The Indonesian Terms of Disease Names: A Corpus Linguistic Study

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ABSTRACT

The Indonesian terms of disease names are unique. Despite being different from their medical terms, Indonesian terms of disease names contain elements of figurative language. This study aims to analyze stylistic naming. The data were Corpora from articles, social media forums, and online news on health for 2013-2023, involving 1,206,281,985 tokens from the Indonesian-Leipzig Corpora Collection (ILC) and 39,294 tokens collected for the 2023 Health Forum Corpus (HF). Data analysis concerned the wordlist and collocation feature to see the frequency, trend, and pattern, and the concordance feature examined the language style of the names. The study does not find any evidence of changes in health terms over the past decade, such as "penyakit jantung" (heart disease), "headache," and "hospital." However, it does uncover some interesting findings regarding the formation of disease names. Affixation and compounding are the primary word formation processes. The stylistic elements of disease names were hyperbolic figures, such as "gagal ginjal" (chronic kidney disease), and symbolic figures, such as "kaki gajah" (filariasis) and "mata ikan" (clavus). In conclusion, the names of diseases followed a particular pattern, but the specific terminology used might vary based on linguistic factors and cultural understanding.

INTRODUCTION

In the medical world, the naming of diseases is typically based on the virus or bacteria that causes it. This standardized naming system facilitates communication between healthcare professionals and researchers to identify and classify diseases. For example, *Tuberculosis* or TB is caused by *Mycobacterium Tuberculosis*. Outside of the medical field, disease names can vary widely based on cultural, historical, and linguistic factors. For example, in some cultures, diseases are named after the symptoms they cause. In others, they are named after their supposed causes or even after influential people associated with the disease. In Indonesia, the process of naming diseases is more than just a matter of direct translation from other languages. Instead, it is influenced by a complex interplay of cultural, linguistic, and historical factors that give rise to a rich and diverse set of disease names.

The naming of diseases in Indonesia is a fascinating topic that sheds light on the unique cultural and linguistic influences that shape the Indonesian language. For instance, the disease *Cantengan* (*Paronychia*), an infection due to irritation or injury to the nails, highlights the distinctiveness of Indonesian disease naming. The term *Cantengan* comes from the Javanese word *Cantek* which means to cut or trim. It reflects the cultural importance of nail care and hygiene in Indonesia, as well as the historical influence of the Javanese language on Indonesian. This example highlights the importance of understanding the cultural and linguistic factors that shape disease naming in Indonesia and underscores the richness and complexity of the Indonesian language. In contrast to *Paronychia*, which illustrates the complex and varied nature of disease naming in Indonesia, the disease *Mycobacterium Tuberculosis* or *TBC* has a completely different name that is used by both medical professionals and society.

In addition, Indonesians tend to use disease names that differ from their medical names, such as *Kesemutan*, *Bintitan*, *Masuk Angin*, and *Angin Duduk*. These names are deeply ingrained in the Indonesian language and culture. For example, *Kesemutan* is a term used to describe the sensation of feeling like thousands of ants are biting someone’s feet. Similarly, *Bintitan* is used to refer to a sty or a small, painful lump that can form on the eyelid. The use of such names reflects the creative, poetic, and sometimes even humorous approach that Indonesians take to language, often incorporating stylistic elements in the naming of diseases. Furthermore, there is a clear pattern in the naming of diseases in Indonesia, with many of them composed of nouns ending in the suffix -an. It reflects the tendency of Indonesians to name diseases based on the effects of the disease itself, as well as presents the unique cultural and linguistic factors that shape the Indonesian language and culture.

Although the naming of diseases in Indonesia is unique in its cultural-linguistic factors, the study of the naming of diseases in Indonesia relatively has not been discussed yet. Previous studies have extensively focused on the etymology and linguistic origins of disease names in Western countries, which are often derived from Latin or Greek terms through linguistic and cultural transfer (Fomin & Arkhipova, 2018). (Kolesnyk, 2021) also concluded that disease is from an etymological naming concept to a typology that targets certain universals related to disorders and dysfunctions of biological systems. However, the naming of a disease is not only about place but also the name of the disease's discoverers. (Gil Extremera, 2019) states, "The names of syndromes and diseases were taken from the names of the disease's discoverers, such as Homan, Cushing, Fanconi, etc." Besides, some of the names of diseases in today's technological era show language attitudes as a form of desire to face the grim reality of disease by stigmatizing the labeling of disease names such as baby boomers who are elderly patients with war year births or perpetrators who relate to the Chinese diseases, Covid-19 (Lillo, 2020).

Since previous studies have focused solely on the etymology and the origin of the disease names, this study conducted a linguistic analysis exploring the uniqueness of the disease naming patterns in Indonesia. The linguistic analysis concerned the stylistic features of disease names in Indonesian terms to reveal the disease naming patterns in Indonesia to gain a deeper understanding of the diverse cultural heritage of Indonesian society. In Indonesia, the names of diseases imply cultural references, reflecting Indonesian heritage and linguistic diversity that makes them distinct from other disease names in other countries.

However, another question arises behind the distinctiveness of disease names in Indonesia: Are these names still being used today? The names of diseases in Indonesia
might change regarding the rapid flow of technology and society’s language changes. For this reason, the changes and stability of the disease name in Indonesian terms for a decade from 2013 to 2023 need to be analyzed in the linguistic corpus. Griess (Gries, 2009) says, “Corpus linguistics plays a role in processing digital linguistic data in large amounts.” Corpus linguistics works on the units of linguistic analysis (Cheng, 2011) that contain wordlists (words in a text with frequency), keywords (the co-occurrence frequency of words), and concordances (a list of each occurrence of a word in text) (Adolphs, 2006). In addition, (Baker et al., 2008) state, “Corpus linguistics is a methodology to explore a linguistic phenomenon in context.”

In recent years, the use of corpus linguistics in language research has gained popularity due to its emphasis on empirical data and statistical analysis, which allows for the identification of trends and patterns that may not be apparent through traditional methods, as shown in a study on word trends in social media by (Puspitasari, 2022). Corpus explicitly examines language through natural and accurate data (written and transcribed spoken data) (Adolphs, 2006). This study compiled and compared two corpora, namely the 2013 Indonesian language corpus from the Indonesian-Leipzig Corpora and the 2023 Health Forum corpus taken from open conversation forums related to health and alternative medicine from the Facebook page. Underlying that the names of diseases in Indonesian terms might contain cultural meanings led this study to focus on the analysis of stylistic features, which provide a deeper insight into the cultural and symbolic meanings behind the names of diseases in Indonesia. Stylistics reveals language in figurative forms (Mills, 1997; Natawidjaja, 1986; Zhang, 2010). According to (Keraf, 2009), "The forms of figurative language are comparison, satire, affirmation, and opposition." The most common form is comparison, particularly hyperbole, and symbolism. Hyperbole is a figure of speech using exaggerated statements which contradicts reality. In contrast, symbolism is a figure of speech using symbols to express a specific purpose. Both hyperbole and symbolism represent an object, person, situation, or word to something else in a figurative meaning (Syahdi, 2011).

In many cultures, including Indonesia’s, the names of diseases have powerful symbolic and metaphorical meanings as the ways health and illness are perceived. In Indonesia, the disease name is more than a simple description of symptoms, rather a reflection of how a society understands and interprets the illness. To prove the cultural and symbolic meanings behind the names of diseases in Indonesian terms, identifying the hyperbolic and symbolism of the disease names were highlighted in this study. For those reasons, three questions of this study are (1) what is the trend in health terms for 2013 and 2023?; (2) what is the pattern of the disease names in Indonesian terms for 2013 and 2023; and (3) what are the stylistic features of the disease names in Indonesian terms?

2. METHOD

2.1 Research Design

This study adopted the development of digital research (DRM) and used a mixed method (quantitative and qualitative). According to (Snee, 2016), "DRM has become a new approach to social humanities research since 1990, and used online media and digital technology, such as big data, online forms, digital text, and voice recognition, to support research activities". DRM has a function to bridge the interaction between researchers and research objects like in the conventional method. In a sociocultural context, digital data can identify human behavior and interactions because digital data is well-recorded, dynamic,
and broad-scope (Rheingold, 2000; Unik & Larendra, 2019). In addition, the quantitative method involved linguistic corpus calculation in the frequency and other statistical measures of language features of the 2013 Indonesian-Leipzig Corpora Collection (ILC) and the 2023 Health Forum Corpus (HF). The statistical results of the quantitative analysis were a statistical database used in a qualitative method. The qualitative method described the stylistic elements of the names of diseases in Indonesian terms and compared the disease names in Indonesian terms that appeared in 2013 and 2023. The data used in this study were (1) words; (2) phrases; and (3) sentences.

2.2 Data Collection

This study involved corpus linguistics, in which data is from two different corpora. The corpora were compilations of news articles and social media conversations on health for 2013 and 2023. Indonesian-Leipzig Corpora Collection (ILC) and the 2023 Health Forum Corpus (HF). The health forum corpus is an open conversation forum of health and alternative medicine on a Facebook page. The tokens of the Indonesian-Leipzig Corpora Collection were 1,206,281,985 tokens, and the tokens of the 2023 Health Forum Corpus were 39,294 tokens with 3,691 entries. Corpus can analyze large amounts of language data, avoid bias in the analysis process, and ensure the research's credibility (Baker, 2006).

2.3 Data Processing

Using two Corpus Tools (CL), Wortschatz-Leipzig and Antconc, statistical analysis was conducted to process the collected data into significant collocation in the 1L and 1R range. The statistical analysis used Antconc (a linguistic corpus toolkit) to identify the level and the accuracy of the word occurrences as the significance level of collocations.

2.4 Data Analysis

Data analysis considered wordlists and collocation features to see the frequency, trend, and patterns of the disease names in Indonesian terms. Besides, the concordance feature analyzed the stylistic elements as well as the language style.

3. RESULTS AND DISCUSSION

3.1 The Trends in Health Terms for 2013 and 2023

Due to this study focused on trends in the latest Indonesian terms of disease names (2023) and the terms used ten years ago (2013), Leipzig Corpora is the appropriate comparative data for Indonesian data (Nugraha, 2021). This study also analyzed the linguistic features, such as wordlists and concordances, to reveal the word trends and patterns (Islamiyah & Fajri, 2019; Puspitasari, 2022).

Based on the analysis of the 2023 health forum corpus, the most frequent words in the corpus are not unique or distinctive disease names. Instead, the top three words with the highest frequency are penyakit (disease), sakit (sick), and minum (drink). Based on the results of the concordant features or keyword in context (KWIC) analysis, the word penyakit in this corpus is typically associated with body parts such as hati (liver) and saraf (nerve). Furthermore, the collocation analysis showed that the word penyakit (disease) is commonly used to describe a disease name related to a body part, as shown by the high frequency of the word nama (name) as the left collocate and the word jantung (heart) as the right
collocate. Overall, these findings confirm that the naming of diseases in the 2023 Health Forum corpus is more focused on describing the body part affected by the disease rather than creating unique or poetic names for the diseases.

In the Indonesian-Leipzig Corpora Collection, the word jantung (heart) is also the dominant noun associated with the word penyakit (disease). However, the left collocate of the word penyakit (disease) in the Indonesian-Leipzig Corpora Collection is different, and the word is menderita (suffer). The analysis also reveals that the word sakit (sick) refers to specific conditions, such as sakit kepala (headache) or sakit punggung (lumbago). Accordingly, the word sakit (sick) typically preceded a body part name, like kepala (head) or punggung (back). This pattern shows that Indonesians tend to describe diseases in terms of the body parts affected. Though the left colloquial form of the word penyakit, menderita, is different; the word penyakit is still used as a descriptive noun. An interesting fact was that the word penyakit had been closely associated with the word jantung (heart) rather than other nouns such as hati (liver) and saraf (nerve). This finding implies that Indonesians have been discussing Penyakit Jantung (Cardiovascular Disease) more frequently than Penyakit Saraf (Neurologis) and Penyakit Hati (Hepatitis) in the past decade. It may indicate that Penyakit Jantung (Cardiovascular Disease) is a more pressing health issue in Indonesia, or that it was simply a more common topic of discussion in the media and public discourse.

While the analysis of the Health Forum and Indonesian-Leipzig Corpora Collection identifies Penyakit Jantung (Cardiovascular Disease) as a major concern for Indonesians, it seems important to verify these findings with more comprehensive studies that take into account various factors such as demographics, lifestyle, and healthcare access. These studies can help provide a more nuanced understanding of the health issue in Indonesia and inform policies and interventions aimed at improving public health. Besides the health issue, It is interesting to note that despite the global pandemic of COVID-19 during the last four years dominating online media terms (Puspitasari, 2022), Penyakit Jantung (Cardiovascular Disease) still remains a significant concern in Indonesia. The awareness and attention given to Penyakit Jantung (Cardiovascular Disease) in the media and by healthcare professionals might influence its frequency rate in recent years since the word penyakit (disease) is not a top collocate of Covid-19. These findings also confirm what Puspitasari & Sukma (2022) found that the word penyakit was not in the top 10 rank word lists in an analysis of word lists, concordances, and collocations of Covid-19 news, and even it barely appeared during 2019–2022. However, it increased in early 2023.

The second highest frequency word found in the 2023 Health Forum corpus is the word sakit (sick) which is the base word for the word penyakit (disease). The result of concordance analysis shows that the word sakit (sick) is associated with the words like kepala (head), punggung (back) or mata (eyes). Those words form disease names in Indonesian terms, such as Sakit Kepala (Headache), Sakit Punggung (Lumbago/Back Pain), or Sakit Mata (Ophalmagia). Meanwhile, the collocation analysis shows that names of parts of the body are the right collocates of the word sakit (sick). The word kepala (head) is the strongest collocate, followed by perut (stomach) and punggung (back). The phrase kepala (head) in the HF corpus refers to a painful condition such as vertigo, dizziness, which feels like the environment around is spinning circles. The word pusing (dizzy) appeared in the HF corpus, which relates to the word kepala (head). However, the word pusing (dizzy) indicates health problems as the following examples. In line with Baker (2006) the use of corpora has generally directed the finding at examining public debates regarding an issue and displays portraits of conditions.
Datum 1
sejak kemarin saya pusing and lemas, kenapa ya?
[I have been dizzy and weak since yesterday, why is that?]

Datum 2
sudah minum obat tapi tetap pusing, berkunang-kunang, tidur pun susah
[I've already drink medicine, but I am still dizzy as if see stars, even falling asleep is difficult]

Datum 3
obat sakit kepala yang gak bikin ngantuk apa ya?
[What is a medicine for headache that does not cause sleepiness?]

Datum 4
minum madu and lemon bisa meredakan sakit kepala juga
[drinking honey and lemon can relieve headache too]

Based on the data analysis, the strongest collocate of the word sakit (sick) for both corpora are similar. The left collocate of the word sakit (sick) is rumah (home), and the right collocate is kepala (head). Actually, the phrase rumah sakit (hospital) derives from two different Indonesian base words. The same case was also found in two corpora for the phrase Sakit Kepala (Headache). The most interesting finding is that the phrase Sakit Kepala (Headache) has the highest frequency too. It implies that the right colloquial word of sakit has not shifted in the last ten years. Based on the collocation analysis, the word kepala was the strongest collocate for the word sakit, and Sakit Kepala (Headache) is one of the most frequent collocations in the Health Forum corpus. It shows that Sakit Kepala (Headache) may be a commonly reported health problem in Indonesia. For that case, there is a tendency that the health problems that Indonesian people often experience are Sakit Kepala (headache), not Sakit Gigi (Toothache), Sakit Punggung (Lumbago/Back Pain), Sakit Tenggorokan (Pharyngitis) or etc.

Next, the third most frequent word found in the corpus of the 2023 Health Forum was minum (drink). This finding seems to be an odd language in an Indonesian chat room. The word minum has colloquial variations in 1R, such as rebus (boil), air (water), and obat (medicine), and various nouns dominated by plant names, such as the words akar (root), daun (leaf), kunyit (turmeric), ketumbar (cilantro), etc. The result of the concordance analysis for the word minum suggests that the Indonesian community in the chat forum recommended a medical treatment, such as minum obat, and also traditional treatments, such as minum akar, minum kunyit, or minum ketumbar (see Data 7 and Data 8).

Datum 7
jangan lupa minum obat rutin
[don't forget to take your medicine regularly]

Datum 8
minum air ketumbar hangat di pagi hari
[drink warm coriander water in the morning]

In the Indonesian-Leipzig Corpus (ILC), the word minum (drink) is the most frequent word. The word minum (drink) was not specifically used in the health sector, as the example minum obat (suggesting to take or medicine). However, the result of ILC corpus collocation
analysis shows that air (water) is the most common word for the word minum. The phrase minum air is a common way for Indonesians to drink water or offer a drink to their guests. In contrast to the Heath Forum corpus, the word minum (drink) is not specifically associated with liquid, but it is associated with obat (medicine) to form a phrase minum obat or in English take medicine. For that case, the word obat after the word minum does not typically refer to types of medicine in Indonesia. It's interesting to note the cultural habit of using the verb minum for taking medicine, regardless of its form (solid or liquid). This habit may reflect the importance of staying hydrated while taking medication, as well as the emphasis on drinking water as a healthy habit in Indonesian culture. Data 9–11 show examples of the word minum in the Health Forum corpus. In the examples, the word minum is used to take traditional medicine as a common habit of Indonesians.

Datum 9
sebaiknya minum rebusan daun pandan
[should drink pandan leaf decoction]

Datum 10
bisa juga minum jahe tiap pagi and sore
[also drink ginger in every morning and evening]

Datum 11
minum madu saja insya Allah sembuh
[just drink honey it will heal, with God wills]

The HF corpus contains a non-formal context. The result of this corpus analysis is not different from the IL corpus, in which the word minum (drink) is not followed by nouns relating to the liquid thing, while the strong collocate is obat (medicine). A close association between the word minum (drink) and the word obat (medicine) in both the HF corpus and the IL corpus forms the phrase minum obat. It describes the Indonesian habit of drinking water after taking medicine. Besides, it may be a cultural practice in Indonesia in formal and non-formal contexts. So, the phrase minum obat is a stereotype of language use in Indonesia, which has no shift in language patterns related to health and medicine for at least the last ten years. However, it is also important to note that language use and cultural practices can be complex and diverse, and not all Indonesians may follow the stereotype.

As Chaer (2007) asserts that language is a complex system including different elements, such as words, phrases, and grammar. A language depends on its users to create the word meaning since it represents conveying ideas and concepts. On the other hand, phrases are made up of two or more words combined to form a more complex meaning. The phrase formation also varies depending on the language and culture of the users. For example, some languages may place the adjective before the noun, while others may place the adjective after the noun. Similarly, some languages may have a fixed word order for phrases, while others may allow more flexibility.
Table 1
Comparison of ILC and HF Corpus Collocations

<table>
<thead>
<tr>
<th>Corpus</th>
<th>1L</th>
<th>Hit</th>
<th>1R</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILC 2013</td>
<td>Nama [name]</td>
<td>Penyakit [disease]</td>
<td>Jantung [heart]</td>
</tr>
<tr>
<td>HF 2023</td>
<td>Menderita [suffer]</td>
<td>Jantung [heart]</td>
<td></td>
</tr>
<tr>
<td>HF 2023</td>
<td>Rumah [house]</td>
<td>Kepala [head]</td>
<td></td>
</tr>
<tr>
<td>HF 2023</td>
<td>Air [water]</td>
<td>Obat [drug/medicine]</td>
<td></td>
</tr>
</tbody>
</table>

Overall, the top three collocates found in the 2023 Health Forum corpus are the same as the top collocates found in the Indonesian-Leipzig corpus. The findings describe that the Indonesian use the three collocates *penyakit* [disease], *sakit* [sick], *minum* [drink]) both in formal and non-formal contexts. Besides, the findings reveal the fact that the health terms in Indonesia have never changed since the past decade, and even some of them are still trending right away. For the health matter, a question appears: Is the health condition of Indonesian still the same as the condition in the last ten years?

3.2 The Patterns of the Disease Names in Indonesian Terms

Indonesians are unique in naming to place names (Lauder & Lauder, 2015), plant names (Wijana, 2022), and even nicknames (Wijana, 2022). Based on previous research, naming has a particular pattern. In general, the naming of diseases in Indonesia also has a similar pattern. These different patterns range from unique understandings of disease to linguistic processes. Two linguistic aspects were found from the analysis of the mention of Indonesian language disease names found in the two corpora (2023 Health Forum and 2013 Indonesian-Leipzig Corpora Collection), namely the number of words and the process of word formation. Based on the analysis findings, the equivalent name of a disease familiar to the ears of Indonesian people has a pattern of the number of words consisting of one and two.

The data of the two corpora show that the Indonesian terms of disease names consist of one syllable with a base word pattern. The diseases are *Bisul* (Furunkel), *Jerawat* (Acne), *Panu* (Tinea Versicolor), *Kadas* (Tinea Corporis), and *Kurap* (Ringworm). Considering the word class, the base word of the disease names is a noun. However, not all disease names consist of one syllable with a base word pattern. Other disease names in Indonesian terms consist of one syllable with affixes. It is the same as disease names which consist of two syllables known as compound words. Regarding the word formation process, the patterns of disease names in Indonesian are affixes and compound words.

First is the process of word formation by affixing. In linguistic terms, affixes are the process of adding words known as affixation. According to Mustakim (Mustakim, 2015), the word affix is a word that is formed from base words and affixes. Affixes include prefixes, infixes, suffixes, and affix combinations. Data analysis of the two corpora’s results reveals that words with one syllable (suffix), such as *Bintitan* (Hordeolum), *Cantengan* (Ingrown
Nail), Cegukan (Ulkus Tropikum), and Koreangan (Singultus) are names of disease in Indonesian terms. The pattern of disease names in Indonesian terms is derived from the base word (bintit, canteng, koreng, and ceguk) and the suffix -an. The Indonesian dictionary (KBBI), which stresses the base word, states the disease names as having incorrect lexical definitions. However, the fact is that Indonesians tend to use the disease names, such as Bintitan (Hordeolum), Cantengan (ingrown Nail), Koreangan (Ulkus Tropikum), and Cegukan (Singultus), more frequently. Other affixes also contribute to the corpora's disease names. The simultaneous presence of prefixes and suffixes within disease names is referred to as simul fixing. Prefixes and suffixes are used to add names of diseases like Keputihan (Leukorea), Kehamilan (Gravida), Keguguran (Abortus), and Pendarahan (Hemoragik). The prefixes ke-, pen-, and the suffix -an are all present in the disease name. In a study on the concept of disease, Campbell et al. (1979) found that there is ambiguity surrounding the definition of the term "disease." While laypeople may perceive disease as a living agent that causes illness, physicians or medical professionals have accepted a more diverse set of defining characteristics. Despite this, they remain hesitant to adopt a purely nominalist perspective.

Second, the naming disease process involves a compound word formation, a word combination with a new meaning. Based on the analysis's findings, the names of diseases created through this process typically have two syllables. The pattern of the disease names is a combined pattern of base words, such as nouns combined with nouns; and nouns combined with adjectives (see Table 2). This study's results align with Udoye's (2019) research on the naming structure and morphological formation of chemical drug diseases.

Udoye's study identified four categories of morphological forms used in naming chemical drug diseases: clipping, blending, prefixation, and suffixation.

**Table 2**
The names of diseases involving a compound word.

<table>
<thead>
<tr>
<th>No.</th>
<th>Compound Pattern</th>
<th>Disease Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Noun + Noun</td>
<td>Batu Ginjal (Nefrolitiasis), Karang Gigi (Dental Calculus), Cacing Hati (Fasciola Hepatica), Penyakit Jantung (Cardiovascular), Usus Buntu (Apendisitis), Kencing Manis (Diabetes Mellitus), Anus Gatal (Pruritus Ani), Paru-Paru Basah (Pneumonia), Mata Ikan (Clavus), Kaki Gajah (Filariasis), Raja Singa (Sillilis), Flu Burung (Avian Influenza), Cacar Monyet (Monkey Pox), Cacar Air (Varicella), Masuk Angin (Common Cold), and Angin Duduk (Anicina Pectoris).</td>
</tr>
<tr>
<td>2</td>
<td>Adjective + Noun</td>
<td>Asam Lambung (Gastroesophageal Reflux Disease), Gagal Ginjal (Chronic Kidney Disease), and Gagal Jantung (Heart Failure).</td>
</tr>
</tbody>
</table>

In addition, the compound word formation of the disease names in Table 2 that consist of different word classes have different meanings. The noun combination of disease names, such as Penyakit Jantung (Cardiovascular), Batu Ginjal (Nefrolitiasis), Karang Gigi (Dental Calculus), Cacing Hati (Fasciola Hepatica), Usus Buntu (Apendisitis), Paru-Paru Basah (Pneumonia), and Anus Gatal (Pruritus Ani), refer to parts of the body like Jantung (Heart), Hati (liver), Ginjal (Kidney), Gigi (Tooth), Usus (Intestines), Paru-Paru (Lungs), and Anus (Rectum).
Next, another pattern of the disease names in Indonesian terms is the combination of the names of animals and parts of the body. The disease names in Indonesian terms are Mata Ikan (Clavus) and Kaki Gajah (Filariasis). Meanwhile, Raja Singa (Sifilis), Flu Burung (Avian Influenza), Cacar Monyet (Monkeypox) are disease names in Indonesian terms involving the pattern of using animal names like Singa (Lion) or Burung (Bird) or Monyet (Monkey) after nouns Raja (King), Flu (Influenza), or Cacar (Pox). Besides the pattern of using animal names in disease names, another finding also identifies Hamil Anggur (Mola Hidatidosa) as a disease name with the pattern of using a plant name; and Cacar Air (Varicella) as a disease name with the pattern of using the disease description/condition. The last pattern of disease names in Indonesian terms involves the personal nature of human characteristics to a disease name, such as duduk literally means sit in English. The disease name in Indonesian refers to Angin Duduk (Angina Pectoris).

The findings of this study confirm the classification of human physical and mental illnesses in Indonesia based on word forms, language origin, and semantic aspects described by (Wijana, 2023) in their scientific article titled "Human Diseases Names in Indonesia."

3.3 Stylistic Features: Symbolism and Hyperbole in Disease Names

As previous studies, using corpus analysis enriched data from Indonesian standard dictionaries and other relevant sources (Islamiyah & Fajri, 2019; Puspitasari, 2022), this study investigation reveals several forms of symbolism and hyperbole in Indonesian terms of disease names. According to the data analysis, symbolism, and hyperbole are two of the stylistic features commonly used in disease names in Indonesian terms.

The Indonesian terms of disease names are unique and often involve the use of symbolism and hyperbole. These names reflect Indonesia’s cultural and linguistic context and how people perceive and understand certain diseases. The use of symbolism and hyperbole in naming disease in Indonesian terms is based on the elements of closeness or similarity to the symptoms of the disease, so it can help people to understand the disease and its symptoms better, especially in cases where medical terms may not be easily understood. For example, Kencing Manis (Diabetes Mellitus) literally means "sweet urine" in English. The use of Kencing Manis (Diabetes Mellitus) is just a symbolic name associated with frequent urination and high blood sugar levels. People with diabetes often have high levels of sugar in their urine due to their body’s inability to absorb glucose properly. The condition causes them to urinate frequently. Therefore, the proper symbolic figure for the disease symptoms is Kencing Manis (Diabetes Mellitus) in the Indonesian term.

Another stylistic feature of disease names found in this study is hyperbole. Hyperbole, a figure of speech that involves exaggeration, is often used in Indonesian terms of disease names. For example, Mati Rasa (Numbness) is a term used to describe a loss of sensation or feeling or a condition of paralysis, such as in diabetic neuropathy. Mati Rasa (Numbness) is often a symptom of nerve problems in the body that can send abnormal signals or fail, resulting in loss of sensation in the affected area. The disease can affect the complete or partial body, but it commonly affects the arms, legs, and fingers. The Indonesian noun “mati” (death) in the disease name gives a hyperbolic sense to stop living, though it emphasizes the severity of the numbness or loss of sensation in a particular body area. Similarly, Mata Ikan (Clavus) and Kaki Gajah (Filariasis) are also examples of hyperbolic terms used for foot problems. The use of hyperbole in disease names makes the condition sound more
serious or dramatic and helps create a showy name for the disease. Table 3 shows Indonesian terms of disease names with symbolic and hyperbolic figures.

It is worth noting that hyperbole in disease names is not limited to cultural and linguistic factors. In the United States, for instance, disease names are often used as a political tool for various purposes. (Fomin & Arkhipova, 2018) study on "Linguistic and Cultural Transfer in Euphemistic Naming of Social Diseases" describes six categories of euphemisms used in naming diseases, including medical fraud, incurable or terminal illnesses, sexually transmitted diseases, physical and mental disorders, and addiction. The replacement names for these diseases are often borrowed from foreign languages through linguistic and cultural transfer.

Table 3
Indonesian Terms of Disease Names in Symbolic and Hyperbolic Stylistic Features

<table>
<thead>
<tr>
<th>No.</th>
<th>Disease names</th>
<th>Medical terms</th>
<th>Meaning Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Angin Duduk</td>
<td>Angina Pectoris</td>
<td>Hyperbole</td>
<td>Chest pain arises due to impaired blood flow to the heart muscle tissue.</td>
</tr>
<tr>
<td>2.</td>
<td>Asam Urat</td>
<td>Gout Arthritis</td>
<td>Symbolic</td>
<td>Arthritis occurs due to the buildup of uric acid crystals. This condition can occur in any joint, such as the toes, ankles, knees, and most commonly, the big toe. Gout occurs because purine compounds (molecules formed from carbon and nitrogen atoms) cannot be processed by the body optimally, so the acid levels in the blood increase and affect the joints.</td>
</tr>
<tr>
<td>3.</td>
<td>BAB Berdarah</td>
<td>Hematochezia</td>
<td>Symbolic</td>
<td>There is blood in the stool or feces condition. There is blood in feces when people with this condition clean their rectum. This condition can occur if there is bleeding in the digestive tract or specific conditions, such as hemorrhoids or colitis.</td>
</tr>
<tr>
<td>4.</td>
<td>Batu Ginjal</td>
<td>Nephrolithiasis</td>
<td>Symbolic</td>
<td>The condition is caused by the solid precipitate resembling gravel in the kidneys that come from chemicals in the urine. Kidney stones can range in size from a grain of sand to the size of a pea.</td>
</tr>
<tr>
<td>5.</td>
<td>Biang Keringat</td>
<td>Miliaria</td>
<td>Symbolic</td>
<td>A slight reddish rash that stands out feels itchy and causes a stinging or burning sensation because the skin does not sweat properly. Biang Keringat often appears on the body, neck, and chest. In the literal sense, Biang is the parent, head, leader, principal, or origin. The origin of this disease is sweat causing a reddish rash. Therefore, this disease is termed Biang Keringat.</td>
</tr>
<tr>
<td>6.</td>
<td>Buta Warna</td>
<td>Color Vision</td>
<td>Symbolic</td>
<td>The condition of the eye that is unable to see colors usually. People with this disease find it difficult to distinguish specific colors (partial color blindness) or even all colors (total color blindness). Sufferers do not experience blindness in the true sense; they cannot see anything or any objects or are blind. People with color blindness can still see like normal eyes in general; it is just that they cannot distinguish colors.</td>
</tr>
<tr>
<td></td>
<td>Disease Name</td>
<td>Term</td>
<td>Type</td>
<td>Description</td>
</tr>
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</tr>
<tr>
<td>7.</td>
<td>Anus Gatal</td>
<td>Pruritus Ani</td>
<td>Symbolic</td>
<td>An itchy feeling or sensation in the anal canal or rectum generally occurs due to irritation of the skin of the anus.</td>
</tr>
<tr>
<td>8.</td>
<td>Bau Mulut</td>
<td>Halitosis</td>
<td>Symbolic</td>
<td>Poor oral health or hygiene causes bad breath. This condition is bad tasting and dry in the mouth and has a white color on the tongue.</td>
</tr>
<tr>
<td>9.</td>
<td>Gagal Ginjal</td>
<td>Chronic Kidney Disease (CKD)</td>
<td>Hyperbole</td>
<td>Condition when kidney function decreases gradually due to damage to kidney tissue. The kidneys' primary function is to filter waste (wastes of the body's metabolism) and excess fluid from the blood excreted through urine. Daily, the two kidneys filter around 120–150 liters of blood and produce around 1–2 liters of urine. However, this condition does not mean that the kidneys are not functioning or have failed, but rather that the filtering rate has decreased.</td>
</tr>
<tr>
<td>10.</td>
<td>Hamil Anggur</td>
<td>Mola Hidatidosa</td>
<td>Hyperbole</td>
<td>Abnormal formation of the placenta (placenta) during pregnancy can cause complications. The placenta in this condition is shaped like a bunch of grapes but does not contain a fetus, only an abnormal placental cluster. Although the shape of the placenta is like a bunch of grapes, it contains a fetus, not a grape.</td>
</tr>
<tr>
<td>11.</td>
<td>Jerawat Batu</td>
<td>Jerawat Kistik (Cystic Acne)</td>
<td>Hyperbole</td>
<td>Pimple size are larger than regular, reddish in color, filled with pus, and cause pain. Bacteria cause this acne by infecting the skin deeper, causing more severe conditions than regular acne. This acne type is the same as acne and has nothing to do with stones.</td>
</tr>
<tr>
<td>12.</td>
<td>Gagal Jantung</td>
<td>Cardiac Failure</td>
<td>Hyperbole</td>
<td>A condition in which the heart weakens so it cannot pump enough blood throughout the body. In this condition, it does not mean that the heart has completely stopped functioning but cannot function properly.</td>
</tr>
<tr>
<td>13.</td>
<td>Paru-paru Basah</td>
<td>Pneumonia</td>
<td>Symbolic</td>
<td>An infection caused by bacteria, viruses, or fungi causes the air sacs in the lungs to become inflamed and swollen. Fluid, mucus, or pus fill the lungs and become wet.</td>
</tr>
<tr>
<td>14.</td>
<td>Kaki Gajah</td>
<td>Filariasis</td>
<td>Hyperbole</td>
<td>Swelling of the legs due to infection caused by filarial worms can cause the size of the human foot to be very large compared to the normal size of the feet. This condition is interpreted symbolically with elephant legs because elephants have large feet.</td>
</tr>
<tr>
<td>15.</td>
<td>Keringat Dingin</td>
<td>Diaforesis</td>
<td>Hyperbole</td>
<td>The reaction is abnormal sweating even though there is no increase in body temperature (the body is in normal condition/not hot). This type of sweat differs from sweat in general because it does not appear after exercise, exposure to hot weather, or exposure to cold weather. However, the sweat temperature is not cold and is the same as usual.</td>
</tr>
</tbody>
</table>
16. Masuk Angin  
   (No medics name)  
   Hyperbole  
   In the medical world, colds are not a disease but a term that Indonesians often use to refer to a group of symptoms or complaints that occur in the body, such as runny nose, headache, fever, chills, nausea, and flatulence which occurs due to the vulnerability of the body when the transition of the season from dry to rainy (transition).

17. Mata Ikan  
   Clavus  
   Hyperbole  
   Thickening of the skin on the hands, feet, and fingers due to repeated pressure and friction, usually round with a smaller size than calluses, has a rigid center, and is surrounded by inflamed skin. This disease has nothing to do with fish.

18. Mata Kering  
   Dry-Eye Syndrome  
   Symbolic  
   A condition in which the tear film in the eye is unstable in quantity and quality, so it loses its ability to protect the eye's surface. Decreased tear production or evaporation of tears causes a lack of tears, so this instability makes the eyes feel dry.

19. Nyeri Otot  
   Myalgia  
   Symbolic  
   Conditions or pain occur in the muscles.

20. Serangan Panik  
   Panic Disorder  
   Hyperbole  
   Excessive fear or anxiety suddenly appears for no reason. This condition can last a few moments with a rapid heartbeat, shortness of breath, dizziness, muscle tension, or tremors. The term attack does not mean an attack or invasion occurring from the outside, but a condition experienced from within the body suddenly.

21. Susah Tidur  
   Insomnia  
   Symbolic  
   Sleep disorder that occurs when a person has difficulty or difficulty sleeping. This condition makes the sufferer not have enough sleep according to the body's normal needs.

22. Mata Merah  
   Conjunctivitis  
   Symbolic  
   Inflammation of the membrane lines the surface of the eyeball and the inner eyelid (conjunctiva of the eye) so that the eyes feel itchy and watery. The conjunctiva of the eye contains blood vessels that dilate when conjunctivitis occurs. The dilation of blood vessels causes the eyes to turn red.

23. Panas Dalam  
   (no medics name)  
   Hyperbole  
   Heartburn is a term known to the public to refer to a collection of symptoms, such as chapped lips, canker sores, coughing, weakness, and sore throat. The symptoms known as “heartburn” usually appear after overeating fried food, drinking cold drinks, or being tired. So, it has nothing to do with the feeling of heat or the sensation of heat that occurs in the body.

24. Perut Kembung  
   Meteorismus  
   Symbolic  
   The air or gas in the abdominal cavity or intestines makes the stomach look distended or bulging more than its usual size.

25. Sesak Napas  
   Dyspnea  
   Symbolic  
   This condition occurs due to insufficient oxygen supply to the lungs, which causes breathing to become faster, shorter, and shallower so that it feels like experiencing a feeling of tightness. However, the sufferer can still breathe.
26. Rabun Senja
   
   **Nyctalopia**
   Symbolic
   Impaired vision in the eyes when the eyes cannot adjust in the late afternoon towards the evening, that is, when the light starts to get dark. This condition occurs due to damage to the function of the stem cells in the retina.

27. Tahi Lalat
   
   **Nevus Pigmentosus**
   Hyperbole
   Small brown or black spots on the skin's surface are from pigment-producing cells called melanocytes that are grouped and are harmless. However, a small percentage can turn into symptoms of a tumor or skin cancer.

28. Turun Peranakan
   
   **Prolaps Uteri**
   Symbolic
   The condition is when the uterus, whose function is to care for the egg to become a fetus, drops down until it protrudes outside the vagina due to the weakening of the muscles and tissues around the pelvis so that they are unable to support the uterus. This condition can occur due to pregnancy, childbirth, or aging in women.

29. Usus Buntu
   
   **Appendicitis**
   Symbolic
   Diseases of the intestine that occur due to infection so that the intestinal cavity becomes clogged. As a result, bacteria overgrow, causing the intestine to become inflamed, swollen, and festering.

30. Kutu Air
   
   **Tinea Pedis**
   Hyperbole
   A contagious fungal infection usually appears on the skin of the feet, especially between the toes. Damp conditions generally cause this condition on the feet due to excessive sweating, which facilitates fungus growth and has nothing to do with fleas.

The above table describes the 13 hyperbolic and 17 symbolic figures in Indonesian terms of Disease Names. The disease names in the hyperbolic figure are Angin Duduk (Angina Pectoris), Kaki Gajah (Filariasis), Gagal Ginjal (Chronic Kidney Disease), Hamil Anggur (Mola Hidatidosa), Jerawat Batu (Cystic Acne), Gagal Jantung (Cardiac Failure), Keringat Dingin (Diaphoresis), Mata Ikan (Clavus), Serangan Panik (Panic Disorder), Tahi Lalat (Nevus Pigmentosus), and Kutu Air (Tinea Pedis). Meanwhile, Masuk Angin and Panas Dalam are not medical terms but rather popular terms used in Indonesia to describe common symptoms such as fever, body aches, and fatigue. They are not specific diseases but rather a general description of discomfort. The use of the disease names like Masuk Angin or Panas Dalam reflects the cultural belief and practices of Indonesians, who often use natural remedies to treat common diseases. Overall, those hyperbolic names are often used in disease names in Indonesian terms to create vivid and showy names. In addition, the use of hyperbole in the disease names often involves word combinations that do not directly describe the actual condition but rather exaggerate or emphasize particular symptoms or sensations associated with the condition.

Furthermore, other disease names in Table 3 are considered to be symbolic stylistic forms. The disease names are Asam Urat (Gout), BAB Berdarah (Hematochezia), Batu Ginjal (Nefrolitiasis), Biang Keringat (Miliaria), Anus Gatal (Pruritus Ani), Bau Mulut (Halitosis), Paru-Paru Basah (Pneumonia), Buta Warna (Color Vision), Mata Kering (Dry Eye Syndrome), Nyeri Otot (Myalgia), Gangguan Tidur (Insomnia), Mata Merah (Konjungtivitis), Perut Kembung (Meteorismus), Sesak Napas (Dyspnea), Rabun Senja (Nyctalopia), Turun Peranakan (Prolaps Uteri), and Usus Buntu (Apendicitis). Symbolic
stylistic form in disease names uses words or phrases that symbolize or represent the diseases beyond their literal description to inform particular symptoms, causes, or effects of the diseases. Similarly, BAB Berdarah (Hematochezia), Anus Gatal (Pruritus Ani), Bau Mulut (Halitosis), Buta Warna (Color Vision), Mata Kering (Dry Eye Syndrome) have symbolic stylistic forms. Symbolism in the disease names in Indonesian terms does not directly describe the diseases literally, rather than reflecting the condition of the diseases. The findings are consistent with the scientific work by (Primantoro & Isodarus, 2021), which identifies five basic types of naming physical diseases in Javanese based on the naming theory. These include naming the diseases based on the parts of the affected body, the causes of the disease, the taste of the disease, conventions, and sound imitation.

Disease names with symbolic forms in Indonesian tend to describe the disease condition using the closest characteristics to the actual condition. They are often more straightforward and do not rely on exaggeration or hyperbole. It makes them easier to understand and remember. In contrast to names with hyperbolic meanings, names with symbolic meanings seem more superficial and express the actual condition by using the closest characteristics to the disease characteristics. In contrast, hyperbolic disease names may be more impressive, but they can also be misleading or confusing if the hyperbole does not accurately reflect the disease's symptoms. Hence, future studies that investigate how the hyperbolic and symbolic disease names affect people's understanding and perception of the disease may be interesting to conduct. In addition, tracking changes in social media language use over time can help identify language shifts or trends to see how people's attitudes and beliefs about health and disease may change. Additionally, it would be interesting to compare the language use of social media users from different regions or age groups to see if there are any variations in naming diseases.

4. CONCLUSION

Generally, the disease names in Indonesian have similar patterns in the word formation process, which involve affixation and compounding. The linguistic process contributes to the unique and varied disease names in the Indonesian-Leipzig Corpus and the Health Forum corpus. The number of words used for disease names in Indonesian also varies, but it is common for the disease names to consist of one or two words. In addition, the word formation process used to create disease names can be from simple word combinations to more complex processes, such as simulfix. The disease names in Indonesian terms also have a unique and distinct naming style from other countries. The use of symbolism and hyperbole in disease names is one of the unique features of disease names in Indonesian terms. Those names reflect the characteristics or the symptoms of the diseases. It reflects the close relationship between the disease names, the culture, the language, and the community.

Overall, the findings show a gap between laypeople and medical professionals in naming diseases in Indonesia. The gap has occurred for at least a decade proved by the results of the data analysis. Social factors such as educational levels, cultural norms, and language differences can influence it. In some cases, laypeople may use more colloquial or vernacular terms like “Kutu Air” to describe certain diseases or symptoms. In contrast, medical personnel may use more technical or medical terms, Tinea Pedis. It can sometimes lead to misunderstandings or confusion when laypeople seek medical help, as they may need to be more familiar with the medical terms used by healthcare professionals. Following a review of the linguistic phenomena presented in the findings, we suggest conducting
further research on naming diseases in Indonesian based on medical data to promote better consistency between colloquial and medical terms. It may be helpful to improve health literacy and develop better communication between laypeople and medical personnel. It could involve developing standardized terminology that is more easily understood by laypeople and medical personnel and providing education and resources to help bridge the gap between medical terms and colloquial.

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Authors’ Contribution
Hernina worked on the project and the main conceptual ideas and wrote and proofread the manuscript. Yenny Karlina translated this paper from Indonesia to English, wrote the manuscript, worked on data visualization, and proofread the manuscript. Devi Ambarwati Puspitasari worked on the main conceptual ideas and analysis, wrote the manuscript, collaborated to collect the data, and provided software.

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REFERENCES


