State, Nigeria. Library Philosophy and Practice, 2019, 3561.

Aromataris, E., & Munn, Z. (2020). JBI manual for evidence synthesis. Joanna Briggs Institute.

Asekun-Olarinmoye, E. O., & Amusan, O. A. (2008). The impact of health education on attitudes towards female genital mutilation in a rural Nigerian community. European Journal of Contraception and Reproductive Health Care, 13(3), 289–297.

Atulomah, B. C., & Atulomah, N. O. (2012). Health literacy-perceived information needs and preventive health practices in rural community in Ikenna, Nigeria. Ozean Journal of Social Sciences, 5(3), 95–104.

Atulomah, N. O., Olanrewaju, M. F., Amosu, A. M., & Adedeji, O. (2010). Level of awareness, perception and screening behaviour regarding prostate cancer among men in a rural community of Ikenna LGA, Nigeria. Prevention Insights, 2, 11–20.

Bella-Awusah, T., Adedokun, B., & Dogra, N. (2014). The impact of a mental health teaching programme on rural and urban secondary school students' perceptions of mental illness in southern Nigeria. Journal of Child and Adolescent Mental Health, 26(3), 207–215.

Bello, C. B., Esan, D. T., Akerele, S. A., & Fadare, R. I. (2022). Maternal health literacy, utilisation of maternal health care services and pregnancy outcomes among newly delivered mothers: A cross-sectional study in Nigeria. Public Health in Practice, 3, 1–7.

Bolarinwa, O. A., Juni, M. H., Nor-Afiah, M. Z., Salmiah, M. S., & Akande, T. M. (2019). Mid-term impact of home-based follow-up care on health-related quality of life of hypertensive patients at a teaching hospital in Ilorin, Nigeria. Nigerian Journal of Clinical Practice, 22, 69–78.

Budhathoki, S., Pokharel, P., Good, S., Limbu, S., Bhattachan, M., & Osborne, R. (2017). The potential of health literacy to address the health-related UN sustainable development goal 3 (SDG 3) in Nepal: A rapid review. BMC Health Services Research, 17, 13–17.

Dipeolu, A. O., & Akinyemi, O. O. (2018). Impact of health literacy on the management of chronic diseases in Nigeria: A cross-sectional study. Nigerian Medical Journal, 59(5), 218–224.

Edwards, M., Wood, F., Davies, M., & Edwards, A. (2015). Distributed health literacy: Longitudinal qualitative analysis of the roles of health literacy mediators and social networks of people living with a long-term health condition. Health Expectations, 18(5), 1180–1193.

Ekoko, N. O. (2020). An assessment of health information literacy among rural women in Delta State, Nigeria. Library Philosophy and Practice, 20, 1–14.

Gidado, S. O., & Sulaimon, A. A. (2017). Public health education and health literacy in Nigeria. Nigerian Journal of Public Health, 9(1), 51–59.

Iliyasu, Z., Abubakar, I. S., & Sani, I. K. (2012). Cultural barriers to health literacy in Northern Nigeria. Social Science & Medicine, 74(4), 639–646.

Itasanmi, S. A., Andong, H. A., & Adelore, O. O. (2023). Impact of health literacy of contraceptive knowledge, attitude and use among the Nigerian adult population. Journal of Health Literacy, 8(2), 25–40.

Itasanmi, S. A., Ekpenyong, V. O., & Andong, H. A. (2022). Examining health literacy levels and its association with demographic dynamics among intra-city commercial drivers: Results from a survey in Nigeria. Journal of Health Literacy, 6(4), 9–21.

Kuyinu, Y. A., Femi-Adebayo, T. T., Adebayo, B. I., Abdurraheem-Salami, I., & Odusanya, O. (2020). Health literacy: Prevalence and determinants in Lagos State, Nigeria. PLoS ONE, 15(8), e0237813.

Malik, M., Zaidi, R. B., & Hussain, A. (2017). Health literacy as a global public health concern: A systematic review. Journal of Pharmacology and Clinical Research, 4(2), 55–63.

Menadbe, N. (2017). Health literacy and SDGs. https://www.sustainablegoals.org.uk/health

Moses, O., Adejo, M., & Adadu, M. E. (2021). Health literacy as a precursor to functional health in Nigeria: Challenges and the way forward. Jewel Journal of Librarianship, 16(3), 102–116.

Mourouti, N., Michou, M., & Costarelli, V. (2022). Health literacy in relation to health outcomes in hypertension: A systematic review, 13(3), 109–118.

National Population Commission. (2021). Population and housing census. http://www.npc.gov.ng

Ofotokun, I., Binongo, J. G., Rosenberg, E. S., Kane, M., Ifland, R., & Lennox, J. L. (2010). Culturally adapted and audio-technology assisted HIV/AIDS awareness and education program in rural Nigeria: A cohort study. BMC International Health and Human Rights, 10, 2.

Okeke, T. A., & Ukwuoma, C. S. (2020). Language barriers in healthcare: A Nigeria context. Journal of Health Communication, 22(3), 275–280.

Olabanji, K. T. (2023). Interventions to improve health literacy in Nigeria: Systematic review of effectiveness and policy recommendations. The Nigerian Health Journal, 23(3), 707–716.

Olamijuwon, E. O., & Ayodele, I. A. (2018). The impact of poverty on health literacy in Nigeria. Health Economics Review, 10(1), 12–14.

Olanrewaju, O. L., & Adebayo, S. O. (2019). Health system challenges and health literacy in Nigeria. Journal of Public Health and Epidemiology, 11(2), 25–32.

Olayemi, O. M. (2023). Influence of health information literacy on health-related quality of life of tuberculosis patients in Lagos State, Nigeria. Health Management and Information Science, 10(1), 46–53.

Olayemi, O. M., & Abolarinwa, T. S. (2023). Internet use and e-health literacy among tuberculosis patients in the directly observed therapy centre Lagos State, Nigeria. Information Research, 28(1), 30–49.

Olayemi, O. M., Madkoma, E., & Yacob, H. (2022). Health information literacy of tuberculosis patients in DOT centres in Lagos State, Nigeria. Frontiers in Health Informatics, 11, 117.

Olorunfemi, O. (2023). Health literacy, medication belief and demographic factors correlate of medication adherence in persons with diabetes mellitus. Journal of Diabetology, 4(2), 100–106.

Onyeneho, N. G., & Uzochukwu, B. S. (2019). Health literacy and maternal health in Nigeria: A review of barriers and interventions. African Health Sciences, 19(3), 2350–2359.

Osu, U. C., Adegbite, O. O., Olunubi, T. O., Ogunniyan, F. G., & Afolabi, P. I. (2025). Empowering female teachers through health literacy, reproductive health and lifestyle modifications in Osun State, Nigeria. Journal of Arts, Humanities and Social Sciences, 2(2), 1–10.

Pelikan, J. M., Gahahi, K., & Roethlin, F. (2018). Health literacy as a determinant, mediator and moderator of health: Empirical models using the European Health Literacy Survey dataset. Global Health Promotion, 25(4), 57–66.

Popoola, B. (2019). Involving libraries in improving health literacy to achieve sustainable development goal 3 in developing economies: A literature review. Health Information and Libraries Journal, 36(2), 717–724.

Rever, R. T., Chukwu, E. O., & Hamina, D. (2023). Health literacy and adherence to care by people living with HIV in Nasarawa State. Journal of Community Medicine and Primary Health Care, 35(3), 109–122.

Schillinger, D., Grumbach, K., Piette, J., Wang, F., Osmond, D., & Daher, C. (2002). Association of health literacy with diabetes outcomes. JAMA, 288(4), 475–482.

Shoyemi, O. S., Abdulsalam, A., Oni, I. F., Hassan, A. I., & Azeez, T. A. (2024). Critical analysis of health literacy and its impact on health outcomes. Medical Discoveries, 3(3), 1–7.

Thomas, A., Lubarsky, S., Varpio, L., Durning, S. J., & Young, M. E. (2020). Scoping reviews in health professions education: Challenges, considerations and lessons learned about epistemology and methodology. Advances in Health Sciences Education, 25(4), 989–1002. https://doi.org/10.1007/s10459-019-09932-2

Trezona, A., Dodson, S., & Osborne, R. (2015). Development of the organizational health literacy responsiveness framework in collaboration with health and social services professionals. BMC Health Services Research, 17, 1–17.

Ubogun, O. E., Orhe, O. G., Oturu, S. O., & Anyanwu, E. B. (2023). Health literacy among adult hypertension patients in a tertiary hospital in South-South, Nigeria. World Journal of Advanced Pharmaceutical and Medical Research, 4(2), 49–57.

United Nations. (2021). The sustainable development goals report 2021. https://www.unstats.un.org

Uzochukwu, B. S., & Onwujekwe, O. E. (2004). Community health workers: Their role and potential impact on health literacy in Nigeria. Tropical Medicine and International Health, 9(2), 128–136.

World Health Organization. (2014). African region: Nigeria statistics. https://www.who.int/countries

World Health Organization. (2020). The role of health literacy in improving public health outcomes (WHO Technical Report Series).

World Health Organization. (2021). Health promotion: Health literacy. https://www.who.int

World Health Organization. (2022). TB incidence: Global reports. https://www.who.int

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