Cholera Communication and Trust Ecology in Conflict- Affected Cameroon: A Multi-Channel Analysis Across social, Broadcast, and Faith- Based Media.

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Abstract

Background

Cholera outbreaks in delicate political settings test the integrity of both public institutions and information structures. In the 2021/2022 cholera outbreak which happened in southwest region of Cameroon, there was an unfolding amid an armed conflict that brought about an uneven trust in official communication, and uncovered the limitations of centralized crisis messaging.

Objective

This study examines how numerous information networks, digital, broadcast, and faith-based, affected public sentiment and communication adherence during the 2022 outbreak. The findings are situated within the frameworks of Trust Ecology, Crisis and Blame Framing and WHO Infodemic Management.

Methods

A reflective thematic analysis of 13 publicly accessible social media posts(Facebook, YouTube, Twitter, and blogs) and background review of state, commercial, and faith-based radio/TV content from January to April 2022. Posts were coded for actor type, theme, sentiment, and misinformation. Additional qualitative data were triangulated from local field perceptions and community reports curated by the Pillar Core Research Group.

Results

Social media deliberations were dominated by honest signals of 66 percent and prevention messages of about 33 percent, with structural-blame framing of about 24 percent, aiming infrastructure and governance failures rather than biomedical denial. Positive or neutral sentiment reported for 82 percent of posts; misinformation was insignificant. Meanwhile, state and faith-based radio/TV provided constant, personalized health messaging, helping stabilize public confidence and enabling early containment.

Conclusion

The findings expose a strong trust construction anchored in radio, television, and faith-based communication. Despite conflict, the region's multi-channel ecosystem preserved factual integrity, demonstrating how fusion media collaboration can counterweight institutional distrust.

Keywords: Cholera, Cameroon, Health Communication, Broadcast media, faith Networks, Infodemic Resilience, trust Ecology, Conflict Communication.

1. Introduction

Disease communication becomes both a medical and political act in conflict affected societies. This intersection was exemplified through the 2021/2022 cholera outbreak in the South West Region of Cameroon. It was a biological emergency which unfolded amidst a crisis of legitimacy. Citizens turned to trusted intermediaries like faith leaders, radio hosts, and humanitarian organization, to interpret and filter official messages as both state and non-state actors compete for narrative authority.

Historically, cholera is linked to poor sanitation and weak infrastructure, making it thrive in such governance vacuums. The cholera outbreak in Cameroon followed regional patterns of misinformation, institutional fatigue, and political fragmentation disrupted risk communication as it was in Haiti in 2010, Yemen in 2017-2019, and Eastern DRC in 2018-2020.

These phenomena is recognized by the Pillar Interdisciplinary Research Journal (PIRJ) not merely as public- health issues but as socio technical failures. This study links epidemiology, communication, sociology, and governance to illuminate how multi-channel trust ecosystems operate under duress.

2. Methods

2.1 Study Design

Qualitative, Retrospective, interpretive, this analysis applied Trust Ecology to map communicative power structure within an ongoing conflict zone.

2.2 Data Sources

- **Online corpus (n=11):** Publicly accessible posts from January to April, 2022 referencing cholera in Tiko, Limbe, Buea, of the South West Region.
- **Supplementary Sources:**

  Health bulletin archives from Cameroon's Ministry of Public Health.

  Local radio broadcast and faith-based summaries curated by Pillar Core Network's field partners.

  Community listener feedback notes.

2.3 Coding Framework

Variable	Description
Platform	Facebook, Twitter, You Tube, Blogs/News
Actor Type	Humanitarian, Government/NGO, Citizen Media
Theme	Prevention, Reassurance, Alert, Structural Blame
Misinformation	Minor, None, Major
Sentiment	Negative, Neutral, Positive

2.4 Analytical Approach

Inductive thematic coding was conducted using NVivo-style manual clustering. Frequencies were generated for sentiment and thematic distribution. Trends were interpreted through crisis and Blame Framing and Infodemic management lenses.

2.5 Ethical Compliance

This study used publicly accessible, non- identifiable data and was deemed exempt from full IRB review under Pillar Core Network LLC Internet- Based Research Policy (IRB Ref.2025-01).

The research adheres to Cope with WHO digital- Data Ethics Guidelines (2021-2022).

3. Results

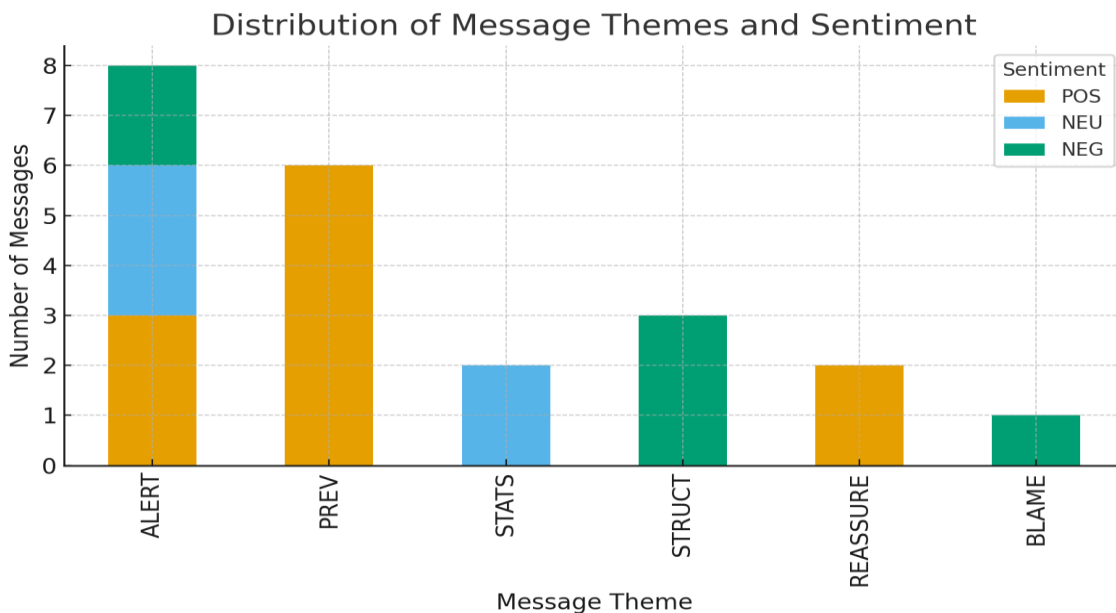## 3.1 Thematic Composition of Outline Discourse

Figure 1. Distribution of message themes and sentiment in social-media posts on cholera (n=11).

Factual alerts and practical prevention messages accounted for 9 or 11 posts (82%). Structural blame content appeared in 2 posts(24%), reflecting grievances toward governance while retaining biomedical accuracy .Only one instance of minor misinformation (handshake avoidance) was identified.
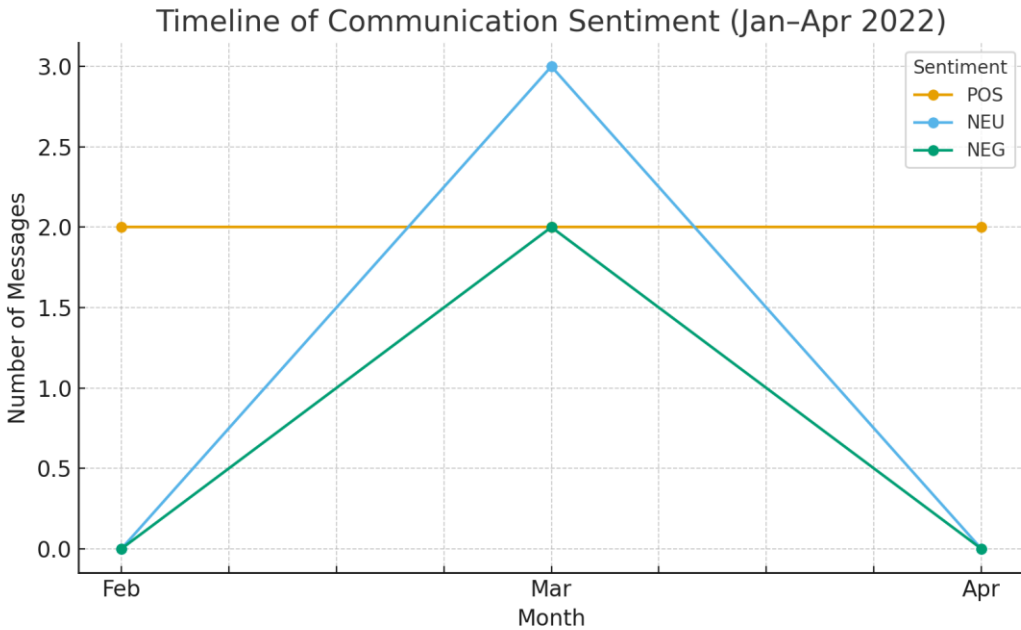
3.2 Temporal Sentiment Pattern

Figure 2. Timeline of online sentiment related to cholera communication (January to April, 2022).

Sentiment analysis indicated a transient negatively spike in March coinciding with case escalation. By April, reassurance dominated, aligning with national reports of containment.

''We are on alert, keep water clean and hands washed." (Feb 2022)

''Our town suffers while leaders argue who is responsible."(March 2022)

3.3 Broadcast and Faith Based Narratives

Radio and television sustained practical, uniform guidance across linguistic lines. Religious media reframed hygiene as spiritual discipline and moral duty.

"I heard it on the radio and then at church, so everyone started boiling water."

This faith broadcast alignment counterbalanced the absence of political consensus, maintaining coherence across communities divided by conflict.

4. Discussion

This study underscores how trust ecosystems can remain operational under sociopolitical stress. Social media acted as an expressive but largely factual arena, while broadcast and faith-based channels functioned as stabilizers.

4.1 Interdisciplinary Insight

From a communication standpoint, Cameroon's hybrid ecosystem validated the multi-legitimacy model, diverse voices carrying unified technical guidance.
From a governance lens, it highlights how controlled broadcasting, often critiqued for censorship, can function as a containment instrument during acute public-health crises. Sociologically, the re-moralization of hygiene behavior by faith actors demonstrates the persistence of cultural authority in information uptake.

4.2 Comparative Context

Compared to Haiti (2010) and DRC (2018–2020), where misinformation cascaded alongside institutional distrust, Cameroon's case demonstrates that when factual broadcast anchors remain trusted, digital noise can coexist without destabilizing behavior.

4.3 Policy and Practice
1. Institutionalize partnerships between Ministries of Health and faith broadcasters.
2. Classify licensed radio/TV as strategic health infrastructure.
3. Integrate real-time social-listening dashboards to identify emerging grievances.
4. Foster convergence of content while respecting plurality of voices.

5. Limitations

The dataset was small and English/Pidgin dominant. Radio and sermon content relied on verified program summaries rather than full transcripts. Behavioral impact was inferred through plausibility, not direct measurement.

6. Conclusion

Within a context of political instability, Cameroon's 2022 cholera response demonstrated that hybrid communication ecosystems, linking state, religious, and community media, can sustain factual accuracy and rebuild trust.

For interdisciplinary scholarship, this case reinforces that health crises are not only biomedical events but information governance challenges. Strengthening such cross-sector communication should be central to Africa's epidemic preparedness.

7. Acknowledgements

8. Funding

9. Competing Interest

The author declares no competing interests.

10. Data Availability

Dataset (*buea_cholera_conflict_sensitive_dataset_2022.csv*) available upon request; to be archived on *PillarScholar.org* repository post-publication.

11. Author Contributions (Credit Taxonomy)

Conceptualization, Methodology, Data Curation, Writing, Original Draft: Adeline Shuri, PhD **Review & Validation:** Pillar Core Research Group.

12. References

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Annex A- Dataset Transparency Summary (Pillar Core Repository Draft)

File Name: *buea_cholera_conflict_sensitive_dataset_2022.csv*

Variables: Platform · Actor Type · Themes · Sentiment · Conflict Orientation · Misinformation Level · Date · Excerpt

Curated by: Pillar Core Research Group, Pillar Core Network LLC (Tulsa, USA).

Data Sharing Statement: Will be hosted on *PillarScholar.org/data* upon editorial acceptance.

Formatting Checklist for PIRJ Submission

- Font: *Times New Roman, 12 pt*
- Line spacing: *Double*
- Margins: *1 inch all sides*
- Page numbering: *Bottom centre*
- Insert:

> **Figure 1:** figure1_sentiment_distribution.png (after Section 3.1)
>
> **Figure 2:** figure2_timeline_sentiment.png (after Section 3.2)