

## The Use of Effective Sentences in Health Promotion Posters by Pharmacy Students

**Ripi Hamdani**

Doctoral Student of Indonesian Language Education

Muhammadiyah University Prof. DR. HAMKA, DKI Jakarta, Indonesia, 12740

[ripihamdani@uhamka.ac.id](mailto:ripihamdani@uhamka.ac.id)

### Abstract

This study aims to analyze the effectiveness of sentences in health promotion posters designed by pharmacy students using Google Sites. Employing a qualitative descriptive approach, the research focuses on 45 digital posters created by students of the Faculty of Pharmacy at Muhammadiyah University of Riau. Data was collected through poster documentation and limited interviews, then analyzed based on Tarigan's (2008) principles of effective sentences, which include unity of ideas, word economy, structural coherence, diction accuracy, and logical clarity. The results indicate that most posters excelled in unity of ideas (84.4%) and diction accuracy (73.3%), reflecting students' ability to convey core messages and choose appropriate vocabulary. However, challenges were observed in word economy (46.7%) and logical clarity (53.3%). Common issues included unnecessary word repetition, the use of technical terms without explanation, and assumptions about the audience's prior knowledge. This suggests that while students can develop scientifically accurate content, adapting language for a general audience remains an area for improvement. These findings highlight the need to simplify scientific language into more accessible communication without losing informational accuracy. Additionally, the study emphasizes the importance of balancing verbal and visual effectiveness, as health posters must be both attention-grabbing and easy to understand. Therefore, it is recommended that pharmacy students receive training in concise writing and audience analysis, particularly in the context of health promotion targeting the general public. This study has limitations, including a sample limited to one institution and the lack of behavioral impact measurement from the posters. Thus, further research is recommended to combine linguistic analysis with empirical testing, such as audience comprehension surveys or field experiments. Moreover, developing interdisciplinary training modules integrating health content with popular communication strategies could serve as a long-term solution to enhance the effectiveness of health promotion materials among pharmacy students. By providing a critical evaluation of student work, this study not only identifies areas for improvement but also opens opportunities for innovative pharmacy education that is more responsive to public health communication needs.

**Keywords:** Effective Communication, Health Promotion, Pharmacy Students, Poster Design, Sentence Structure

## Introduction

In the era of digital information and global challenges in the health sector, public communication on health issues is a crucial element in shaping public understanding and behavior. (Zhang et al., 2024) Efforts to convey health messages effectively depend not only on the content, but also on how the message is communicated. (Al-Knawy et al., 2023) Among the various communication media used, health promotion posters are one of the most commonly used media because they are visual, concise, and can reach a wide audience quickly. (Adebisi et al., 2023).

According to (Nurvita & Chotimah, 2022) The effectiveness of health posters is greatly influenced by sentence structure and the choice of appropriate diction so that the message is clearly received by the public. Pharmacy students, as future health workers, have a strategic role in educating the public. (Munanjar et al., 2023) In community service activities, campus activities, and professional practice programs, they are often involved in creating educational media such as posters. (Wiyani, 2023).

However, the effectiveness of health messages in posters is largely determined by the quality of the sentences used. (Budiman et al., 2023). Ineffective, confusing, or overly technical sentences can actually lead to misinterpretation or fail to attract the reader's attention. (Ghufron et al., 2022). Even in a recent study by (Zulfadhli et al., 2022) It was found that most posters created by health students still contained ambiguous sentences that hindered comprehension. Therefore, training in writing effective sentences is urgently needed as part of health communication literacy.

Effective sentences in the context of health promotion posters are not only concise and logical, but also persuasive-oriented and motivate real action. (Putri, 2024) emphasizes that the dominance of sentences such as appeals and invitations reflects the core effectiveness of social service public posters. This is reinforced by (Ghufron et al., 2022), which proves that the use of effective sentences in health protocol posters can change the behavior of local people. Likewise, research by (Wati et al., 2021) showed that students' understanding of the principles of creating health promotion posters, including simplicity, accuracy, and economy of sentence structure, increased after special training.

Similar results were also seen in a poster intervention study for pregnant women by (Wibowo et al., 2023), where effective sentences in posters are proven to significantly increase motivation to take concrete action (consumption of Fe tablets). Finally, (Nasution et al., 2023) proving that stunting educational posters that use simple and persuasive sentences have succeeded in drastically increasing children's understanding.

Several previous studies have highlighted the importance of clear and easy-to-understand health communication. (Miftahuddin et al., 2024) emphasizes that good health information design must take into account the understanding of the target audience, including in the selection of sentence structures used in printed and visual materials. In his study, (Pramudita et al., 2022) showed that health literacy assignments requiring pharmacy students to simplify

medical information had a positive impact on better understanding of communication with patients. Meanwhile, (Earl et al., 2020) developing a health literacy module that focuses on the ability to write patient-centered written communication, including sentence structure in promotional materials such as posters.

However, the focus on the effectiveness of sentence structure in posters has not been widely discussed in depth, especially in the context of pharmacy education in Indonesia. Most studies focus on message content or graphic visualizations, while linguistic quality, specifically effective sentences, remains an underexplored aspect. In fact, in health communication, the use of effective sentences is crucial because the general public, the target audience, does not always have a sufficient medical or pharmaceutical background to understand complex technical terms.

In line with that, research by (McKay et al., 2023) shows that in conference poster creation, the use of full sentences is often avoided to keep the visuals light, but this actually creates another problem: a lack of clarity of meaning. (Newsom et al., 2021) also emphasized the importance of utilizing imaginative pedagogical strategies in pharmacy education, including how students articulate health messages through posters. The use of effective sentences in this context is not only intended to save space but also to ensure the message's comprehensibility and appeal.

On the other hand, research conducted by (Mayaneta et al., 2024) shows that media such as posters, flyers, and even videos can be very effective educational tools if managed properly, including in the use of language. (Rizky et al., 2024) A health poster that is well-designed visually but contains ineffective sentences will lose its function as a communication tool.

The urgency of this research is further strengthened if we look at the strategic role of pharmacy students in educational activities and community service. (Seyedi et al., 2024) In the context of pharmacy education, posters are often used as assignment media in pharmaceutical communication, health promotion, and field work practice courses. (Armstrong et al., 2024). However, there are not many academic studies that evaluate the quality of sentences in posters made by students, especially based on the theory of effective sentences as put forward by (Tarigan, 2008) This study aims to fill this gap by offering a linguistic analysis of the sentences in pharmacy students' health promotion posters.

The novelty of this research lies in the linguistic approach used to evaluate the posters. (Hsia et al., 2021), where the structural aspects of language are studied using theory (Tarigan, 2008) which has not been widely used in the context of pharmacy education. (Marni et al., 2024) By focusing analysis on sentence effectiveness, this study seeks to provide a conceptual contribution to the development of pharmacy students' communication skills in developing health promotion materials that are not only informative but also communicative. Furthermore, the results of this study are also expected to provide input into the pharmacy education curriculum, particularly in strengthening written communication.

The main problem that this research aims to answer is to what extent the sentences used in health promotion posters by pharmacy students fulfill the elements of effective sentences as

formulated by (Tarigan, 2008) From this question, the main objective of this study can be formulated, namely to evaluate the quality of sentences in pharmacy students' health promotion posters based on five elements of effective sentences: unity, cohesion, economy, accuracy, and logic.

This research also aims to contribute to improving the quality of pharmacy education in Indonesia. By presenting empirical data and analysis of the sentences used in student posters, it is hoped that it will reflect students' communication competency in conveying health messages to the public. The findings of this study will be highly relevant for use in the development of written communication learning modules in pharmacy education and can serve as a reference in training on developing health promotion materials.

Overall, this article offers both theoretical and practical contributions. From a theoretical perspective, this study reinforces the urgency of utilizing linguistic theory, particularly the theory of effective sentences, in the context of health communication. Practically, the research findings can serve as a basis for developing guidelines for creating more communicative health posters and improving communication learning outcomes within the pharmacy curriculum. In the long term, improving pharmacy students' communication competencies will impact the effectiveness of public health promotion programs.

To achieve this objective, the research method used is descriptive-qualitative with a text analysis approach. The collected health promotion posters will be analyzed systematically using five criteria from the theory. (Tarigan, 2008) The data obtained will then be critically interpreted to identify trends, common errors, and potential developments in sentence structure. This research will not only reveal students' success rates in applying linguistic rules but also provide concrete recommendations in the form of principles for constructing effective sentences relevant to the context of health communication.

Thus, this study not only addresses the gap in academic studies regarding linguistic aspects in health promotion media, but also positions pharmacy students as strategic subjects in delivering effective health information.

Given the significant communication challenges in the information age, the ability to construct communicative and effective sentences is a crucial asset in developing professional healthcare professionals who are responsive to community needs. In an academic context, pharmacy students are responsible not only for mastering scientific knowledge but also for conveying information accurately and effectively to the public.

The need for written communication competency, especially in making health promotion posters, is an important aspect because posters are a representation of the transfer of pharmaceutical knowledge into lay language that is communicative and persuasive. (Safitri et al., 2022) Errors in the use of sentence structure or a lack of effectiveness in conveying a message can obscure the meaning of the health message itself. (Pramitasari et al., 2023)

The use of effective sentences as a basis for compiling promotional materials has been discussed in various linguistic and pedagogical theories. (Tarigan, 2008) emphasized that effective sentences must meet five elements: economy, clarity, cohesion, unity, and logic. In the context of posters, the application of these five elements is even more relevant because communication space is limited and readers don't have much time to digest information. Therefore, students must be able to craft messages that are concise, concise, yet communicative.

Although the theory of effective sentences has been widely discussed in the linguistic sphere, its specific application in the work of pharmacy students is still limited (Dianasty et al., 2024). A study by (Yao et al., 2024) highlighted that most pharmacy students have difficulty analyzing effective sentence structure, particularly regarding economy and diction. This impacts the poor language quality of the posters they produce (Haupka et al., 2021).

(Alrasheed et al., 2024) examined the interpersonal communication of pharmaceutical technicians in customer service and found that the main weakness lies in the limited ability to convey messages effectively verbally and nonverbally. While barriers exist in the context of direct service, the difficulties become more complex in the context of written or visual media such as posters.

(Blebil et al., 2022) In his research on pharmacists' communication regarding the interpretation of written prescriptions, he demonstrated that understanding written language is key to effective communication between healthcare professionals and patients. Therefore, written communication training, including effective sentence structure, should be an integral part of the pharmacy education curriculum.

Meanwhile, (Durand et al., 2022) emphasized the importance of English language proficiency as part of a pharmacy student's global communication strategy. However, their interdisciplinary approach also revealed that a foundation of effective Indonesian language communication skills remains essential, particularly when students are developing materials for local audiences.

In the linguistic dimension, (Hossain et al., 2024) conducted a study on the use of Indonesian in scientific articles by pharmacy students. They found that many sentences lacked logic and coherence. This finding parallels the issue of language use in health promotion posters, as both forms of writing rely on effective sentence structure to avoid ambiguity and enhance comprehension.

(Lakoan, 2023) also found that appropriate language training interventions for pharmacy students improved their writing skills in informative and communicative sentences. They developed a community service-based training model that demonstrated an improvement in the quality of educational posters after the intervention.

Furthermore, (Hesti et al., 2022) This study examined the relationship between interpersonal communication between pharmacists and patient satisfaction. One indicator of effective

communication is the delivery of written drug information through educational media such as posters. In this context, students, as future pharmacists, must be trained in composing concise yet effective messages.

Study (Kusreni et al., 2023) also makes a significant contribution by demonstrating the effectiveness of phrase-based health literacy training in improving pharmacy students' writing skills. This aligns with the effective sentence approach, where understanding phrase structure, predicates, and objects is crucial to avoiding information confusion.

There is one study (Sukmawan et al., 2022) from developing a smartphone-based application that helps pharmacy students construct simple sentences. This application demonstrates that technology can be used as a language learning medium that supports effective sentence construction skills in the context of health promotion.

Thus, although there have been several studies that have touched on the relationship between language skills and communication competencies of pharmacy students, not many have explicitly discussed the evaluation of sentences in health promotion media based on linguistic theory as proposed. (Tarigan, 2008) This research aims to fill this gap by focusing on a practical linguistic analysis of the sentences used in posters written by pharmacy students.

## **Research methods**

This study uses a qualitative descriptive approach, which aims to provide a systematic, factual, and accurate description of the phenomenon under study, specifically the effectiveness of sentences in visual communication media, specifically health promotion posters. This study does not aim to measure quantitatively, but rather emphasizes a deeper understanding of the quality of language use, sentence structure, and the effectiveness of the message conveyed in the context of digital posters.

The main focus of this study is an analysis of the effectiveness of the wording used in health promotion posters. These posters were published digitally through the Google Sites platform and were created by pharmacy students as part of a health campaign program or activity.

The choice of Google Sites as a publication medium is not without reason. This platform provides easy access. (Kabilan, 2023) rapid dissemination of information, and enabling students to present visual designs that support the health messages they wish to convey to the public, particularly the campus community. This aligns with the findings (Madhani & Susilo, 2023) which shows that Google Sites supports creativity and collaboration in delivering digital-based educational content.

The research object was specifically limited to visual products in the form of digital posters designed and compiled by students. These posters were created as part of a health promotion campaign held on campus.

This limitation of objects is done to maintain the focus and consistency of the analysis, and to enable researchers to explore linguistic aspects in more depth in a limited but representative context.

Digital posters, as a form of visual communication, have unique characteristics: they combine text and images to create a concise, clear, and engaging message. Therefore, analyzing the sentences used within them is highly relevant, given the text's role in conveying core information to the audience.

The unit of analysis in this study is the sentences contained in the digital poster. Each sentence is analyzed based on the principles of effective sentences, which in this study refer to the theory proposed by (Tarigan, 2008), which states that effective sentences have several main characteristics, including unity of idea, cohesion, economy, precise diction, clear logic, and straightforwardness. Through this approach, researchers sought to identify the extent to which sentences in posters fulfill these elements, as well as how the effectiveness of these sentences influences the delivery of health messages to the audience.

In the context of health communication, effective sentence structure is crucial to the success of a campaign or promotional message. Ambiguous, overly long, or illogical sentences can result in the message not being conveyed or even leading to misunderstandings. Therefore, in this study, each poster was thoroughly examined, including sentence structure, word choice (diction), and the appropriateness of the text and images used.

The use of a qualitative descriptive approach allows researchers to capture the hidden meanings behind language use and allows for in-depth interpretation of the phenomena under study. This study also seeks to explore how students' creativity in poster design can influence the quality of the message conveyed, and how linguistic aspects play a crucial role in creating communicative and persuasive posters.

Overall, this research is expected to provide theoretical and practical contributions to education, particularly in language learning and visual communication. The analysis can inform curriculum evaluation and development related to language use in digital media, and encourage students to be more critical and creative in conveying health messages that positively impact society.

The data used in this study is primary data, consisting of health promotion poster documents created and published by students on Google Sites. Additionally, secondary data was used from journals and scientific publications related to effective sentences, digital health literacy, and the principles of visual communication in health promotion (Tarigan, 2008)

Participants in this study were students of the pharmacy study program at the University of Muhammadiyah Riau, who actively took Indonesian language courses and were asked to make promotional posters as part of an assignment.

The data collection technique was carried out in several stages. First, the researcher identified and collected Google Site links containing posters created by students. Second, documentation

and an inventory of sentences on the posters were conducted for analysis based on the principles of effective sentences according to [the sentence structure]. (Tarigan, 2008), namely the aspects of unity, economy, cohesion, accuracy, and logic. In addition, limited interviews were conducted to confirm the students' intent and context in which they constructed their sentences.

Data were analyzed using content analysis techniques, examining the structure and quality of sentences in the context of health communication. The analysis was conducted inductively and qualitatively, categorizing sentences based on dimensions of sentence effectiveness. This procedure was adapted from an approach that includes data reduction, data presentation, and conclusion drawing.

Data validity was obtained through source and technique triangulation, comparing sentence analysis results from poster documents, interviews, and functional linguistics theory and visual communication principles. To ensure consistency, peer-checking was conducted by two lecturers specializing in language and health promotion.

The research process diagram can be described as follows:

### Research Flowchart

1. Object determination: Health promotion poster on Google Site
2. Data collection: Poster documentation & limited interviews
3. Sentence analysis based on Tarigan's five principles (2008)
4. Categorization and interpretation of sentence meaning
5. Data triangulation and validation
6. Drawing conclusions

### Results and Discussion

#### Research result

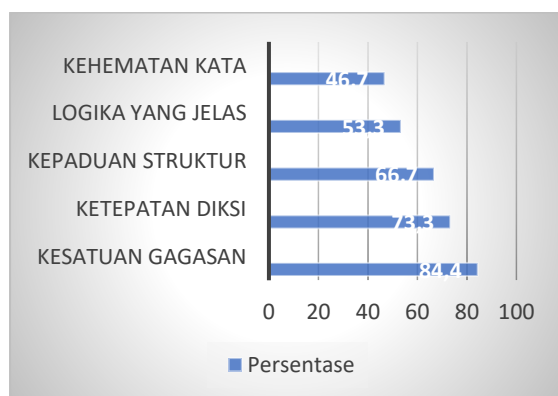
This study analyzed 45 health promotion posters created by pharmacy students published on Google Sites. The effectiveness of the sentences was evaluated based on five principles. (Tarigan, 2008): unity of ideas, economy of words, structural coherence, accuracy of diction, and clear logic. Here are the main findings:

**Table 1. Distribution of Fulfillment of Effective Sentence Principles in 45 Posters**

| Principles of Effective Sentences | Number of Posters that Meet the Requirements | Percentage (%) |
|-----------------------------------|--|----------------|
|                                   |  |                |

|                     |    |      |
|---------------------|----|------|
| Unity of ideas      | 38 | 84   |
| Economy of words    | 21 | 46.7 |
| Structural cohesion | 30 | 66.7 |
| Accuracy of diction | 33 | 73.3 |
| Clear logic         | 24 | 53.3 |

For more clarity, please see the following bar chart:



**Figure 1. Percentage of Poster Compliance with the Principles of Effective Sentences**

The results show that:

- Unity of ideas was the strongest aspect (84.4%), indicating that students were able to convey the core message in a focused manner.
- Word economy was the lowest (46.7%), with a tendency to use repetition (example: "It is very important to..." → it should be "It is important to...").
- The sentence logic is still weak (53.3%), especially in posters that use technical terms without explanation (e.g.: "Prevent stunting!" without definition or concrete steps).

## Discussion

### a. Summary of Results

The majority of posters met the principles of unity of ideas (84.4%) and accuracy of diction (73.3%), reflecting students' ability to construct a unified message and choose appropriate

words. However, wordiness (46.7%) and logic (53.3%) were major challenges, indicating the need for simplification of language and adaptation to a lay audience.

#### b. Reflection: Causes of Findings

Low word economy is caused by the habit of academic writing which tends to be long-winded and the lack of creative writing training for visual media.

Unclear logic arises because students often assume the audience's prior knowledge (e.g., using pharmaceutical terms like "adherence" without translation).

The structural cohesion is relatively good (66.7%) because the sentence structure in the poster is generally short and patterned.

#### c. Interpretation of Meaning

These findings confirm that health promotion posters require not only visually appealing design but also verbal accuracy. Although pharmacy students have mastered the scientific content, adapting the language for a general audience still needs to be developed.

#### d. Research Implications

Popular health writing training that emphasizes:

Use of short and active sentences.

Eliminate redundancy (example: "can prevent" → "prevent").

Translation of technical terms.

Integration of visual and linguistic communication principles in the pharmacy curriculum.

Utilization of readability analysis tools (such as the Readability Test Tool) for self-evaluation.

#### e. Comparison with Other Research

Suitability: Research on health communication and the effectiveness of promotional media such as posters has been extensively conducted, particularly highlighting visual aspects, message content, and media accessibility (Fatriansari, 2023). Several studies emphasize the importance of developing clear and easy-to-understand messages in educational media, but their primary focus is generally limited to visual design or the substance of medical information, rather than linguistic structure or sentence effectiveness as essential components of written communication.

As an example, (Samboja & Triayomi, 2023) emphasizes that the audience's understanding of health material is greatly influenced by the design and structure of sentences, but does not explicitly use linguistic theories such as (Tarigan, 2008) (Samboja & Triayomi, 2023) And (Haryadi & Riyanto, 2023) Instead, it places greater emphasis on general health literacy in health professional education, particularly on simplifying medical information to make it easier

for patients to understand. This approach is pedagogical and practical, but it does not yet address linguistic aspects in the form of sentence structure analysis on posters.

On the other hand, research by (Firdaus et al., 2023) and (Ariftiarno & Lestari, 2023) discusses how reducing the use of full sentences in posters for space efficiency often sacrifices clarity of message. While they address the issue of sentence structure, their approach is more practical and design-oriented, lacking a systematic analysis of sentence structure based on effective sentence theory.

Meanwhile, in the Indonesian context, (Najah & Lestari, 2024) and (Wicaksono et al., 2023) began to move towards linguistic studies in pharmaceutical education. Pratikno highlighted students' difficulties in constructing efficient and precise sentences, while (Pramitasari et al., 2023) identified a lack of coherence and logic in students' scientific writing. While relevant, these two studies did not specifically address sentences in health promotion media such as posters.

Research by (Hidayah et al., 2024) and (Nurlatifah & Suprihatiningrum, 2023) discussed the weaknesses of interpersonal communication in pharmaceutical services, including in the context of written language such as prescriptions and educational materials. However, their research focused more on patient care aspects, rather than written promotional media. (Permatasari et al., 2023) touched on the importance of mastering English as part of global communication, but acknowledged that the foundations of communication in Indonesian, including effective sentence construction, still receive less attention.

The research that is closest to the focus of this study is from (Boris et al., 2024) as well as (Isyrofi et al., 2024). They evaluated the impact of health literacy training on improving sentence writing skills in educational media. However, their approach was primarily descriptive and did not explicitly integrate effective sentence theory as an analytical framework.

Unlike previous studies, this study specifically integrates Tarigan's (2008) theory on effective sentences as a basis for evaluating the language structure of health promotion posters created by pharmacy students. This makes this study unique because it combines linguistic and health communication approaches in the context of pharmacy education. This research also addresses the gap in more specific studies of linguistic aspects in visual communication media, which have tended to be overlooked in health promotion studies.

#### f. Action Plan for Further Research

Test effective sentence templates (e.g., "What? Why? How?") to improve message consistency.

An A/B testing experiment compared the student version of the poster with a revised version based on the principle of sentence effectiveness.

Collaboration with health communication experts to develop digital poster writing guidelines.

## Conclusion

Research This research comprehensively reveals that the ability of pharmacy students in compiling health promotion posters reflects success in mastering the aspects of unity of ideas and accuracy of diction, two main elements in the principles of effective sentences which are very important in the context of public communication, especially when the message conveyed is related to medical or health information that requires clarity, precision, and accuracy of meaning.

The pharmacy students who participated in this study demonstrated that they had acquired a strong technical background in the field of pharmacy, as evidenced by their use of appropriate pharmaceutical terms in the posters they designed. However, on the other hand, when their work was analyzed in more depth using a linguistic approach based on the principles of effective sentences according to (Tarigan, 2008), it appears that many posters still contain weaknesses in the economy of words, where the excessive use of words or phrases actually obscures the main message and makes it difficult for the audience to grasp the essence of the health information being conveyed.

Another shortcoming lies in the logic of message delivery, reflected in a lack of coherent sentence structure or the use of incoherent inter-sentence relationships, resulting in a lack of overall systematic information and reduced communication effectiveness. This finding is significant because it demonstrates that technical competence in the pharmaceutical field is not necessarily accompanied by good public communication skills, even though in the context of health promotion, both skills are crucial and must go hand in hand.

Awareness of the importance of effective communication in delivering health information still needs to be improved, because even complex medical information will lose its meaning if it is not delivered in a concise, clear, and easily understood form by the general public who, incidentally, do not come from a health background. Therefore, this study makes an important contribution in identifying the gap between mastery of pharmaceutical content and written communication skills, particularly in the form of posters as one of the digital health promotion media that is increasingly used in the era of social media and online campaigns.

The main contribution of this research is the development of an evaluation framework for effective sentences for digital poster-based health promotion media, which can be used as a tool in interdisciplinary learning between health sciences and communication, both at the higher education level and in professional training. This framework consists of five main indicators, namely unity of ideas, accuracy of diction, economy of words, logical delivery, and cohesion between sentences, all of which are rooted in the theory of effective sentences but contextualized for the needs of today's health communication. Another added value of this research is its ability to formulate practical recommendations for the development of health poster writing training modules that are not only based on scientific content, but also pay attention to visual aspects and message delivery strategies that are appropriate to the characteristics of the audience.

These findings are highly relevant to the challenges of health literacy in Indonesia, which remains relatively low, requiring simplification of complex health promotion messages without losing accuracy and persuasiveness. Amidst the rapid onslaught of digital information, health promotion posters must compete in conveying messages concisely yet powerfully, and this requires the competence to write sentences that are not only linguistically correct but also communicatively effective. While this study successfully identified several important dimensions of sentence effectiveness for health promotion posters, there are several limitations that need to be noted for further study.

First, this study only involved students from one higher education institution in the field of pharmacy, so the findings cannot be generalized to all pharmacy students in Indonesia who have diverse educational backgrounds, curricula, and academic cultures.

Second, the analysis conducted is still descriptive linguistic in nature and has not yet reached the stage of empirical evaluation regarding the actual impact of the posters on audience understanding or behavioral changes. In other words, the actual effectiveness of the message in society cannot be measured in this study, as no dissemination trials or measurement of audience response to the posters analyzed have been conducted.

Third, the focus of this study is more directed at sentence structure and word choice, while visual aspects such as graphic design, color, and typography have not been made part of the evaluation, even though in visual media such as posters, these elements also play an important role in the success of message delivery. Therefore, to enrich the results that have been achieved in this study, further studies are strongly recommended to develop a more holistic and multidisciplinary approach, involving visual elements, communication psychology, and quantitative measurements of public perception and understanding of messages in health promotion posters.

Future research could also be designed in the form of experiments comparing the effectiveness of different types of posters based on the level of effectiveness of their wording, or conducting surveys to determine the extent to which student-designed posters are able to influence public health intentions or behaviors in the long term.

The results of this research can be used as a basis for designing a pharmacy education curriculum that integrates communication skills at every stage of learning and encourages the development of a scientific communication culture that is not only accurate but also user-friendly. This way, pharmacy graduates will not only be skilled at dispensing medications and understanding health terminology, but also be capable of becoming reliable health communicators in educating, influencing, and encouraging the public to adopt a healthy lifestyle through effective and wide-reaching communication media. Therefore, this research not only answers fundamental questions about the quality of the sentences in health promotion posters created by pharmacy students, but also opens up a broader space for reflection on the importance of communication literacy in the world of health, and offers a practical contribution

in the form of an evaluation framework that can be applied in various contexts of visual text-based health promotion in the rapidly evolving digital era.

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