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Health Literacy and Educational Strategies for Promoting Proactive Personal and Community Health in Rivers State

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Abstract

Health literacy is an essential determinant of population health because it influences individuals' and communities' capacity to access, understand, evaluate, and apply health information for appropriate health decisions and preventive action. This paper examines health literacy and educational strategies for promoting proactive personal and community health in Rivers State, Nigeria. The conceptual foundation shows that health literacy extends beyond basic reading ability to include functional, interactive, critical, and digital competencies required for effective health decision-making. The current health context in Rivers State indicates persistent communicable diseases, maternal and child health concerns, emerging non-communicable disease risks, environmental challenges, and disparities in access to understandable health information and healthcare services. Major challenges include socioeconomic inequalities, cultural beliefs and misconceptions, language barriers, the digital divide and health misinformation, weak health communication systems, and policy and funding constraints. Proactive personal and community health is presented as a preventive approach involving healthy lifestyles, early detection, informed decision-making, appropriate healthcare utilization, community participation, sanitation, disease prevention, and collective health action. The paper identifies school-based health education, community health education, healthcare provider-led education, digital and social media interventions, faith-based and workplace programmes, and peer education and community engagement as complementary strategies for strengthening health literacy. The policy and practice implications emphasize shared responsibilities among government, educational institutions, healthcare professionals, NGOs, media organisations, and community leaders. The paper concludes that sustainable improvement in health literacy in Rivers State requires coordinated, culturally responsive, accessible, and adequately funded interventions that transform health information into informed personal behaviour and collective community action.

Keywords: Health literacy, Health education strategies, Proactive health behaviour, Community health promotion, Rivers State, Preventive health.

Introduction

The importance of health literacy cannot be just viewed as an individual skill; it is also a social determinant of health, as it is a way of organizing and presenting information, education, and health services in a society (Nutbeam, 2008). In this context, health literacy goes beyond simply being able to read health instructions, it involves the cognitive and social abilities and the motivation and capacity needed to access, comprehend, evaluate, and apply information to support and maintain good health. Recent data show that there is a strong link between health literacy and health behaviour and health outcomes. McAnally and Hagger (2023) conducted a meta-analysis of 203 studies and 210,622 participants in 2023, which revealed that health literacy was linked to health behaviours and health outcomes, with health self-efficacy and health attitudes partially accounting for this relationship. Likewise, a systematic review and meta-analysis found that about 23% of 39,423 people had poor or sub-optimal health literacy and that poorer health literacy was linked to higher mortality risk (Fan et al., 2021). The findings suggest that health literacy is an important element of a successful disease prevention program, using health services appropriately, and the ability to make informed health choices.

It is of particular concern in developing nations such as Nigeria where the transmission of health information is likely to take place in a great span of education, socio-economic, cultural, linguistic and geographical differences. These differences can be seen in Nigeria. Elechi et al. (2020) found that adequate health literacy and health literacy was significantly associated with the use of broadcast media and the internet as health information. Evidence also exists in Nigeria to show the need for affordable access to understandable and reliable health information, but is not as recent. In large-scale study of 691 people in the south-western region of Nigeria, there were significant variations in COVID-19 health literacy among socioeconomic groups (Ukwenya et al., 2021). Whereas, a study in another part of this nation conducted in 2022 revealed that 62.3% of the respondents were interested in knowing the home remedies and the treatment protocols for COVID-19 and 89.9% of the respondents found the information that they had received to be beneficial (Ndubuisi-Okoroezi et al., 2022). The results of this study show that Nigerians are interested in the acquisition of health information but also need information that is reliable, understandable and actionable to facilitate health decisions.

Rivers state is one of the most industrialized and densely populated areas of the Niger Delta region and is thus of particular interest with respect to the dynamics of health literacy and education strategies. The state's abundant economic potential is facing up to environmental problems, urbanization pressure and public health challenges like malaria, non-communicable diseases (NCDs) and maternal and child health problems. Such issues are ongoing, as revealed by recent evidence. Whyte et al. (2024), in Rivers State, Nigeria, there are significant implementation gaps of the national guidelines in the diagnosis of malaria among children under five years, which necessitate proper communication, health practices, and an effective primary healthcare system. In another study, pregnant women in Port Harcourt were also shown to have 19.7% of their blood samples testing positive for malaria and malaria parasitaemia was also found in the blood samples of the neonates and the placenta (Ojiyi & Obi, 2025). Maternal health issues also exist in the communities. Onotai et al. (2023) for instance, investigated the use of delivery service among mothers in Aluu community, Ikwerre Local Government Area of Rivers state showing the current relevance of health-service utilization at the community level, and maternal health education. These conditions require an approach to health literacy and education that is proactive and sensitive to context, whereby communities are empowered to know and have the capacity to practice preventive health behaviours.

The changing paradigm of health education approaches in Nigeria has been driven by the vision of the National Primary Health Care Development Agency (NPHCDA) upon community oriented primary health care (COPHC). But there are still implementation gaps, particularly related to the adaptation of education approaches to local languages, beliefs and socio-economic situations. The example of Rivers State is a good illustration of this challenge. In an adult resident survey conducted by Owhanda et al. (2022) in Rivers State, 47.0% of the respondents had poor knowledge of COVID-19, whereas 39.0% were able correctly to wash all critical parts of their hands. Educational level, location and occupation were significantly associated with knowledge, and knowledge was a good predictor of preventive practice. The highest sources of information about COVID-19 were radio jingles (86.7%) and television ads (74.0%). The results show that access to health information does not necessarily equate to health literacy or healthy behaviour. Rather, information needs to be conveyed in ways that are easy to access and accessible in presentation formats that allow people to understand, assess, and utilize it. Therefore, enhancing the health literacy of the people of Rivers State can directly impact the health outcomes and decrease the burden of disease in the State.

Health Literacy is built on education. Formal education helps to improve cognitive capacity, critical thinking and processing of health information and informal education using community discussion, mass media and peer learning supports health-promoting behaviours. The role of health literacy in supporting people's active involvement in their own health care is supported by current literature. The results of over 200 studies by McAnally and Hagger (2023) showed that health literacy was associated with health behaviours and health outcomes indirectly through attitudes and self-efficacy. Downie et al. (2022) also found that interventions focused on health literacy and patient activation can aid in the management of chronic disease. This is especially relevant to Nigeria where there is a growing burden of NCDs which coexists with Communicable diseases. High blood pressure (HBP) and high blood glucose (HBG) prevalence were 12% and 22% respectively based on single-point screening results from a 2026 national screening programme for HBP and HGB conducted on over 1.55 million Nigerians (Oguntade et al., 2026). The results suggest a need to strengthen people's and communities' ability to identify health risks early, to access timely and appropriate care, to understand health advice and recommendations for prevention, and to engage in ongoing health management..

Health literacy programs need to be innovative in Rivers State, where socio-economic inequalities, underdeveloped infrastructure, environment, and cultural factors contribute to poor health results. The issue of proactively managing personal health and the health of their communities is becoming more significant as more health risks can be mitigated if people have the knowledge and confidence to take preventive actions and communities can mobilise around shared health issues. Health literacy helps individuals to identify symptoms, evaluate the trustworthiness of the health information, comprehend the health prevention messages, make informed health choices, and utilize health services. It can boost community involvement in immunization, sanitation, disease surveillance, maternal health practices, screening and timely health-seeking at the community level. This approach is evidenced to be vital in Rivers State, where knowledge was among the key factors that influenced COVID-19 preventive practices (Owhonda et al., 2022), and in Nigeria where a significant burden of malaria persists and an increasing burden of non-communicable diseases (NCDs) is developing, which also need preventive and health-system interventions (GBD 2019 Diseases and Injuries Collaborators, 2022; Mukhtar et al., 2025). Therefore, success of such programmes depends on the

collaboration of the stakeholders that includes health professionals, educators, media practitioners, religious organisations, community leaders and policy makers. Digital health tools and community-based education can help close literacy gaps and provide the tools and resources that allow individuals and families to both be informed and take action.

The challenge and opportunity of improving health literacy in Rivers State is evident. It demands a multi-sectoral approach, a culture of proactive health management, in which health education, social empowerment and technology are united. Health literacy is on the rise as a public health priority in the current public health context – characterized by persistent infectious diseases, maternal and child health issues, emerging NCD risks, information gaps, and unequal access to health services. Current approaches to health education should focus on people's capacity to access, comprehend, critically analyse, communicate and apply health information in the context of daily health choices. Thus, this paper seeks to review health literacy and health education strategies in Rivers State with specific emphasis on the current public health landscape, proactive personal and community health and practical approaches to enhancing health literacy and health-promoting behaviors in the State.

Conceptual Foundation of Health Literacy

Health literacy is a complex phenomenon that is more than just reading and writing. It is knowledge, motivation, and skills that allow people to access, comprehend, evaluate, and utilize health information and services to support and maintain health. The idea is not just about being able to read the health instructions; it is also about the ability to interact with health professionals, to be able to assess the credibility of health information, to make informed health decisions and to make the best of the health systems. Health literacy is a result as well as a process. As a consequence, it captures how accessible, usable, and understood basic health information is to people. It is a process, and refers to developing the capacity to learn, communicate and access social support systems (Batterham et al., 2016). Health literacy is also viewed as a multi-faceted phenomenon, with individual skills and demands from health systems and social contexts, in contemporary perspectives (Nutbeam & Lloyd, 2021; Sørensen et al., 2012).

There are several dimensions to health literacy that are related. Sørensen et al. (2012) defined health literacy as a four-act process: health information seeking, health information understanding, health information appraisal, and health information action. Accessing health information requires the capacity to find and get information from the right sources. Appraising is the ability to critically assess and evaluate the reliability, relevance and implications of information gained, understanding is the ability to comprehend information gained. Applying health information means using health information to make appropriate decisions and take actions that promotes health. These dimensions are interwoven and not individual skills. For instance, a person can access information on how to prevent malaria but may not be able to assess the veracity of the information or apply it correctly in their daily life. Thus, the health literacy competencies involve information seeking, understanding, assessing, decision making, and using information.

Nutbeam (2000) also distinguished between three stages of health literacy: functional, interactive and critical health literacy. Functional health literacy is the ability to read and write simple messages in health-related situations, e.g., reading prescriptions, understanding appointment

information, or a simple health message. Interactive health literacy is the more demanding cognitive and social skills needed to engage in health communication, access information from other sources, and use new information in response to changing situations. In addition to simply understanding how to recognize health information, the concept of critical health literacy allows individuals to critically analyse health information, understand the social and environmental determinants of health, and have more autonomy over decisions and circumstances that impact their health. These levels indicate that health literacy is a continuum that progresses from being able to understand basic information to being able to engage with health-related systems and to critically interpret information for self and community health decisions.

In reality, these dimensions and awareness levels of health literacy are dynamic. For example, a woman in Rivers State can be able to read medicine labels, read and understand labels but might not have the interactive or critical health literacy skills needed to evaluate conflicting health information about maternal nutrition. Likewise, someone may have insight into information regarding hypertension but may lack the ability to evaluate if information on social media is trustworthy or what effect it should have on individual health choices. Having general literacy doesn't guarantee adequate health literacy. Health literacy is the combination of cognitive, communicative, social and decision-making skills that enable individuals to act in response to health information. There is recent evidence suggesting that health literacy is linked to health behaviours and health outcomes, in part via health attitudes and health self-efficacy (McAnally & Hagger, 2023). This corresponds with the belief that health literacy is a functional skill for informed health action, not just knowledge of written information.

Individual, social, educational, economic, cultural and health-system factors all affect the level of health literacy. Factors affecting the individual include age, cognitive ability, prior knowledge, language proficiency, motivation and own experience of health condition. Since formal education can build reading, comprehension, critical thinking and information processing abilities, this is of particular interest. Socioeconomic factors also affect access to health information and services, as people who can't afford a lot of money may face larger barriers to accessing a reliable source of information as well as quality health services. Factors such as culture and language may also influence the understanding and uptake of health messages. Factors within the health system, such as the complexity of health information, how health information is communicated by health workers, the availability and accessibility of services, and the presence of health information that is understandable to health consumers can either facilitate or impede health literacy. This recent literature highlights the fact that health literacy should therefore not be seen as a personal responsibility only, as health systems and social environments also play a role in who can access, understand, evaluate and use health information (McAnally & Hagger, 2023; Nutbeam & Lloyd, 2021).

Digital technology has further become a more growing influence and context on health literacy. The internet, smartphones, social media and digital health platforms have all been growing exponentially, providing more information and information that is more accessible for people to access. But the more information—does not always mean the more health literacy. People should be able to recognize reliable sources, be able to differentiate evidence-based information from misinformation, understand digital health information, and be able to apply relevant information as it is appropriate. This has led to an increasing attention on digital health literacy as a supplement to traditional health literacy. Individuals who are less tech savvy may not be able to

take advantage of health information that can be found online and incorrect health information can affect health choices. Modern health literacy demands skills to effectively navigate within the traditional and digital health information landscape.

Thus, health literacy is a public health agenda and a social justice issue. The inequities in education, socio-economic status, language, culture, technology access and health systems' responsiveness can create unequal opportunities to build and use health literacy. People who have good health literacy have better chances to understand health risks, communicate with health care providers, assess health information, engage in preventive behaviors and make informed choices about their health. On the other hand, poor health literacy can restrict a person's ability to access health information and health services. A number of current studies support the importance of health literacy to health behaviours and health outcomes, including those in population and preventative health (Fan et al., 2021; McAnally & Hagger, 2023). Consequently, the development of health literacy must go beyond the creation of access to health information and include the use of education and communication tools to support and foster functional, interactive, critical, and digital health literacy skills.

Challenges of Health Literacy

The health literacy status of residents of Rivers State is also similar to the overall situation of the Nigerian populace, where over 60% of adults are found to be with limited health literacy (Ajuwon & Raji, 2020). This is due to a number of interrelated problems.

First, there are inequalities in education between local government areas. The school attendance rate and access to quality education is low in rural communities like Ahoada, Gokana and Andoni, while the literacy rate is relatively high in other communities like Port Harcourt and Obio/Akpor. This difference hinders the spread of health information and understanding of public health messages.

Second, cultural/linguistic barriers are important. Many public health campaigns are carried out in English, but significant proportion of people communicate mainly in local language (Ikwerre, Kalabari and Ogoni). Linguistic and cultural adaptation of health messages often leads to misinterpretation or rejection of vital health messages, particularly regarding vaccination, family planning and sanitation (Onyekwere & Ijeoma, 2022).

Thirdly, weaknesses in health systems add to the issue. In many areas of Rivers State, Health Communication (HC) is a skill that is not widely practiced by the primary health centers personnel. Advice is given to patients in the language of medicine; minimal attempt is made to ensure understanding. As a result, treatment and prevention behaviors are not adhered to.

Fourth, socioeconomic factors such as poverty and unemployment reduce the people's ability to invest in health. The high cost of healthcare, coupled with the environmental pollution caused by oil activities makes people vulnerable as they overlook their health services until the disease enters a stage of severity (Okon & Amadi, 2021).

Lastly, there have been problems with the digital and media. Despite the rise in mobile phone penetration, many residents have restricted digital literacy knowledge to assess the criticality of online health information. Misinformation, particularly in relation to critical diseases such as COVID-19, malaria, and HIV, spreads rapidly across social media and can often work against government-led health initiatives (Chukwu et al., 2021).

Currently, Rivers State health literacy is influenced by a combination of education, culture, economic and infrastructure determinants which collectively pose health communication and decision making challenges.

Proactive Personal and Community Health

Personal health refers to the overall health of an individual, attained through his/her conscious and responsible health related decision making. It is a state of healthy living that is maintained by good nutrition, regular exercise, good rest, proper hygiene and routine medical examination. Personal health is the optimal condition of the body, mind and spirit, not just the lack of illness or disability; it is a product of one's actions, surroundings and health resources. Gogo et al. (2019) noted that emotional resilience and adapting to life problems without sacrificing general well-being are also part of personal health.

Personal health is multi-dimensional, with several important components. Physical health relates to the right way to care for the body - nutrition, exercise, immunisation and medical check-ups. Mental and emotional well being is a balance of mental health, stress management, and positive relationships. The other critical factor is social health, which involves the capacity to interact, communicate and establish positive social networks that enhance overall health. A healthy person is more productive, resilient and able to make a significant contribution to the community and national development. Thus, education, awareness and access to care should be considered an important investment in personal health and social development.

Community Health

Community health is the organized activity and solidarity of institutions, groups, and individuals to protect, promote, and sustain the health and well-being of a community or population in a specific geographic area (World Health Organization, 2018)). It highlights on prevention, health promotion and equal access to health services. The World Health Organization (2024) define community health as the process of working with the community to improve health outcomes, engaging in the social determinants of health including education, income, housing, sanitation, and bringing together local institutions and the health care system. Community health is not just about treating diseases, it's about making it possible for people and communities to live healthier lives.

There is more to a community's health than just treating disease, it is about providing conditions that allow individuals and communities to live healthy lives. Community health can be understood as an interdisciplinary approach that integrates public health, environmental health, and social dimensions to address health needs within specific communities. Community-based health approaches emphasize collaboration with community members and adaptation of health interventions to local circumstances and priorities (Nava et al., 2023). This acknowledges that the health problems faced by rural and urban areas are not the same, with access to clean water, pollution, and health literacy being cited as examples.

Proactive Health Behaviour

Proactive health behaviour is the intentional and preventive behavior people engage in to preserve or enhance their health before they become ill or develop health problems. It includes participation in healthful activities such as physical exercise, a healthy diet, adequate sleep, proper hygiene, timely utilization of preventive health services and refraining from the use of

harmful products such as cigarettes and excessive alcohol intake. Shi et al. (2025), proactive health behavior involves a person's efforts to seek health information, take personal health responsibility, and change their lifestyle to lower health risks like physical inactivity, poor nutrition, and stress. Likewise, Yu et al. (2024) explain proactive health behaviour as an ongoing, self-initiated health management process, involving preventive health and regular health check-ups and informed decisions to improve life quality and longevity. The idea is thus to act in time to avoid serious health issues, and to seek help before falling ill.

The concepts of proactive personal health involve: prevention, early detection, personal responsibility, informed decision making, healthy lifestyle, continuity of care and active participation in health management. Prevention involves the person becoming aware of potential health hazards and taking reasonable measures to avoid exposure to such hazards. Early detection includes taking the necessary screening tests, identifying the early warning signs and getting professional help as soon as possible if something is not normal or as soon as possible if abnormal symptoms are seen. Personal responsibility involves making a personal contribution to personal health, and informed decision making involves the capacity to acquire, comprehend, assess, and use reliable health information. Continuity of care is not the same as "health now and then" but, rather, a practice of keeping "health" up to date. These principles are very similar to health literacy as people require sufficient knowledge and practical skills to make the right preventative choices. Personal health proactivity, then, is not just a health information acquisition; it is consistent and regular transformation of reliable information to health decisions and action.

The significance of pro-activ health behaviour is that it can encourage prevention rather than cure, decrease exposure to unnecessary risk factors and provide early detection and management of health issues. Proactive personal health behaviours are those that help prevent illness and promote personal well-being, such as eating a balanced diet, exercising regularly, personal and environmental hygiene, attending recommended health checks and health screening programmes, taking prescribed medications as directed, using health services as needed, engaging in safe sexual behaviours, getting sufficient sleep, managing stress and avoiding tobacco and harmful substance use. These behaviors can help prevent and treat Communicable and Non Communicable Diseases (NCDs). Health literacy empowers these behaviours by helping people to comprehend health risks, follow health recommendations, spot misinformation, and make decisions. The findings presented by McAnally and Hagger (2023) suggest that there is a correlation between health literacy and health behaviours and health outcomes, which align with the idea that health literacy can play a role in influencing health behaviours towards a healthier pattern.

Personal health is a proactive approach and is not only physical, but also mental and social. People can take preventive steps toward mental health by paying attention to changes in their mood or behaviour that last over time, by keeping their social environment supportive, by controlling stress with healthy coping mechanisms and by seeking professional help when necessary. Likewise, healthy relationships, being active and engaged in supportive community activities and communication skills can positively impact social health. Proactive doesn't mean that people are only responsible for their health outcomes. Instead, it acknowledges that people can contribute positively to their health if they are given the right information, the right environment, good services and chances to be involved in decisions about their health. This is

crucial because socioeconomic factors, health system access, environmental factors, and social factors can either promote or hinder the ability to incorporate healthy behaviors into everyday life.

The principles of pro-active community health are those of individual action applied in a collective way. It includes the capacity of families, neighbourhoods, community groups, schools, churches, health services and others to recognise health problems, access resources, encourage healthy behaviours and act early on the problem before it takes hold and becomes large and complex. These include community sanitation, waste-management programs, health education, vaccination drives, community screening, maternal and child health promotion, malaria prevention, disease surveillance, nutrition education, tobacco and harmful substance education, etc. It is especially vital for community involvement as many health issues are related to environmental and social conditions that people can't solve on their own. The community can thus promote a pro-active health system by providing enabling conditions for healthy choices.

Proactive community health is especially noticeable in disease prevention and health promotion activities. The following are some collective practices that can help reduce communicable diseases: environmental sanitation, proper hygiene, vaccination, vector control, early reporting of suspected cases, and following public health guidelines. Likewise, communities need to support healthier nutrition, physical activity, tobacco prevention and control, screening, and timely access to health care services for the prevention and control of non-communicable diseases. CHP may also enhance the knowledge of maternal and child health, mental health, nutrition, and other health concerns. With respect to this, health literacy can be seen as a tool for personal and community benefit. Nutbeam and Lloyd (2021) highlight the importance of social and structural factors in the development of health literacy and argue that it needs to be tackled at a level beyond the individual. Enhancing community health literacy can empower individuals to engage more effectively in health programs, share health issues, question false information, and make decisions that impact community health.

Proactive personal and community health is especially relevant due to the presence of a mix of communicable diseases, non-communicable diseases, environmental health issues, and access to health care services in communities. Health education that is understandable, culturally appropriate, participatory and connected to available health services is needed to promote proactive behaviour. Individuals should be empowered to take responsibility for prevention practices and communities and institutions should offer the social/environmental support needed for preventive practices to be sustained. The objective is to shift the focus of health behaviour from reactive (where people try to get help when disease is serious) to preventive (where people are health conscious, take early action, take continuous care, engage in the community and seek timely help from appropriate health services). This will enhance disease prevention, encourage health and contribute to the overall health of community and individual in Rivers State.

Education Strategies for Improving Health Literacy

Health education's basic purpose is to empower people and communities to make informed choices regarding health through providing accurate information, enhancing critical thinking, and fostering behavior change. Education strategies need to be adaptable, inclusive and community-driven where public health issues overlap with environmental, socio-economic and cultural issues.

With effective education, health literacy allows individuals to not only prevent diseases, manage chronic diseases, but also to advocate for better environments. Proactive health strategies for education are therefore not limited to the classroom, but also apply to the interpersonal and community dimension as well as the digital domain.

A key tool in tackling health literacy is health education, which provides individuals and communities with the knowledge and skills they need to access, comprehend, appraise and apply health information to make informed health decisions. Health education should therefore not just be about input but also input and output, input and discourse, input and learning and testing out of the acquired health knowledge in everyday life. There are new studies to support the use of several, and complementary, educational strategies such as school based, community based, healthcare provider led, digital, faith, workplace and peer approaches.

School Based Health Education: School-based health education is an important avenue to build health literacy at an early age. Health issues, like good personal hygiene, nutrition, physical activity, prevention of diseases, mental health, reproduction, environmental health and the proper utilization of health services can be incorporated into school activities and in the curriculum. Nash et al. (2021) in their international review of 21 school based health literacy programmes for children 2-16 years, noted the importance of whole-school approaches, integration with the curriculum, teacher professional development, involvement of parents and communities. In a similar way, Smith et al (2021) reported that practical learning activities, peer support, attention to the school environment, parental involvement and connections with the community were effective strategies to encourage healthy behaviours for disadvantaged adolescents.

School health education can, therefore, integrate classroom learning with health clubs, demonstrations, school health talks, hygiene activities, and nutrition education and/or practical disease-prevention activities. These can contribute to students being able to decode health messages and use them in their daily lives. Engaging parents and the broader community can augment the flow of health information from school to home and community.

Community Health Education: Community health education involves taking health information and skills directly to people in their homes, neighbourhoods and community institutions. CHWs, community leaders, women's groups, youth organisations and community-based organisations can contribute to sanitation, malaria prevention, immunisation, maternal and child health, nutrition, non-communicable diseases and mental health education. Community based education is especially valuable when some individuals may struggle to access and understand information from formal health care delivery systems due to educational, socioeconomic or geographical limitations.

Community education is more effective when it involves community members in the identification of their health needs and the development of adequate community response. Relevance, trust and local ownership can be enhanced using participatory approaches as health messages can be tailored to the local population's language, culture and context. Community health education, then, should therefore be conducted in a language that is accessible to the community and utilize local examples; and should include as part of the presentation health talks, outreach, demonstrations, and dialogue with community members.

Healthcare Provider-Led Education: Healthcare providers are vital resources of health information – patients often rely on health providers for information about illness, treatment, and

prevention. Diagnoses, medications, treatment plans, follow-up and lifestyle practices and warning signs for further medical attention should be explained. Avoid using unnecessary technical terms and be sure to have patients ask questions and tell you in their own words.

A good technique is the teach-back method, which involves asking a patient to explain what he or she has learned about the medical issue instead of asking him or her if he or she understands it. In a systematic review, Shersher et al. (2021) found that teach-back was more likely to be used when healthcare professionals were trained in its use and found improvements in knowledge and satisfaction in some groups of patients. A subsequent systematic review of chronic kidney disease (CKD) also reported positively on teach-back for increasing self-management, self-efficacy and knowledge. Therefore, health care systems in Rivers State can improve the level of health literacy by integrating understandable communication, teach-back, visual communication, and patient questions during the routine check-up and outreach sessions.

Digital and Social Media Interventions: Digital platforms offer new avenues for delivering health literacy on smartphones, through websites and social media, mobile apps, electronic health records, text messages, and online education. These platforms can offer quick access to information on disease prevention, healthy way of life, health care services and emergency health messages. Importantly, though, digital interventions should also equip people with the knowledge to find trustworthy information, assess health information on the internet, and spot misinformation.

Research shows that digital strategies have the potential to enhance multiple aspects of health literacy and health-related skills. Wang et al. (2023) conducted a systematic review and meta-analysis of 17 studies including 5,138 individuals with chronic conditions, and demonstrated that digital interventions (defined as any intervention delivered digitally that included skills training, websites, electronic personal health records, remote monitoring and education) led to an increase in eHealth literacy compared to usual care. Likewise, Car et al. (2022) found that there are potential benefits to interventions to increase consumers' online health literacy, but the evidence base is still limited, and additional more rigorous studies are needed.

Digital health education can then be provided via short videos, infographics, SMS messages, social media campaigns, online forums and more. Digital programmes should be created in simple language and, if applicable, enhanced with other methods of communication so as not to exclude people with limited digital access or skills.

Faith-based and Workplace Programmes: Faith-based organisations can be an important place to provide health education as they congregate individuals with existing social networks. The use of health education in suitable community programmes, to cover various topics including health and hygiene, immunisation, healthy living, maternal health, and seeking appropriate health services, should be encouraged. This should include the dissemination of factually accurate information using values and structures of the community being engaged in a respectful manner.

Workplaces are also a place where health education and disease prevention services can be delivered to adults. Occupational health programmes can encompass health talks, screening activities, educational programs on occupational safety, physical activity promotion, and education on prevention and management of NCDs. A systematic review and meta analysis of Diego-Cordero et al. (2021) shows that workplace and organisational environments have been explored as means to promote health outcomes related to work, and that the practice of spiritual

interventions in the workplace has been subject of studies. Workplace and faith-based programmes can, therefore, complement formal healthcare/faith-based community education as they reach people in their environments where they interact on a regular basis in Rivers State.

Peer education: Peer education is the dissemination of health information, encouragement and support to others in similar or the same social group by individuals in the population. It can be beneficial among adolescents and youth as peers might be more willing to discuss health sensitive issues. Peer education is relevant to hygiene, nutrition, physical activity, reproductive health and mental health and other health-related behaviours.

Results from a systematic review of peer education in schools worldwide suggest that school-based peer education is growing in popularity to support adolescent health and that peer educators can deliver health information in spaces where adolescents are already present. More recently, Widnall et al. (2024) reviewed the mechanisms by which school-based peer education can enhance young people's health literacy and health behaviours, emphasizing the need to understand the mechanisms of peer interventions, as well as the fact that 'peer delivery' is not necessarily effective.

Peer education should be complemented by the engagement of community members to ensure that they are not only receiving health information, but also contributing to the identification of health issues, the design of activities, the implementation of activities and the evaluation of the results. This is a participatory approach which can enhance trust, relevance and ownership. Peer educators can collaborate with schools, community organisations, healthcare facilities and youth groups in Rivers State to reach people outside the formal health system with health education.

Addressing Challenges of Health Literacy

Policy/Practice Implications: Health literacy is a policy and practice issue that has a bearing on government policy, education practice, healthcare delivery, community development and public communication in Rivers State. Health literacy should not be self-reliant, but a collective responsibility. This entails coordinated interventions that render health information understandable, accessible, culturally appropriate and actionable.

Government Responsibilities: Government has the primary responsibility for creating an enabling policy and financing environment for health literacy promotion. There is need for the Federal Government and Rivers State Government to embed health literacy into other health promotion, primary healthcare, disease-prevention, and digital-health initiatives. Adequate funding should be provided for community health education, health communication, training of health workers and production of understandable health information. The BHCPF has an existing funding stream to support primary health care and enhance the accessibility of poor and vulnerable people. In addition, the government should increase monitoring and accountability to ensure that resources are targeted to the intended population for health promotion and communication. The current health promotion framework in Rivers State can be used to coordinate health education, risk communication and community engagement.

Educational Institutions: Health literacy should be integrated into formal and informal learning in educational institutions. Schools, colleges and universities can help students to access reliable health information, understand health messages, assess the credibility of online health information, and make responsible health decisions. The teaching and learning process should be

practical and participative, not only based on lectures. Health talks, screening awareness, health club, community outreach etc. can also be organised in educational institutions, in association with health care institutions and community organisations. This can help students to be knowledgeable consumers of health information and provide the same to relatives and neighbors.

Healthcare Professionals: Health care professionals have direct responsibility in making health information understandable and usable. All healthcare professionals (doctors, nurses, pharmacists, community health officers) must speak clearly and avoid any unnecessary technical language, try to prompt the patient to ask any questions they may have, and confirm what they have understood with the patient prior to them leaving the healthcare setting. The teach-back approach has been shown to have some positive evidence for enhancing patient knowledge and satisfaction in certain healthcare settings (Shersher et al., 2021). There is also a need for health professionals to be involved in outreach, health campaigns and digital communication through providing accurate and evidence based information that is given to the community.

The role of NGOs and Community Organisations: NGOs and community-based organisations can support government health literacy programmes by advocating for populations that might not be covered by the formal health sector. NGOs can assist in community education, training, advocacy, and production of educational materials and mobilization of vulnerable groups. They should be carried out in a coordinated way with government health programmes in order to avoid duplication and continuity. The current health-sector strategy in Nigeria has begun to fully acknowledge the need to cooperate between government, civil society, development partners and private-sector players to improve health services.

The role of Media Organisations: Media can be a significant source of accurate health promotion information and refute misinformation. Radio, television, newspapers and digital media can communicate information on disease prevention, healthy lifestyles, available health services and public-health emergencies. Media practitioners should collaborate with health experts to make sure that health information is correct, comprehensible and suitably contextualised. Media campaigns should also steer clear of unnecessary technical and sensationalistic language and presentation that may lead to confusion or fear. The Federal Ministry of Health and Social Welfare has stated that an enhanced strategic communication and media engagement is one of the strategies aimed at health-sector reform visibility and communication.

Community Leaders: Community leaders, especially traditional, religious, youth, women, and other community leaders, can contribute to strengthening the trust between health institutions and the communities. They can help spread accurate health information, promote engagement in health initiatives and help identify misconceptions or concerns in their community. Where formal health messages are not easily delivered to specific parts of the population, their involvement is extremely useful. Public involvement should be used in conjunction with, but not as a substitute for professional health guidance, however. Community leaders should therefore liaise with trained health responders and public health agencies to assure the information shared is accurate and aligns with the health guidance.

The best way to promote health literacy in Rivers State is probably a coordinated system in which the government leads with policy direction and resources, educational institutions prepare health-literacy skills, healthcare providers present the information they share with patients in an understandable manner, NGOs facilitate community programmes, media organisations present

credible information, and community leaders facilitate trust and participation. Nigeria's recent health sector reforms focus on inter-sectoral cooperation, between government at all levels and civil society, as well as between the private sector and development partners, and offer a policy framework for such joint cooperation. This integrated approach can help to take health literacy from one time awareness creation to a sustained public-health practice that enables informed decisions by individuals and improved community health for Rivers State.

Conclusion

In order to promote proactive personal and community health in Rivers State, health literacy is vital as it allows people to access, comprehend, assess and utilize health information to make health decisions. Despite the above, socioeconomic differences, cultural attitudes, language barriers, digital differences, misinformation, poor health communication, and policy and funding restrictions continue to impede effective health literacy promotion.

A proactive approach to health involves making prevention, early detection, healthy lifestyles and using the health system and collective health action appropriately the priority for individuals and communities. This will take multiple approaches such as school-based and community health education, education delivered by healthcare providers, digital and social media interventions, faith-based and workplace health education programmes, peer education and community engagement.

Thus, it will take the concerted efforts of government, educational institutions, health care service providers, NGOs, media organisations and community leaders to improve health literacy in Rivers State. A culturally responsive, well-funded and multi-sectoral strategy can deliver greater support for health promoting practices and support to better and more equitable personal and community health outcomes.

Recommendations

Based on the issues discussed in the paper, the following recommendations are made:

1. Include health literacy in health policies and programmes at the institutional level. Federal Government and Rivers State Government should include health literacy in Non-communicable disease, environmental health, digital-health, maternal and child health, disease-prevention and health-promotion programmes in primary healthcare.
2. There must be sustainable fundings for the health education provided by government. Community health education, production of health materials that can be understood and training of health workers should receive sufficient and regular resources and support, as should public health promotion and monitoring of programmes on health literacy, especially in disadvantaged areas.
3. School-based health literacy education should be enhanced in the educational institutions. Practical health-literacy activities should be embedded in the appropriate subjects and in the extra-curricular programmes in school, and should be introduced in areas such as hygiene, nutrition, physical activity, disease prevention, mental-health, environmental-health, and proper healthcare-utilization.

4. Healthcare professionals need to have a patient-centred approach to communication. Healthcare workers (HCWs) – such as doctors, nurses, pharmacists and community health officers – should engage in clear communication and avoid using unnecessary medical jargon, allow patients to ask questions, and practice techniques like 'teach-back' to check for patient understanding.

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