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Persuasive Strategies in WHO's Dengue Awareness Posters: ELM-Based Content Design in Vietnam

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Abstract

Public health communication is essential for raising awareness and influencing behavior. In Vietnam, dengue fever remains a major health concern, with WHO-designed posters promoting prevention and management. However, their persuasive effectiveness remains underexplored. This study applies the Elaboration Likelihood Model (ELM) to analyze these posters and propose improvements. A qualitative content analysis of eight WHO dengue prevention posters published on Facebook (September 2022–2023) examined central cues (message clarity, logical argumentation, action-oriented guidance) and peripheral cues (visual appeal, emotional engagement, source credibility). Findings show a strong reliance on central cues, while peripheral elements—such as striking visuals and digital engagement—are underutilized, limiting persuasive impact. To enhance effectiveness, the study recommends improving visual appeal, incorporating emotional triggers, and optimizing digital engagement. These insights contribute to applying ELM in health communication and improving public health messaging in Vietnam.

Keywords: *ELM, health communication, persuasiveness in media, poster analysis*

INTRODUCTION

In Vietnam, health communication has gained increasing attention as an essential tool for public health campaigns. Specifically, the COVID-19 pandemic has underscored the urgency of investing in, researching, and developing more effective communication strategies. As a result, encouraging individuals to take an active role in their own healthcare and make informed health decisions has become a crucial need in modern society (Ishikawa & Kiuchi, 2010). Among various public health communication methods, propaganda posters remain one of the simplest yet most widely used tools. However, with the rapid advancement of digital media, particularly the expansion of the internet and social networks, the way people seek and access health-related information has significantly changed. Instead of relying solely on official health organizations, individuals are now more proactive in engaging with diverse information sources, including social media platforms and independent online channels (Hesse et al., 2005; Napoli, 2001). Consequently, while propaganda posters continue to play a role in health communication, ensuring their effectiveness in today's digital landscape presents new challenges. In this context, it is important to explore how these posters can remain impactful and how health agencies can adapt their strategies to enhance public engagement. To address

this issue, this article applies the Elaboration Likelihood Model (ELM) to analyze how propaganda posters influence public perception and decision-making, particularly in the context of dengue fever awareness campaigns in Vietnam. In Vietnam, dengue fever has become increasingly severe over these past years. Especially, in 2022, the country recorded 367,729 cases—the highest number reported between 1980 and 2023 (Ngoc Diep, 2024). By examining the cognitive processes involved in message reception, this study aims to provide valuable insights into optimizing the design and content of these posters for greater engagement and effectiveness. Moreover, it proposes strategic recommendations for health agencies to improve their communication efforts, ensuring that public health messages not only reach a wider audience but also resonate more effectively in the modern media landscape.

The Elaboration Likelihood Model (ELM) was developed by Petty and Cacioppo (1986) to explain how individuals process information and subsequently change their attitudes and behaviors after receiving a message. According to this model, attitude change occurs through two primary routes: the central route and the peripheral route. The central route involves individuals actively engaging in analytical thinking and logical reasoning to evaluate and interpret messages, leading to a more enduring attitude change. In contrast, the peripheral route relies on external cues, such as the credibility or attractiveness of the message source, rather than deep cognitive processing, resulting in more superficial and temporary attitude shifts (Petty & Cacioppo, 1984; Cacioppo, Petty, & Stoltenberg, 1985; Bhattacherjee & Sanford, 2006). The effectiveness of each route depends on several factors, including an individual's knowledge base, reasoning ability, and motivation to process information (Cheung et al., 2009). Additionally, message-related factors, particularly source credibility and potential biases, play a crucial role in enhancing the persuasiveness of the information (Susmann et al., 2022; Andreoli & Worchel, 1978; Briñol & Petty, 2009; Chaiken & Maheswaran, 1994; Smith & Shaffer, 1995). In the context of the modern media landscape and the sharing economy, research on the ELM model has primarily focused on specific factors such as online reviews and second-hand information posts, examining their impact on users' attitudes and perceived credibility of services and products in e-commerce and online business (Thomas, Wirtz, & Weyerer, 2019; Tian et al., 2021). However, while studies have explored the application of ELM in social networks, they have largely concentrated on promotional marketing messages—such as product recommendations and advertisements—rather than extending its use to other domains like health communication or political messaging (Teng, Khong, & Goh,

2014). This gap presents an opportunity for further research into how ELM can be applied to fields beyond commercial marketing, particularly in public health campaigns where effective message dissemination is crucial.

Meanwhile, studies applying the ELM model in health communication provide valuable insights into how health messages are designed to enhance persuasion and influence public health behaviors, such as promoting physical activity and discouraging harmful habits like smoking and unhealthy eating (Petty et al., 2017; Flynn et al., 2011; Withers et al., 2002). While a growing body of research has examined the factors that persuade individuals to adopt healthier lifestyles, there remains a significant gap in understanding how people cognitively process health-related information, particularly when messages are conveyed in a visual format (Lam, Huang, & Shen, 2022). Despite the increasing reliance on visual communication in public health campaigns, researchers have yet to fully explore how visual elements interact with cognitive processing to shape attitudes and behavior change.

Previous research on visual health communication has demonstrated that different types of images, such as illustrations, data charts, and photographs, can significantly influence key factors such as attitudes, attention, memory, and health-related behaviors (King & Lazard, 2020). Visual content in health communication is generally categorized into two main types: graphic images (e.g., data charts) and illustrations (e.g., photographs and visual depictions) (King, 2015). Among these, research on illustrations includes studies examining the impact of public health posters on citizens' attitudes and behaviors. Over time, educational propaganda posters have evolved to better align with changing media audiences. In the early 20th century, such posters often failed to reflect racial and linguistic diversity while reinforcing prevailing social norms (Griffin, 2015). However, by the 1950s and 1960s, poster design increasingly incorporated emotional appeals and diversified messages to reach broader segments of society (Elizabeth, Millward, & Mold, 2019). In today's digital media landscape, integrating artistic creativity and emotional elements—such as humor—has been shown to enhance public receptiveness to health messages, particularly during public health crises like the COVID-19 pandemic (Verma, 2022). Moreover, to effectively engage younger audiences, both the format (e.g., leveraging social media platforms and collaborating with influencers) and content (e.g., incorporating relatable language, interactive features, and dynamic graphics) of public health posters must be carefully adapted (Hamilton & Harper, 2024).

In general, research on the application of the ELM model in communication—particularly in health communication—primarily focuses on analyzing factors that influence

message effectiveness when conveyed to the public. However, these studies often emphasize the persuasive mechanisms of messages processed through the peripheral route, especially those relying on visual cues rather than deep cognitive engagement. Furthermore, the use of the ELM model to analyze health education posters remains relatively unexplored, both globally and in Vietnam. Despite the widespread distribution of disease awareness posters in Vietnam for many years, there is a notable lack of research evaluating the effectiveness of their messaging strategies. Among the limited studies available, Lam Van Dung and Nguyen Trung Nghia (2023) highlighted the limitations of relying solely on posters for information dissemination, suggesting that this approach is insufficient in influencing public behavior. Given this gap, the following article will apply the ELM model to analyze dengue fever awareness posters in Vietnam. Dengue fever was chosen as the focus of this study due to its prevalence in tropical countries, including Vietnam, where outbreaks occur frequently. In recent years, the country has consistently reported high case numbers, with a significant outbreak recorded in November 2024, when the Ministry of Health reported a total of 114,906 cases (Ministry of Health, 2024). By examining the effectiveness of dengue fever awareness posters through the lens of the ELM model, this study aims to provide insights into improving public health communication strategies in Vietnam.

RESEARCH METHODOLOGY

To examine how dengue fever awareness posters utilize persuasive mechanisms, this study selected posters published on the official Facebook page of the World Health Organization (WHO) in Vietnam (at https://www.facebook.com/WHOVietnam). The decision to analyze posters from an online platform was based on the convenience of storage, accessibility, and the ability to systematically review and reanalyze the materials when needed. Additionally, Facebook is the preferred platform due to its popularity. According to a report from the Ministry of Information and Communications, as of June 2024, Facebook had 72 million users, making it the second most-used social network in Vietnam after Zalo (Trong Dat, 2024). The selected posters were sourced from the "Everything About Dengue" album in the WHO Vietnam Facebook archive (the facebook page itself has 320,000 followers). This album contains a total of eight posters, posted between September 13, 2022, and September 8, 2023. Notably, seven of these posters were published between September and November 2022, with only one additional poster released in September 2023. It is important to highlight that this period—September to November—coincides with Vietnam's peak dengue fever season, when environmental conditions are most favorable for mosquito activity (Luong, 2024). By

focusing on this critical period, the study aims to assess the effectiveness of WHO's dengue fever communication strategies during the height of the outbreak season in Vietnam.

This study does not include posters produced by Vietnamese government health agencies, despite their role as one of the primary sources of health and epidemiological communication, including dengue fever awareness. Instead, the analysis focuses on posters issued by the World Health Organization (WHO), based on the premise that their informational content and presentation are shaped by an international organization rather than a national governing body. By examining WHO posters, this study aims to explore how globally oriented health communication strategies influence public awareness and behavior in Vietnam.

The collected posters will be analyzed through both the central and peripheral routes of the ELM model. Specifically:

Central processing route: This approach emphasizes the logical evaluation of messages. In this mode of information processing, the recipient actively engages in reasoning and critical thinking about the content presented (Stanley & Dennis, 2021). In other words, when individuals are encouraged and given the opportunity to carefully consider a persuasive health message related to dengue fever, they are more likely to be influenced through the central route. With this method of persuasion, the quality of the message plays a crucial role in providing information and evidence that stimulate cognitive engagement. While existing studies on the ELM model have not established a universal framework for assessing message quality, several key factors are commonly recognized, including clarity, coherence, and persuasive appeal (Wagner & Petty, 2022). Particularly, in this paper, the following aspects will be considered: 1) Clarity of content: Key messages—such as guidance, symptom warnings, and prevention measures—are presented in a clear and easily understandable manner; 2) Scientific accuracy: Information and terminology related to the disease are conveyed accurately, with specific explanations to enhance comprehension; 3) Call-to-action language: The message is framed in an encouraging and actionable way, directly guiding the audience toward specific preventive measures; 4) Audience relevance: The content is tailored to a specific target group, incorporating relevant details, visuals, and language that resonate with that audience.

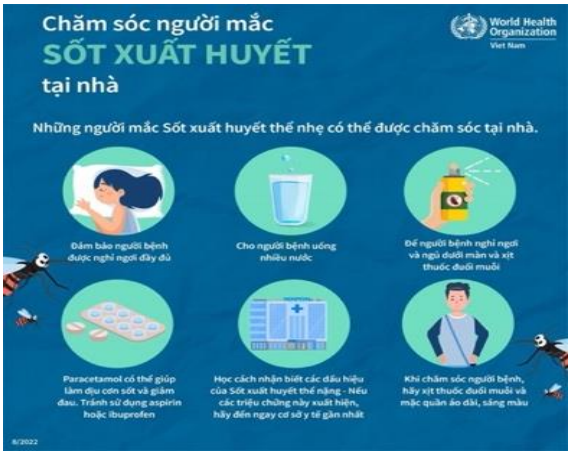
Peripheral processing route: messages are processed based on factors unrelated to the content's substance, such as the attractiveness of the information source, visual and auditory

appeal, or other surface-level cues (Stanley & Dennis, 2021, 266). In this case, recipients rely on heuristic cues—particularly the perceived credibility of the source—rather than engaging in deep logical reasoning to form attitudes and judgments about the message (Hass, 1981). Following this logic, the following factors from posters will be analyzed: 1) Visual appeal: The use of vibrant colors, striking images, and well-designed elements enhances the poster's ability to capture attention; 2) Emotional impact: The message is crafted to evoke strong emotions, such as fear (of infection) or hope (for prevention), to influence audience perception and engagement; 3) Iconography: Clear, visually appealing icons—such as depictions of mosquitoes, medications, or prevention methods—aid in making the information more recognizable and easier to process; 4) Source credibility: Familiar logos from reputable health organizations (governmental or international) are prominently displayed to reinforce trust and authority.

After carefully analysing the posters under the lens from the ELM model, they will also be evaluated to understand the general trends of creating persuasive messages in this specific health communication activities (posters in health communication). In particular, the following aspects are examined: 1) The reciprocity between emotional appeal (peripheral) and key disease information (central); 2) The reciprocity between the image (peripheral) and the scientific, logical aspects of the message (central).

FINDINGS AND DISCUSSIONS

a. Posters Analysis



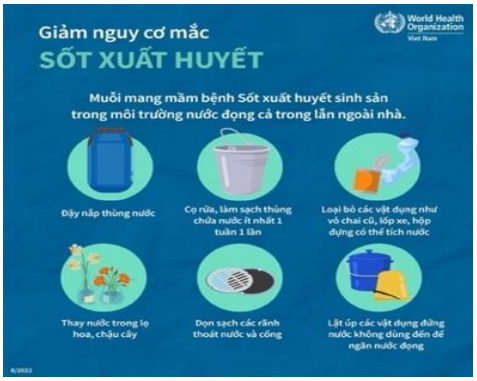
Picture 1. Poster 1 – posted September 13, 2022

(https://www.facebook.com/photo/?fbid=173824008495053&set=a.184403310770456)

Central processing route : information is conveyed in easy-to-understand, clear language, with a logical connection between the main title (taking care of people with dengue

fever at home) and information on how to take care of people at home, making it easy for viewers to associate the meaning. Scientific terms are hardly used, except for the names of common drugs (paracetamol, aspirin, ibuprofen). The names of drugs are not transcribed into Vietnamese (or annotated according to the name of each drug) but are clearly linked to their uses (relieving fever and relieving pain). The messages presented on the poster tend to call for actions corresponding to the information given (make sure, give…, let…, avoid…, learn how to…, … go to a medical facility immediately, when taking care of…, spray… and wear…). In addition, the message is expressed in universal language,making the content easy to understand for the general public (except the name ibuprofen may cause some difficulties).

Peripheral processing route : The dominant color scheme across all eight posters consists of blue and turquoise tones, with the disease name DENGUE FEVER prominently capitalized and highlighted in turquoise to draw attention. The combination of blue and pastel shades, along with white text, is consistently applied throughout the designs. Beyond their aesthetic appeal, these colors—especially blue—are known to evoke feelings of relaxation and calmness, contributing to a visually soothing experience for the viewer. Research suggests that blue tones can positively influence mood and enhance creativity (Khaleghimoghaddam, 2023). Additionally, the posters incorporate easily recognizable symbols, such as tablets, water, mosquitoes, sprays, and hospitals, ensuring clear visual associations. Notably, the mosquito is depicted as a stylized illustration rather than a real image, making it more engaging and less distressing for viewers. To reinforce credibility, the posters prominently feature the World Health Organization (WHO) logo along with the organization's name, specifically stating "WHO Viet Nam," in the right corner of each design.

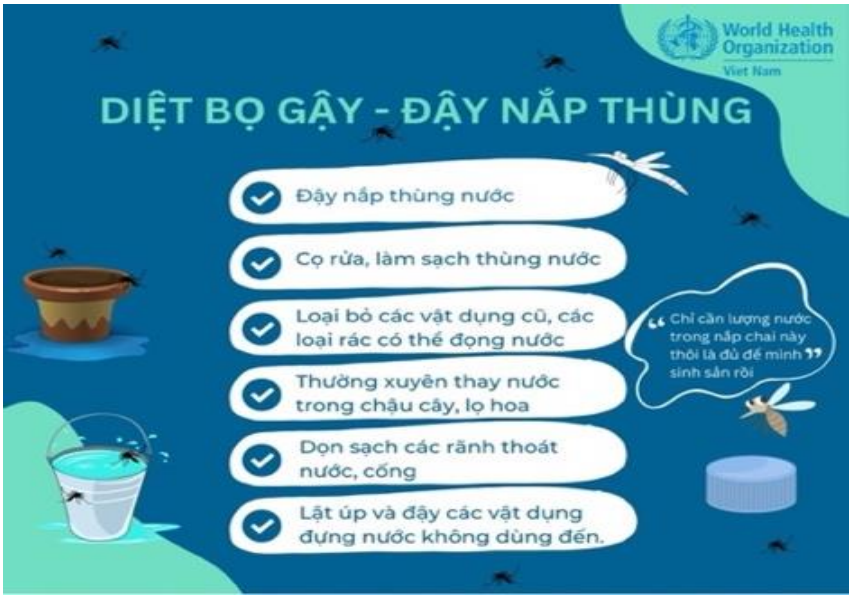


Picture 2. Poster 2 – posted October 7, 2022
(https://www.facebook.com/photo/?fbid=178676221343165&set=a.184403310770456)

Central processing route : similar to poster 1, poster 2 delivers a message on reducing the risk of dengue fever by following a structured approach. First, it clearly identifies the

breeding grounds of disease-carrying mosquitoes—specifically stagnant water environments. Based on this, the poster outlines corresponding preventive actions to eliminate these conditions, forming the core content of the message. This logical progression ensures clarity and makes the information easy to follow. Additionally, the poster avoids the use of complex scientific or foreign terms, allowing general viewers to quickly absorb and understand the message. Furthermore, the content effectively links key information with actionable directives, using imperative phrases such as "cover," "scrub," "clean," "remove," "change water," and "turn upside down" to reinforce preventive measures.

Peripheral processing route : The color scheme and visual presentation in poster 2 closely resemble those in poster 1. The symbols used in the design depict everyday objects familiar to the public, making the message more relatable and easily understood. The illustrations are simple and straightforward, maintaining harmony with the overall blue-toned color palette. Additionally, the World Health Organization (WHO) Viet Nam logo and name are positioned consistently in the same location as in poster 1, reinforcing brand recognition and credibility.



Picture 3. Poster 3 – posted October 14, 2022

(https://www.facebook.com/photo/?fbid=179930147884439&set=a.184403310770456)

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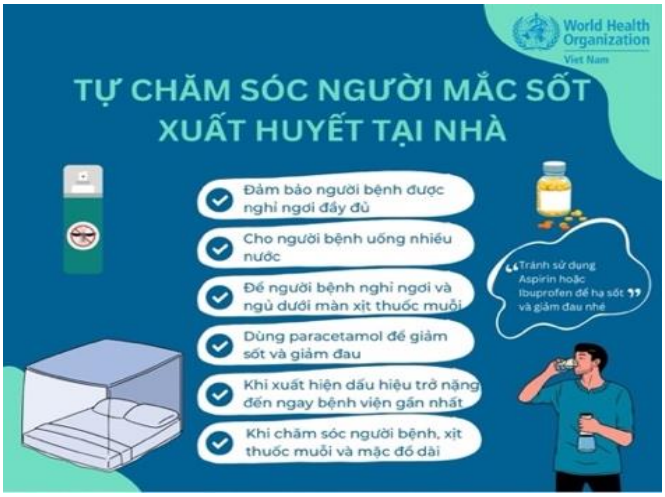
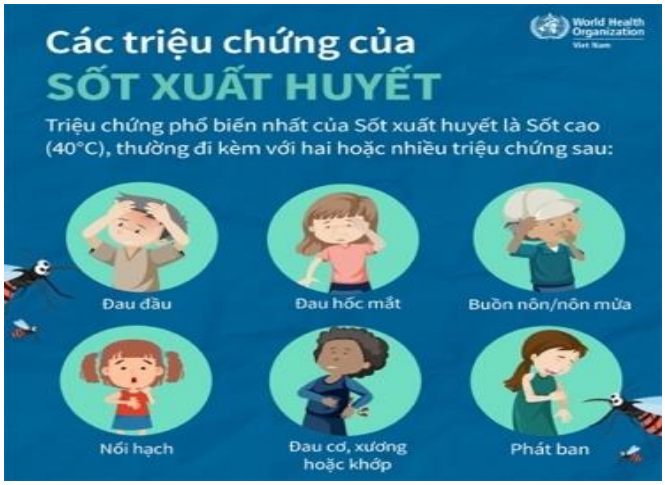


Picture 4. Poster 4 – posted October 19, 2022

(https://www.facebook.com/photo/?fbid=180795087797945&set=a.184403310770456)

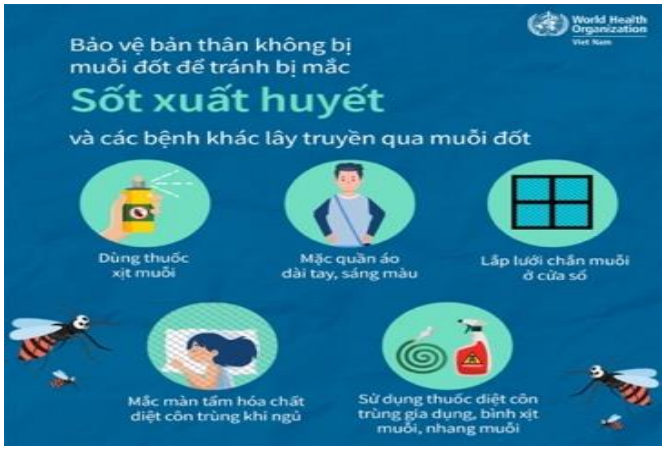
Central processing route: The information is presented in the form of a checklist in both poster 3 and 4, making the message more structured and action-oriented. A large, prominent headline establishes a strong connection with the key message, while complementary details—such as a list of recommended actions—are positioned alongside it. These supporting points are visually framed as thoughts (enclosed in quotation marks) and paired with corresponding subject images to enhance clarity. Posters 3 and 4 continue to use action verbs; however, the sense of urgency and encouragement is heightened due to the checklist format, which reinforces the call to action. Additionally, no scientific terms appear in either poster, except for the mention of a commonly known drug in poster 4.

Peripheral processing route: The blue tone remains consistent across posters 3 and 4, maintaining visual coherence with the previous designs. However, compared to Posters 1 and 2, the number of images is noticeably reduced, with a stronger emphasis on illustrating a key message (poster 3) or highlighting important information (poster 4). Notably, both posters incorporate an emotional connection by presenting information in a thought-based format—poster 3 features the mosquito's thoughts, while poster 4 portrays the patient's perspective. This approach enhances viewer engagement by making the message feel more personal and relatable. Additionally, while the logo and name of the World Health Organization remain in the same position as in posters 1 and 2, they are framed differently, appearing in a blue-colored box instead of the previous white frame, subtly distinguishing these posters within the series.



Picture 5. Poster 5 – posted October 27, 2022

(https://www.facebook.com/photo/?fbid=182815980929189&set=a.184403310770456)



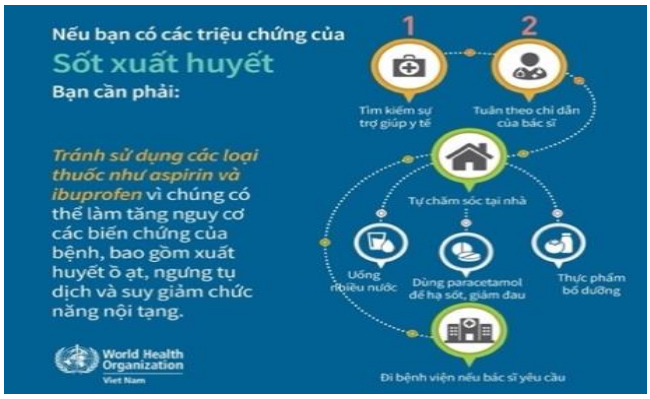
Picture 6. Poster 6 – posted November 9, 2022

(https://www.facebook.com/photo/?fbid=185919223952198&set=a.184403310770456)

Central processing route: The message in posters 5 and 6 follows a similar structure to posters 1 and 2, maintaining a clear connection between the title and the main content. For instance, poster 5, titled *Symptoms of Dengue Fever*, provides a list of symptoms associated with the disease, with a notable emphasis on *high fever of 40 degrees Celsius*. However, the listed format may unintentionally lead to confusion, as the symptoms appear independent rather than being understood as accompanying a common condition—*a high fever of 40 degrees Celsius*. In contrast, poster 6 establishes a stronger logical connection between its title, *How to Protect Yourself from Dengue Fever*, and the main content, which consists of a list of preventive measures. While the title also implies broader protection against mosquito-borne diseases, this aspect is not emphasized as prominently as the dengue-specific information, potentially causing recipients to overlook it. The appeal and coherence of the message are

most evident in poster 6, where the link between the title and content is more explicit. Additionally, both posters avoid the use of scientific terminology, opting for simple and accessible language—particularly when describing symptoms such as *pain in the eye socket* and *swollen lymph nodes*. This choice enhances readability and ensures the message remains relatable to a general audience.

Peripheral processing route: The main color scheme and visual style in poster 5 and poster 6 remain consistent with poster 1 and 2, ensuring a cohesive design across the series. In poster 5, the symbolic illustrations of symptoms depict a diverse range of individuals, including different ages and genders (*elderly, young, male, and female*), all shown with painful expressions and discomfort, fostering an emotional connection with the audience. However, some symptoms, such as vomiting and swollen lymph nodes, are not as clearly illustrated, making them less immediately recognizable. Both posters 5 and 6 prominently feature the Aedes mosquito, reinforcing the visual association between the insect and its role as the primary cause of dengue fever.

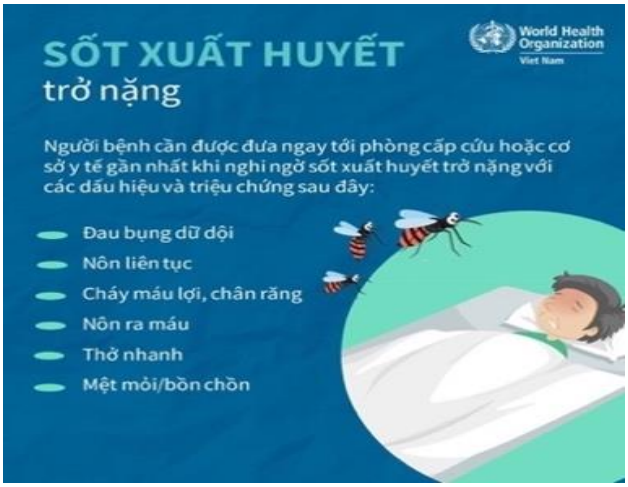


Picture 7. Poster 7 – posted November 16, 2022

(https://www.facebook.com/photo/?fbid=187588673785253&set=a.184403310770456)

Central processing route: Unlike the previous posters, poster 7 presents information in the form of a step-by-step process, visually structured through numbered steps (1 and 2) and connecting lines that create a clear sequential flow. Supporting information is placed alongside the diagram, with key points highlighted in a different color to emphasize their importance. Unlike earlier posters, poster 7 incorporates drug names and scientific terms related to medical conditions (ibuprofen, aspirin, complications, bleeding, fluid accumulation, organ failure) to enhance the credibility and depth of the message. While the language remains accessible to the general public, the inclusion of medical terminology increases the complexity of the message, making it potentially more challenging for some audiences to fully grasp.

Peripheral processing route : The primary color remains blue, but unlike posters 1, 2, 5, and 6, poster 7 contains fewer visual elements. The instruction "avoid using drugs such as aspirin and ibuprofen" is highlighted in yellow, drawing attention to its importance. Additionally, icons for step 1 (seek medical help) and step 2 (follow your doctor's instructions) are clearly displayed, reinforcing the sequential process. Unlike previous posters, this one lacks emotionally engaging elements, focusing instead on clear, informative visuals. The icons are well-defined, easy to recognize, and effectively illustrate the key information, ensuring clarity and accessibility.



Picture 8. Poster 8 – posted September 8, 2023

(https://www.facebook.com/photo/?fbid=314280571116062&set=a.184403310770456)

Central processing route: The message is clearly structured and presented in the form of a checklist, similar to poster 3 and 4, allowing for step-by-step information processing. The call to action (urging immediate action) appears only once, strategically placed in logical connection with the list of symptoms. Additionally, the symptoms are described in common language, making them easier to understand compared to poster 7, which includes more technical medical terms. This approach enhances clarity and accessibility, ensuring that the information is readily comprehensible to the general public.

Peripheral processing route: The images in the poster are directly linked to its core message—the worsening of dengue fever. The depiction of a seriously ill person is designed to evoke fear and concern, reinforcing the severity of the disease and prompting the audience to take precautions. Additionally, the Aedes mosquito image reappears, emphasizing the direct cause of the illness and reinforcing the association between the mosquito and dengue fever.

The World Health Organization's information remains consistently placed in the upper right corner, maintaining credibility and authority across the posters.

b. General assessment

Overall, the images in the posters effectively align with their respective messages. The visuals are relatively diverse, depicting individuals of different ages and genders, and they are vivid in their depiction of actions and facial expressions, particularly in conveying pain and discomfort. The Aedes mosquito appears repeatedly (in posters 1, 3, 5, 6, and 8), reinforcing its role as the primary disease vector. Additionally, symbols such as hospitals, medical tools, and doctors are easily recognizable and closely tied to the intended messages.

However, the images primarily serve an illustrative function rather than creating a strong visual impact. The color palette relies heavily on light tones, and the drawings are simplified, with minimal detail in facial features and body parts.

Regarding emotional elements, the dominant color is blue (blue and turquoise), which, according to Khaleghimoghaddam (2023, 227), evokes a sense of peace, relaxation, and trust. In posters 5 and 8, the emotional appeal is heightened through facial expressions that clearly convey pain and distress. Additionally, red and yellow are strategically used to increase focus, tension, and urgency, particularly in the depiction of the red mosquito and key warning messages.

In summary, while the posters maintain positive emotional reinforcement through blue tones, they also leverage red and yellow for heightened awareness in critical messages. This demonstrates a connection between peripheral and central processing routes, where images and colors support the persuasive intent of each poster. However, the lack of color variation across all posters, including those with urgent warnings (posters 7 and 8), results in a limited visual impact. The uniform use of blue, even for high-alert messages, suggests a missed opportunity to tailor colors to specific message objectives, reducing the overall effectiveness of visual engagement.

c. ELM model in dengue fever propaganda posters

Regarding the message transmission trend : through an analysis of how the posters present their messages, it is evident that they primarily target the public through the central route of persuasion. Since the dengue fever messages focus heavily on central processing, recipients' attitudes are more likely to be retained longer, processed more deeply, and lead to more predictable behavioral outcomes (Stanley & Dennis, 2021, 268). Given that the posters

convey complex and essential health information, such as disease prevention, symptoms, and preventive measures, adopting a central processing approach is logical and enhances the effectiveness of message retention (Chen & Chaiken, 1999).However, the combination of central and peripheral routes must ensure message consistency, as peripheral cues can sometimes distort or interfere with the central processing of information (Ibid). Among the analyzed posters, most visuals align well with the intended messages and provide clear illustrations, with the exception of poster 5, where the worsening symptoms of dengue fever are not entirely consistent with the accompanying images.

Overall, the posters predominantly rely on the central processing route while incorporating colors and images to support information retention. This combination helps the message reach the audience more quickly while ensuring lasting impact. Nevertheless, greater consideration of peripheral stimuli could further enhance persuasion, as studies have highlighted the role of visual imagery in increasing the effectiveness of health messages (Lam, Huang, & Shen, 2022). In particular, presenting information in infographic formats (such as in poster 7) can facilitate higher levels of inference and engagement compared to text-heavy designs.

Regarding the factors affecting the ELM model : studies on the Elaboration Likelihood Model (ELM), particularly in the healthcare sector, emphasize the crucial role of information sources in establishing credibility and enhancing message persuasiveness, particularly within the peripheral information processing system. The source of a message strongly influences trust-building (a peripheral factor) while simultaneously enhancing message quality (a central attribute factor) (Quin et al., 2022; Susmann et al., 2021; Tian et al., 2021).

In the analyzed posters, the World Health Organization (WHO) logo appears consistently in either the right (primarily) or left corner, with its color scheme aligning with the main tones of the posters (blue or white). Alongside the logo, the English name ("World Health Organization") and its Vietnam office designation are clearly presented. By prominently displaying this information, the posters aim to reinforce credibility and authority by leveraging the reputation of a globally recognized health organization. The WHO's established expertise in public health, particularly in Vietnam, enhances the legitimacy and reliability of the messages. Furthermore, WHO's global recognition contributes to the international credibility of the information, increasing the likelihood of message acceptance among the public.

Notably, in the context of rising health communication efforts on the internet, the analyzed posters were also published on the WHO Vietnam Facebook page. In such digital spaces, online word-of-mouth (WOM)—expressed through shares, likes, and comments—plays a significant role in influencing peripheral processing, thereby increasing persuasiveness (Qin et al., 2022). However, within the scope of this study, analyzing online WOM factors was not conducted, as the focus remained on the content of the posters rather than the associated posts. Nonetheless, an initial observation of engagement levels shows that posts containing these posters received limited shares (13–48 per post) and very few comments (0–1 per post), with little substantive discussion. This suggests that WHO Vietnam has not actively implemented strategies to enhance online WOM dynamics, which could otherwise play a crucial role in boosting message reach and public engagement in health communication efforts.

CONCLUSION

This study contributes to the analytical application of the Elaboration Likelihood Model (ELM) in health communication, particularly in the field of public health messaging. By analyzing the content of eight dengue fever awareness posters posted on the Facebook page of the World Health Organization (WHO) in Vietnam, the study reveals that these posters primarily aim to influence the public through the central processing route. This emphasis can be attributed to the complex nature of dengue fever-related messages, which require in-depth cognitive processing and logical evaluation. Additionally, WHO's goal of fostering long-term awareness and behavioral change further supports the decision to prioritize central processing.

However, the findings also highlight limitations in the use of peripheral cues to enhance message persuasiveness. Specifically, the visual elements and color schemes used in the posters are not particularly striking or engaging, potentially reducing their immediate appeal. Additionally, the lack of active strategies to promote online word-of-mouth engagement limits the potential for broader audience reach and message reinforcement.

Based on these insights, the study recommends enhancing the visual appeal of posters and optimizing post content to better support both central and peripheral processing, thereby improving the overall effectiveness of health communication. Furthermore, these findings open new research directions for applying the ELM model—and similar theories related to media cognition and information processing—to health communication in Vietnam, exploring more diverse formats such as music videos, short films, and interactive media.

Within the scope of this study, the research was conducted on a limited number of poster samples, specifically analyzing a series of dengue fever awareness posters posted in a dedicated folder on the WHO Vietnam Facebook page. While additional dengue-related posters exist on the same platform, some of which use different message delivery approaches, they were not included in this study due to challenges in retrieval, searching, and differences in content development strategies.

Furthermore, the study acknowledges the need for broader data collection to enhance the diversity of perspectives on this topic. Future research should consider expanding the dataset by incorporating posters from other sources, such as the Vietnamese government's health agencies and private hospital organizations. This would provide a more comprehensive understanding of health communication strategies in Vietnam.

Additionally, this study focuses solely on poster content as the primary factor in evaluating the impact of message processing within the ELM model. However, for a more comprehensive analysis, it is essential to consider recipient-related factors, including individual needs, emotional states, and personal characteristics that influence information reception and processing. Future research should explore these audience-specific variables to clarify their role in shaping the effectiveness of health communication strategies within the framework of modern medical communication.

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