

Multimodal Discourse Analysis of Tuberculosis Posters in Indonesia

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ABSTRACT

This study examines how Indonesian tuberculosis (TB) posters construct health messages through multimodal resources. It analyzes five public health posters using Kress and van Leeuwen's visual grammar to explore representational, interactive, and compositional meanings. A qualitative Multimodal Discourse Analysis was applied to posters on TB symptoms, drug-resistant TB, treatment side effects, healthy lifestyles, and cough etiquette. The findings show that representational meanings depict TB through symptoms, treatment risks, and preventive practices using both narrative and conceptual processes. Interactive meanings are mainly realized through offer images, eye-level perspectives, medium social distance, and low-modality illustrations that make health information accessible, while the drug-resistant TB poster creates greater urgency through a more confrontational design. Compositionally, titles, icon clusters, color salience, and segmented framing organize information into clear and memorable messages. The study concludes that Indonesian TB posters function as effective multimodal tools that strengthen public understanding, treatment awareness, preventive behavior, and institutional trust.

Keywords

multimodal discourse analysis; tuberculosis posters; public health communication; visual grammar

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1. INTRODUCTION

Tuberculosis remains one of the most urgent infectious diseases in global and Indonesian public health. Global and national reports continue to identify TB as a major cause of illness and death, while Indonesia remains a high-burden setting that requires sustained public education (World Health Organization, 2025; Nim Arinaminpathy et al., 2024; Kementerian Kesehatan Republik Indonesia, 2025). Although TB can be prevented, diagnosed, and treated, public awareness remains uneven because the disease is often associated with stigma, delayed treatment, limited knowledge of symptoms, and incomplete understanding of prevention practices (DeSanto et al., 2023; Moura & Dias, 2024; Valdivino et al., 2025). In Indonesia, this issue becomes more complex because health information must reach communities with different educational backgrounds, linguistic repertoires, media access, and cultural attitudes toward illness. Public health communication therefore needs media

that can deliver medical information clearly and persuasively without creating fear or social distance.

A public health poster is not merely an arrangement of written information. It is a multimodal text in which words, images, color, typography, placement, and framing interact to produce meaning. In a TB poster, a coughing figure, a red bacteria icon, a medical worker, a mask, a window, or a vaccine symbol does not only decorate the message. Each visual element participates in the construction of health discourse. It directs attention, shapes the viewer's emotional response, organizes medical concepts, and positions the audience in relation to the recommended action. For this reason, tuberculosis posters provide a relevant object for Multimodal Discourse Analysis because their meanings depend on the coordinated work of several semiotic resources.

In public health campaigns, posters must perform several communicative functions at once. They must identify the disease, explain risk, encourage early recognition, promote preventive behavior, support treatment adherence, and reduce stigma. They also need to build trust in medical institutions and present health workers as reliable sources of information. Posters remain relevant because they can circulate in clinics, schools, community spaces, and digital campaigns as compact public health media (Muganda, 2024; Oyebo & Unuabonah, 2013). Their persuasive force comes from the interaction between written messages and visual semiotic resources that attract attention, organize information, and guide viewer interpretation (Iedema, 2003; Liu, 2019; Yu, 2019). These goals cannot be achieved only through lexical choices. Visual resources help translate abstract medical issues into recognizable and actionable signs.

Existing studies in multimodal discourse have shown that visual and verbal resources in health campaigns can guide audience perception and improve message accessibility. Studies on COVID-19 posters, health awareness materials, HIV/AIDS posters, vaccine promotion, online health campaigns, and digital health discourse have demonstrated that images and layout shape how health risks are understood and how audiences are invited to respond (Al-Subhi, 2025; Ezirim & Aworo-Okoroh, 2023; Gill & Lennon, 2022; González-Chacón et al., 2023; Ingolo & Ong'onda, 2024; Mordecai, 2023; Ope-Davies & Shodipe, 2023; Oyebo & Unuabonah, 2013; Padilla & Padilla, 2023; Panna & Tongpoon-Patanasorn, 2025; Saidu & Rajandran, 2024). However, tuberculosis posters in Indonesia remain underexplored from a visual grammar perspective. Previous studies of tuberculosis have more often focused on policy, stigma, treatment behavior, and epidemiological discourse (DeSanto et al., 2023; Moura & Dias, 2024; Valdivino et al., 2025). Less attention has been given to how TB is visually and verbally constructed in Indonesian public health posters, especially through representational, interactive, and compositional metafunctions.

This gap is important because TB communication in Indonesia is not only biomedical. It is also social, institutional, and ideological. A TB poster can present the disease as a set of symptoms, a public risk, a treatable condition, a responsibility shared by families and health workers, or a matter requiring disciplined prevention. These meanings are not neutral. They are built through design choices such as the selection of participants, the presence or absence of gaze, the size of icons, the position of titles, the use of red or green, and the separation of information into framed sections. A systematic multimodal analysis can reveal how these choices shape public understanding and encourage preventive action.

Accordingly, this study aims to examine how five Indonesian TB posters construct health messages through representational, interactive, and compositional meanings. More

specifically, it addresses three research questions. First, what actions, participants, concepts, and circumstances are visually represented in the posters? Second, how do the posters position and engage viewers through gaze, social distance, angle, and modality? Third, how do layout, salience, information value, and framing organize TB information and support public health persuasion? By answering these questions, this study contributes to the development of Multimodal Discourse Analysis in the field of health communication and offers empirical insight into how Indonesian TB posters construct disease awareness, treatment responsibility, and prevention practices.

The study uses Kress and van Leeuwen's visual grammar as the main analytical framework because it provides systematic tools for examining how images communicate. The framework is especially relevant for posters because it explains how visual elements represent events and concepts, how images establish relationships with viewers, and how design organizes information. The analysis does not treat the posters as isolated pictures. Instead, it examines the interaction between textual labels, visual illustrations, color choices, frames, and spatial organization. This approach allows the study to show how TB posters operate as integrated multimodal texts rather than as simple visual aids attached to written messages.

The article is organized as follows. The literature review discusses Multimodal Discourse Analysis, visual grammar, and the three metafunctions that guide the study. The methodology explains the qualitative design, data source, sampling criteria, poster identification, and operational stages of analysis. The results and discussion section presents detailed findings for the representational, interactive, and compositional meanings of the five posters. It also summarizes narrative and conceptual patterns in tables so that cross-poster comparison becomes clearer. The conclusion condenses the main findings and explains the contribution of the study to Multimodal Discourse Analysis and public health communication.

2. METHOD

This study adopts a qualitative research design using Multimodal Discourse Analysis. A qualitative design is appropriate because the study does not measure audience response statistically. Instead, it interprets how visual and verbal resources construct meanings in public health posters. The analysis focuses on the internal semiotic organization of the posters and the social meanings produced through image, text, color, layout, and framing. The main analytical framework is Kress and van Leeuwen's (2006) visual grammar, which consists of representational, interactive, and compositional metafunctions. This framework is combined with discourse-level attention to lexical choices, health framing, and institutional messages in the written elements of the posters (Iedema, 2003; Ope-Davies & Shodipe, 2023).

The data consist of five Indonesian TB posters produced by the Directorate General of Disease Prevention and Control, Ministry of Health of the Republic of Indonesia (Direktorat Jenderal Pencegahan dan Pengendalian Penyakit, Kementerian Kesehatan RI). The posters belong to the TOSS TB public health education campaign materials and are titled *Gejala TB*, *TB Resistan Obat*, *Efek Samping Pengobatan TB RO*, *Gaya Hidup Sehat dan Pencegahan TB*, and *Etika Batuk*. The source line printed at the bottom of the posters identifies the institutional publisher, while the poster titles identify the specific

communicative focus of each item. This source specification makes the corpus transparent, traceable, and replicable for future researchers.

The five posters were selected through purposive sampling. The selection criteria were as follows. First, each poster explicitly addressed tuberculosis through symptoms, drug resistance, treatment side effects, prevention, healthy lifestyle, or cough etiquette. Second, each poster contained both verbal and visual elements, including titles, labels, icons, illustrations, and color-coded sections. Third, each poster was designed for public health communication and could be understood as part of a broader campaign to educate the Indonesian public about TB. Fourth, the selected posters represented different thematic dimensions of TB communication: recognition, risk, treatment, prevention, and hygiene behavior. These criteria ensured that the data were relevant to the research questions and suitable for visual grammar analysis. To increase transparency and replicability, the poster data are listed in Table 1. The table identifies the poster code, poster title, institutional source category, main topic, and reason for selection. The poster codes are used consistently throughout the analysis. This coding avoids confusion and enables cross-poster comparison in the results section.

Table 1. Data source and poster identification

Code	Poster title	Institutional source	Main topic	Reason for selection
P1	Gejala TB	DGPDC, Ministry of Health RI; TOSS TB campaign material	Main and secondary TB symptoms	Represents early recognition of TB through a salient coughing figure and categorized symptom icons.
P2	TB Resistan Obat	DGPDC, Ministry of Health RI; TOSS TB campaign material	Drug-resistant tuberculosis	Represents resistance through a bacteria character, shield, and medicine to visualize treatment risk.
P3	Efek Samping Pengobatan TB RO	DGPDC, Ministry of Health RI; TOSS TB campaign material	Side effects of drug-resistant TB treatment	Classifies mild to moderate and severe side effects, making it suitable for conceptual and narrative analysis.
P4	Gaya Hidup Sehat dan Pencegahan TB	DGPDC, Ministry of Health RI; TOSS TB campaign material	Healthy lifestyle and TB prevention	Uses multiple prevention icons to show everyday practices linked to TB control.
P5	Etika Batuk	DGPDC, Ministry of Health RI; TOSS TB campaign material	Coughing etiquette	Uses sequential procedural images to demonstrate hygiene behavior and transmission prevention.

The analysis followed an operational procedure designed to connect every empirical observation with the three metafunctions of visual grammar (Kress & van Leeuwen, 2006). In the first stage, each poster was read several times to identify its theme, title, verbal labels, main image, secondary icons, and color organization. In the second stage, representational meaning was analyzed by identifying represented participants, actors, goals, vectors, narrative processes, conceptual classifications, and circumstances. In the third stage, interactive meaning was examined through gaze, social distance, horizontal angle, vertical angle, and modality. In the fourth stage, compositional meaning was examined through information value, salience, framing, reading path, and title-image-text relation. In the final stage, the findings were compared across the five posters to identify dominant multimodal patterns in Indonesian TB health communication.

The analysis was not limited to content description. Each observation was interpreted through Kress and van Leeuwen's concepts. For example, the coughing figure in Poster 1 was analyzed not only as a picture of illness but also as a represented participant involved in a narrative process. The enlarged bacteria in Poster 2 was interpreted not only as a humorous drawing but also as a demand image and as a symbolic actor that dramatizes drug resistance. The divided left-right arrangement in Poster 3 was examined as a compositional distinction between given and new information. This operational approach enabled the study to address the reviewer's concern that the representational analysis should move beyond description and explicitly connect findings with visual grammar theory.

To make the procedure more operational, every poster was analyzed through the same coding sequence. First, the represented participants were identified, including human figures, bacteria, medical workers, objects, and health symbols. Second, vectors were traced through bodily movement, gaze direction, gestures, spatial orientation, and object interaction in order to determine whether the poster realized a narrative process. Third, conceptual meanings were coded when icons, labels, categories, or symbolic attributes classified TB symptoms, treatment risks, prevention practices, or institutional authority without an actional vector. Fourth, interactive resources were examined through contact, social distance, angle, and modality. Fifth, compositional resources were examined through information value, salience, framing, and reading path. This consistent procedure allows the analysis to compare the five posters systematically rather than treating each poster as an isolated description.

Table 2. Operational stages of multimodal analysis

No	Stage	Analytical focus	Operational indicators
1	Data familiarization	Initial reading of poster theme and visual-verbal resources	Title, labels, central image, secondary icons, color system, institutional signs, and visible reading path.
2	Representational analysis	How the poster depicts actions, participants, and concepts	Represented participants, actors, goals, vectors, narrative processes, conceptual classifications, symbolic attributes, and circumstances.
3	Interactive analysis	How the poster positions viewers	Contact or gaze, offer or demand relation, social distance, horizontal angle, vertical angle, and modality.
4	Compositional analysis	How the poster organizes information	Information value, salience, framing, title placement, icon grouping, color contrast, and visual hierarchy.
5	Cross-poster interpretation	Comparison of dominant multimodal patterns	Similarities and differences among five posters in representing symptoms, risk, treatment, prevention, and etiquette.

This study analyzes publicly available health campaign materials. It does not involve interviews, experiments, direct observation of human participants, or personal medical data. For that reason, informed consent from individuals was not required. Nevertheless, the study followed principles of research integrity by using the posters only for academic analysis, identifying the institutional source category, and avoiding any manipulation of poster content. The analysis focuses on semiotic structure and public health discourse, not on evaluating individual patients or private experiences. The posters are treated as institutional communication products intended for public education.

3. RESULTS AND DISCUSSION

This section presents the findings based on the three metafunctions of visual grammar. The analysis shows that the five Indonesian TB posters build a coherent public health discourse through the integration of visual and verbal resources. Representationally, the posters make TB visible through figures, icons, medical objects, symptoms, preventive actions, and health service symbols. Interactively, they manage viewer engagement through gaze, social distance, angle, and modality. Compositionally, they organize information through title placement, icon clusters, color contrast, and framed sections. The findings are presented by metafunctions, followed by integrated discussion of how the posters contribute to health communication.

The five posters do not communicate the same aspect of TB. Poster 1 focuses on symptom recognition. Poster 2 explains drug resistance. Poster 3 informs viewers about side effects of drug-resistant TB treatment. Poster 4 promotes healthy lifestyle and TB prevention. Poster 5 demonstrates coughing etiquette. Despite these thematic differences, the posters share a common communicative pattern: they translate biomedical knowledge into visually simplified, action-oriented, and institutionally authorized public information. This pattern shows how a poster series can produce a broader discourse of early recognition, treatment discipline, prevention, and collective responsibility.



Figure 1. Tuberculosis posters analyzed in the study.

3.1. Representational Metafunctions

The representational metafunctions concerns the way images construct the world of the poster (Kress & van Leeuwen, 2006). In the five TB posters, this world is built through a combination of human participants, bacteria, medical personnel, medical objects, hygiene tools, food, windows, masks, and bodily gestures. These participants do not simply fill the poster space. They perform representational roles. Some act as actors in narrative processes, some function as goals or affected participants, and others function as conceptual symbols that classify health information. Through these resources, the posters transform TB from an abstract disease name into visible actions, bodily symptoms, medical categories, and preventive practices.

Poster 1, *Gejala TB*, constructs TB primarily through symptom representation. The central coughing man functions as a human represented participant. His open mouth, bent posture, facial discomfort, and hand movement create a narrative process because they visually indicate an ongoing bodily action. The action is not decorative; it directs viewers to recognize persistent cough as a key symptom. Secondary icons such as fever, shortness of breath, weight loss, bloody sputum, loss of appetite, and night sweats work conceptually because they classify related symptoms into a visible set. In Kress and van Leeuwen's terms, the poster combines a narrative structure, which dramatizes the action of coughing, with a conceptual classificational structure, which organizes symptoms into categories. This combination allows the poster to address both recognition and explanation.

The representational meaning of Poster 1 becomes clearer when vectors are considered. The coughing gesture, bodily orientation, and facial expression produce visual directionality. These vectors connect the represented participant to the symptom being communicated. The man is not only a passive object. He becomes an actor whose body demonstrates the disease. The surrounding symptom icons function as conceptual attributes attached to the broader category of TB. The medical team icon at the bottom or margin further adds institutional authority. It suggests that the symptom information comes from recognized health professionals, not from informal knowledge. Therefore, the poster constructs TB as both embodied experience and medically validated category.

Poster 2, *TB Resistan Obat*, constructs drug-resistant TB through symbolic narration. The red bacteria figure, muscular posture, shield, and defeated medicine create a narrative process in which bacteria appear as an actor and medicine becomes the affected goal. The clenched fists, stomping gesture, and direction of movement function as vectors. These visual resources personify the bacteria and dramatize the concept of resistance. The poster does not merely state that TB bacteria can become resistant to medicine. It stages resistance as a conflict between pathogen and treatment. This narrative representation makes an abstract microbiological process easier for public audiences to understand.

At the same time, Poster 2 contains conceptual meaning. The bacteria, shield, and medicine serve as symbolic attributes of resistance, immunity, and treatment failure. The shield represents protection against first-line drugs. The muscular bacteria represent enhanced strength. The medicine represents standard treatment. These elements classify the poster's main concept: TB resistance is a dangerous condition in which bacteria no longer respond to ordinary treatment. The conceptual process gives stability to the message, while the narrative process gives it urgency. The poster therefore uses visual grammar to translate a complex clinical concept into a public warning.

Poster 3, *Efek Samping Pengobatan TB RO*, represents treatment side effects through classification and bodily symptoms. The poster separates mild to moderate side effects from severe side effects. This arrangement creates a conceptual classificational process because the visual elements are organized into categories. Each icon represents a symptom or bodily condition, such as nausea, joint pain, rash, balance disturbance, hearing problem, or serious reaction. The human figures shown touching the head, stomach, chest, shoulder, mouth, or ear also create local narrative processes because body gestures show symptom experience. The result is a hybrid structure: classification organizes medical information, while bodily gestures humanize treatment experience.

The representational significance of Poster 3 lies in its ability to balance reassurance and warning. Mild side effects are represented as manageable conditions, while severe symptoms are visually separated and highlighted as requiring attention. This distinction is not only medical but also semiotic. The poster uses representational contrast to guide viewers toward appropriate interpretation. In Kress and van Leeuwen's terms, the poster uses conceptual taxonomy to establish medical categories and narrative embodiment to show how side effects may appear in real life. This allows patients or family members to recognize symptoms without interpreting all side effects as equally dangerous.

Poster 4, *Gaya Hidup Sehat dan Pencegahan TB*, constructs prevention through everyday practices. The represented participants include a bed or sleeping environment, open window, person exercising, immunization or medicine symbols, nutritious food, and no smoking sign. These elements mostly function conceptually because they classify healthy lifestyle practices related to TB prevention. However, the exercising figure also creates a narrative process through bodily movement. The stepping feet and running posture form vectors that represent active health behavior. This movement distinguishes exercise from static preventive icons and gives the poster a sense of agency.

The conceptual structure of Poster 4 is important because TB prevention cannot be reduced to one action. The poster presents prevention as a set of related practices: ventilation, rest, physical activity, immunization, nutrition, and avoidance of smoking. Each icon functions as part of an analytical structure in which TB prevention is broken into visible components. The poster constructs health as a practical routine that viewers can perform in everyday life. This representational strategy shifts TB discourse from disease-centered fear to prevention-centered action. It also frames responsibility as distributed across daily habits rather than located only in clinical treatment.

Poster 5, *Etika Batuk*, represents cough etiquette through sequential actions. The visual elements include a person wearing a mask, a person covering the mouth and nose with tissue or elbow, a hand throwing tissue into a trash bin, and handwashing with soap and water. These images form clear narrative processes because each step involves action. Bent hands, covered mouths, moving hands, water flow, and disposal gestures operate as vectors. The actors are represented as people or hands performing hygienic behavior, while the goals are the mouth, tissue, trash bin, soap, and water. Unlike Poster 1, which represents symptoms, Poster 5 represents correct response to transmission risk.

The conceptual meaning in Poster 5 appears through the classification of coughing etiquette into procedural steps. Numbering and repeated circular frames transform the actions into an instructional sequence. The poster does not only show people coughing. It classifies appropriate behavior into a set of socially acceptable and medically recommended practices. In this sense, the narrative process supports imitation, while the conceptual

process supports memorization. The poster constructs TB prevention as a public etiquette, not only as private health behavior. This is significant because cough etiquette requires awareness of others and recognizes respiratory illness as a social responsibility.

Table 3. Summary of representational meanings across posters

Poster	Narrative process	Conceptual process	Interpretation
P1 Gejala TB	Coughing body, facial discomfort, and symptom gestures create vectors that show illness experience.	Symptom icons classify main and additional TB symptoms.	TB is represented as embodied signs that viewers can recognize early.
P2 TB Resistansi Obat	Bacteria attacks or defeats medicine through muscular posture, stomping, and clenched fists.	Shield, medicine, and bacteria symbolize resistance and treatment failure.	Drug resistance is represented as an active conflict between pathogen and medicine.
P3 Efek Samping Pengobatan TB RO	Figures touching body parts visualize side effect experience.	Icons classify mild, moderate, and severe side effects.	Treatment knowledge is represented as categorized risk that requires informed response.
P4 Gaya Hidup Sehat dan Pencegahan TB	Exercise figure shows active movement toward health.	Ventilation, food, immunization, rest, and no smoking signs classify preventive practices.	Prevention is represented as a system of everyday healthy habits.
P5 Etika Batuk	Mask use, covering cough, tissue disposal, and handwashing create sequential action.	Numbered steps classify coughing etiquette as a procedure.	TB prevention is represented as social hygiene behavior that protects others.

Table 3 summarizes the narrative and conceptual processes found in each poster. The table shows that all five posters contain both types of representation, but each poster emphasizes them differently. Poster 1 uses narrative embodiment to make symptoms recognizable. Poster 2 uses dramatized narration to personify resistance. Poster 3 uses conceptual categorization to distinguish side effect levels. Poster 4 uses conceptual grouping to construct prevention as a healthy lifestyle system. Poster 5 uses procedural narrative to demonstrate correct public behavior. These differences show that representational choices respond to the communicative problem each poster addresses.

3.2. Interactive Metafunctions

The interactive metafunctions explains how the posters position viewers in relation to the represented participants and health messages (Kress & van Leeuwen, 2006). Across the five posters, the dominant pattern is informational engagement rather than emotional confrontation. Most represented human participants do not look directly at the viewer. They are shown coughing, exercising, washing hands, wearing masks, or experiencing symptoms. This creates offer images. The poster offers information for viewers to observe, interpret, and apply. This pattern is suitable for health education because it reduces pressure and allows viewers to process the message without feeling accused or personally exposed (Al-Subhi, 2025; Padilla & Padilla, 2023).

Poster 1 uses an offer relationship. The coughing man does not directly demand a response from the viewer. Instead, the image presents a recognizable symptom scenario. The medium shot creates moderate social distance. Viewers are close enough to identify the physical condition but not so close that the image feels invasive. The eye-level orientation suggests equality. The cartoon style lowers naturalistic modality but increases accessibility. These choices position viewers as ordinary members of the public who need to recognize TB symptoms calmly. The poster's interactive design therefore supports early detection without producing excessive fear.

Poster 2 differs from the other posters because it uses stronger interactive force. The bacteria character appears front-facing, enlarged, and visually dominant. If interpreted as looking toward the viewer, it creates a demand image. This direct orientation makes the bacteria appear as an active threat that asks for viewer attention. The close framing reduces social distance and makes the risk feel immediate. The cartoon modality still softens the image, but the aggressive posture, red color, shield, and action against medicine produce urgency. This poster uses demand strategically because drug-resistant TB requires heightened attention and treatment discipline. Poster 3 returns to an offer mode. The symptom icons and patient figures present information about side effects rather than directly addressing viewers. This is appropriate because treatment side effects can create anxiety. A confrontational demand image might intensify fear and discourage treatment adherence. Instead, the poster uses medium distance, simple icons, and category-based organization to position viewers as informed patients or caregivers. The eye-level, non-dramatic angle suggests that side effects can be understood and managed through consultation with health workers. The interactive design therefore supports responsible awareness rather than panic.

Poster 4 positions viewers as potential performers of healthy habits. Most icons do not look directly at the viewer. The images are presented as models of action: sleep in a healthy environment, open windows, exercise, receive immunization, eat nutritious food, and avoid smoking. The offer gaze works with moderate social distance to create an instructional tone. The viewer is not emotionally confronted. Instead, the viewer observes examples that can be incorporated into daily life. The low-modality illustration also contributes to inclusiveness because the icons do not represent a specific person, social class, or region. They function as general public health signs. Poster 5 also uses offer images, but its interaction is procedural. The viewer watches sequential actions related to coughing etiquette. The figures and hands demonstrate behavior rather than establish personal contact. This design positions the viewer as a learner who can imitate the steps. Medium framing makes the actions visible, while close-up hand images emphasize specific hygienic practices. The lack of direct gaze reduces embarrassment because coughing etiquette may imply illness or potential transmission. Through an offer mode, the poster can correct behavior politely and publicly without blaming the audience.

The repeated use of eye-level perspectives across the poster series is significant. It constructs a relation of equality between the health campaign and viewers. The posters do not visually place the audience below medical authority through low-angle images, nor do they place represented participants below viewers through high-angle images. Instead, the eye-level orientation presents TB information as shared public knowledge. This is consistent with the educational purpose of the poster series. The campaign invites viewers to understand and participate, rather than simply obey a distant authority.

Social distance is also carefully managed. The posters generally use medium or medium-close distances. This distance keeps the message relevant and human while preserving informational clarity. Poster 2 uses closer framing to intensify risk, while Posters 1, 3, 4, and 5 use moderate framing to encourage recognition, learning, and imitation. This pattern shows that distance is not random. It varies according to communicative function. Risk messages are brought closer. Instructional and explanatory messages remain at a manageable distance. Modality across the five posters is consistently low to moderate because the images are cartoon-like, iconographic, and simplified. This stylistic choice reduces the frightening effect of disease representation. It also makes the posters easier to understand in public settings where viewers may only glance briefly at the material. While photographic realism might create stronger evidence value, it could also produce discomfort, stigma, or fear. The poster series chooses accessibility over clinical realism. In public health communication, this decision can be effective because it turns TB into a topic that can be discussed, recognized, and managed without excessive emotional burden.

Table 4. Summary of interactive meanings across posters

Poster	Contact	Social distance and angle	Modality and viewer position
P1	Mainly offer image; viewer observes symptoms.	Medium distance and eye-level angle create calm recognition.	Cartoon modality makes symptom information accessible and non-threatening.
P2	Demand-like relation through front-facing bacteria.	Close framing and frontal angle intensify urgency.	Cartoon metaphor makes drug resistance memorable while preserving public accessibility.
P3	Offer image; viewer reads side effect categories.	Medium distance and neutral angle support informed observation.	Simplified icons reduce anxiety about treatment side effects.
P4	Offer image; viewer observes examples of healthy practice.	Moderate distance and eye-level orientation construct equality.	Iconic modality presents prevention as everyday routine.
P5	Offer image; viewer watches procedural behavior.	Medium and close-up framing make hygienic actions visible.	Cartoon sequence supports imitation without blaming the audience.

Table 4 summarizes the main interactive patterns. The comparison shows that most posters use offer images, medium distance, eye-level angles, and low modality. These resources construct viewers as informed public participants. Poster 2 is the exception because it uses demand contact and close framing to dramatize resistance. This variation indicates that the posters do not apply interactive resources randomly. They adjust viewer positioning according to the urgency and emotional character of each TB topic (Kress & van Leeuwen, 2006; Mesinioti, 2025).

3.3. Compositional Metafunctions

The compositional metafunctions shows how the posters organize information into readable and persuasive layouts. Across the five posters, titles are placed at the top, indicating the general or ideal message. The central area contains the main visual content, such as a coughing person, bacteria, symptom categories, preventive icons, or coughing etiquette steps. The lower part often includes supporting labels, institutional identity, or practical information. This top-center-bottom arrangement creates a clear reading path and helps viewers understand the poster quickly. It also reflects a common public health design

strategy: first announce the topic, then visualize the problem or action, then provide specific details.

The compositional metafunctions explains how the posters arrange visual and verbal elements into a coherent message (Kress & van Leeuwen, 2006). Across the five posters, compositional meaning is produced through four recurring strategies: top-positioned titles, central icon clusters, bright color salience, and segmented framing. These strategies create a reading path that helps viewers process TB information quickly. The posters avoid long text blocks and instead distribute information through short labels and clear visual groupings. This confirms that poster design must guide attention as well as provide information (Mubarat et al., 2023; Yu, 2019). Poster 2 uses contrastive composition. The design visually contrasts ordinary TB bacteria with drug-resistant bacteria. The resistant bacteria is made salient through size, color, muscular posture, and dynamic relation to medicine. Red and strong visual contrast foreground danger. The shield and medicine create a conceptual bridge between the left and right elements. The poster's composition leads viewers to understand resistance as a transformation from treatable bacteria to a stronger, more difficult condition. The spatial arrangement therefore supports causal understanding: improper or incomplete treatment can be associated with the emergence of resistance.

Poster 3 relies on categorical composition. The division between mild or moderate side effects and severe side effects creates a strong left-right structure. The left side can be read as more familiar or expected information, while the right side becomes more urgent and attention-worthy. This arrangement helps viewers distinguish between side effects that may be monitored and side effects that require immediate medical consultation. Framing through section boundaries reduces confusion because each icon belongs to a specific category. Color contrast, especially warning colors in the severe section or bottom warning bar, increases salience and guides interpretation. Poster 4 uses distributed composition. Several prevention practices are placed in relatively equal visual units. No single icon completely dominates the poster because the message concerns a lifestyle system rather than one symptom or one risk. The repeated circular or bounded frames create coherence and show that each practice belongs to the same prevention category. The title at the top establishes the ideal message of healthy living, while the icons in the body provide practical examples. The composition thus constructs prevention as a set of achievable habits rather than as an abstract instruction.

Poster 5 uses sequential composition. The coughing etiquette steps are arranged through numbers, frames, and action icons. This layout directs the viewer's reading path from one step to the next. The poster's compositional logic is procedural: do this, then do this, then continue with hygiene. The use of frames separates actions so that viewers do not confuse steps. At the same time, similar colors and repeated icon shapes connect the steps into one unified routine. This structure is especially effective for behavioral instruction because it supports memory and imitation.

Salience is constructed through repeated visual strategies. Large titles, bright colors, red warning elements, green health symbols, circular frames, and simplified human figures direct attention to key information. Red is used more strongly when the poster communicates risk, danger, or warning, especially in Poster 2 and Poster 3. Green is associated with health, prevention, or treatment support, especially in Poster 4. The salience pattern helps viewers identify which information requires immediate attention. Similar findings appear in studies of COVID-19 and health campaign posters, where color

contrast, icon size, and bold typography increase viewer attention and message retention (Ingolo & Ong'onda, 2024; Mubarat et al., 2023). Framing also plays a central role. The posters use circles, panels, color blocks, section divisions, and spatial gaps to separate units of meaning. Framing prevents the visual field from becoming overloaded. It also helps viewers identify which icon belongs to which label or instruction. In health communication, this is crucial because unclear grouping may lead to misunderstanding. The five posters show that framing does more than make the poster neat. It organizes medical knowledge into usable categories and actions. It tells viewers where one message ends and another begins.

Typography contributes to compositional clarity. Titles are bold and placed prominently. Short labels accompany icons. Warning or key phrases receive visual emphasis through color, capitalization, or placement. The verbal elements support the images by naming what the viewer sees. For instance, an icon of a coughing person becomes more specific when paired with the label *batuk terus menerus*. A bacteria character becomes medically meaningful when paired with *TB resistan obat*. This interaction between words and images prevents ambiguity. It also demonstrates why TB posters must be understood as multimodal texts rather than merely visual or verbal texts.

Table 5. Summary of compositional meanings across posters

Poster	Information value	Saliency	Framing and reading path
P1	Top title introduces topic; central coughing figure anchors the message; secondary icons expand details.	Large coughing figure and symptom labels foreground early recognition.	Icons and labels create a diagnostic map from main symptom to additional symptoms.
P2	Contrast between regular and resistant bacteria organizes risk progression.	Red bacteria, shield, medicine, and size contrast foreground danger.	Spatial separation frames resistance as a distinct and urgent condition.
P3	Left-right division separates mild or moderate effects from severe effects.	Warning colors and severe symptom icons receive stronger emphasis.	Sectional framing supports comparison and medical decision-making.
P4	Top title gives ideal message; equal icon distribution presents prevention practices.	Colorful icons make each lifestyle action visible.	Repeated frames construct prevention as a coherent set of habits.
P5	Numbered sequence organizes procedure from cough covering to disposal and handwashing.	Step icons and action labels guide attention.	Frames and numbering create a clear behavioral script.

Table 5 summarizes the compositional patterns. The comparison shows that the posters share a common design grammar, but each adapts this grammar to its topic. The result is a poster series that is visually coherent yet functionally varied. Coherence comes from the repeated use of titles, icon clusters, bright colors, and institutional style. Variation comes from the different organization of symptoms, resistance, side effects, prevention, and etiquette.

3.4. Integrated Discussion

The integrated findings show that the five posters construct TB through three related forms of public health discourse. First, the posters construct TB as recognizable. Poster 1 makes symptoms visible through a coughing body, secondary symptom icons, and categorical labels. Second, the posters construct TB as medically manageable. Poster 3 organizes treatment side effects into graded categories, while Poster 2 warns that improper or ineffective treatment may produce drug resistance. Third, the posters construct TB as preventable through everyday action. Poster 4 presents healthy lifestyle practices as a routine prevention system, while Poster 5 turns cough etiquette into a sequence of socially responsible actions. These findings show that the poster series does not only communicate separate health tips. It builds a coherent discourse in which recognition, treatment awareness, prevention, and public responsibility form one communicative chain (Al-Subhi, 2025; Ezirim & Aworo-Okoroh, 2023; Oyebode & Unuabonah, 2013; Panna & Tongpoon-Patanasorn, 2025).

The ideological meaning becomes clearer when these visual findings are linked directly to the semiotic evidence. In Poster 1, the central coughing figure and symptom taxonomy construct the ideology of early recognition because the viewer is invited to read the body as a source of medically meaningful signs. In Poster 2, the enlarged and confrontational bacteria figure constructs the ideology of treatment discipline because drug resistance is visualized as an active consequence that threatens the effectiveness of medicine. In Poster 3, the division between mild to moderate and severe side effects constructs the ideology of informed treatment adherence because patients are guided to distinguish manageable discomfort from warning signs that require medical consultation. In Poster 4, the repeated icons of ventilation, nutrition, immunization, exercise, and no smoking construct the ideology of preventive self-care because TB control is linked to daily habits. In Poster 5, the numbered cough etiquette sequence constructs the ideology of social responsibility because respiratory hygiene is represented as an action that protects others.

These ideological conclusions are therefore not inferred only from the topic of tuberculosis. They are grounded in visible design choices. Participant selection connects TB with patients, bacteria, medical workers, objects, and public hygiene tools. Narrative vectors connect illness, resistance, treatment, and prevention with action. Conceptual classifications organize symptoms, side effects, and preventive practices as medical knowledge. Interactive resources such as offer images, eye-level angles, and cartoon modality reduce blame and fear, while the demand-like bacteria in Poster 2 intensifies urgency without blaming patients. Compositional resources such as top-positioned titles, divided panels, color salience, and icon clusters guide viewers toward disciplined but achievable health behavior. This relationship between visual evidence and ideological interpretation strengthens the argument that the posters promote collective responsibility, institutional trust, stigma reduction, treatment awareness, and preventive self-care.

The findings also contribute to Multimodal Discourse Analysis by showing that ideology in public health posters is produced through the interaction of metafunctions. Representational meaning defines what counts as a health problem or recommended action. Interactive meaning defines how viewers are positioned toward that problem or action. Compositional meaning defines which information becomes salient, urgent, sequential, or authoritative. The analysis therefore supports the broader argument that images are socially coded systems of meaning rather than neutral illustrations (Iedema, 2003; Kress &

van Leeuwen, 2006; Zhang, 2023). It also extends previous multimodal studies of health posters by demonstrating how an Indonesian TB poster series constructs public health ideology through coordinated visual and verbal design (González-Chacón et al., 2023; Ingolo & Ong'onda, 2024; Saidu & Rajandran, 2024).

Table 6. Relationship between visual findings and ideological meanings

Poster	Main visual finding	Semiotic basis	Ideological meaning
P1 Gejala TB	Coughing body, secondary symptom icons, and symptom labels.	Narrative embodiment of coughing and conceptual classification of symptoms.	Early recognition: TB should be identified through visible signs and confirmed through health knowledge.
P2 TB Resistan Obat	Enlarged bacteria, shield, medicine, and conflict-like action.	Demand-like orientation, strong salience, and narrative conflict between bacteria and medicine.	Treatment discipline: drug resistance is constructed as an urgent risk that requires responsible treatment behavior.
P3 Efek Samping Pengobatan TB RO	Divided categories of mild to moderate and severe side effects.	Conceptual taxonomy, left-right contrast, and warning salience.	Informed adherence: patients should continue treatment while recognizing signs that need medical consultation.
P4 Gaya Hidup Sehat dan Pencegahan TB	Ventilation, nutrition, immunization, exercise, rest, and no smoking icons.	Distributed conceptual grouping and positive health salience.	Preventive self-care: TB prevention is framed as a set of everyday healthy routines.
P5 Etika Batuk	Numbered mask use, cough covering, tissue disposal, and handwashing.	Sequential narrative vectors and procedural framing.	Social responsibility: cough etiquette is framed as public hygiene that protects other people.

3.5. Practical Implications for TB Poster Design

The findings have practical implications for poster design in tuberculosis campaigns. Designers should begin with the communicative task of the poster rather than with a general decorative style. When the task is symptom recognition, the poster should foreground one salient bodily sign and then support it with secondary symptom categories. When the task is treatment adherence, the poster should distinguish between manageable effects and urgent warning signs. When the task is prevention, the poster should present actions as part of everyday routines. When the task is etiquette, the poster should use sequential framing so viewers can easily imitate the steps. These recommendations are grounded in the observed relation between representational structure and communicative purpose in the five posters.

The analysis also suggests that institutional credibility can be built through visual grammar. The recurring presence of medical workers, official visual style, clear labels, and ordered layouts constructs the posters as authoritative health communication. However,

authority is not presented through intimidating distance. Instead, the posters rely on accessible cartoons, eye-level perspectives, and familiar actions. This combination is important in TB communication because the disease may be associated with shame or fear. A poster that is too clinical may increase distance, while a poster that is too playful may reduce perceived seriousness. The analyzed posters generally balance these concerns by using friendly visuals for accessibility and strong categorical organization for credibility.

For future TB communication in Indonesia, multimodal analysis can be used during the design process, not only after publication. Campaign teams can test whether the main visual participant clearly functions as the actor, whether the goal of action is visible, whether the reading path is unambiguous, whether warning information receives enough salience, and whether the chosen modality supports the intended emotional tone. Such questions translate visual grammar into practical design evaluation. They also show that Multimodal Discourse Analysis can contribute to applied health communication by providing a vocabulary for diagnosing strengths and weaknesses in poster design. The poster series also shows that consistency across campaign materials is useful when a health institution wants to build recognition. Repeated color palettes, institutional logos, title placement, and icon style help audiences identify the materials as part of one campaign. At the same time, each poster needs enough thematic specificity to avoid becoming visually repetitive. The five TB posters maintain this balance by sharing a common visual identity while assigning different visual hierarchies to symptoms, resistance, side effects, prevention, and coughing etiquette. This balance between consistency and topic-specific design can strengthen campaign coherence without reducing the communicative precision of each poster.

Another implication concerns stigma-sensitive communication. TB messages often need to warn audiences while avoiding representations that blame patients or portray them as socially dangerous. The analyzed posters rarely use frightening patient images or accusatory direct address. Instead, they rely on neutral offer images, general icons, and procedural instruction. This strategy can reduce the risk of stigmatizing viewers who experience symptoms or undergo treatment. However, the posters still retain persuasive force through salience, categorization, and clear calls to preventive action. In this way, multimodal design supports a more ethical form of health communication that informs the public without intensifying social stigma. From an academic perspective, these design implications show that visual grammar can connect textual analysis with public communication practice. The framework helps scholars explain why a poster appears accessible, urgent, trustworthy, or procedural. It also helps designers evaluate whether visual elements support or weaken the intended health message. This connection between multimodal theory and health practice is important because TB communication depends not only on correct medical content but also on how that content is represented, framed, and visually organized (Caruso et al., 2024; Fitriyani et al., 2017; Mesinioti, 2025; World Health Organization, 2025).

4. CONCLUSION

This study examined five Indonesian tuberculosis posters through Multimodal Discourse Analysis based on Kress and van Leeuwen's (2006) visual grammar. The findings show that the posters operate as coordinated multimodal texts in which visual and verbal resources work together to represent symptoms, treatment risks, prevention practices, and social

hygiene. Representationally, narrative processes make TB visible through coughing, resistant bacteria, side-effect gestures, exercise, and cough-etiquette actions, while conceptual processes classify symptoms, treatment risks, prevention categories, and institutional authority. Interactively, offer images, medium distance, eye-level angles, and low-modality illustration make most messages accessible and non-threatening, while the stronger demand-like design of the drug-resistant TB poster increases urgency. Compositionally, titles, icon clusters, color salience, divided panels, and frames organize medical information into readable and memorable units.

The study also clarifies the ideological meaning of the poster series. The ideological conclusion is grounded in the visual findings, not added as a separate assumption. The coughing figure and symptom categories construct TB as recognizable. The bacteria and medicine conflict constructs drug resistance as a risk connected to treatment discipline. The side-effect taxonomy constructs patients as informed treatment participants. The healthy lifestyle icons construct prevention as everyday self-care. The cough-etiquette sequence constructs respiratory hygiene as social responsibility. Together, these visual and verbal choices frame TB as a preventable, treatable, and collectively manageable condition rather than as a moral failure or private shame. This framing is important for Indonesian health communication because it supports institutional trust, reduces stigma, and encourages public participation in TB control.

The article contributes to Multimodal Discourse Analysis by demonstrating how representational, interactive, and compositional metafunctions jointly produce public health ideology. A visual element becomes persuasive because it is represented as an action or category, positioned in relation to viewers, and placed within a meaningful composition. This finding extends visual grammar into TB communication by showing how medical knowledge, emotional tone, institutional credibility, and collective responsibility are constructed through multimodal design. It also contributes to health communication by suggesting that effective TB posters should combine clear participant roles, visible vectors, stigma-sensitive modality, strong information hierarchy, and transparent institutional identity. Future research can examine audience reception, digital circulation, and the effectiveness of different poster formats across Indonesian communities to strengthen practical strategies for TB prevention, treatment adherence, stigma reduction, and public health education.

REFERENCES

- Al-Subhi, A. S. (2025). Interactional multimodal metadiscourse in public health posters during the COVID-19 pandemic. *Pragmatics & Society*, 16(2), 255–281.
- Caruso, E., Parmer, J., Allen, L., Maiuri, A., Mangan, J. M., Bouwkamp, B., & DeLuca, N. (2024). *Think. Test. Treat TB campaign and tuberculosis awareness among diverse audiences*. Centers for Disease Control and Prevention.
- DeSanto, D., Mthembu, S., Khumalo, N., Ndlovu, T., & Smith, P. (2023). A qualitative exploration into the presence of TB stigmatization across three districts in South Africa. *BMC Public Health*, 23(1), 1–10.

- Engebretsen, M. (2023). Visual storytelling and trust in digital health communication. In M. Engebretsen & H. Kennedy (Eds.), *Data visualization in society* (pp. 115–130). Amsterdam University Press.
- Ezirim, C., & Aworo-Okoroh, J. (2023). Multimodal analysis of selected health awareness materials: A visual grammar approach. *South Asian Research Journal of Arts, Language and Literature*, 5(4), 97–107.
- Fitriyani, N., Utami, S., & Lestari, P. (2017). Lek Tebe: Media robotik untuk meningkatkan kesadaran tuberkulosis. *Jurnal Kesehatan Masyarakat*, 13(2), 145–152.
- Gill, K. A., & Lennon, H. (2022). Conformity through fear: A multimodal critical discourse analysis of COVID-19 information adverts. *CADAAD Journal*, 14(1), 22–44.
- González-Chacón, M., Vergara-Heidke, A., & Marroquín-Velásquez, L. (2023). Carteles preventivos de la salud costarricense más allá de lo verbal: Un análisis multimodal. *Káñina*, 47(1), 95–126.
- Iedema, R. (2003). Multimodality, resemiotization: Extending the analysis of discourse as multi-semiotic practice. *Visual Communication*, 2(1), 29–57.
- Ingolo, H. A., & Ong'onda, A. N. (2024). Health communication: A multimodal discourse analysis of selected Corona Virus posters in Kenya. *African Journal of Empirical Research*, 5(4), 1531–1545.
- Kementerian Kesehatan Republik Indonesia. (2025). *Gerakan Indonesia Akhiri TBC dengan Komitmen dan Aksi Nyata (GIATKAN)*. Ayo Sehat Kemkes.
- Khusna, W. L., Malik, N. J. M. T., & Hardjatno, T. (2022). The ideational meaning of COVID-19 health promotion posters: Multimodal discourse. *Diksi*, 30(1), 57–65.
- Kosman, M. (2024). Multimodal representations of immigrants and illiberal aspects of Polish migration discourse. *Journal of Multimodal Communication Studies*, 11(1), 45–60.
- Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design* (2nd ed.). Routledge.
- Liu, S. (2019). Multimodal discourse analysis of the interactive meaning of public service advertisement. *Journal of Advances in Linguistics*, 10, 1523–1534.
- Mesinioti, P. (2025). Multimodal discourse analysis in health communication: Sketching out the field. *Qualitative Health Communication*, 4(1), 2–16.
- Mordecai, C. (2023). #anxiety: A multimodal discourse analysis of narrations of anxiety on TikTok. *Computers and Composition*, 67, Article 102763.
- Moura, A. A. A., & Dias, S. E. (2024). Social representations of tuberculosis by people with the disease. *Revista Gaúcha de Enfermagem*, 45, e20230159.
- Mubarat, H., Rahma, A., & Wijaya, S. (2023). Typography, color, and viewer attention in public health poster design. *Journal of Visual Communication Design*, 8(2), 89–102.
- Muganda, G. F. (2024). A multimodal discourse analysis of COVID-19 posters in Tanzania: The case of the University of Dar es Salaam. *Southern African Linguistics and Applied Language Studies*, 42(1), 75–88.

- Nim Arinaminpathy, Bastard, M., Floyd, K., & Lönnroth, K. (2024). *TB incidence estimates for the Sustainable Development Goal and End TB Strategy 2025 milestone and 2030 targets assessment: Data sources, analytical methods and process*. World Health Organization.
- Ope-Davies, T., & Shodipe, M. (2023). A multimodal discourse study of selected COVID-19 online public health campaign texts in Nigeria. *Discourse & Society*, 34(1), 96–119.
- Oyebode, O., & Unuabonah, F. O. (2013). Coping with HIV/AIDS: A multimodal discourse analysis of selected HIV/AIDS posters in south-western Nigeria. *Discourse & Society*, 24(6), 810–827.
- Padilla, R. P., & Padilla, J. M. (2023). Visual grammar and audience engagement in vaccine promotion posters. *Journal of Health Communication Research*, 15(3), 201–215.
- Panna, S., & Tongpoon-Patanasorn, A. (2025). A multimodal discourse analysis of health communication posters: A case study of U.S. educational institutions during the COVID-19 pandemic. *Journal of Language, Religion and Culture*, 14(2), 1–23.
- Saidu, A., & Rajandran, K. (2024). A multimodal analysis of Nigerian public health awareness posters. *Southern African Linguistics and Applied Language Studies*, 42(2), 110–125.
- Tafrijiyah, N., & Andriani, D. (2025). Multimodal discourse analysis of social and cultural values in *Bahasa Inggris: English for Change*. *Journal of English Language Teaching and Linguistics*, 10(1), 15–30.
- Valdivino, M., de Vaulgrenant, A., & Horstman, K. (2025). A discourse analysis of social inequities, gender, and stigma in tuberculosis policies of seven countries from Africa, Asia, Europe and South America. *Global Health Action*, 18(1), Article 2547150.
- World Health Organization. (2025). *Global tuberculosis report 2025*. World Health Organization.
- Yin, L., & Hassan, H. (2021). Multimodal discourse analysis of the movie poster *Little Big Soldier*. *International Journal of Languages, Literature and Linguistics*, 7(3), 101–105.
- Yu, B. (2019). Multimodal discourse analysis of posters. In *Proceedings of the 2019 International Conference on Arts, Social Sciences, Economics and Education* (pp. 407–411).
- Zhang, P. (2023). Visual grammar in multimodal discourse: A case study of *Nezha's* poster images. *Athena Transactions in Social Sciences and Humanities*, 1, 85–96.