

## ABSTRACT

### **Sentiment analysis of stunting among Indonesian Twitter users**

#### **Background:**

Stunting is a form of protein-energy malnutrition prioritized by the government to reduce the prevalence to 14% by 2024 to achieve the Sustainable Development Goals (SDGs). Social media including Twitter data could offer rapid and real-time alternative for analysis of situational awareness in public health. The results could be used as a reference for health promotion strategy according to community need as well as input for program or policy intervention. This study aimed to analyse public sentiment on Twitter regarding Indonesian stunting program.

#### **Methods:**

Indonesian-language Twitter data related to the stunting program (keyword: “stunting”) was retrieved from 18 December 2022 – 3 February 2023 using Twitter Search API in R software. The data collected was then pre-processed and classified. Data was identified based on type of users and the location, frequently discussed topics, and sentiments. Exploratory data and qualitative analysis were used to answer the research question.

#### **Results:**

A total of 9.431 from 15.062 tweet that had been captured met the inclusion criteria which positive, negative and neutral sentiment were obtained from 47,7%, 13,8% and 38,4% Twitter’s user. The National Nutrition Day (HGN) increased the trend of positive sentiment and reduced the negative sentiment. Most of users were an individual users, public media, or non-health government institutions, located in Java Island, especially Jakarta City, aimed to react, convey the news and persuasion. Community support for the programs can be influenced by political factors, technical package, effective management, communication, cross-sector partnerships and innovation.

#### **Conclusion:**

Data from Twitter, as an open-access social media, may be useful for greater understanding of public perception of stunting reduction program in Indonesia, finding unique innovation in certain areas, as well as identifying the enabling factors for interventions.

**Keywords:** health program, stunting, sentiment analysis, Twitter