

Authors: **Sunday Oko, Patience Adejo, Kemisola Agbaoye, Vivianne Ihekweazu**

Affiliation: **Nigeria Health Watch**

Introduction/Background

The rapid spread of health misinformation during the COVID-19 pandemic underscored the importance of effective, agile mechanisms of tracking, identifying, and managing misinformation throughout the public health emergency management cycle, from preparedness to recovery. With the advent of social media, misinformation has the potential to spread very rapidly, thus, debunks must be disseminated in a way that matches the speed with which misinformation spreads and on the same platforms.

To explore innovative mechanisms for tracking and managing online misinformation in real time, Nigeria Health Watch piloted a social listening project in September 2022, where online mentions on health misinformation across key focus areas/topics including maternal and child health, nutrition, etc. are monitored. In December 2022, mentions on routine immunisation were added to the list of topics being monitored, to gain insights on vaccine hesitancy/acceptance to inform demand generation for routine immunisation/vaccination programs in Nigeria.

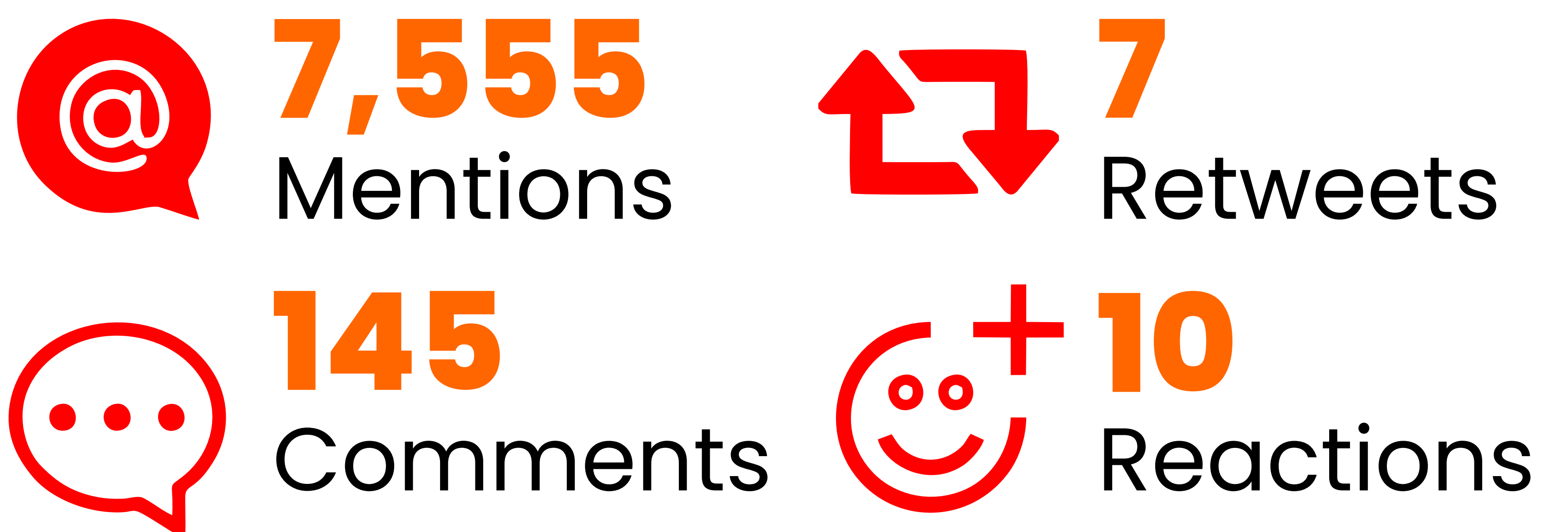
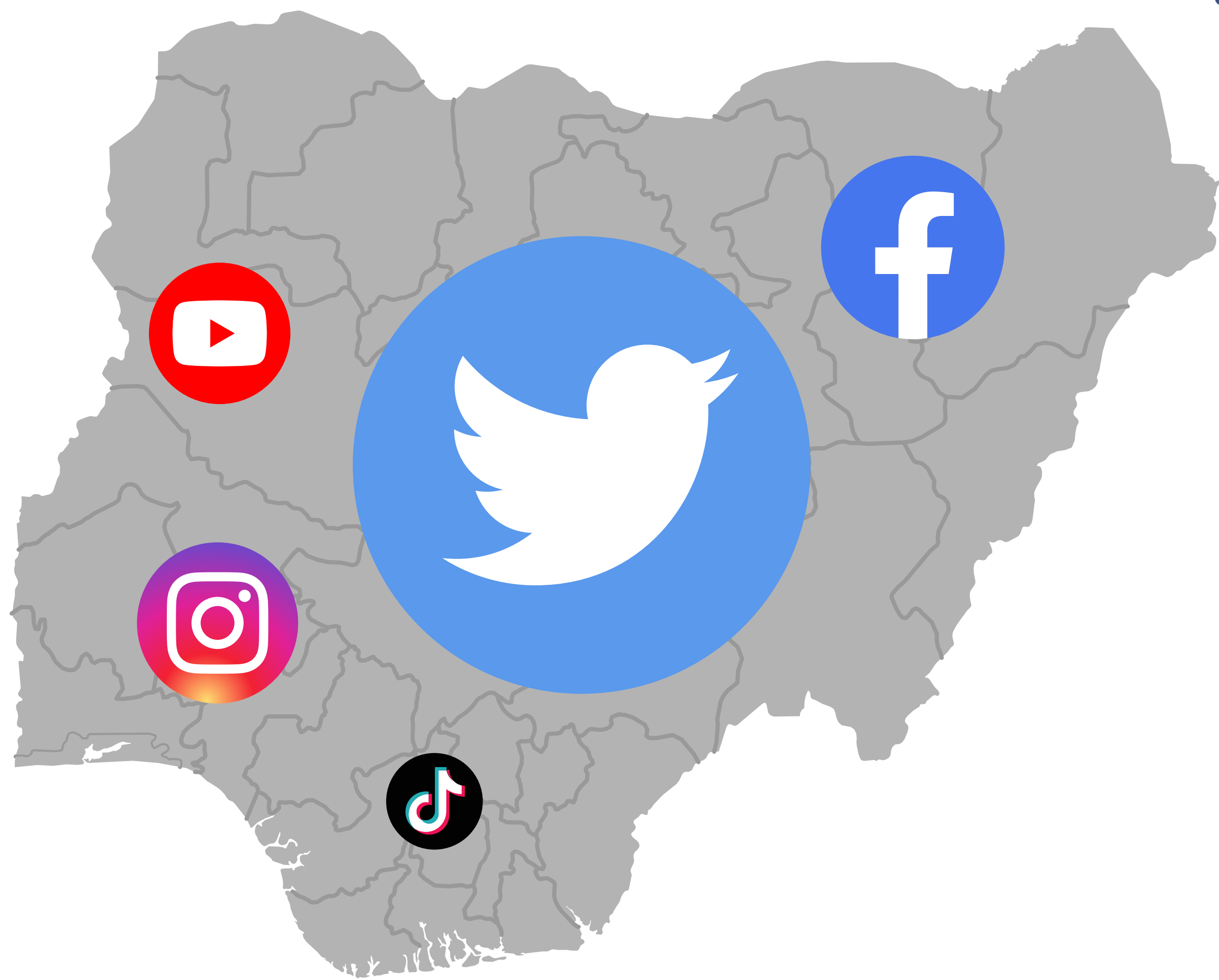
Methods

An online social listening tool (an artificial intelligence powered app) was piloted to listen across various social media platforms (Facebook, Twitter, YouTube, Instagram, TikTok), online news sites, blogs, and fora. Mentions are set to be collected across thirty-six states in Nigeria, generated based on a list of keywords developed by the team. A team of listeners screen mentions collated by the app weekly, and identify misinformation around selected topics. Identified misinformation are collated, analysed and prioritized for debunking using predetermined criteria – level of engagement (number of likes, retweets, reposts, comments, shares), potential to cause harm and believability (more recently added).

Desk research is then conducted to debunk prioritised misinformation using current evidence available in peer reviewed journals, public health guidelines, etc. Debunks are subsequently adapted into easy-to-digest, engaging messaging in multi-formats (infographics, videos, audio, etc.) and disseminated on the same platforms on which they were identified. Impact is measured using online polls and surveys, checking audience knowledge/exposure to the misinformation, as well as online engagement with the debunks (both quantitative and qualitative).

Results

Over a period of six weeks of listening on routine immunization/vaccination (December 1, 2022, to January 11 2023), seven thousand five hundred and fifty-five (7,555) mentions were identified, out of which three (0.2%) were identified as misinformation across various social media platforms, all on the safety and efficacy of the COVID-19 vaccine. All three mentions' authors were from the United States, but 145 comments, 7 retweets and 10 reactions on the posts were from audiences in Nigeria, with Twitter recording the highest level of engagement. No significant differences/similarities were found in the demography and geographical location of the Nigerian audience. The pilot is set to be completed in February 2023.



Recommendations/Conclusion

The COVID-19 vaccines still dominate online discussions around vaccination/routine immunisation, and wrong perceptions on the safety/efficacy of the vaccines persist. The need to track and debunk misinformation on vaccines remains, using agile platforms that match the rapid way misinformation now spreads. There is also a need to explore the impact of public perception of the COVID-19 pandemic (and the roll out of the Emergency Use Vaccines) on routine vaccines, as well as on the roll out of new vaccines for future infectious diseases.

References

- Lee, S.K., Sun, J., Jang, S. et al. Misinformation of COVID-19 vaccines and vaccine hesitancy. *Sci Rep* 12, 13681 (2022). <https://doi.org/10.1038/s41598-022-17430-6>
 Nelson T, Kagan N, Critchlow C, Hillard A, Hsu A. The Danger of Misinformation in the COVID-19 Crisis. *Mo Med.* 2020 Nov-Dec;117(6):510-512. PMID: 33311767; PMCID: PMC7721433.
 WHO <https://www.who.int/emergencies/diseases/novel-coronavirus> (2022).