



SOCIAL MEDIA USER X'S SENTIMENT TOWARDS OMNIBUS HEALTH LAW IN INDONESIA

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ABSTRACT

The Health Omnibus Law aims to reform the health sector. Prior to its enactment, public responses emerged in various forms, one of which was by expressing opinions on X social media. Objective: This study aims to determine public sentiment towards the Omnibus Health Law and its behaviour based on speech act theory. Method: Qualitative data was obtained retrospectively by means of text mining or extracting tweets using the hashtags #UUKesehatanOmnibuslaw and #UUKesehatan. From a total of 1,960 sent from 11 July to 31 August 2023, descriptive research was carried out with a qualitative approach on these tweets. Then classify sentiment using the Naïve Bayes algorithm and classify using speech act theory analysis. Results: 1,960 tweets were found that met the criteria. The results showed that neutral sentiment (94.13%) dominated the tweets compared to negative sentiment (3.16%) and positive sentiment (2.70%). There were 9 themes found in the tweets, with the dominant theme being 'laws and government'. Conclusions: The results showed that the majority of tweet users were assertive and gave 'statements' in response to the omnibus health law.

Keywords: health law; omnibus law; sentiment; social media; twitter X

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INTRODUCTION

Omnibus Law (OBL) is a law that seeks to amend and repeal several laws at once. This concept has developed in common law countries with Anglo-Saxon legal systems, such as the United States, Belgium, United Kingdom and Canada. The concept of comprehensive law offers a solution to the problem of overlapping and duplicative laws. Solving problems using conventional methods can be time-consuming and expensive. Not to mention that the process of drafting and drafting laws and regulations is often deadlocked or not in accordance with interests (Putra, 2020).

The Omnibus Health Law is a law that aims to reform the health sector. It covers various aspects of health policy, including financing, organisation of health services, regulation of medicines, and improving accessibility for the public. After the passing of the Health Omnibus law into law number 17 of 2023, public responses came in various forms; demonstrations, discussion forums, and opinions on social media. The Indonesian Pharmacists Association (IAI), on its website news.iai.id, criticised article 320 paragraph 6, which states that non-prescription drugs can be obtained from pharmaceutical service facilities or other facilities in accordance with the provisions of laws and regulations. IAI interprets that what is meant by other facilities are facilities outside pharmaceutical service facilities such as hypermarkets, supermarkets, and minimarkets. This raises concerns for

patient safety and security, as drugs are commodities that have the potential to be dangerous if used incorrectly, requiring consultation and supervision by pharmacists. In addition to professional organisations, the general public also opines on social media. One of the social media that is often used to express opinions is X. X, formerly known as Twitter, is one of the most commonly used social media by Indonesians. With its popularity, X is one of the pages for expressing public opinion on issues that are currently being discussed (Wijaya et al., 2021). These opinions can be analysed with Big Data methods because the data obtained is broad so that it can almost describe the entire population (Arrifqi et al., 2023).

Analysis with Big Data methods can be done by classifying opinions into 3 sentiment classifications (Positive, neutral, and negative). Classification is done with the Naïve Bayes Classifier algorithm (Wijaya et al., 2021). In addition to sentiment analysis, analysis with behavioral theory can also be applied. one of them is speech act theory. Speech act theory was proposed by J.L Austin and developed by John Searle. This theory identifies speech acts into 5 basic types of speech acts, namely assertive, directive, commissive, expressive, and declarative (Vosoughi and Roy, 2021). Based on the background that has been stated, X as a social media can be utilised to find out the public sentiment towards policies that have been set by the government. From the sentiments obtained, strategies for policy socialisation are formulated and implemented effectively. This research aims to determine the public sentiment of X social media users about the Omnibus Health Law based on speech act theory.

METHOD

This research is a descriptive qualitative study on retrospective data in the form of Indonesian tweets. The research was conducted after obtaining an ethical approval letter from the Medical and Health Research Ethics Commission, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada - RSUP Dr Sardjito No. KE/FK/0596/EC/2024. The research was conducted using a computer device by extracting tweets uploaded from 11 July to 31 August 2023, and taken based on predetermined keywords. The population of this study was all tweets. The sample inclusion criteria were: containing Indonesian keywords, and uploaded in Indonesia from 11 July to 31 August 2023. The exclusion criteria of this study are tweets in the form of links, advertisements, promotions, news, and websites. Keywords are the most frequently used words and are determined by a study of the Omnibus Health Law. The independent variables are tweets containing various things about the Omnibus Health Law, while the dependent variables are sentiment and speech acts.

RESULTS

This research uses instruments in the form of Python as a programming language, Jupyter Notebook as an application, NLTK (Natural Language Tool Kit) as a library for data pre-processing, and Microsoft Excel for data collection sheets. The data collection technique uses text mining with the crawling method using Tweepy, and Stemming to return the word to its basic word form by cleaning the affixes on each word.

Data analysis

Data analysis was done descriptively. Sentiment was classified into positive, negative and neutral with Naïve Bayes algorithm using machine learning method. Speech act analysis was done manually based on the context of the tweet.

Omnibus law Health Law Sentiment

Sentiment analysis is performed with the Naïve Bayes Classifier (NBC) algorithm. NBC classifies sentiment value based on TF-IDF (Term Frequency-Inverse Document Frequency)

calculation. TF-IDF is a technique for calculating the weight of a word in a document. The weight shows how important the word is in representing a document.

This TF model measures how often a word appears in a document. TF is calculated by counting the number of occurrences of a word divided by the number of words contained in the document. IDF measures how important a word is in the context of a larger collection of documents. IDF is calculated by dividing the total number of documents in the collection by the number of documents containing the word, then taking the logarithm to refine the scale. The general formula of TF-IDF is the multiplication of TF value with IDF which will produce a term weight that reflects how important a word in the document is compared to a larger collection of documents (Septiani and Isabela, 2022). The TF-IDF formula is as follows:

$$TF = \frac{\text{number of times a word "x" appears in a document}}{\text{number of words present in a document}}$$

$$IDF = \log \left(\frac{\text{number of documents present in a corpus}}{\text{number of documents where word "x" has appeared}} \right)$$

$$TF\ IDF = TF * IDF$$

Data mining in this study produced 2,561 tweets, with 1,960 tweets that met the criteria. Details of the data 53 (2.70%) contain positive sentiment, 1845 (94.13%) contain neutral sentiment, and 62 (3.16%) contain negative sentiment as shown in Figure 1. The complete results of research related to the sentiment of twitter social media users are contained in Table 1. The accuracy of the NBC model shows a value of 0.949. The value shows that the NBC model shows a good value with 94% correct predictions.

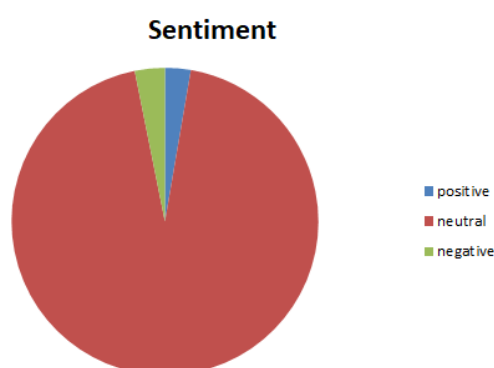


Figure 1. Sentiment diagram

Table 1. Sample Tweets Sentiment

<i>Tweet</i>	<i>Sentiment</i>
“hasil nrimo ing pandum ciptakan uu omnibus kesehatan kita memang top”	Positive
“Mulai UU KPK, UU omnibuslaw sampai sekarang UU kesehatan, rakyat protes gak dianggap... Hal paling aneh, saat ngesahin UU omnibuslaw... Dari DPR sampai presiden gak baca tapi tanda tangan.. salah tulis dlm UU tsb gak ada yg tau, ajaib...”	Negative
“RUU kesehatan sudah sah jadi UU”	Neutral
“Itu keluar krn kekosongan aturan turunan sbg dampak UU Kesehatan yg disahkan.”	Neutral
“Lewat Omnibus Law UU Kesehatan STR tenaga kesehatan dan tenaga medis yang saat ini perlu perpanjangan per lima tahun akan diubah menjadi berlaku seumur hidup layaknya ijazah. Kenapa bukan SIM yg berlaku seumur hidup seperti usulan Aleg F PAN”	Neutral
“Duh! UU Kesehatan Berpotensi Munculkan Perilaku Tidak Etis di Kalangan Nakes”	Negative

“Bikin status di WA ttg UU kesehatan yang baru. Ternyata temen2 nakes banyak yg ga paham n gatau ttg UU ini. So sad yaa” Negative

Speech Acts related to the Omnibus Health Law

Behavioural analysis using the speech act theory approach was conducted on 239 tweets as samples. There were 9 themes, namely the law as many as 92 tweets (38.49%), health workers 35 tweets (14.64%), private 6 tweets (2.51%), people 15 tweets (6.27%), government 65 tweets (27.19%), financing 8 tweets (3.34%), health services 12 tweets (5.02%), health 2 tweets (0.83%), and health insurance 4 tweets (1.67%), which are shown in Figure 2. Examples of tweet themes are also presented in full in Table 2.

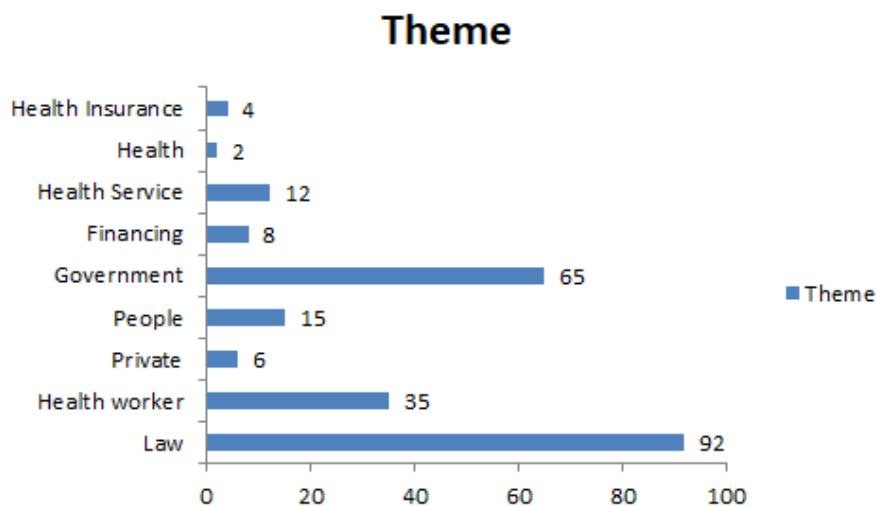


Figure 2. Theme Chart

Table 2.

Sample Tweet Themes

Tweet	Themes
“uu cilaka aja yg diputuskan cacat masih ttp aja jalan dan oke2 aja apalagi ini uu kesehatan”	Law
“jadi ingin tahu bagian mana dari uu kesehatan yg baru yg mengurangi beban para dokter ini”	Health worker
“uu kesehatan baru menkes nakes lebih dilindungi str seumur hidup”	Health worker
“diluar negeri bahkan negara maju mengkhawatirkan kerjasama dengan perusahaan genetika bgi china tapi kita malah melegalisasinya dengan uu kesehatan omnibuslaw bukankah ini akan juga berpotensi mengkhawatirkan keamanan nasion bangsa exclus million taxpay money”	Private
“harusnya uu dibuat untuk menampung aspirasi keinginan rakyat uu kesehatan yg ditolak banyak dokter dan nakes ini dibuat untuk kepentingan siapa”	People
“selama partainya nu ga nolak aku dukung uu kesehatan”	Government
“lalu setelah uu yg baru disahkan maka pembiayaan diserahkan kpd pemilik modal alias pengusaha kesehatan. artinya pemerintah mendukung dan dpr komersialisasi sektor kesehatan. harusnya negara hadir dgn mandatori spending 10 %”	Financing
“apakah UU ini menjamin kesehatan hak seluruh rakyat terutama rakyat kecil sesuai amanat konstitusi? apakah uu ini melindungi hak nakes Indonesia? semoga bukan hanya niat kapitalisasi semata untuk kepnetingan dan keuntungan sekelompok orang/golongan tertentu”	Health service
“perubahan uu kesehatan seharusnya tdk dlm bentuk omnibus law, krna tujuan omnibus law adlah untk investasi. akhirnya masyarakat harus berjuang sendiri2 untuk dapat mengakses kesehatannya sendiri, krna negara membatasi fasilitas tersebut. rip welfare state”	Health service
“dikit dikit kesehatan mental hilih”	Health

“artinya bisa pakai asuransi swasta sebagai bentuk jaminan kesehatan sebagaimana amanat uu ketenagakerjaan atas hak tenaga kerja atas jaminan kesehatan” Health insurance

The theory of speech acts is divided into 5 types, but in this study only 3 types of speech acts were obtained, namely assertive 213 tweets (89.12%), directive 21 tweets (8.78%) and expressive 5 tweets (2.09%).

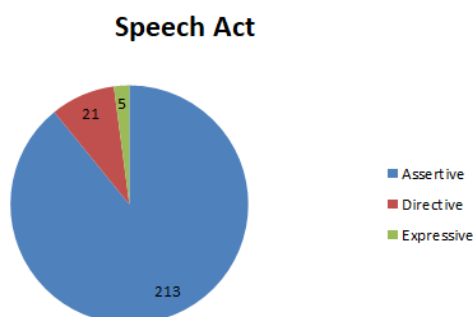


Figure 3. Diagram of speech acts

This study found that the assertive type only contains tweets that state (213 tweets). In contrast, the directive type consists of tweets that invite 2 tweets, recommend 8 tweets, command 10 tweets and prohibit 1 tweet. The expressive type produced 1 tweet each for tweets containing apologies, congratulations, thanks, regrets and thanks (Figure 4).

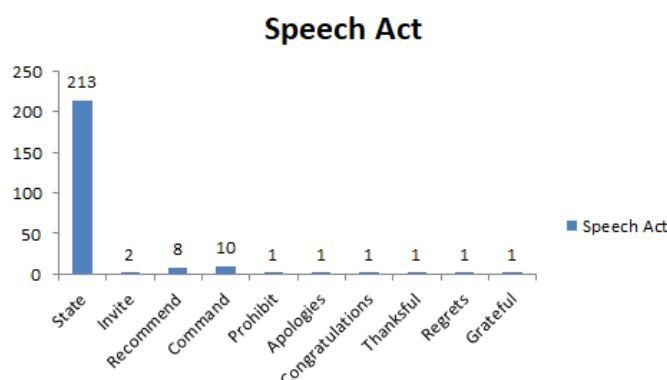


Figure 4. The results of the Speech act analysis

DISCUSSION

Omnibus legislation aims at simplifying the number of regulations that include a review and repeal of many laws in one go. A solution to simplifying too many rules can be found in this concept. Fixing one problem is not enough to revise just one law because of the many overlapping regulations (Putra, 2020). New government policies will certainly bring welcome, response and sentiment from social media users. The common use of tweets by teenagers facilitates a quick response to government policies. Twitter allows users to share their opinions and emotions freely. This media does not have strict rules about what users can share, so users can freely express their opinions and emotions, both positive and negative. This makes twitter a valuable source of data for understanding public sentiment (Bashir et al., 2021). The results showed that the tweeting public was generally neutral although there were some who showed negative and positive sentiments. These results are certainly influenced by information through other social media that intensively report based on the media's point of view. One of the dominant ones is television media. The results of research on the source of the news show that tvonenews.com focuses on the rejection of health workers whose rights are infringed. Meanwhile, liputan6.com conveyed that there are low-income people who are threatened by the omnibus health bill because there is no health financing for them (Krida

GW dan Widodo W., 2023). The results of this study with the NBC model analysis show excellent accuracy with 94% correct predictions. This result is different from previous research that uses KNN algorithm analysis, by showing the effectiveness of using KNN in improving the quality of sentiment analysis with an accuracy value of 84.58% (Tupari, Abdullah S, dan Chairani, 2023). The results also show that the word 'health' dominates the word cloud, indicating that health issues are the most important aspect of the omnibus law.

The impact of the omnibus law itself still draws pros and cons from the public and the government. There has been a lot of negative news related to this law, although the government is still aggressively educating the public. This is because Indonesia's economic difficulties are considered to be alleviated by the ratification of the Job Creation Law. On the other hand, it is feared to be a boomerang that can torment the community or labour force (Citra et al., 2022). Some health professionals objected to the omnibus law, but the bill was enacted anyway (Purnomo AD, Hurit HE, dan Amir M., 2023). Assertive behaviour, which is speech that binds the speaker to the truth of the proposition expressed, has been widely conveyed on twitter although there are some dissertive and expressive speech. Assertive speech can mean 'accepting', 'seeking safety in expressing opinions', but it does not rule out the possibility that many speakers are 'ignorant' of the situation. However, the omnibus law bill has been enacted, so it is necessary for the community to play a role in overseeing the implementation of the law so that its implementation prioritises public health.

CONCLUSION

Neutral sentiment dominated the tweets compared to negative sentiment and positive sentiment. There were 9 themes found in the tweets, with the dominant themes being laws and government. The results showed that the majority of tweet users were assertive and gave 'statements' in response to the omnibus health law. There needs to be an effort to increase socialisation and good implementation of the omnibus law to increase positive sentiment in the community.

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