

THE ROLE OF HEALTH COMMUNICATION STRATEGIES AND HEALTH LITERACY IN SHAPING AUDIENCE BEHAVIOR

BY

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Abstract

This paper examines the philosophical basis of the role of health communication strategies and health literacy in shaping audience behaviour. It appraises the concept of health communication, health literacy, audience behaviour and branches of philosophy. The paper specifically examines the scholarly views on relationship between health communication strategies, audience health literacy elements and persuasion of audience that influence their health behaviour and concludes that, because persuasion is not totally influenced by the health communication strategies and health communication literacy but also depends on the power of selective retention and cognitive dissonance of the audience that influences audience behaviour based on self volition, all health communication strategies and health literacy activities must be audience focussed.

Introduction

Health literacy plays a crucial role in determining better understanding and health behaviors among both children and adults (Kanellopoulou, Notara, Antonogeorgos, Chrissini, Rojas-Gil, Kornilaki & Panagiotakos, 2022). Improving health literacy is essential for effective health communication and equitable health outcomes (Cabellos-García, Martínez-Sabater, Díaz-Herrera, Gea-Caballero, & Castro-Sánchez, 2021). This explains why health communication and health literacy has been the core value of any government with a view to achieving the desired result in health care for the people. The providers of offerings must bring to the awareness of the seekers, the availability and benefit of such offerings which establish the relevance of health communication as an institutional drive to inform both domestic and international healthcare seekers of their offerings to patronize same (Akashoro, 2007). The seekers of offerings (healthcare) are usually induced by some factors to arrive at a decision to patronize such offerings (healthcare) or to retain their prevailing preference (this could be traditional medicine). It is against this that diet and exercise behavior among obese adults are influenced by health communication strategies and health literacy. Persuasion comes in when the seekers of offerings, based on certain considerations, decided to change or alter their consumption preference in favour of the announced offering (Akashoro, 2007). Health communication strategies play a vital role in promoting healthy behaviors, disease prevention, and health literacy among diverse populations (Lanfer, 2021). The rapid evolution of digital technologies has transformed the way health information is created, disseminated, and consumed, presenting both opportunities and challenges for health communication (Khan, 2018). Recent studies have highlighted the importance of tailoring health messages to individual needs and preferences (Moumtzoglou, 2019), leveraging social media and mobile health technologies, and addressing health literacy and numeracy (Paige, 2020).

Research has shown a significant positive association between adult literacy and health promotion behaviors in rural communities (Okeya-Olayinka & Okeya-Olayinka, 2022). Health and nutrition issues, such as chronic illness and poor nutrition, can significantly affect adult learners' academic involvement in literacy programs (Bello et al., 2024). To address these challenges, health communicators should employ a combination of strategies, including health behavior theory, plain language communication techniques, and targeted dissemination strategies (Caballero, Leath, & Staton, 2023). Integrating health literacy into school curricula and community action plans could be an effective tool in managing obesity and improving overall health outcomes (Chrissini & Panagiotakos, 2021). Establishing the

true nature of health providers and seekers brings about the relevance of philosophy concerned with inquiry into and establish the true nature of things. The philosophical discus in this context could be an attempt to give explanations regarding: why people have belief; why people patronize some cervices they desire; what actually informed preference shift in people; how can the true seekers of offerings be determined and how to determine the right message that will lead to a preference shift in such individuals in favor of the providers offerings; what link health communication and health literacy with the offerings and patronage in form of diet and exercise behavior among obese adults. Obesity is a pervasive public health concern, with diet and exercise behaviors playing a critical role in weight management (Busetto, Sbraccia, & Vettor, 2022). Health communication strategies and health literacy are essential factors influencing behavior change, yet their complex interplay remains poorly understood (Lanfer, 2021). This article seeks to explore the philosophical underpinnings of health communication and health literacy, examining how they shape diet and exercise behaviors among obese adults.

Conceptual Overview of Health Communication Strategy and Health Literacy

This study aims to explore the influence of health communication strategies and health literacy on diet and exercise behavior among obese adults from a philosophical perspective.

Health Communication Strategies: is the planned use of communication channels and messages to promote healthy behaviors (Kreps & Neuhauser, 2010). That is the planned use of communication channels and messages to promote healthy behaviors and prevent disease. The use of communication techniques to inform, persuades, and motivates individuals to adopt healthy behaviors. Public health campaigns such as anti-smoking and vaccination using mass media channels (TV, radio, social media) as well as Patient-provider communication strategies like clear explanations, shared decision-making to improve health outcomes are good examples of health communication strategies. From a philosophical perspective, health communication strategies can be seen as a form of "biopower", shaping individuals' understanding of their bodies and health. Health literacy, on the other hand, can be viewed as a form of "empowerment" (Gladstone, 2022), enabling individuals to take control of their health. However, the impact of health communication strategies and health literacy on diet and exercise behaviors among obese adults remains unclear.

Despite these advances, significant gaps remain in our understanding of effective health communication strategies, particularly in the context of emerging digital platforms and technologies (Gupta, Dash, & Mahajan, 2022). This article aims to contribute to the ongoing discourse on health communication strategies by examining the current state of research, identifying key gaps and challenges, and exploring innovative approaches to crafting effective health messages in the digital age. It is important to look at the essential elements in communication process towards achieving the desired results.

Sender-Receiver Dynamic: The sender-receiver dynamic is a critical aspect of health communication, where the sender's message is interpreted by the receiver (Kreps & Neuhauser, 2010). Doctor-Patient communication is a typical example where the Doctor as an expert in health pass message of health to the patient so as to enhance good welfare or guide the sick patient on how to ameliorate his health challenge. The patient no doubt decodes the message encoded by the Doctor, internalize it and adhere strictly to it for his own interest.

Sender's Role: The sender's role is to convey health information in a clear, concise, and culturally sensitive manner (Panjaitan, et al., 2023). It is very essential for sender of the message to package such health information in an unambiguous ways that the receiver quickly understands the implications of the information received on his or her well being. Such information should be delivered in simple terms and be coded in the language the audience understands best so as not to bring about confusion.

Receiver's Role: The receiver's role is to interpret and act on the health information, which is influenced by their health literacy level, prior knowledge, and experiences (Shah, & Wei, 2022). Upon the reception of the health

information, the receiver ruminates over it and act appropriately whether to adopt or not in line with the belief and experience of the past. Here comes the selective implementation of such information.

Health Literacy: Health literacy acts as a mediator between the sender's message and the receiver's understanding, with low health literacy levels potentially leading to misinterpretation or non-adherence (Heikkinen, 2022). The educational or exposure level of receiver determines whether the information will be properly interpreted or not. Intellectual capability plays a vital role here if the result of communication must be realized.

Power Dynamics: Power dynamics between the sender and receiver can impact the effectiveness of health communication, with the sender often holding more power and influence (Neuhauser & Kreps, 2018). The sender in most cases is the owner of the information to be shared and must package his information in an attractive way and encode in a way that such information will be decoded without stress. This is to ensure that is meeting the objective of the communication. The sender passed the information to influence the decision of the receiver either by way of persuasion or to frighten the receiver with a view to responding appropriately to the information.

Cultural Competence: Cultural competence is essential in health communication, as it enables senders to tailor their message to the receiver's cultural background and values (Loewen, 2018). The norms, value, cultural and religious background of the receivers has to be properly put into consideration in communication so as to get the desired feedback. A good example was the resistance of the northerners to child immunization in the 90s until the Sultan of Sokoto, His Eminence Sa'ad Abubakar II was used in personality advertisement on administration of polio vaccine on children. Their response of the people of the north changed immediately the saw their leader doing what they have erroneous beliefs in. the belief in their leaders directive changed the narrative that time.

Health Literacy: The ability of individuals to access, understand, and use health information to make informed decisions (Nutbeam, 2000).The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (Ratzen & Parker, 2000). This means the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use information in ways which promote and maintain good health. A patient understanding their medication instructions and taking their medication as prescribed or a person reading and understanding of a food label to make informed dietary choices are very good examples of health literacy.

In view of the need for knowledge to broaden the horizons of patients through health literacy, this implies that health literacy can influence behavioral change by: Enhancing knowledge and understanding of healthy behaviors (Koh et al., 2019), improving self-efficacy and motivation to adopt healthy behaviors (Harrington et al., 2019), facilitating informed decision-making about health (Huang, Plummer, Lam, & Cross, 2020), and reducing health disparities and inequities (Viswanath, Nagler, Bigman-Galimore, McCauley, Jung, & Ramanadhan, 2012). The evolving healthcare landscape, marked by the proliferation of digital health technologies and changing patient-provider dynamics, has created new challenges and opportunities for health literacy (Raji, 2020). This article aims to contribute to the ongoing discourse on health literacy by examining the current state of research, identifying key gaps and challenges, and exploring innovative approaches to promoting health literacy in the 21st century. The power of health communication and health literacy to impacts on diet and exercise behaviors among obese adults extending beyond mere information transfer. By acknowledging the complex philosophical underpinnings of these concepts, we can develop more nuanced, empathetic, and empowering approaches to health promotion, ultimately supporting individuals in their pursuit of health and well-being.

Power of Health Literacy to Influence Behavioral Change:

Since health literacy is the accessibility of information on health which makes the receiver to be well informed on the need to take specific decision on his health. This no doubt can influence behavioral change by enhancing

knowledge and understanding of healthy behaviors (Koh, (2020); improving self-efficacy and motivation to adopt healthy behaviors (Harrington, Brady, Weihrach-Blucher, Edwardson, Gray, Hadjiconstantinou, & Davies, 2021); facilitating informed decision-making about health (Huang, Plummer, Lam, & Cross, 2020) and reducing health disparities and inequities (Viswanath, Nagler, Bigman-Galimore, McCauley, Jung, & Ramanadhan, 2012). Patient education programs improving health literacy and self-management of chronic diseases; health literacy training for healthcare providers to improve communication with patients; public health campaigns using clear and simple language to promote healthy behaviors are very good examples of tools for health literacy.

Diet Behavior: is the habits and practices related to food intake, including the types and amounts of food consumed, as well as the frequency and duration of eating (Huang et al., 2020). The selection and consumption of foods and beverages, including the avoidance or limitation of certain food groups is also known as diet behavior (Lim, Ham, Moon, Jang, & Kim, 2022). For instance, a person following a vegetarian diet and avoiding meat products or an individual limiting their sugar intake and choosing low-calorie snacks could be referred to as observing health behavior

Exercise Behavior: The regular engagement in physical activity, including aerobic exercise, strength training, and flexibility exercises, aimed at improving overall health and fitness" (Cox, Fairclough, Kosteli, & Noonan. 2020). **in other words**, the intentional engagement in physical activity, including leisure-time activities, transportation, and occupational activities, aimed at promoting health and well-being" (Whitsel, Ablah, Pronk, Huneycutt, Imboden, Anderson, & Wojcik, 2023). For examples, a person engaging in 30 minutes of brisk walking per day for cardiovascular health or an individual participating in strength training exercises twice a week to improve muscle mass.

Empowerment through Health Communication Strategies and Health Literacy:

Empowerment is a crucial aspect of health communication, enabling individuals to take control of their health and make informed decisions. Effective health communication strategies and health literacy empowerment can significantly impact obese individuals, promoting healthy behaviors and improving health outcomes. These Health Communication Strategies are important for achieving the result of health communication and health literacy.

Clear and simple messaging: Message is to be encoded in clear terms devoid of any semantic errors or ambiguity. This will ensure proper understanding of the meaning without any confusion. **Visual aids and multimedia resources:** the use of multimedia and visual aids are effective tools for enhanced understanding of the audience in health communication. A practical demonstration will bring clearer view of the meaning of the information. In the recent times, technological advancement has simplified health communication and health literacy for the targeted audience. **Patient-centered communication:** communication should be geared towards the satisfaction of the audience. Whichever of the Abraham Maslow hierarchy of needs that the audiences want to satisfy, if the information is not focused on improving the lives of the audience the receivers may not show more interest in line with the health belief model. **Shared decision-making:** it is the responsibility of healthcare provider to decide on sensitizing the patient on the need to take appropriate decision on his health upon identifying the implications of his action or inaction on obesity. The need for regular exercise to burn his body calories and adhere strictly to diet behaviour with a view to improving his health.

Supportive and non-judgmental approach:

Autonomy in Health Decision-Making:

Every individual has the right to make informed decisions about their health, free from coercion or manipulation. Autonomy is a fundamental principle in healthcare, respecting individuals' independence and self-determination. Health communication strategies and health literacy can support this autonomy, enabling obese adults to make informed choices about their health. These could be achieved through clear and accurate health information; access

to reliable health resources; patient-centered communication; shared decision-making and respect for individual values and preferences. A healthcare provider presents an obese patient with evidence-based information on weight loss options, allowing them to make an informed decision; a patient with obesity is encouraged to ask questions and express concerns, fostering a patient-centered approach and a healthcare organization provides accessible and reliable health resources, empowering obese individuals to take control of their health. Therefore, exposure of the patients to adequate health information allows for independent or freedom to take decisions on his volition as to how to go about his healthcare management.

Health communication strategies and health literacy are good strategies to support autonomy, healthcare providers can empower obese adults to make informed decisions about their health, promoting self-determination and independence. In the contemporary society especially that the world is now a global village, access to health communication and health literacy has been made easier as they are usually available in abundance on the internet or social media thereby making health literacy of the people to be high among those who can read and write.

Philosophy: it could be described as an attempt by man to inquire into and explain the reality, existence or nature of things in general. Putting philosophy in perspective, Omoregbe (2002:19) defined philosophy as the discipline that studies the ultimate principles of things; or as the discipline which deals with the general cause of things; the discipline which studies the universal aspect of things; as a critical reflection on reality or as a critical reflection on human experience; an intellectual and reflective search for the ultimate meaning of reality.

The above definition implies that philosophy covers all aspects of life or experience including other areas of human experience in an attempt to establish the true nature of being. In other words, health communication and health literacy, despite being concepts, are separate areas of human endeavour. Subjecting the two concepts to philosophical appraisal means trying to look at them from the true sense apart from the ordinary meaning. Philosophical analysis to establish the true nature of the concepts with the use of the five principal branches of philosophy.

Metaphysics is the study of the being ultimate nature of human beings beyond what is naturally known about that being. Metaphysics developed into the school of idealism insisting that perfect knowledge of anything of study can be contacted in the world of ideas through pure and critical thinking. **Epistemology** focuses on the reflection about human claims to knowledge. Epistemology enquires into nature, origin, method, extent and limits of knowledge. It basically focuses on how valid and reliable is human knowledge. **Logic** is concerned with consistent and consequential reasoning. Logic deals with orderly reasoning and thought (thinking). It is concerned with how proposition is made, the argument and how the judgment is arrived at. It deals with formal rather than factual inquiry into how human beings make judgment in reasoning

Axiology is a branch of philosophy that deals with the nature of values and value judgements. It is concerned with questions like how do we determine what is valuable or worthwhile as well as what is the relationship between value and reality. In other words, it deals with reflection on the value placed on human conduct. That is the reflection between ethics and morality. **Ontology** focuses on the nature of existence, being and reality. It explores questions like what exist. What is the nature of reality? What is the relationship mind and word? Ontology is concerned with identifying and understanding the fundamental categories and relationship that shape our understanding of the world.

Philosophical Implications of Health Communication and Health Literacy on Audience Behavior

In view of the different branches of philosophy, there is need to examine both health communication and health literacy will be undertaken as an attempt to establish their true nature and essence.

Language: Signs, Symbols and Codes as Tool for health Communication Strategies and Health Literacy

Language is a fundamental tool for health communication and health literacy, enabling individuals to access, understand, and utilize health information. From a philosophical perspective, language can be viewed as a system of signs, symbols, and codes that convey meaning and facilitate communication. This perspective is rooted in the fields of semiotics, linguistics, and philosophy of language. As Charles Sanders Peirce (1931-1958) noted, signs and symbols are essential components of language, carrying meaning (Callaghan, 1986) and context that shape our understanding of health concepts. Similarly, Culler, (1983) emphasized the role of codes in language, highlighting how they govern the way we interpret and create meaning. In the context of health communication and health literacy, understanding language as a system of signs, symbols, and codes is crucial. It enables healthcare providers and health educators to develop effective communication strategies, taking into account the complexities of language and its impact on health outcomes.

Language itself has its own substance in symbols, signs and codes. Therefore, communication is about bringing information to the knowledge of the audience to make them informed and change individual disposition or orientation. This was occasioned by the strength of language in communication. It is because communication creates awareness which is within and not outside the individual. The individual after the process of information coded in signs and symbols decides out of his free will retain or change an existing predisposition about the message of the communication. The decision to allow or change certain disposition to subsist occurs through a process within the mind of individual. The process of rumination of thought and the end products are stored in the memory for future use depends on language through its elements like signs and symbols. Signs can be effectively used in health communication strategies and health literacy initiatives to promote healthy diet and exercise behaviors among obese adults. Here are some examples:

Visual signs: Posters or info-graphics highlighting healthy food choices and exercise tips (Kumar et al., 2016); and images of healthy meals or snacks in cafeterias or vending machines (Thomson et al., 2017) are typical examples of visual signs which are capable of actions. Actions they say is louder than any other words spoken.

Symbolic signs: Logos or icons representing healthy lifestyle choices (e.g., a heart symbol for healthy heart habits) and color-coding systems to indicate healthy or unhealthy food options (e.g., green for healthy, red for unhealthy)

Textual signs: Clear and concise labels on food packaging or menus indicating nutritional information (Bix, Sundar, Bello, Peltier, Weatherspoon, & Becker, 2015) and signs in gyms or fitness centers promoting exercise routines and safety guidelines (ACSM, 2018)

These signs can be used in various settings, such as healthcare facilities, community centers, workplaces, public transportation and social media platforms among others. By utilizing signs in health communication strategies, healthcare providers and health educators can grab the attention and convey key messages quickly, reinforce healthy behaviors and attitudes, support learning and memory retention as well as encourage behavior change and adoption of healthy habits.

Scholars generally agree on the significant role of signs, symbols, and codes as effective strategic communication. These elements are crucial in conveying specific information and instructions, as seen in highway codes (Ogunmola, 2013). Kriaučiūnaitė-Lazauskienė, G. (2020) In marketing and advertising, semiotics allows for better control over the communication process, enabling more effective and persuasive messaging. The use of symbols is integral to every communication process, with their meanings evolving alongside changes in social interaction patterns (Waitoller et al., 2021). However, the effectiveness of these communication strategies depends on the audience's attention and adherence to the conveyed messages, as demonstrated by the challenges faced in implementing highway codes in Nigeria (Ogunmola, 2013).

This translates that language has more to do with audience conviction than the impact of health communication. And if this is so, the idea of persuasion has ontological implication. The question of who and what is responsible for healthcare health consumers comes in. If language is the wheel of human reasoning which determines the decision to accept or adjust the existing attitude or usual practice towards a specific thing such as products and services. This same language coded in signs and symbols which the health communicators assumed to within the cognitive structure of preference of the healthcare consumers that embodied the message sent by the source of which the receivers decoded to make meaning which eventually informed the decision to retain or alter an existing predisposition. Therefore, it is not acceptable to conclude that health communication strategy and health literacy do not influence persuasion but self-conviction.

Similarly, the assumption of the health communicators that the audience shares with him the same understanding of the meaning of the signs and symbols adopted in composing health communication messages has epistemological implications. The question of how literate the healthcare consumers to the health communication providers. If literacy is the ability to identify, understand, interpret, create communicate using signs and symbols. Literacy involves a range of language skills including reading, writing, listening and speaking, visual interpretation (UNESCO, 2004). Then how justified is the belief of the health communicators about the receiver's cognitive structure? The justification or test for the true knowledge from the perspective of A. J. Ayer (Omogegbe, 1998:16) that what an individual claims to know must be true, the individual must be sure of it and the individual should also have the right to be sure. Also,

Recent research emphasizes the importance of evidence in forming justified beliefs. Williamson Stanley, & Williamson, (2001) argues that a subject's evidence consists solely of propositions they know. However, Hardwig's "no-evidence thesis" suggests that knowledge based on expert testimony lacks direct evidence (Boyd, 2022) counters this, proposing that a layperson's reasons for trusting an expert constitute evidence. Alston (2005) highlights the tension between foundationalist and coherency approaches to justification, emphasizing the need for beliefs to be both true and justified to qualify as knowledge. Grabman, et al. (2024) explore strategies for accurately estimating evidence quality when it is uncertain, demonstrating through simulations the impact of misjudging evidence quality on belief formation. They identify conditions where accurate beliefs can still emerge despite evidence quality misjudgments, as well as situations where no strategy proves effective. Using these conditions as factor for epistemological appraisal, it is obvious that health communicators cannot fulfill all these conditions which make his assumption of true knowledge healthcare consumer's cognitive dissonance. What other substantial evidence can the health communicators provide for believing in his claimed knowledge of health communication consumers sharing the same understanding of signs and symbols used in packaging health communication messages? Except if health communicators ascribed persuasion to the results of the reception of health communication messages to the healthcare consumers. That is if any persuasion happened and if there is any evidence of feasible change in the predisposition towards the objective of the health communication messages and health literacy

Health communication strategies and health literacy play crucial roles in influencing audience behavior. Health communicators should employ a combination of approaches, including health behavior theory, plain language techniques, and targeted dissemination strategies to address limited health literacy and reach diverse populations (Brawer & Pham 2023). Understanding public health attitudes and behaviors is essential for determining the type, frequency, and format of messages to improve individual and community health practices (Petrescu-Mag, Petrescu, Ivan, & Tenter, 2023). However, there is often a gap between how scientists communicate and how people interpret messages. To bridge this gap, it is important to integrate science communication literature with health literacy research and anthropological insights on cultural variations in message comprehension (Collyer, 2023). Additionally, considering rapid changes in information access and involving communities in developing communication strategies can enhance the effectiveness of health messages and promote positive behavior change (Harrington & Record 2024).

However, health literacy encompasses functional, interactive, and critical skills that empower individuals to overcome health barriers (Porr, Drummond & Richter 2006). Effective communication strategies should address both structural and individual causes of health issues, tailoring messages for improved persuasiveness (Baxter, 2020). This is particularly important for vulnerable populations, such as immigrants, who face language, cultural, and economic challenges (Kreps & Neuhauser, 2015). eHealth interventions show promise in engaging diverse audiences and positively impacting health behaviors through interactivity, multimodality, and mass customization (Neuhauser & Kreps, 2010). However, challenges remain in improving information access for vulnerable groups and leveraging new media channels effectively. To enhance health communication effectiveness, strategies should incorporate audience participation, consider social contexts, and utilize integrated multimedia approaches (Kreps & Neuhauser, (2015).

The evolving healthcare landscape, marked by the proliferation of digital health technologies and changing patient-provider dynamics, has created new challenges and opportunities for health literacy (Kim et al., 2020; Neuhauser & Kreps, 2018). This article aims to contribute to the ongoing discourse on health literacy by examining the current state of research, identifying key gaps and challenges, and exploring innovative approaches to promoting health literacy in the 21st century. Health communication and literacy face significant challenges in the contemporary technological era. Mobile health (mHealth) applications, while promising, often struggle to match content with users' health literacy levels, potentially limiting their effectiveness (Ouédraogo, 2024). Health literacy, encompassing functional, interactive, and critical components, is crucial for empowering individuals to overcome health barriers (Mancuso, 2008). The Internet has become a primary health information source for adolescents, but their ability to benefit depends on their media and health literacy skills (Shabi, & Oyewusi, 2018). Challenges include functional literacy (e.g., spelling medical terms), critical literacy (distinguishing accurate information), and interactive literacy (applying information to health behaviors) (Jain & Bickham, 2014). To address these issues, audience segmentation based on health information orientation and literacy levels can facilitate targeted communication strategies (Strekalova, (2014). A multifaceted approach involving various stakeholders is necessary to effectively tackle these challenges and improve health outcomes.

For health communication strategies and health literacy to realise the objectives depends on the power of cognitive and belief or value of the audience. Going by the arguments that health communication strategies and health literacy has the power to persuade and influence the health behaviour of the audience yet, there are factors that determines the influence of persuasion on the audience as literacy level and exposure reflects in whether to accept the new idea or to retain the old ones that are known to be reliable to some extent. This is where the audience selective retention and cognitive dissonance comes in.

Conclusion

It is true that health communication strategies and health literacy plays significant role in persuading the audience. The philosophical appraisal of true nature of audience persuasion and the role played by health communication and health literacy indicates that audience persuasion depends on audience independent decision influenced by many reasons of which health communication and health literacy may be part of them. Persuasion is not necessarily influenced as communication involves more than one party, it is informed of synergy. Therefore, the generality of health communication strategies and health literacy should be planned and executed to meet the needs of the audience.

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