

# Characterizing the politicized news media coverage of the Mpox epidemic

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## **Extended Abstract**

Mass media plays a central role in framing political discourse surrounding health issues and impacts public attitudes when the issue is partisan divided (Fowler & Gollust, 2015; Kahan & Landrum, 2017). Crucially, when media coverage of health issues is highly politicized, i.e., driven by partisan interests as opposed to scientific facts, individuals may increasingly rely on political elites as opposed to medical professionals for information, hence amplifying partisan differences in risk perceptions (Hart et al., 2020, p. 19). Studies have shown that such perceptions, shaped by partisan motivated reasoning and cultural contagion, serve to increase vaccine hesitancy and distrust in medical institutions (Fowler & Gollust, 2015; Kahan & Landrum, 2017), thus undermining public health efforts during medical crises.

In 2022, the United States was struck with an Mpox epidemic, which disproportionately affected Sexual and Gender Minorities (SGMs), primarily Men who have Sex with Men (MSMs). Between 17<sup>th</sup> May 2022 and 11<sup>th</sup> January 2024, it led to 31,689 cases and 56 deaths. The World Health Organization (WHO) declared the Mpox epidemic as a public health emergency of international concern between 23<sup>rd</sup> July 2022 to 10<sup>th</sup> May 2023. Mpox (formerly known as monkeypox) which was conventionally zoonotic (transmitted from animals to humans) and endemic to central and western Africa, was primarily spreading via skin-to-skin contact or direct contact with body fluids during this epidemic across the world. While it was not classified as a sexually transmitted infection (STI), the community transmission of Mpox occurred overwhelmingly among sexual contact networks of SGMs (95.2% of all cases), and additionally disproportionately affected Black and Hispanic individuals (63.48% of all cases) in the US (2022 *U.S. Map & Case Count | Mpox | Poxvirus* / CDC, 2023; Philpott, 2022).

The media coverage of the Mpox epidemic highlighted the many weaknesses of the US public health system. Sentiment analysis and topic modelling studies on public discourses on Facebook, Twitter, and Reddit (Anoop & Sreelakshmi, 2023; Thakur, 2023) reveal a pervasiveness of fear and stigma-based messaging. SGMs found that the Mpox messaging overwhelmingly targeted and stigmatized the LGBTQIA+ community, thus increasing mental distress and distrust in governmental institutions among vulnerable communities (Hong, 2023; Owens & Hubach, 2023). Political actors such as Marjorie Taylor Greene painted Mpox as a sexually transmitted infection and a “gay disease” to further their anti-LGBTQIA+ legislation such as the “Don’t say gay” bill. However, very little attention has gone into studying the news media coverage of Mpox during the epidemic. While social media discourses could serve as a proxy for public discourse and perceptions of Mpox, news media complements our understanding of how journalists dramatize controversial issues for

attention, and how political elites weaponize the controversy to propagate partisan ideology. Surprisingly, where scholarship has studied the politicization of health controversies such as the COVID-19 and the HPV in news media, its extrapolation to the case of the Mpox epidemic hasn't been addressed.

In this study, we characterized and measured politicization in the US news media coverage of Mpox. First, we obtained a dataset of 7721 articles published in 249 national US news outlets between May 1 to October 31 2022 through Media Cloud (Roberts et al., 2021), an online open-source content analysis tool that maps news coverage of current events. Second, we curated texts for 6283 of these articles by web-scraping through the Python package newspaper3k (*Newspaper3k: Article Scraping & Curation — Newspaper 0.0.2 Documentation*, n.d.). Third, we conducted a thematic analysis (Braun & Clarke, 2006) on a subset of these articles (844 articles) for which partisan-leaning information for the media outlets that published them could be obtained (Robertson et al., 2018). We used an inductive and latent approach to identify 9 politicized themes (t1-t9, **Table 1**) in the corpus, with each individual article as the unit of analysis. Each article could be assigned 1 or more politicized themes (one to many classification) between t1-t9, and if none of those themes were identified in the article, it was classified as nonpoliticized (t0). Thus, we defined politicization in our context in terms of the 9 politicized themes (t1-t9) and classified an article as politicized if it contained at least one of those themes. Finally, we adopt an LLM-in-the-loop framework to leverage a supervised GPT-4 based model to scale up the analysis, by feeding the 844 human-labelled articles as the training dataset to generate codes for the rest of the 6283 articles. While Machine-learning model-assisted frameworks have been previously used for measuring politicization, they primarily used a keywords-based approach, which oversimplifies politicization to word-based semantics. On the other hand, while manual coding approaches successfully identify the nuanced latent politicized themes, they're time-intensive and don't scale up easily. Therefore, we married these two approaches to measure the politicization of news media coverage of Mpox in our study.

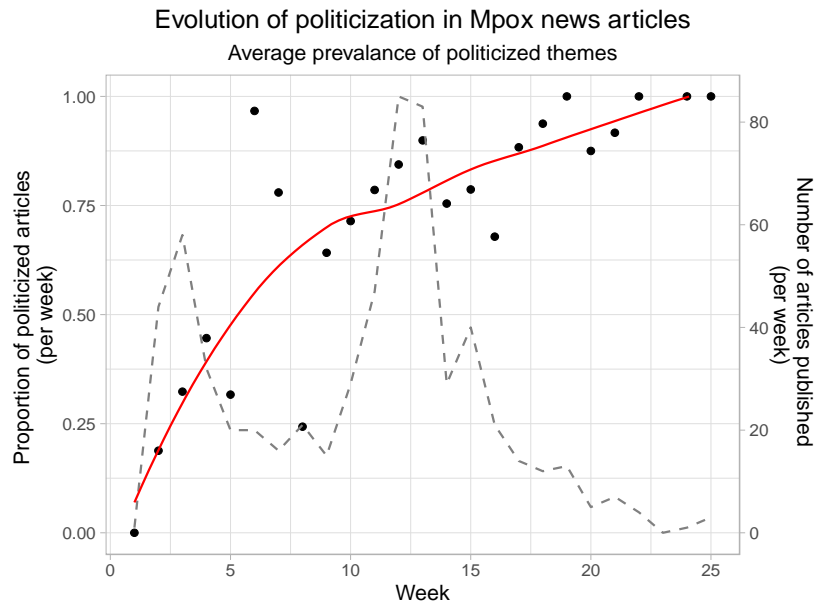
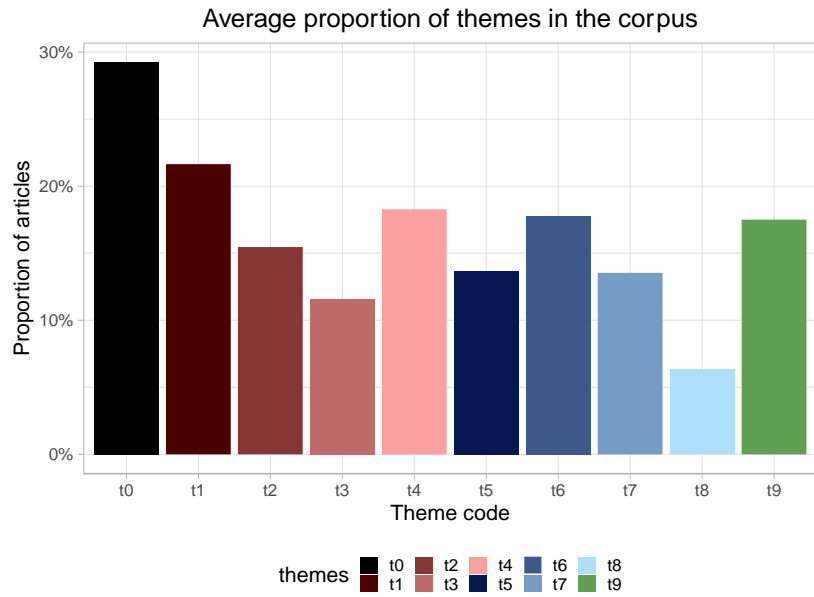
We found that the news media coverage of Mpox was heavily politicized (**Figure 1A**), with over 70.75% of all articles containing at least one of the politicized themes (t1-t9). While there were differences between the pervasiveness of left-leaning (t5-t8) and right-leaning (t1-t4) themes, they were both considerable, totaling 51.28% and 66.96% of all articles (note that an article can feature both left and right-leaning themes). Undermining or stigmatizing Mpox (t1) was the most prominent theme (21.64%), whereas left-wing ideology unrelated to SGMs or Mpox (t8) was the least prominent theme (6.32%). Surprisingly, 19.51% and 14.51% of all articles contained t3/t4 and t7/t8 themes respectively, indicating that a notable portion of the messaging wasn't centered around Mpox, and instead weaponized it as an instrument to propagate purely partisan interests. Finally, in line with previous findings on the sticky nature of politicization (Fowler & Gollust, 2015), we find that the proportion of politicized articles increased over time (**Figure 1B**). Thus, we show that once a health issue, especially one concerning marginalized communities gets politicized, the political and controversial nature of the issue becomes persistent a feature of the discourse.

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Label	Theme	Description	Example quotes
t0	Nonpoliticized	Primarily informative, no existence of the following themes.	<i>“The virus can spread via body fluids, skin contact and respiratory droplets”</i>
t1	Undermining or stigmatizing Mpox	Expressing disgust and over-emphasizing the sexual nature of transmission among SGMs	<i>“Gay sex is the chief spreader of Mpox.”</i> <i>“All panic about monkeypox should be shrugged off”</i>
t2	Berating public health response to Mpox	Emphasizing the public health failure in Mpox response and distrust in institutions	<i>“Woke healthcare contributes to Mpox spread.”</i> <i>“Federal government has another public health failure.”</i>
t3	Condemnation of SGMs, unrelated to Mpox	Heteronormative essentialism, anti-trans rhetoric, anti-marriage equality, anti-abortion.	<i>“Can we at least try to find a cure for homosexuality?”</i> <i>“Procreation has been the hallmark of marriage since its inception.”</i>
t4	Republican talking points unrelated to SGMs & Mpox	Partisan views pro-republican, anti-democrats, anti-masking, right wing discourse on other legislative movements	<i>“Democrat run cities are war zones.”</i> <i>“Mask mandates have done little to nothing to reduce the spread of the Chinese coronavirus”</i>
t5	Guidance against Mpox stigma and misinformation	Emphasizing that Mpox is not a gay disease, debate over abstinence-based messaging	<i>“Despite some framing that paints monkeypox as an STI, it is not”</i> <i>“Stigma and discrimination can be as dangerous as any virus”</i>
t6	Highlighting public health challenges around Mpox	Expressing disappointment over CDC’s response, reporting vaccine shortage, and empathizing with SGMs	<i>“Vaccine availability has been limited and slow to come online.”</i> <i>“The monkeypox outbreak reveals the failure in the U.S. to take public health seriously”</i>
t7	Empathizing with SGMs, unrelated to Mpox	Comparisons to the HIV/AIDs crises, views pro-abortion, pro-marriage equality, pro-queer and trans rights	<i>“Conservatives try to ruin family friendly drag show.”</i> <i>“We need to ensure the safety of pregnant people who seek abortion care”</i>
t8	Democratic talking points unrelated to SGMs & Mpox	Partisan views pro-democrat, anti-republican, pro-masking	<i>“Biden has defended democracy across the globe.”</i> <i>“But Republicans just want an excuse to hate.”</i>
t9	Biomedical racism	Highlighting racial disparities in epidemic demographics and vaccine distribution, racist connotations in Mpox messaging	<i>“Black men in Georgia are being disproportionately impacted by the latest terrifying virus to hit the planet.”</i>

**Table 1:** Politicized themes identified through inductive thematic analysis of 844 news articles surrounding Mpox. An article is politicized if any of the themes t1-t9 are present in the article.



**Figure 1: (A)** Total prevalence of themes in 844 news articles. 70.75% (inverse of t0) of all articles were politicized, i.e., contained at least one among t1-t9 themes in them. Themes t1-t4 are right-leaning, t5-t8 are left-leaning in their latent ideology.

**(B)** Dynamics of the total number of news articles published per week (gray, dashed line), and the proportion of them that were politicized (black points are the true value, and red curve is the smoothed fit estimates through LOESS regression). The politicized nature of news media coverage is sticky, i.e., once an issue is politicized, it stays politicized.