Fabio Cangero and Antonio Fruttaldo

Breaking the Chains of Bias. Investigating Monkeypox (Mpox) Narratives in Public Health Discourse[1]

Abstract: Ever since its onset, the monkeypox outbreak (July 2022–May 2023), similarly to HIV in the 1980s, has been disproportionately associated with a category of people defined by international medical organisations and the media as gay, bisexual and men who have sex with men (GBMSM), since a higher percentage of infections has been reported among this cohort. Inevitably, the phenomenon has fuelled stigma and discrimination against the LGBTIQ+ community, leading to incidents of violence and ostracism. However, it was with the rollout of the vaccine in the UK and the US that monkeypox-related social exclusion soared to a dramatic extent, thereby reinforcing the false myth that sexual orientation can determine susceptibility to the virus. In this regard, official accredited sources like the UK NHS and the GOV UK website recommend that vaccine should be primarily administered to GBMSM "who have multiple partners or participate in sex groups or attend sex-on-premises venues", thus publicly constructing this category as more vulnerable to contracting the disease. In light of this, the present study employs a combination of quantitative and qualitative research methods to explore the discourses underpinning the (mis)representation of monkeypox. In particular, the methodology will involve corpus-based approaches to analyse a large dataset of newspaper articles, while a more qualitative and discourse-based analysis will focus on a series of institutional documents issued by the UK, the US and Italian governments and medical organisations. Underpinning both approaches is a Critical Discourse Studies (CDS) theoretical background in order to gain a deeper understanding of the data to: (i) unearth the discursive strategies whereby media representations and official guidelines have fed marginalisation and stigma against LGBTIQ+ individuals; (ii) analyse the deleterious impact of prejudiced language use in formal documents and international media coverage on health-seeking behaviour; and finally (iii) call for a more inclusive and evidence-based approach to public health communication so as to avoid perpetuating negative stereotypes and prejudices.

Keywords: *critical discourse analysis*, *corpus linguistics*, *stigma*, *monkeypox (mpox) outbreak*, *official guidelines*, *news reporting*

1. Introduction

Since the eradication of smallpox was declared by the World Health Assembly in 1980, monkeypox (hereafter referred to as 'mpox'; see Section 5.1 for the reasons behind this choice) has become one of the most significant orthopoxvirus threats to global health.[2] Mpox, a human pathogen that was first identified in the Democratic Republic of Congo (formerly Zaire) in 1970, has a significant historical background.[3] It emerged in the 1970s in Central and West Africa, marking the first recorded outbreaks and, over the past five decades, cases of the mpox virus have been documented in eleven African

[1] The authors have jointly discussed and conceived this paper. Nevertheless, individual contributions in writing this research article are identified as follows: Fabio Cangero is responsible for Section 2, Section 4, and Conclusion; Antonio Fruttaldo is responsible for Introduction, Section 3, and Section 5.

[2] The period defining the mpox outbreak (i.e., July 2022–May 2023), as referenced in the text above, was officially established by the World Health Organization (WHO) based on the virus's epidemiological trajectory. For additional details, refer to the following website: https://worldhealthorg.shinyapps.io/mpx_global/, accessed 2 May 2024.

[3] Munawar Hraib *et al*., "The Outbreak of Monkeypox 2022: An Overview", *Annals of Medicine and Surgery*, 79 (2022), 1-4, DOI: 10.1016/j.amsu.2022.104069.

countries, which have been considered endemic to the disease as serological evidence suggests that various mammalian species harbour the mpox virus in endemic regions.[4]

The most recent outbreak of mpox was officially confirmed on May 7, 2022, following the presentation of symptoms consistent with the virus by a British resident who had recently travelled to Nigeria, a country with a high prevalence of the disease. According to the World Health Organization (WHO), as of March 31, 2024, over 95,226 cases have been reported across 117 countries worldwide, with more than 5,785 patients hospitalised globally for isolation or medical treatment. The United States reported the highest number of cases (i.e., 31,904 cases, with 58 deaths), followed by Brazil (i.e., 10,967 cases, with 16 deaths), Spain (i.e., 7,960 cases, with 16 deaths) and France (i.e., 4,206 cases, with fortunately no deaths).

#	Country or region	Total confirmed cases	Total probable cases	Total deaths
1	United States	31,904	0	58
2	Brazil	10,967	349	16
3	Spain	7,960	0	3
4	France	4,206	0	0
5	Colombia	4,090	0	0
6	Mexico	4,084	52	34
7	The United Kingdom	3,908	0	0
8	Germany	3,830	0	0
9	Peru	3,812	0	20
10	China	2,034	0	1
11	Democratic Republic of the Congo	1,763	0	2
12	Canada	1,499	77	0
13	Chile	1,449	26	3
14	Netherlands	1,299	0	0
15	Portugal	1,193	0	3
16	Argentina	1,136	0	2
17	Italy	1,042	0	0
18	Nigeria	843	0	9
19	Belgium	806	0	2
20	Thailand	755	0	1

Table 1: Mpox cases and deaths by country as of March 31, 2024 as reported by the World Health Organization (WHO).[5]

As Table 1 shows, the number of the cases reported globally is the reason why the unprecedented mpox outbreak in 2022-2023 caused international concern. Most cases reported were in Europe and the Americas and, because of the scale of the outbreak, the WHO Director-General Tedros Adhanom

[4] Faheem Anwar and Aqsa Waris, "Monkeypox Virus Outbreak: A Brief Timeline", *New Microbes and New Infections*, 48 (2022), 1-2, DOI: 10.1016/j.nmni.2022.101004; Hraib *et al*., "The Outbreak of Monkeypox 2022: An Overview".

[5] The global overview of mpox epidemiological situation is reported online by the World Health Organization (WHO) at the following website: https://worldhealthorg.shinyapps.io/mpx_global, accessed 2 May, 2024.

Ghebreyesus declared the multi-country outbreak of mpox to be a Public Health Emergency of International Concern between July 2022 and May 2023, issuing temporary recommendations to guide countries for a coordinated approach in the emergency response.

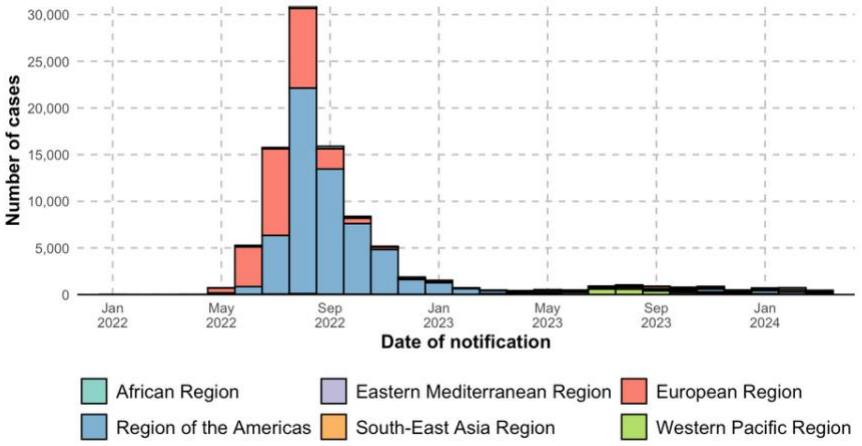


Fig. 1: Epidemic curve for mpox cases as reported up to March 31, 2024 (data taken from the WHO official website).[6]

In Figure 1, the epidemic curve of the mpox outbreak is provided showing that, since May 2022, a high proportion of these cases have been reported from countries without previously documented mpox transmission (specifically, outside of West and Central Africa). Throughout history, the emergence of certain stigma narratives has been a recurring phenomenon during the initial phases of outbreaks,[7] and such distorted narratives tend to be perpetuated through specific media framing strategies. For instance, during the COVID-19 pandemic, biased news framing in online media has led to the proliferation of prejudice against Chinese and, broadly speaking, Asian communities in American society, with China often unfairly labelled as the primary source of the coronavirus, fostering discriminatory narratives targeting Asian individuals.[8] Similarly, in the early stages of the mpox outbreak, African nations were erroneously labelled as the 'source' of the virus's spread, a misconception largely fuelled by media news reporting but, most importantly, by what Grant and Halaly present as 'colonial superiority', which is the result of imperialism influences in the perception of foreign affairs, particularly regarding medical

[6] The epidemic curve for mpox cases is available on the WHO official website at https://worldhealthorg.shinyapps.io/mpx_global, accessed 2 May, 2024.

[7] Gregory M. Herek and John P. Capitanio, "AIDS Stigma and Sexual Prejudice", *American Behavioral Scientist*, 42.7 (1999), 1130-1147, DOI: 10.1177/00027642990420070; Winnie W.S. Mak *et al*., "Comparative Stigma of HIV/AIDS, SARS, and Tuberculosis in Hong Kong", *Social Science & Medicine*, 63.7 (2006), 1912–1922, DOI: 10.1016/j.socscimed.2006.04.016; Chee T. Chang *et al*., "Monkeypox Outbreak: Preventing Another Episode of Stigmatisation", *Tropical Medicine & International Health*, 27.9 (2022), 754-757. DOI: 10.1111/tmi.13798; Weilun Ju *et al*., "Stigmatizing Monkeypox and COVID-19: A Comparative Framing Study of the Washington Post's Online News", *International Journal of Environmental Research and Public Health*, 20.4 (2023), 1-20, DOI: 10.3390/ijerph20043347.

[8] Henna Budhwani and Ruoyan Sun, "Creating COVID-19 Stigma by Referencing the Novel Coronavirus as the 'Chinese Virus' on Twitter: Quantitative Analysis of Social Media Data", *Journal of Medical Internet Research*, 22.5 (2020), 1-7, DOI: 10.2196/19301; Yachao Li *et al*., "Constructing and Communicating COVID-19 Stigma on Twitter: A Content Analysis of Tweets during the Early Stage of the COVID-19 Outbreak", *International Journal of Environmental Research and Public Health*, 17.18 (2020), 1-12, DOI: 10.3390/ijerph17186847; Angie Y. Chung *et al*., "COVID-19 and the Political Framing of China, Nationalism, and Borders in the U.S. and South Korean News Media", *Sociological Perspectives*, 64.5 (2021), 747-764, DOI: 10.1177/07311214211005484.

diseases or viruses.[9] The authors, following Karim's and Durham's observations,[10] emphasise the role of language in framing discussions with geographical spaces central to the process of 'othering' and media representations, similar to maps, shaping perceptions through language, visual imagery and symbols, thus positioning Western media as arbiters of 'normalising ideologies' around international standards of health (see Section 2 for a more detailed discussion). In this way, the Global North serves as a cultural reference point in geopolitical discussions, reinforcing power dynamics and reporting on global virus spread as a menace to westernised notions of civility often coming from African contexts.

In addition to racist discourses, discrimination surrounding mpox has also been directed at specific groups, such as individuals within the LGBTIQ+ community, with initial confirmed cases partially attributed to intimate encounters between men who have sex with other men.[11] This is the reason why, in the provocative title of their paper, Shah refers to mpox as the 'new gay plague', echoing the public attitudes toward such a virus as a result of media framing.[12] In this respect, the title draws a comparison, as will be further elaborated in Section 2, between the old (i.e., the HIV outbreak) vs new (i.e., the mpox epidemic) perception of the diseases, with HIV having been heavily stigmatised by media framing as a gay men-targeting illness since the 1980s. Scholars in the field of media studies often emphasise the concept of media frames in the frameworks of social constructionism and reality formation,[13] according to which the framing of an idea through various semiotic systems (including language itself) has the power to emphasise certain aspects while obscuring others.[14] Consequently, media contents such as news stories do not merely reflect reality; they actively shape it.[15] In this way, the use of metaphors,

[9] Rachel Grant and Alan Halaly, "Paralleling the Gay Man's Trauma: Monkeypox Stigma and the Mainstream Media", *Journal of Communication Inquiry* (2024), 1-19, DOI: 10.1177/01968599241241467.

[10] Karim H. Karim, *The Media of Diaspora: Mapping the Globe* (London and New York: Routledge, 2003); Meenakshi G. Durham, "Scene of the Crime: News Discourse of Rape in India and the Geopolitics of Sexual Assault", *Feminist Media Studies*, 15.2 (2015), 175-191, DOI: 10.1080/14680777.2014.930061.

[11] Clarissa R. Damaso, "Phasing out Monkeypox: Mpox is the New Name for an Old Disease", *The Lancet Regional Health: Americas*, 17 (2023), 1-2, DOI: 10.1016/j.lana.2022.100424; Francisco Rocha *et al*., "Monkeypox and the Return of a Specter: The Healthcare Field in Dark Times", *Interface: Comunicação, SaúDe, Educação*, 26 (2022), 1-10, DOI: 10.1590/interface.220473; Mário Scheffer *et al*., "Monkeypox in Brazil between Stigma, Politics, and Structural Shortcomings: Have We Not Been Here Before?", *The Lancet Regional Health: Americas*, 17 (2023), 1–6, DOI: 10.1016/j.lana.2022.100394.

[12] Tej Shah, "'The New Gay Plague': Analysis of Public Attitudes toward Monkeypox", *medRxiv* (2022), 1-30, DOI: 10.1101/2022.11.01.22281797 (preprint).

[13] Teun A. van Dijk, *Racism and the Press* (London: Routledge, 1991); Teun A. van Dijk, *Society and Discourse: How Social Contexts Influence Text and Talk* (Cambridge: Cambridge U.P., 2009); Gregory M. Herek *et al*., "Stigma, Social Risk, and Health Policy: Public Attitudes toward HIV Surveillance Policies and the Social Construction of Illness", *Health Psychology*, 22.5 (2003), 533–540, DOI: 10.1037/0278-6133.22.5.533; Kathleen Tierney *et al*., "Metaphors Matter: Disaster Myths, Media Frames, and Their Consequences in Hurricane Katrina", *The Annals of the American Academy of Political and Social Science*, 604.1 (2006), 57–81, DOI: 10.1177/0002716205285589; Michael McCauley *et al*., "The H1N1 Pandemic: Media Frames, Stigmatization and Coping", *BMC Public Health*, 13 (2013), 1–16.

[14] Erving Goffman, *Frame Analysis: Essays on the Organization of Experience* (Boston, MA: Northeastern U.P., 1974); William A. Gamson *et al*., "Media Images and the Social Construction of Reality", *Annual Review of Sociology*, 18 (1993), 373-393; Giuseppe Balirano, "Framing Identities in Advertising: Multimodal Discourse Analysis", in Giuseppe Balirano and Maria Cristina Nisco, eds., *Language, Theory & Society: Essays on English Linguistics and Culture* (Naples: Liguori Editore, 2015), 2-40.

[15] Dennis Chong and James N. Druckman, "Framing Theory", *Annual Review of Political Science*, 10 (2007), 103–126, DOI: 10.1146/annurev.polisci.10.072805.103054; Paul D'Angelo, "Framing: Media Frames", in Patrick Rössler *et al*., eds., *The International Encyclopedia of Media Effects* (Hoboken, NJ: John Wiley & Sons, 2017), 1-10, DOI: 10.1002/9781118783764.wbieme0048; Giuseppe Balirano and Bronwen Hughes, "The Rainbow Conspiracy: A Corpus-Based Social Media Analysis of Anti-LGBTIQ+ Rhetoric in Digital Landscapes", in Stefania M. Maci *et al*., eds., *The Routledge Handbook of Discourse and Disinformation* (London and New York: Routledge, 2024), 306-324; Angela Zottola, *LGBTQ+ and Feminist Digital Activism: A Linguistic Perspective* (Cambridge: Cambridge U.P., 2024).

specific narrative techniques, and personal biases in discourse play crucial roles in moulding collective knowledge and influencing how we perceive the world around us.[16]

In an era characterised by globalisation and technological advancements, individuals increasingly navigate and make sense of their surroundings with images shaped by the media, using them to derive meaning about political and social issues. Therefore, the fact that, ever since its onset, mpox has been disproportionately associated with a category of people defined by international medical organisations and the media as gay, bisexual, and men who have sex with other men (GBMSM), as a higher percentage of infections has been reported among this cohort, inevitably fuelled stigma and discrimination against the LGBTIQ+ community, leading to incidents of violence and ostracism.[17] However, it is crucial to acknowledge a significant turning point in the mpox outbreak, coinciding with the vaccine rollout and leading to a noticeable increase in mpox-related social exclusion. Unsurprisingly enough, as previously underlined, the media played a substantial role in perpetuating these misconceptions. But what is interesting is that, in recommending prioritising for vaccination GBMSM, particularly "those who have multiple partners, participate in sex groups, or attend sex-on-premises venues",[18] official sources may have contributed to inadvertently frame this category as more susceptible to mpox, thereby encouraging and amplifying the misconceptions linked to the virus. Regrettably, this reinforced the false belief that one's sexual orientation or conduct could determine their vulnerability to the virus.

Given this background, in the following sections, a combination of quantitative and qualitative research methods will be adopted to investigate the discourses underpinning the (mis)representation of mpox in official governmental and medical guidelines and news reporting. The importance of these discursive forms of communication is highlighted by Chang *et al*.'s multilevel stigma mitigation framework,[19] which is based on Salihu *et al*.'s socio-ecological model.[20] This framework, with its five-level structure encompassing individual, interpersonal, organisational, community, and public policy dimensions, provides a comprehensive tool to visualise and characterise various anti-stigma forms of intervention. In particular, we will focus on the community and public policy dimensions tied to shared values, beliefs, attitudes, and behaviours, including disease-related stigma and discrimination, and the perspectives of laws, social services, and resource distribution to address inequalities. If these dimensions, which can be linked to media framing for the community dimension and to official governmental and medical guidelines for the public policy dimension, do not combat stigma but instead perpetuate it, the historical pattern of structural inequity and discrimination in responses to disease outbreaks will persist, as the case of mpox will serve as a stark reminder.

In this way, the present study aims to explore the ways in which official guidelines and the mainstream media reinforced stigma against GBMSM through its description and reporting on the 2022-2023 mpox outbreak. By investigating this topic, this article makes significant contributions to both queer studies and health communication domains since, by employing a critical discourse analytical perspective, different ideological discourses will be underpinned in the official voice of experts and the media coverage of the mpox outbreak. In particular, LGBTIQ+ stigma will emerge as one of the main ideological tenets of the texts under investigation, combined with racialised discourses linked to the misrepresentation of the virus as a form of attack against the Global North. Therefore, through an in-

[16] Renping Liu and Cheng Chen, "How News Reporting Exacerbated the Monkeypox Pandemic in Spain and the US: A Corpus-Based News Values Analysis", *Global Public Health*, 19.1 (2024), 1-16, DOI: 10.1080/17441692.2024.2320422.

[17] Grant and Halaly, "Paralleling the Gay Man's Trauma".

[18] This specification is available on the UK Health Security Agency website, in the Q&A section addressing mpox, available at the following link: https://ukhsa.blog.gov.uk/2022/10/28/answering-questions-on-monkeypox-vaccination, accessed 2 May, 2024.

[19] Chang *et al*., "Monkeypox Outbreak".

[20] Hamisu M. Salihu *et al*., "Socio-Ecological Model as a Framework for Overcoming Barriers and Challenges in Randomized Control Trials in Minority and Underserved Communities", *International Journal of MCH and AIDS*, 3.1 (2015), 85-95.

depth examination of these discourses, we aim to shed light on the underlying mechanisms through which stigma is perpetuated and offer insights for fostering a more inclusive approach to public health communication in order to avoid spreading negative stereotypes and prejudices.

2. Stigma, Minority Stress, Health Disparities and Transparency

In this section, a theoretical framework will be provided to facilitate a clearer interpretation and understanding of the discursive (mis)construction of mpox. Key concepts central to this study include *stigma*, *minority stress*, *health disparities* and *transparency*, all of which have massively informed this linguistic investigation.

One of the pioneering definitions of stigma provided by Erving Goffman frames it as an "attribute that is deeply discrediting",[21] resulting in the reduction of an individual to that stigmatising feature, which gradually comes to seep into every aspect of their persona. More specifically, this attribute can be regarded as the breach of a societal norm that an individual is inherently expected to abide by,[22] or the possession of a trait deemed socially undesirable.[23]

In the model expounded by Link and Phelan,[24] the initial stage of stigma formation involves the selection of the attribute to be stigmatised. In this regard, certain attributes are more prone to becoming stigmatised and stigmatising than others. For instance, characteristics like eye colour or tastes in food, music or movies are hardly ever the basis for stigma. On the other hand, attributes like skin colour, sexual orientation, gender identity, ethnicity, disability and obesity, to name but a few, often serve as catalysts for the rise of stigma and discrimination. The selection of the stigmatising feature is termed 'labelling',[25] involving the attachment of a category external to the individual onto them, which simplifies a person's complexity, reducing them to a stereotype or predefined category. This process also contributes to 'cognitive efficiency',[26] as predefined and stereotypical categories typically come with a set of defining features that allow us to readily form a mental representation of the stigmatised individual, stripping away their underlying complexity. Therefore, by categorising individuals based on external labels or attributes, we minimise the cognitive task of understanding and interacting with others.

The following step in the model hitherto described involves 'otherisation' or 'social othering',[27] whereby the stigmatising label gives rise to an irreconcilable dichotomy developing on the 'us' axis and the 'them' axis, which can even escalate to the point of violent behaviour and the exercise of violence when the 'other' is perceived as a threat.[28] This process often coincides with the use of linguistic expressions adopted by the in-group that totally identify members of the out-group with the stigmatising

[21] Erving Goffman, *Stigma: Notes on the Management of Spoiled Identity* (Englewood Cliffs, NJ: Prentice Hall, 1963), 3.

[22] Mark C. Stafford and Richard R. Scott, "Stigma, Deviance, and Social Control: Some Conceptual Issues", in Stephen C. Ainlay *et al*., eds., *The Dilemma of Difference: A Multidisciplinary View of Stigma* (New York and London: Plenum Press, 1986), 77-91.

[23] Jennifer Crocker *et al*., "Social Stigma", in Daniel T. Gilbert *et al*., eds., *The Handbook of Social Psychology*, Fourth Edition, vol. 2 (Boston, MA: McGraw-Hill, 1998), 504-553.

[24] Bruce G. Link and Jo C. Phelan, "Conceptualizing Stigma", *Annual Review of Sociology*, 27.1 (2001), 363-385, DOI: 10.1146/annurev.soc.27.1.363.

[25] Ibid.

[26] Susan T. Fiske, "Stereotyping, Prejudice, and Discrimination", in Daniel T. Gilbert *et al*., eds., *The Handbook of Social Psychology*, Fourth Edition, vol. 2 (Boston, MA: McGraw-Hill, 1998), 357-411.

[27] van Dijk, *Racism and the Press*; van Dijk, *Society and Discourse*; James A. Morone, "Enemies of the People: The Moral Dimension to Public Health", *Journal of Health Politics, Policy and Law*, 22.4 (1997), 993-1020; David W. Garland, *The Culture of Control: Crime and Social Order in Contemporary Society* (Oxford: Oxford U.P., 2001); Massimiliano Demata, "The Language of Fear: Cybercrime and the Borderless Realm of Cyberspace in British News", *I-LanD Journal: Identity, Language and Diversity*, 1.1 (2017), 126-144, DOI: 10.26379/1008; Massimiliano Demata, "Of Infiltrators and Wild Beasts: Nationalism and Populism in Benjamin Netanyahu's Narrative of the Borders", *Journal of Language and Politics* (2024), 1–22, DOI: 10.1075/jlp.23084.dem.

[28] Link and Phelan, "Conceptualizing Stigma".

attribute. A case in point is the utilisation of medicalising structures such as 'HIV-sufferer' instead of 'person living with HIV' when illness is stigmatised.[29]

The subsequent step to otherisation is 'status loss', which occurs when the stigmatising label attributed to a targeted individual leads to their social status being devalued. It has been observed that social status loss can manifest in various ways, from socialisation to the world of work, with out-group members experiencing ostracism and marginalisation at varying levels.

Besides, from the perspective of Ecological Systems Theory (EST),[30] stigma can be unpacked into three different categories, that is, (i) structural, (ii) interpersonal and (iii) individual.[31] The term 'structure' refers to systems including governments, institutions, organisations and communities, where stigma is perpetuated through legal measures that limit or hinder access to certain services, thereby creating an unequal distribution of resources and opportunities between in-group and out-group members.[32] While structural stigma mainly occurs at an institutional level, interpersonal stigma is the immediate result thereof. More specifically, the former legitimises individuals outside the stigmatised community to enact stigma at an interpersonal level, for example by attacking, harassing, assaulting or discriminating directly members of the targeted group. At a deeper, yet equally significant level, lies individual stigma, which entails the internalisation of self-constructed "orientations to themselves, others, and their environmental circumstances".[33] This leads to expectations of rejection, a propensity for concealment,[34] heightened anxiety and avoidance of social situations for fear of being targeted.

The experience of stigma within a community at one or multiple levels lays the groundwork for what has been defined as 'minority stress',[35] originating from proximal and distal stressors unique to a

[29] Luke Collins and Paul Baker, *Language, Discourse and Anxiety* (Cambridge: Cambridge U.P., 2023).

[30] In Ecological Systems Theory (EST), it is posited that phenomena evolve across multiple levels and exhibit diverse manifestations. These levels are conceptually depicted as concentric circles nested within each other, similar to Russian nesting dolls. This metaphor illustrates that while a particular phenomenon may unfold differently depending on the level or concentric circle under consideration, all its manifestations are interconnected and stem from a common origin. See Urie Bronfenbrenner, "Toward an Experimental Ecology of Human Development", *American Psychologist*, 32.7 (1977), 513-531; Urie Bronfenbrenner, *The Ecology of Human Development: Experiments by Nature and Design* (Cambridge, MA: Harvard U.P., 1979); Urie Bronfenbrenner, "Recent Advances in Research on the Ecology of Human Development", in Rainer K. Silbereisen *et al*., eds., *Development as Action in Context: Problem Behavior and Normal Youth Development* (Heidelberg and New York: Springer, 1986), 287-309.

[31] Jaclyn M. White Hughto *et al*., "Transgender Stigma and Health: A Critical Review of Stigma Determinants, Mechanisms, and Interventions", *Social Science & Medicine*, 147 (2015), 222-231, DOI: 10.1016/j.socscimed.2015.11.010.

[32] Mark L. Hatzenbuehler *et al*., "The Impact of Institutional Discrimination on Psychiatric Disorders in Lesbian, Gay, and Bisexual Populations: A Prospective Study", *American Journal of Public Health*, 100.3 (2010), 452-459.

[33] Ibid., 226.

[34] Concealment arises when individuals with a "stigmatising attribute" (see Goffman, *Stigma*, 3) seek to hide it to avoid becoming vulnerable to unjust treatment. Successful concealment, also referred to as 'passing' (see Walter O. Bockting *et al*., "Stigma, Mental Health, and Resilience in an Online Sample of the US Transgender Population", *American Journal of Public Health*, 103.5 (2013), 943–951), occurs when individuals with potentially stigmatising attributes manage to present themselves as members who do not belong to the stigmatised community, thus evading stigma. However, attempts to conceal one's identity can become a significant stressor, leading to persistent anxiety and hypervigilance.

[35] Ilan H. Meyer, "Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence", *Psychological Bulletin*, 129.5 (2003), 674-697; Michael L. Hendricks and Rylan J. Testa, "A Conceptual Framework for Clinical Work with Transgender and Gender Nonconforming Clients: An Adaptation of the Minority Stress Model", *Professional Psychology: Research and Practice*, 43.5 (2012), 460-467; Cristiano Scandurra *et al*., "The Italian Validation of the Gender Minority Stress and Resilience Measure", *Psychology of Sexual Orientation and Gender Diversity*, 7.2 (2020), 208-222, DOI: 10.1037/sgd0000366.

stigmatised minority group.[36] In Minority Stress Theory (MST), it is asserted that: (i) the stressors affecting targeted communities possess unique features not shared among other types of stressors; and (ii) the long-term effects of such stressors can bring about mental and health issues.[37] While social selection theory claims that individuals succumb to stressors owing to their inherent predisposition,[38] social causation theory contends that it is social factors to underpin stress.[39] In the theoretical framework adopted in this investigation, we will take the stance of social causation theory, framing health disparities in the context of mpox as rooted in social stigma-related factors.

One of the first definitions of health disparities dating as far back as the 1990s goes as follows:

> [health disparities] are not only unnecessary and avoidable but, in addition, are considered unfair and unjust. […] Equity in health implies that ideally everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that no one should be disadvantaged from achieving this potential, if it can be avoided.[40]

What Margaret Whitehead highlights here is that factors such as social class, skin colour, gender identity, sexual orientation, living in an urban setting, to indicate but a few examples, can unfairly determine access to health resources. As a result, individuals who do not fit certain socially constructed norms cannot realise their "full health potential".[41] This concept lies at the core of health disparities, in that membership of a specific group can invariably affect an individual health status, with members of disadvantaged groups experiencing not only hardship and/or stigma but worse health outcomes and greater health risks than privileged groups as well. In contrast, two key principles undergirding health equity state that, firstly, healthcare access and resource allocation should be tailored to individuals' needs;[42] and secondly, equal medical treatment should be provided based on equal needs.[43] Health disparities can thus be regarded as the concrete realisation of long-established and deep-seated stigma perpetrated against a specific community, whose physical and mental health or healthcare access are compromised as a result of a combination of distal and proximal stigma-related stressors.

In this respect, it should be noticed that illness works as a powerful vehicle to socially construct and perpetuate stigma, especially when a solid link between a particular illness and a stigmatised community

[36] Stigma can manifest in various forms, each with its own implications for an individual's well-being. Distal stressors are those that arise directly from immediate interactions, like facing discrimination or verbal abuse, which can provoke instant emotional and physical reactions. These are immediate, short-term and situation-specific. On the other hand, proximal stressors have a subtler, lingering and long-term impact. These stem from internalised negative beliefs or societal attitudes, leading to enduring feelings of shame, low self-esteem or social alienation. Although not tied to specific events, they can significantly affect mental and emotional health over time (see Richard S. Lazarus and Susan Folkman, *Stress, Appraisal, and Coping* [New York, NY: Springer Publishing Company, 1984]).

[37] David M. Frost and Ilan H. Meyer, "Minority Stress and the Health of Sexual Minorities", in Charlotte J. Patterson and Anthony R. D'Augelli, eds., *Handbook of Psychology and Sexual Orientation* (New York, NY: Oxford U.P., 2013), 252-266; David M. Frost *et al*., "Minority Stress and Physical Health Among Sexual Minority Individuals", *Journal of Behavioral Medicine*, 38 (2015), 1-8.

[38] J. Michael Bailey, "Homosexuality and Mental Illness", *Archives of General Psychiatry*, 56.10 (1999), 883-884.

[39] Bruce P. Dohrenwend, "Social Status and Psychological Disorder: An Issue of Substance and an Issue of Method", *American Sociological Review*, 31.1 (1966), 14-34; Bruce P. Dohrenwend, "The Role of Adversity and Stress in Psychopathology: Some Evidence and Its Implications for Theory and Research", *Journal of Health and Social Behavior*, 41.1 (2000), 1-19.

[40] Margaret Whitehead, "The Concepts and Principles of Equity and Health", *International Journal of Health Services*, 22.3 (1992), 106.

[41] Ibid.

[42] Lu Ann Aday *et al*., *Access to Medical Care in the U.S.: Who Has It, Who Doesn't* (Chicago, IL: Chicago U.P., 1984), 1-18.

[43] Gavin H. Mooney, "Equity in Health Care: Confronting the Confusion", *Effective Health Care*, 1.4 (1983), 179-185.

is established in discourse.[44] For instance, in the aftermath of the AIDS pandemic of the 1980s, Susan Sontag commented on the differences between being diagnosed with HIV and cancer in this way:

> Because of countless metaphoric flourishes that have made cancer synonymous with evil, having cancer has been experienced by many as shameful, therefore something to conceal, and also unjust, a betrayal by one's body. Why me? the cancer patient exclaims bitterly. With AIDS, the shame is linked to an imputation of guilt; and the scandal is not at all obscure. Few wonder, Why me? Most people outside of sub-Saharan Africa who have AIDS know (or think they know) how they got it. It is not a mysterious affliction that seems to strike at random. Indeed, to get AIDS is precisely to be revealed, in the majority of cases so far, as a member of a certain "risk group," a community of pariahs. The illness flushes out an identity that might have remained hidden from neighbors, job-mates, family, friends. It also confirms an identity and, among the risk group in the United States most severely affected in the beginning, homosexual men, has been a creator of community as well as an experience that isolates the ill and exposes them to harassment and persecution.[45]

HIV is a shining example of how illness can develop into a shame- and guilt-ridden medical experience that not only proves life-changing for patients as far as their health status is concerned, but it also leaves on them an indelibly stigmatising mark that will forever set them apart as different from the others. As Sontag argues in the quote, "the illness flushes out an identity" that a newly diagnosed patient had gone to great lengths to conceal, thereby triggering a two-fold trauma: the first related to the contraction of a virus that will never be eradicated from their body (first stressor), the second related to a forced disclosure of their identity (second stressor). What is more, illnesses so heavily laden with stigma, like HIV and mpox, as will be shown later, are discursively construed as a well-deserved punishment meted out by divine providence for a blame or social transgression, like indulgence in controlled substances, deviant sexual practices and perversion. Therefore, illness comes to symbolise a divine retribution for deriving pleasure from what is discursively portrayed as unnatural sexual behaviour.

In light of the forced disclosure of one's sexual orientation or identity entailed by being diagnosed with some stigmatised diseases, along with the discriminating discourses surrounding them, we would like to finally mention the last key concept that will inform this analysis, namely, the distinction between *transparency* and *opaqueness* in illness delineated by Sontag.[46] More specifically, an illness defined as transparent is one enabling the other to see through the patients, betraying a diagnosis based on a set of symptoms and indicators ascribable to a specific condition, like tuberculosis. On the other hand, illnesses categorised as opaque do not exhibit any visible or specific symptoms suggestive of the illness afflicting the patient; they are latent, silent and often erupt violently in the last stages, when it is too late to take action, as in the case of cancer. While originally posited to highlight the difference in the symptomology of tuberculosis and cancer, these two concepts are aptly applicable to this study as well, since mpox undoubtedly falls within the category of transparent illnesses, given its tangible and recognisable symptoms.

In order to assess the social impact an illness can make on sufferers' lives, we will use a framework expounded by Joachim and Acorn,[47] which includes three main factors determining its severity: (i) the *strain* illness can place on social relationships, often related to its contagiousness or transmissibility. This factor addresses the question: *how likely am I to get infected if I get physically close to a sufferer?*; (ii) *aesthetic disturbance* and *change in appearance*, which involve the extent to which a patient's body

[44] Lucy Yardley, *Material Discourses of Health and Illness* (London and New York: Routledge, 1997); Richard Gwyn, *Communicating Health and Illness* (London: SAGE, 2001).

[45] Susan Sontag, *Illness as Metaphor and AIDS and Its Metaphors* (London: Penguin Books Limited, 2013), 110.

[46] Ibid.

[47] Gloria Joachim and Sonia Acorn, "Stigma of Visible and Invisible Chronic Conditions", *Journal of Advanced Nursing*, 32.1 (2000), 243-248.

undergoes an illness-induced transformation due to the onset of visible symptoms. For example, the occurrence of pustules, skin rashes, vomiting, open wounds/lesions, jaundice and weight loss or gain can augment transparency. This factor addresses the question*: how likely is my body to transform as a result of getting the illness*?; and (iii) *stigma-related issues*, which refers to the connection between illness and a particular marginalised community. This factor addresses the question: *does this illness contribute to the stigmatisation of the group I belong to?* In applying this framework to measure the severity of mpox impact, it can be observed that (i) mpox is highly contagious, transmitted through skin contact and occasionally infected droplets. This led to widespread fear of contagion and social hysteria, fuelled by extensive media coverage in news discourse (*strain*); (ii) one of the defining symptoms of mpox is the appearance of scaly crusts, lesions in the oral cavity and skin swelling. This makes its symptomology highly transparent, allowing everybody to see through the patients' body (*aesthetic disturbance*/*appearance*); (iii) the discourses around mpox have been marked by non-scientific fallacies and misconceptions, subtly suggesting that only gay, bisexual, and men who have sex with other men (GBMSM) can contract it, thus giving rise to unprecedented stigma and health disparities affecting this category (*stigma*).[48]

3. The Representation of the Mpox Outbreak: Corpus Collection and Methodology

In order to analyse the representation of mpox in official governmental and medical guidelines and news reporting, different data and methodologies have been adopted to provide a broader contextualisation of the discourses emerging from such texts. In particular, to analyse how the media represented the mpox outbreak, two corpora were collected following these criteria. We accessed NexisUni and employed the search terms 'monkeypox' and 'mpox' as well as relevant variations, selecting a timespan from January 1, 2022, to April 25, 2023, to create a two-million-word corpus named the mpox Media Corpus (MMC), representative of the global construction of the mpox outbreak in Anglophone media outlets. XML annotations were used to preserve contextual information about the news stories collected. Once the MMC was cleaned and tagged, it was then uploaded onto Sketch Engine for analysis.[49]

[48] Julian W. März *et al*., "Monkeypox, Stigma and Public Health", *The Lancet Regional Health: Europe*, 23 (2022), 1-3, DOI: 10.1016/j.lanepe.2022.100536;

[49] Adam Kilgarriff *et al*., "The Sketch Engine", in Geoffrey Williams and Sandra Vessier, eds., *Proceedings of the Eleventh EURALEX International Congress: EURALEX 2004* (Lorient: Université de Bretagne-Sud, 2004), 105-116; Adam Kilgarriff *et al*., "The Sketch Engine: Ten Years On", *Lexicography*, 1.1 (2014), 7-36.

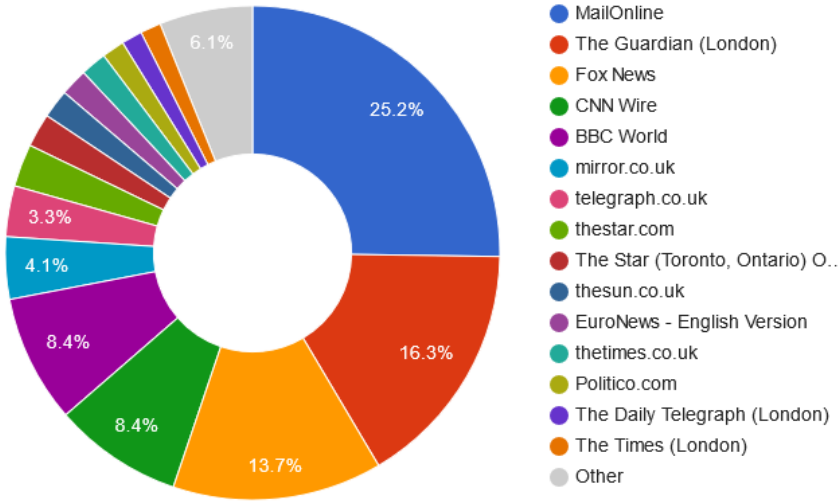


Fig. 2: Media sources included in the Mpox Media Corpus (MMC).

Figure 2 shows the different media sources included in the MMC. As can be seen, next to traditional newspaper outlets, the MMC also comprises TV news reporting, that is, extracts of TV interviews or news broadcasts during which the mpox outbreak was discussed on specific news channels (e.g., Fox News, BBC World News, among others). This allowed for a more comprehensive investigation into the discursive representation of mpox in media discourse.

A second corpus was also collected in order to provide a contrastive analysis between global news reporting and the Italy's specific scenario. Indeed, as shown in Table 1 (see Section 1), given Italy's inclusion among the top twenty countries significantly affected by the mpox outbreak, the collection of the Vaiolo delle Scimmie Corpus (VSC) was deemed necessary to also provide potential comparison between the global media representation and mpox portrayal in Italian news stories. Therefore, the VSC was collected by accessing once again NexisUni, using the expanded search terms 'vaiolo delle scimmie', 'monkeypox' and 'mpox', as well as relevant variations, and selecting only Italian media sources in the timespan from January 1, 2022, to April 25, 2023, to create a 250,448 word corpus.

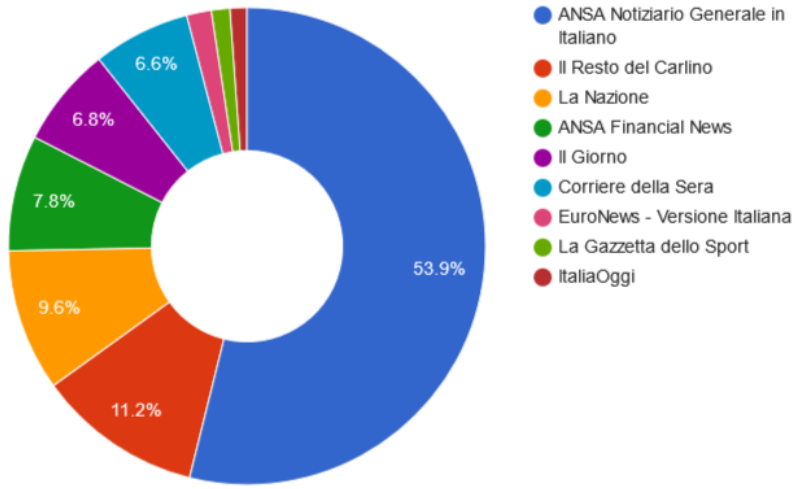


Fig. 3: Media sources included in the Vaiolo delle Scimmie Corpus (VSC).

As illustrated in Figure 3, the majority of news stories originating from the Italian scenario and included in the VSC are from *ANSA Notiziario Generale in Italiano*. This is primarily because NexisUni is currently unable to offer a wider range of news stories from non-English-speaking countries. However, alongside *ANSA Notiziario Generale in Italiano*, there are also news stories sourced from traditional and well-established Italian newspapers including *Il Resto del Carlino*, *La Nazione*, and *Corriere della Sera*, among others.

While a more detailed analysis of the two corpora will be provided in Section 5, for the time being, the comparison between the VSC and MMC from a purely quantitative perspective yields some insights into their respective composition and density of news stories. As a matter of fact, if we want to focus on the density of news stories in the two corpora, we can underline that while the VSC corpus comprises 954 news texts in the timespan under investigation, the MMC corpus contains a significantly larger pool of 1,625 news texts in the same period of time, with the MMC corpus therefore including nearly seven times more tokens, thus indicating a substantial difference in size. Calculating the proportion between the two, we find that for every news story in the VSC corpus, there are approximately two news stories in the MMC corpus. This may suggest a higher density of news reporting within the MMC corpus, potentially indicating broader coverage of the topic. However, we must exercise caution in interpreting these findings, considering factors such as statistical significance and the representativeness of the two corpora.

The annotations introduced in the two corpora have also allowed us to analyse the distribution in news coverage of all the news stories linked to the mpox outbreak. Therefore, in the following figures (i.e., Figure 4 and Figure 5), the timelines of the media coverage of the mpox outbreak in the MMC and the VSC are displayed:

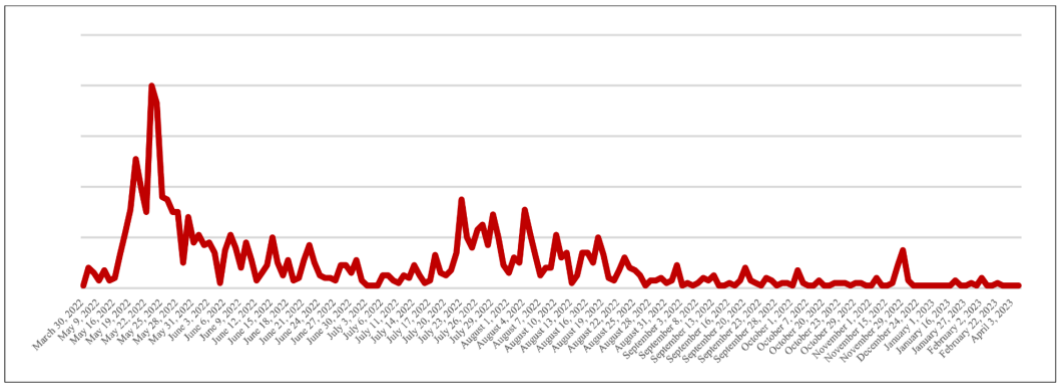


Fig. 4: Timeline of the media coverage of the mpox outbreak in the Mpox Media Corpus (MMC).

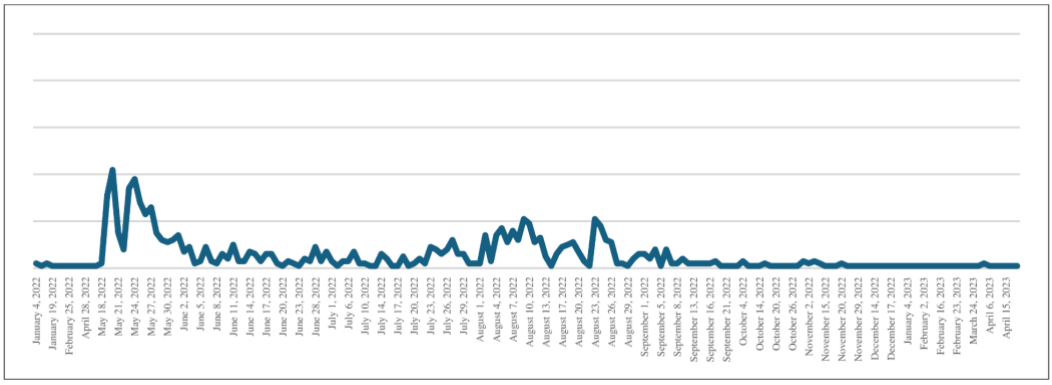


Fig. 5: Timeline of the media coverage of the mpox outbreak in the Vaiolo delle Scimmie Corpus (VSC).

As can be seen from these figures, the media coverage is extremely similar. It reached a peak in the period from May 16 to June 6, 2022, when the first cases of mpox were reported in the Global North.[50] Another peak in news coverage was reached between July 17 and August 31, 2022. During this time, vaccine rollout efforts were encouraged by different countries and, notably, on July 23, 2022, the WHO declared mpox a Public Health Emergency of International Concern. This designation has only been used by the WHO for two other diseases: COVID-19 and Polio. Such a decision carries significant weight as WHO Director-General Tedros Adhanom Ghebreyesus overruled a panel of advisers who could not come to a consensus. Furthermore, this opened the door for coordinating an international response to fight against this virus, thus explaining the peak in media coverage.

However, the timelines shown in Figure 4 and Figure 5 further highlight an interesting aspect related to the news reporting of the virus. In fact, global news reporting shows a broader retention of the news event, with peaks and periods when the mpox outbreak is still discussed. In contrast, in the Italian press, after an initial phase of extreme interest, reporting on the virus seems to diminish. This may be due to

[50] Think Global Health, an initiative of the Council on Foreign Relations in collaboration with the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, provides a detailed timeline with key dates and descriptions of main events linked to the mpox outbreak. The timeline can be accessed at https://www.thinkglobalhealth.org (last accessed: May 2, 2024).

the fact that the event in time was considered no longer newsworthy by the Italian press, something that might be deemed as worrisome as the global outbreak was only declared by the WHO as no longer a Public Health Emergency of International Concern on May 11, 2023.[51] The sudden drop in interest by the Italian press from September 2022 onwards therefore appears contradictory given the seriousness of the global threat. Another hypothesis linked to the sudden drop in interest is that once specific scapegoats for this outbreak were identified – specifically gay, bisexual, and men who have sex with other men (GBMSM) –, media attention gradually decreased globally and, more specifically, nationally in Italy. This hypothesis is confirmed by the close analysis of the data, and we refer to the dedicated sections of this paper analysing media coverage for more details (see Section 5). However, such a phenomenon could also be a case of *acclimatisation* to news where, after the initial peak of interest in it, public attention gradually dwindles as the event becomes normalised and assimilated into everyday life.

As part of the analysis of official documents issued by governments and health organisations, our investigation has focused on texts provided by the UK government (*gov.uk*), the New York City government (*nyc.gov*), and the Italian government (*salute.gov.it*). These sources were regularly updated with information about the anti-mpox vaccination campaign between July 2022 and May 2023. Different texts were then selected for qualitative analysis to investigate the discursive representation of mpox outbreak management from an institutional perspective (see Section 4 for a detailed examination of these texts).

As for our analytical framework, it combines insights coming from different theoretical and methodological approaches. While Section 2 has already provided a detailed background of the main theoretical tenets that inform our investigation, from a more discursive perspective, this study is guided in the qualitative and quantitative interpretation of the texts under scrutiny by a Critical Discourse Studies (CDS) framework of analysis. This is due to the fact that, while examining the linguistic elements in texts, CDS unveils the subtle yet profound influences of power dynamics in shaping and constraining interactions and behaviours.[52] From this perspective, which is the one adopted in the present study, language is therefore seen as playing a dual role: it is perceived as both (i) a construct of social and political life and (ii) something fundamentally shaped by the environment it is used in, forming a dialectical relationship between texts and contexts. Therefore, our investigation will pay close attention to the lexical choices made in the texts under scrutiny as terms and expressions individuals select reflect their affiliations, values and positions in the representation of societal issues. Furthermore, we closely examined the roles and relationships of the participants in the discourse, particularly with regard to the processes in which they are involved, to identify the agents performing actions and those affected by them.

While CDS, as previously argued, is one of the main frameworks of analysis in this study, another approach has been adopted, especially in order to deal with the large amount of data retrieved from the

[51] The WHO decision is reported at the following website: https://www.who.int, accessed 2 May, 2024.

[52] Norman Fairclough, *Language and Power* (London: Longman, 1989); Norman Fairclough, *Discourse and Social Change*, Fifteenth Edition (Cambridge: Polity Press, 1992 [2013]); Norman Fairclough, *Media Discourse* (London: Hodder Arnold, 1995); Norman Fairclough, *Analysing Discourse: Textual Analysis for Social Research* (London and New York: Routledge, 2003); Norman Fairclough, "Critical Discourse Analysis", in Michael Handford and James P. Gee, eds., *The Routledge Handbook of Discourse Analysis*, Second Edition (London and New York: Routledge, 2023), 1-12; Norman Fairclough and Ruth Wodak, "Critical Discourse Analysis", in Teun A. van Dijk, ed., *Discourse as Social Interaction*, vol. 2 (London: SAGE, 1997), 258-284; Gilbert Weiss and Ruth Wodak, eds., *Critical Discourse Analysis: Theory and Interdisciplinarity* (New York, NY: Palgrave Macmillan, 2003).

media representation of the mpox outbreak. Indeed, corpus-based methodological approaches[53] have been utilised to deal with the large amount of texts collected to analyse how the media have reported news linked to mpox. It is crucial to underline, however, that while the quantitative results from the corpus analysis directly inform how commonly we will encounter a linguistic feature in the discourses surrounding the representation of the mpox outbreak, they will offer no information relating to the contextual factors favouring one linguistic feature over another (see Egbert *et al*. for a more detailed discussion of this aspect of corpus-based analyses).[54] It will be up to us to reconstruct such links between insights coming from corpus analysis and the societal contexts where those linguistic features were employed. Therefore, the combination of quantitative and qualitative approaches will still guide our understanding of the texts under investigation, thus avoiding the common pitfall of merely relying on quantitative insights.

As for the corpus-based methodological approaches employed to analyse the texts under investigation, we have included an initial frequency analysis to identify the most commonly used terms in the datasets, followed by more qualitative methods aimed at contextualising the data and corroborating the quantitative insights. Specifically, concordance and collocation analyses were also conducted to explore the linguistic environments of selected terms in greater depth. The analysis was facilitated by the use of the Sketch Engine platform,[55] which provided additional tools that will be introduced and described in further detail in Section 5.

On the basis of this theoretical and methodological background, the following sections will firstly present a detailed analysis of the texts from the three government sources to shed light on the discursive strategies employed in the communication and management of the mpox outbreak (Section 4). Subsequently, a close analysis will be performed of how media outlets have reported the events surrounding the mpox epidemic through a corpus-based investigation of the global and Italian mediatic scenarios. The comparative analysis of the governmental and media discourses will therefore offer insights into the similarities and differences in the representation of the mpox outbreak and vaccination campaign across different types of discourse. In other words, our investigation seeks to answer the following research questions:

- **RQ1:** *What are the key discursive strategies employed by governmental and health organisations in communicating and managing the mpox outbreak, and how do these strategies reflect broader societal and political dynamics?*
- **RQ2:** *How do global and Italian media differ in their discursive representation of the mpox epidemic, and what factors predict the variation in news coverage?*
- **RQ3:** *How do lexical choices and linguistic patterns in media and governmental discourse shape public perceptions of the mpox outbreak, particularly in relation to the stigmatisation of specific social groups?*

By answering these research questions, the present study aims to contribute to a deeper understanding of the role that language plays in shaping public perceptions and responses to health crises.

[53] Tony McEnery *et al*., *Corpus-Based Language Studies: An Advanced Resource Book* (London: Routledge, 2006); Tony McEnery and Andrew Hardie, *Corpus Linguistics: Method, Theory and Practice* (Cambridge: Cambridge U.P., 2012); Paul Baker, *Using Corpora to Analyse Gender* (London: Bloomsbury, 2014); Paul Baker and Tony McEnery, eds., *Corpora and Discourse: Integrating Discourse and Corpora* (London: Palgrave, 2015); Jesse Egbert and Paul Baker, eds., *Using Corpus Methods to Triangulate Linguistic Analysis* (London: Routledge, 2019); Jesse Egbert *et al*., *Doing Linguistics with a Corpus: Methodological Considerations for the Everyday User* (Cambridge: Cambridge U.P., 2020); Anatol Stefanowitsch, *Corpus Linguistics: A Guide to the Methodology* (Berlin: Language Science Press, 2020); Paul Baker, *Using Corpora in Discourse Analysis*, Second Edition (London and New York: Bloomsbury, 2023).

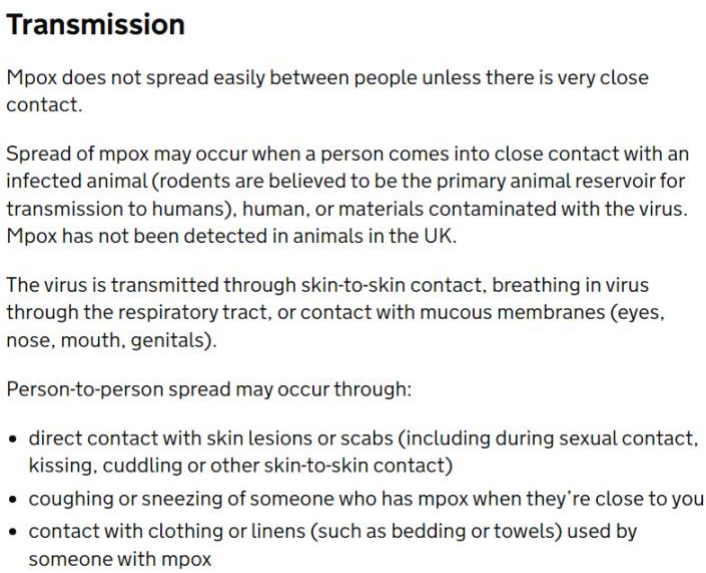
[54] Egbert *et al*., *Doing Linguistics with a Corpus*.

[55] Kilgarriff *et al*., "The Sketch Engine"; Kilgarriff *et al*., "The Sketch Engine: Ten Years On".

4. Key Insights from Official Guidelines for Mpox Management

This section will provide an analysis of mpox representation across official governmental websites, focusing on the UK government (*gov.uk)*, the New York City government (*nyc.gov*) and the Italian government (*salute.gov.it*), which were regularly updated with information about the mpox transmission methods and anti-mpox vaccination campaign between July 2022 and May 2023. Our aim is to identify discursive cues on these platforms which appear to conflict with the medical guidelines endorsed by the respective institutions, contributing to widespread miscommunication that led to a biased shaping of the narrative surrounding mpox.

Let us now move on to Figure 6, Figure 7 and Figure 8, which will be used to draw a comparison between the informative sections on mpox transmission methods from the three websites previously mentioned:[56]



Transmission

Mpox does not spread easily between people unless there is very close contact.

Spread of mpox may occur when a person comes into close contact with an infected animal (rodents are believed to be the primary animal reservoir for transmission to humans), human, or materials contaminated with the virus. Mpox has not been detected in animals in the UK.

The virus is transmitted through skin-to-skin contact, breathing in virus through the respiratory tract, or contact with mucous membranes (eyes, nose, mouth, genitals).

Person-to-person spread may occur through:

- direct contact with skin lesions or scabs (including during sexual contact, kissing, cuddling or other skin-to-skin contact)
- coughing or sneezing of someone who has mpox when they're close to you
- contact with clothing or linens (such as bedding or towels) used by someone with mpox

Fig. 6: Extract from the UK government website focusing on mpox transmission methods.[57]

[56] The three screenshots were taken on April 28, 2024.

[57] The section of the UK government website devoted to mpox transmission methods can be reached online at https://www.gov.uk/guidance/monkeypox, accessed 2 May, 2024.

Transmission

Mpox is spreading almost exclusively through oral, anal and vaginal sex, and other intimate contact such as rimming, hugging, kissing, biting, cuddling and massage.

Mpox can spread through:

- Direct contact with a rash or sores of someone who has the virus, which is most common
- Prolonged face-to-face contact
- Contact with clothing, bedding and other items used by a person with mpox, which is less common

It is not yet known whether mpox can spread through semen, vaginal fluid, urine or feces.

A person with mpox can spread the virus to others from the time symptoms start until the rash has fully healed and a fresh layer of skin has formed. Some people can spread mpox to others from one to four days before their symptoms appear — it is not known how common this is. There is currently no evidence of people who never developed symptoms spreading the virus to someone else.

For more information, see CDC: How Mpox Spreads.

Fig. 7: Extract from the NYC government website focusing on mpox transmission methods.[58]

Come si diffonde Mpox da persona a persona?

Una persona affetta da Mpox è infettiva a partire dalla comparsa dei sintomi prodromici fino alla caduta delle croste di tutte le lesioni e la formazione di nuova pelle.

La trasmissione può avvenire attraverso il contatto fisico stretto (faccia a faccia, pelle a pelle, bocca a bocca o bocca a pelle), compresa l'attività sessuale, con una persona infetta, con i suoi fluidi corporei o le sue lesioni cutanee. Non è ancora noto se il virus possa essere trasmesso sessualmente attraverso i fluidi genitali.

Il virus può essere trasmesso anche da oggetti contaminati quali vestiti, lenzuola, asciugamani, posate, dispositivi elettronici e superfici.

Ulcere, lesioni o piaghe della bocca possono essere infettive e il virus può diffondersi attraverso il contatto diretto con la bocca, *droplet* respiratorie e probabilmente attraverso aerosol a corto raggio.

Il virus può anche diffondersi da una donna in gravidanza al feto, dopo la nascita attraverso il contatto pelle a pelle, o da un genitore infetto a un neonato o bambino per contatto stretto.

Le persone che sono contatto stretto, compresi gli operatori sanitari, i membri della famiglia e i partner sessuali, sono quindi a maggior rischio di infezione.

Fig. 8: Extract from the Italian government website focusing on mpox transmission methods.[59]

By having a cursory look at the three texts, it is immediately evident that the UK website markedly emphasises the rarity of mpox transmission, stressing that only close contact can cause it (from Figure

[58] The section of the NYC government website dealing with mpox transmission methods is available online at https://www.nyc.gov/site/doh/health/health-topics/mpox.page, accessed 2 May, 2024.

[59] The section of the Italian government website devoted to mpox transmission methods can be reached at https://www.salute.gov.it/portale/malattieInfettive/dettaglioFaqMalattieInfettive.jsp?lingua=italiano&id=291, accessed 2 May, 2024.

6: 'Mpox does not spread easily between people unless there is very close contact'). It should be noticed that on the UK website, this information is not only fronted at the beginning of the mpox transmission methods section but is also conspicuously absent on the NYC (Figure 7) and Italian (Figure 8) websites. While this could be viewed as a minor difference at first glance, on closer inspection, it may reflect defining decision-making approaches and governance strategies rooted in the UK policies. This datum in fact appears to tie in with the literature on 'policy styles', that is, the different ways and coping strategies governments adopt to address social, political, financial and health-related problems.[60] As for the UK, Richardson and Zahariadis *et al*. argue that policymaking is characterised by (i) a 'reactive' rather than 'anticipatory' style, thus indicating a focus on addressing a problem after it has arisen, rather than taking proactive measures to prevent it beforehand; and (ii) a consensual style in its state-society relationship, in the sense that measures unpopular among citizens are rarely implemented due to the fear of losing public consensus or support. Thus, it could be argued that positioning the information related to the difficulty with which mpox spreads at the outset of the text epitomises: (i) a 'reactive' rather than 'anticipatory' approach because highlighting that people do not get easily infected does not stimulate cautious or preventative behaviour; and (ii) a consensual style in the state-society relationship, as downplaying the severity of the problem projects an image of the government as a strong, powerful and responsible father able to protect his citizens.

Another significant difference to be underlined concerns the representation of sexual intercourse as a potential mode of virus transmission. While the three websites acknowledge that scientific studies have not conclusively ascertained whether genital fluids can transmit the virus, they still include sexual activities among the practices to be avoided to prevent infection. However, the NYC website, in particular, foregrounds this information:

(1) Mpox is spreading almost exclusively through oral, anal and vaginal sex […]

and to make this connection between sex and mpox even stronger, the NYC website provides a thorough list of the sexual practices allegedly responsible for virus transmission:

(2) […], and other intimate contact such as rimming, hugging, kissing, biting, cuddling and massage.

While in all the texts there is mention of sexual intercourse as a risk practice, there are remarkable differences in the extent to which this information is presented and managed. The NYC website places it at the start of the text, asserting that mpox can "almost exclusively" be contracted through sexual activities and offering a full list of risk sexual practices. Contrariwise, the Italian and the UK websites mention it within the text, using the term "compresa" and "including" to suggest that sexual intercourse is just one of several risk practices leading to mpox transmission, and not necessarily the primary one:

(3) La trasmissione può avvenire attraverso il contatto fisico stretto (faccia a faccia, pelle a pelle, bocca a bocca o bocca a pelle), *compresa* l'attività sessuale, con una persona infetta, con i suoi fluidi corporei o le sue lesioni cutanee. Non è ancora noto se il virus possa essere trasmesso sessualmente attraverso i fluidi genitali. (emphasis added)[61]

[60] Jeremy Richardson, *Policy Styles in Western Europe* (London: Allen & Unwin, 1982); Nikolaos Zahariadis *et al*., "Policy Styles and Political Trust in Europe's National Responses to the COVID-19 Crisis", *Policy Studies*, 44.1 (2023), 46-67.

[61] Translation: "Transmission can occur through close physical contact (face-to-face, skin-to-skin, mouth-to-mouth, or mouth-to-skin), including sexual activity, with an infected person, their body fluids, or skin lesions. It is not yet known whether the virus can be transmitted sexually through genital fluids".

(4) Person-to-person spread may occur through: direct contact with skin lesions or scabs (*including* during sexual contact, kissing, cuddling or other skin-to-skin contact) […]. (emphasis added)

In this regard, there is a case to be made that among the three websites under investigation the NYC website is the only one to establish such an explicit and strong connection between the virus and sex, while the others do not give it as much prominence. Hence, with respect to these data, two possible interpretations can be discerned: (i) the NYC policy style aims for clearer and unequivocal communication, working on the assumption that medical jargon is susceptible to misinterpretation on the part of the readers, so it is recommendable to expressly outline which practices pose a threat to individuals' health; or (ii) the NYC website strives to cement a stronger relationship between sexuality and illness, particularly mpox in this instance, compared to the UK and the Italian ones.

In addition, the inclusion of information as to the potential transmission of the virus from pregnant women to the foetus or through skin-to-skin contact after birth on the Italian website provides insights into the cultural and medical discourses. At first glance, this may seem insignificant, but on closer examination, it reveals underlying values associated with Italian culture:

(5) Il virus può anche diffondersi da una donna in gravidanza al feto, dopo la nascita attraverso il contatto pelle a pelle, o da un genitore infetto a un neonato o bambino per contatto stretto.[62]

More specifically, it can be seen that the family-centred structure and deep reverence for the sanctity of motherhood that are characteristic of Italian culture[63] are reflected in these scientific guidelines.[64] By acknowledging the foetus as a living and sentient being with the potential to contract the virus from its mother, the Italian website demonstrates a commitment to maternal and infant health that extends beyond the immediate postnatal period. On the other hand, the lack of such details on the UK and NYC websites may indicate distinct cultural outlooks on maternal and child health. This reveals a uniquely Italian cultural inclination to shield the family nest from any potential external risk that might play havoc with its inner balance. While maternal well-being remains a focus in these places, the different emphasis on family-centric approaches and the respect for motherhood observed in Italian culture may not be just as manifest.

The information consistently provided and highlighted across all the three online guidelines in the mpox transmission method section is the risk of transmission through direct skin-to-skin contact, particularly contact with lesions. However, when moving on to the sections discussing mpox vaccination on the UK and Italian websites, a heretofore unmentioned category emerges as a priority for vaccination, that is, gay, bisexual, and men who have sex with other men (GBMSM):

[62] Translation: "The virus can also spread from a pregnant woman to the foetus, after birth through skin-to-skin contact, or from an infected parent to an infant or child through close contact".

[63] Marina Bettaglio, "Maternal Momoirs in Contemporary Italy", in Laura Lazzari and Joy Charnley, eds., *To Be or Not to Be a Mother: Choice, Refusal, Reluctance and Conflict: Motherhood and Female Identity in Italian Literature and Culture*, Special issue of *Intervalla: Platform for Intellectual Exchange*, 1 (2016), 47-60. Available online at https://www.fus.edu/intervalla/special-volume-1-to-be-or-not-to-be-a-mother-choice-refusal-reluctance-and-conflict, accessed 2 May, 2024.

[64] "Put on a pedestal and supported by a plethora of naturalistic religious and lay discourses, this powerful cultural construction continues to dominate the Italian cultural landscape" (Ibid., 48).

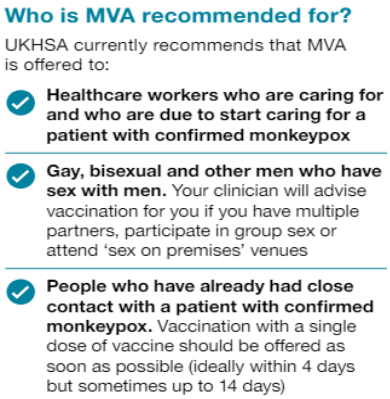


Fig. 9: Extract from the UK government website focusing on the anti-mpox vaccination campaign.[65]

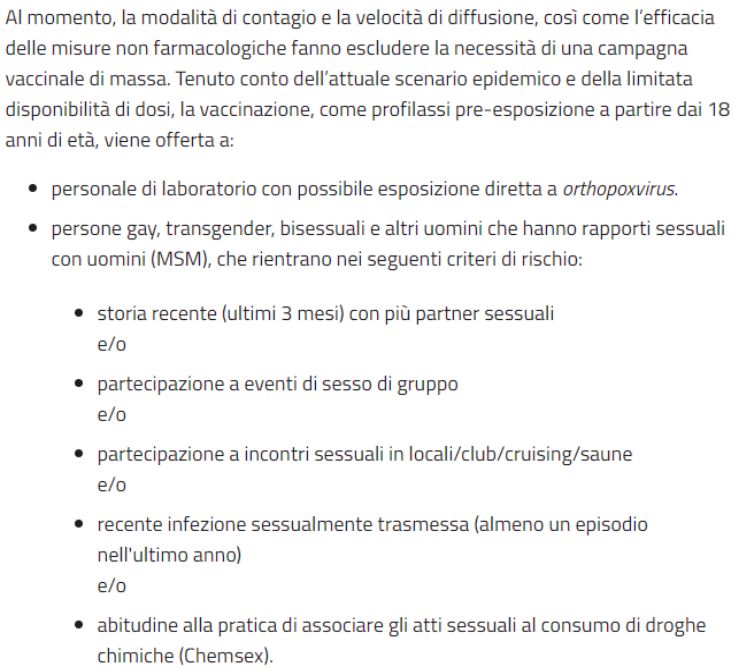


Fig. 10: Extract from the Italian government website focusing on the anti-mpox vaccination campaign.[66]

What is markedly inconsistent is that the online guidelines do never state that skin or lesions of GBMSM individuals are inherently more contagious than those of non-GBMSM individuals. However, GBMSM are listed as a high-priority category for vaccination on the websites. Furthermore, both extracts depict additional risk factors associated with this group, such as engaging in multiple partners, group sex, sex

[65] The extract taken from the UK government website devoted to the anti-mpox vaccination campaign can be found online at https://assets.publishing.service.gov.uk/media/631619318fa8f502256a9570/UKHSA-12370-monkeypox-vaccination-leaflet.pdf, accessed 2 May, 2024.

[66] The extract taken from the Italian government website focusing on the anti-mpox vaccination campaign can be found online at https://www.salute.gov.it/portale/malattieInfettive/dettaglioFaqMalattieInfettive.jsp?lingua=italiano&id=291, accessed 2 May, 2024.

in specific environments like clubs or saunas, recent contraction of sexually transmitted diseases or participation in chemsex activities. In light of this, it can be argued that specific *mating strategies*[67] – the manners in which individuals engage in intimate, romantic or sexual activities – are mentally represented, socially constructed and discursively reproduced as pertaining to GBMSM. This misconstruction was physically enacted in the bias-driven anti-mpox vaccination campaign that classified this population as a risk group without scientific evidence. While stereotypes surrounding the gay and lesbian communities appear to be grounded in what has been termed a *gender inversion assumption*, according to which homosexuality leads to the individual performing behaviours stereotypically associated with the opposite sex,[68] this assumption does not apply to health concerns. In health contexts, gay people are more likely to be construed as a *health threat*[69] because their alleged promiscuity is inextricably linked to disease.[70] Based on the data analysed so far, it appears that discourses surrounding GBMSM and promiscuity may have subtly influenced and infiltrated the official online guidelines on mpox transmission, leading to the portrayal of this category as a risk group based on non-scientific principles.

In contrast to the UK and Italian websites, the NYC website not only steers clear of establishing this connection, with GBMSM going unmentioned, but also reiterates that access to anti-pox vaccination is guaranteed irrespective of sexual orientation and gender identity:

Eligibility

Vaccination is free and available regardless of immigration status.

The following people are eligible to be vaccinated in NYC:

- People of any sexual orientation or gender identity who have or may have multiple or anonymous sex partners, or participate or may participate in group sex
- People of any sexual orientation or gender identity whose sex partners are eligible per the criteria above
- People who know or suspect they have been exposed to mpox in the last 14 days
- Anyone else who considers themselves to be at risk for mpox through sex or other intimate contact.

Fig. 11: Extract from the NYC government website focusing on mpox vaccination campaign.[71]

The guidelines above restate twice that there is no direct correlation between a specific sexual orientation or gender identity and a higher risk of contracting mpox, for emphasis falls on the construction of sexual intercourse as a risk practice. This point is conveyed through the repeated use of the opening noun phrase "People of any sexual orientation or gender identity", which precedes the relative clauses "who have or

[67] David Pinsof and Martie G. Haselton, "The Effect of the Promiscuity Stereotype on Opposition to Gay Rights", *PloS One*, 12.7 (2017), 1-10, DOI: 10.1371/journal.pone.0178534.

[68] Mary E. Kite and Kay Deaux, "Gender Belief Systems: Homosexuality and the Implicit Inversion Theory", *Psychology of Women Quarterly*, 11.1 (1987), 83-96.

[69] Catherine A. Cottrell and Steven L. Neuberg, "Different Emotional Reactions to Different Groups: A Sociofunctional Threat-Based Approach to Prejudice", *Journal of Personality and Social Psychology*, 88.5 (2005), 770-789.

[70] In this regard, it can be noticed that the connection between unprotected sex/unsafe sexual practices and GBMSM as well as HIV and GBMSM is still widespread, despite extensive debunking of these associations. See Peter Hegarty and Felicia Pratto, "The Effects of Social Category Norms and Stereotypes on Explanations for Intergroup Differences", *Journal of Personality and Social Psychology*, 80.5 (2001), 723-735; Damian R. Murray *et al*., "Perceived Threat of Infectious Disease and its Implications for Sexual Attitudes", *Personality and Individual Differences*, 54.1 (2013), 103-108; Sarah K. Calabrese *et al*., "Sexual Stereotypes Ascribed to Black Men Who Have Sex with Men: An Intersectional Analysis", *Archives of Sexual Behavior*, 47.1 (2018), 143–156, DOI: 10.1007/s10508-016-0911-3.

[71] The extract from the NYC government website linked to the mpox vaccination campaign can be found online at https://www.nyc.gov/site/doh/health/health-topics/mpox-vaccination.page, accessed 2 May, 2024.

may have multiple or anonymous sex partners, or participate or may participate in group sex" and "whose sex partners are eligible per the criteria above". This introductory noun phrase plays a pivotal role in providing a different representation of the virus compared to the UK and Italian guidelines, in that it is significantly more in tune with scientific evidence and, most importantly, is more inclusive for individuals who may have been exposed to the risk of transmission.

Other documents that are worth analysing in this investigation include the mpox vaccination registration forms. However, our focus will be limited to the model provided by the California Department of Public Health, as it is the only publicly accessible document available online for examination.

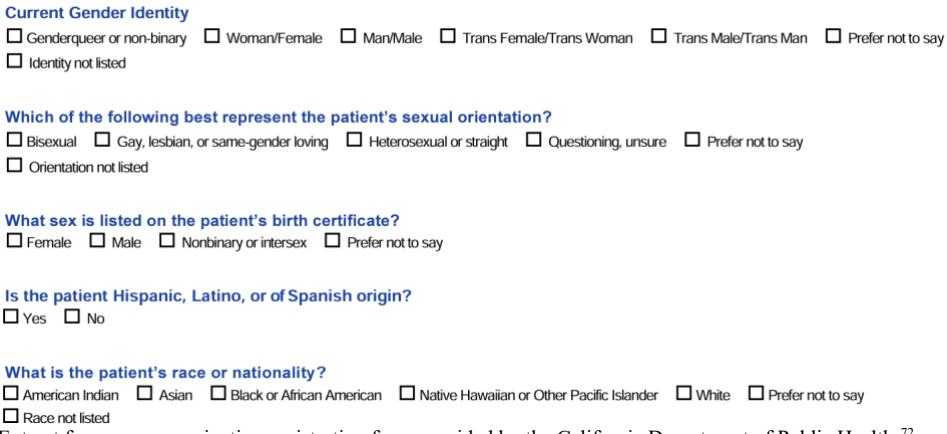


Fig. 12: Extract from mpox vaccination registration form provided by the California Department of Public Health.[72]

As can be noticed in the extract from the mpox vaccination registration form above, applicants must enter sociodemographic details such as their current gender identity, sexual orientation, sex listed on the birth certificate and race/nationality. Nonetheless, if vaccination is provided only to the risk categories mentioned above, failure to provide this information could potentially lead to the applicant being denied vaccination. Therefore, access to vaccination entails what has been referred to above as the *flushing out* (revelation) of an individual's identity, making it transparent in the process. In addition to reinforcing stigma against GBMSM, this vaccination campaign may unwittingly transform the act of vaccination into a "telltale" moment, echoing Sontag's metaphorical phrase,[73] for it casts the act of receiving the vaccine as a revealing marker, subtly exposing individuals as either healthcare workers or members of the GBMSM community – the two groups able to access the vaccine.

5. The Representation of the Mpox Outbreak in the Mpox Media Corpus (MMC) and the Vaiolo delle Scimmie Corpus (VSC)

In the following section, we now turn our attention to how the mpox outbreak was represented in media discourse by investigating, as previously described (see Section 3), two corpora: the mpox outbreak in the Mpox Media Corpus (MMC), representative of global news reporting, and the Vaiolo delle Scimmie Corpus (VSC), representative of the Italian media scenario. Both corpora have been analysed by employing specific corpus linguistics tools.

[72] The form is available online at https://eziz.org/assets/docs/MPOXregistration_consentform.pdf, accessed 2 May, 2024.

[73] Sontag, *Illness as Metaphor and AIDS and Its Metaphors*.

In particular, a frequency analysis was firstly performed to get a sense of the most frequently used terms in the two corpora. Even though such an approach emphasises frequencies over other aspects of language use in the analysis of data, it must be regarded as a starting point for our investigation, which has then used more qualitative approaches to the contextualisation of the data. Therefore, concordance analysis and collocation analysis were also performed on the data under investigation so as to better understand the linguistic environment of each word taken into consideration.

As for the collocation analysis, we employed a span of five words to the right and five words to the left for consideration and the statistical measures utilised for computing collocates were LogDice, MI3, and LogLikelihood, in order to observe specific linguistic associations from different perspectives.[74] In the adoption of Sketch Engine[75] as the online software for corpora analysis, we have also employed some of the tools provided by this platform, particularly the word sketch tool and the word sketch difference. As for the latter, it can be used to quickly analyse the collocates and contextual words of a given lemma, thus offering a concise summary of its grammatical and collocational patterns. These findings are then categorised into grammatical relations, identifying elements like objects or subjects of verbs, modifiers, and more, which can be also visualised in a relationship graph. The analysis of the collocates and contextual surrounding of a lemma is guided by rules within the sketch grammar of the software. As for the word sketch difference tool, it facilitates the comparison between two different lemmas by contrasting collocations, thus allowing for an analysis of how they are distinctively used in context. In other words, by examining collocates, this tool offers valuable insights into variations in usage and meaning when contrasting two lemmas by automatically generating word sketches and highlighting the collocates that distinguish the two. In this way, by using a colour-coded system, Sketch Engine assigns a unique colour to each search word, generating two word sketches for comparison. This comparison is conducted across different grammatical relations, with colours indicating the frequency of each collocate relative to the search words. The intensity of the colour reflects the strength of the collocation, while neutral white lines represent collocates with no preference for either search word.

After this brief description of the main corpus linguistics techniques used in the analysis of the MMC and the VSC, in the next sections, we will comment on the main results ensuing from the application of these tools, offering a broader understanding of the implications and significance of the linguistic patterns observed in the corpora.

5.1. Discursive Representation of the Mpox Outbreak in the MMC

In this section, we will start by focusing firstly on the media representation of the mpox outbreak in global news reporting. Therefore, in Table 2, a word frequency list of the MMC is provided, displaying the first twenty content words most frequently occurring in the corpus. Next to the raw and relative frequency of each item in the list, we have decided to also include the relative document frequency, that is, the percentage of documents that contain the item. Therefore, only the words that show a relative document frequency of 100% were included in the list, thus implying that these are words that are well-distributed in the corpus under investigation.

#	Item	Raw frequency	Normalised frequency (pmw)	Relative document frequency
1	*monkeypox*	13,902	7,987.76	100%
2	*cases*	9,074	5,213.70	100%

[74] On the interpretation of statistical measures in corpus linguistics, see Vaclav Brezina, *Statistics in Corpus Linguistics: A Practical Guide* (Cambridge: Cambridge U.P., 2018).

[75] Kilgarriff *et al*., "The Sketch Engine"; Kilgarriff *et al*., "The Sketch Engine: Ten Years On".

#	Item	Raw frequency	Normalised frequency (pmw)	Relative document frequency
3	*said*	8,057	4,629.36	100%
4	*health*	7,921	4,551.22	100%
5	*people*	6,658	3,825.53	100%
6	*virus*	6,036	3,468.14	100%
7	*more*	5,260	3,022.27	100%
8	*disease*	3,848	2,210.97	100%
9	*outbreak*	3,792	2,178.79	100%
10	*contact*	3,767	2,164.43	100%
11	*uk*	3,611	2,074.79	100%
12	*men*	3,605	2,071.34	100%
13	*now*	3,343	1,920.80	100%
14	*spread*	3,291	1,890.93	100%
15	*first*	3,180	1,827.15	100%
16	*new*	3,164	1,817.96	100%
17	*vaccine*	2,929	1,682.93	100%
18	*other*	2,907	1,670.29	100%
19	*like*	2,751	1,580.66	100%
20	*US*	2,716	1,560.55	100%

Table 2: First twenty content words in the word frequency list extracted from the Mpox Media Corpus (MMC).

As can be seen from Table 2, while some of the words frequently occurring in the MMC are straightforward indicators of how newsworthiness is constructed in the media products we have taken into consideration,[76] with items such as 'now' (raw frequency [r.f.]: 3,343; normalised frequency [n.f.]: 1,920.80) constructing timeliness or 'new' (r.f.: 3,164; n.f.: 1,817.96) and 'first' (r.f.: 3,180; n.f.: 1,827.15) enhancing unexpectedness, there are three specific elements that demand our focused attention: the items 'people' (r.f.: 6,658; n.f.: 3,825.53), 'contact' (r.f.: 3,767; n.f.: 2,164.43), and 'men' (r.f.: 3,605; n.f.: 2,071.34).

Our initial focus will be on 'people' and 'men', which are being analysed together due to their role in highlighting a notable shift in the discursive representation of the mpox outbreak. In fact, upon closer examination of the concordance lines for these two terms, it becomes evident that, initially, the virus was portrayed as impacting 'people' in a general sense:

(6) Experts have stressed that human-to-human transmission is rare, but said some *people* who have come into contact with the individual will be contacted as a precaution.

(7) Cases in the UK are rare, with the viral infection – which was first found in humans in 1970 – most prevalent in parts of Western and Central Africa. In most instances it causes a mild illness, with fever

[76] Monika Bednarek and Helen Caple, *News Discourse* (London and New York: Bloomsbury, 2012); Monika Bednarek and Helen Caple, "Why Do News Values Matter? Towards a New Methodological Framework for Analyzing News Discourse in Critical Discourse Analysis and Beyond", *Discourse & Society*, 20.10 (2014), 1-24; Monika Bednarek, "Voices and Values in the News: News Media Talk, News Values and Attribution", *Discourse, Context & Media*, 11 (2016a), 27-37; Monika Bednarek, "Investigating Evaluation and News Values in News Items That Are Shared via Social Media", *Corpora*, 11.2 (2016b), 227-257; Helen Caple and Monika Bednarek, "Rethinking News Values: What a Discursive Approach Can Tell Us about the Construction of News Discourse and News Photography", *Journalism: Theory, Practice and Criticism*, 17.4 (2016c), 435-455; Monika Bednarek and Helen Caple, *The Discourse of News Values: How News Organizations Create Newsworthiness* (Oxford and New York: Oxford U.P., 2017).

usually followed by a rash breaking out, usually on the face. Most *people* recover within four weeks, medics said today, although the virus can cause serious illness in rare cases.

(8) It was first discovered in a colony of monkeys in the modern-day Democratic Republic of the Congo in 1958, with the first human case confirmed in 1970. In most cases it is a "mild self-limiting" illness and the majority of *people* recover within a few weeks, experts say.

(9) Monkeypox does not spread easily between people. It is usually a mild self-limiting illness and most *people* recover within a few weeks. However, severe illness can occur in some individuals.

The fact that the virus was initially constructed from a discourse perspective as affecting people in general is testified also by the meta-data introduced into the corpus, underlining that from May 18 to May 31, 2022 there is a peak in occurrences of the word, with texts from May 23, 2022 featuring the word 416 times (n.f.: 3,972.99). Additionally, the examples provided extracted from the concordance lines are chronologically ordered and, as can be seen, portray the initial phases of the media coverage of the virus as 'people'-oriented.

However, upon further analysis of the corpus data, it becomes evident that there was a shift in the discursive representation of the mpox outbreak. In fact, as the events progressed, the focus transitioned from a general impact on 'people' to a more specific emphasis on 'men' within the media discourse. This shift can be observed in the increasing frequency of the plural term 'men' in the corpus, with a peak in frequencies in the period June–August 2022, indicating a notable change in the narrative and attention given to the affected demographic. Therefore, as the outbreak progressed and official guidelines began to identify a specific segment of the population more affected by it (see Section 4 for a detailed account), the discourse underwent a transformation: mpox transitioned from a 'people'-oriented to a 'men'-oriented virus, therefore linguistically represented as potentially affecting male individuals more and, in particular, those who have sex with other men, as can be seen from the word sketch difference in Figure 13, where the lemmas 'man' and 'person' are compared.

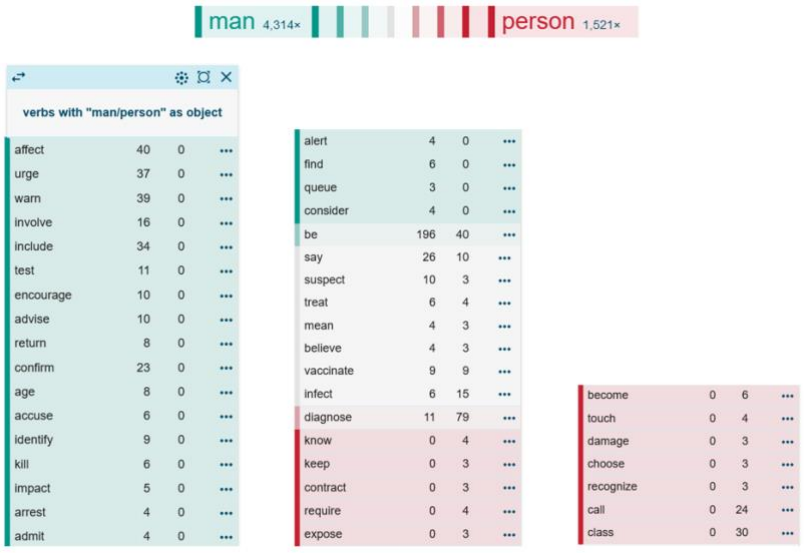


Fig. 13: Word sketch difference of the lemma 'man' and 'person' in the Mpox Media Corpus (MMC).

As can be seen from the word sketch difference provided in Figure 13, the verbs typically collocating with the lemma 'man' as their object are displayed in green, while the verbs collocating with the lemma 'person' as their object are displayed in red. By analysing such results, it quickly becomes apparent how the group of processes involving male individuals is significantly larger than those involving people in general. Moreover, the type of verbal processes linked to these two lemmas distinctly indicates that while 'people' are at the centre of diagnostic interest (i.e., the verb 'diagnose' strongly collocates with this lemma), 'men' are primarily represented as being affected by the virus – a clear discursive indication of a targeted population. This shift in the journalistic narrative prompts a deeper exploration of the reasons behind the altered representation and the implications it carries. Therefore, further investigation into the linguistic patterns and contextual usage of the term 'men' in relation to the mpox outbreak is essential to understand the evolving narrative and its underlying constructs. Indeed, the emergence of 'men' as a prominent term in the context of the mpox outbreak suggests a deliberate shift in focus within media coverage driven, as we have seen, by specific linguistic representations in institutional discourse, and this is the reason why Figure 14 shows a visualisation of the word sketch for the lemma 'man' in the MMC:

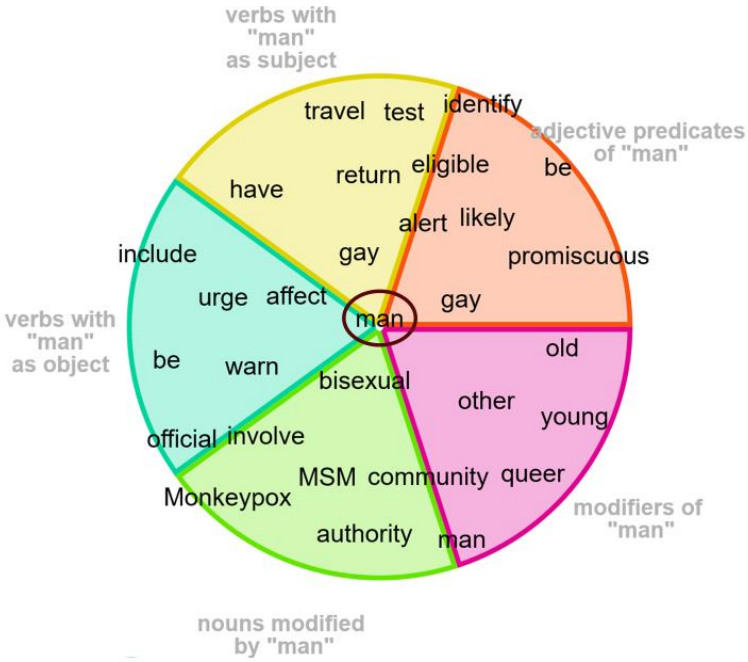


Fig. 14: Visualisation generated via Sketch Engine of the word sketch for the lemma 'man' in the Mpox Media Corpus (MMC).

An examination of the word sketch for the lemma 'man' indeed reveals fascinating collocational patterns associated with this linguistic element. It becomes evident that a particular segment of the population, specifically gay, bisexual and men who have sex with other men (GBMSM) individuals, is being linguistically identified as the most vulnerable to mpox. Within this group, those who engage in promiscuous sexual behaviours are the ones deemed in need of vaccination and care.

Turning our attention to the wordlist provided in Table 2, the frequent use of the word 'contact' (r.f.: 3,767; n.f.: 2,164.43) in the MMC is also noteworthy. In fact, when we used the concordancer to observe

its behaviour across the news stories, we identified a pattern that can be easily noticed in the following examples extracted from the concordance lines:

(10) Health officials said they are investigating where and how the latest cases of monkeypox acquired their infection. People who might have been in close *contact* with either case are being contacted and given information and health advice, the UKHSA said.

(11) UKHSA is rapidly investigating the source of these infections because the evidence suggests that there may be transmission of the monkeypox infection in the community, spread by close *contact*.

(12) Michael Head, a senior research fellow in global health at the University of Southampton, says the latest cases may be the first time transmission of monkeypox though sexual *contact* has been documented, but this has not been confirmed, and in any case it is probably close *contact* that matters.

(13) Officials stress that the virus is only spread through very close *contact*. It is not known to be a sexually transmitted disease.

As argued in the previous section, the noun 'contact' tends to occur when means of transmission are explained, and this is the reason why it typically occurs with the adjectives 'close' (MI3: 28.63; Log Likelihood: 12,481.22; LogDice: 12.75) or 'direct' (MI3: 25.52; Log Likelihood: 3,987.95; LogDice: 11.43), as it is 'close personal contact' to spread the virus, regardless of sexual orientation and gender identity. However, once again, this appears at odds with the mpox narrative woven by the media, in which GBMSM individuals are the main carrier of the virus. In fact, if close contact is enough to get infected, why are only GBMSM discursively targeted?

The fact that GBMSM are indeed discursively constructed as the scapegoats of the mpox outbreak is further underscored when we examine the list of adjectives that are most frequently used in the corpus provided in Table 3:

#	Item	Raw frequency	Normalised frequency (pmw)	Relative document frequency
1	*other*	2,907	1,670.29	100%
2	*first*	2,410	1,384.72	100%
3	*new*	2,129	1,223.27	100%
4	*gay*	1,997	1,147.42	100%
5	*sexual*	1,887	1,084.22	100%
6	*close*	1,769	1,016.42	100%
7	*public*	1,679	964.71	100%
8	*high*	1,489	855.54	100%
9	*last*	1,482	851.52	100%
10	*infected*	1,337	768.20	100%
11	*bisexual*	1,325	761.31	100%
12	*many*	1,319	757.86	100%
13	*infectious*	1,058	607.90	100%
14	*african*	587	337.28	100%
15	*unusual*	521	299.35	100%
16	*endemic*	493	283.27	100%
17	*severe*	479	275.22	100%
18	*tropical*	441	253.39	100%
19	*direct*	424	243.62	100%

#	Item	Raw frequency	Normalised frequency (pmw)	Relative document frequency
20	*western*	303	174.10	100%

Table 3: First twenty adjectives in the word frequency list extracted from the Mpox Media Corpus (MMC).

As can be seen, there is a distinct prominence of references to 'gay' (r.f.: 1,997; n.f.: 1,147.42) and 'bisexual' (r.f.: 1,325; n.f.: 761.31) men in the MMC. These adjectives consistently appear in contexts that not only highlight the vulnerability of these individuals to the virus but also stress the importance of them taking specific precautions to prevent its transmission (see Figure 15):

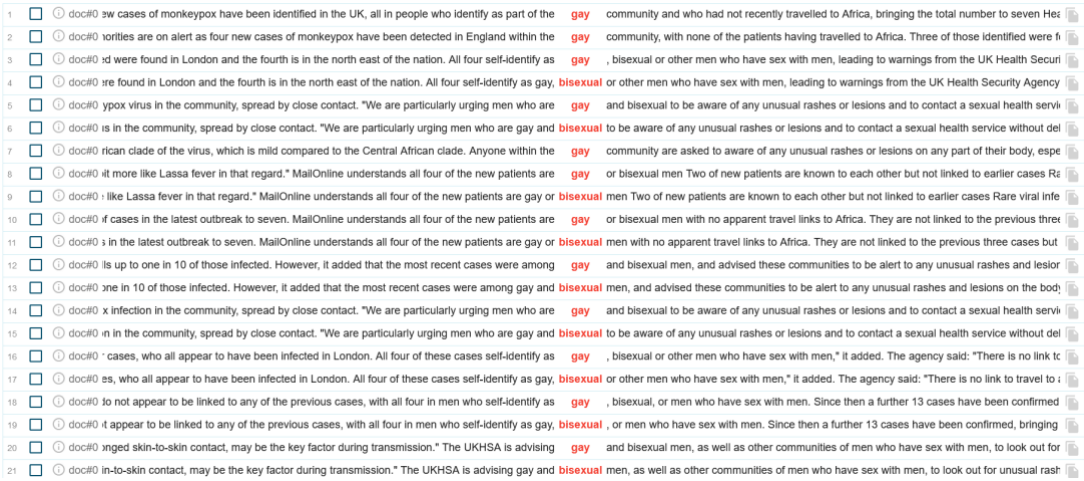


Fig. 15: Randomised concordance lines showing the context of use for the adjectives 'gay' and 'bisexual' in the Mpox Media Corpus (MMC).

This linguistic phenomenon is of particular significance as it reflects the media's role in framing the narrative around mpox: by repeatedly associating 'gay' and 'bisexual' men with both the highest susceptibility to the virus and the necessity for protective measures, the media influence how this segment of the population is perceived and how public health measures are formulated. Such a discursive construction is further exacerbated by the type of linguistic associations that are formed in media discourse, reinforcing stereotypical notions and stigmatising this group of individuals, as the word sketch provided in Figure 16 shows:

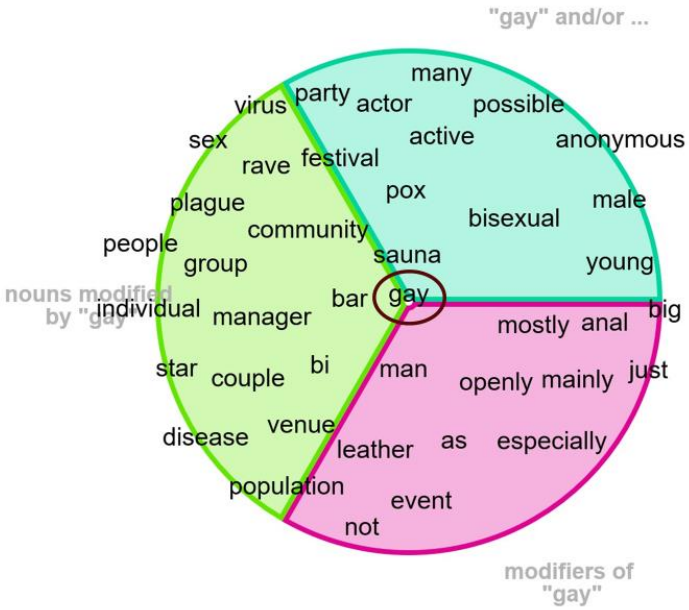


Fig. 16: Visualisation generated via Sketch Engine of the word sketch for the adjective 'gay' in the Mpox Media Corpus (MMC).

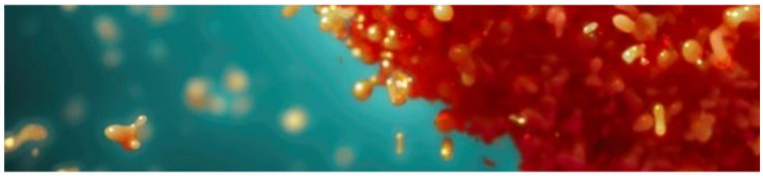
Therefore, as can be seen from Figure 16, it must be added that an examination of the word sketch for the lemma 'gay' reveals a discursive construction that reinforces that idea of promiscuity linked to the spread of the virus. Words such as anonymous sex encounters, saunas, gay fetish communities (i.e., leather, rubber, etc.), and plague are indeed extremely indicative of this. In this way, the deliberate emphasis on gay and bisexual men in media coverage of the mpox outbreak raises critical questions about the intersection of language, public health and societal attitudes, underscoring the need to avoid specific types of narratives around public health crises that can influence the allocation of resources and support to affected communities. Furthermore, the linguistic associations and portrayals of specific demographics in relation to the mpox outbreak highlight the broader issues of discrimination and marginalisation within public health discourse. Indeed, by discursively foregrounding certain individuals as particularly vulnerable and, therefore, indirectly responsible for the spread of the virus, the media perpetuate harmful stereotypes and contributes to their social stigmatisation. This not only hinders effective public health communication but also perpetuates disparities in access to healthcare and support systems. In light of these linguistic implications in the media coverage of the mpox outbreak, it is therefore imperative to pay close attention to the language used in public health communication and framing of epidemiological narratives. By taking into consideration the implications of language choices and contextual representations, there is an opportunity to challenge and reshape the narrative around infectious diseases, fostering inclusive and evidence-based responses that prioritise public health equity and social justice rather than reproducing specific ideological discourses.

However, if we go back to the adjective frequency list, there are other two elements that are worth our attention, that is, the adjectives 'African' and 'endemic'. These two terms have been taken into consideration because of the effect that the discursive constructions linked to them caused and the reparative actions taken by the WHO.

Fig. 17: Sample of randomised concordance lines for the adjectives 'African' and 'endemic' in the Mpox Media Corpus (MMC).

As we can see from the sample of concordance lines shown in Figure 17, mpox is discursively constructed as being endemic to African countries. From such a geographical area, mpox has then affected other countries. Therefore, we can clearly see that the media are also constructing the virus as an outside enemy that is attacking Western society, thus also leading to racist discourses and a process of otherisation, whereby the virus is seen as an outside enemy menacing the Global North. In order to curb such a discursive construction, which was exacerbated by the media coverage of the virus, on November 28, 2022, the WHO issued a document to address the use of racist and stigmatising language in different contexts, hoping that the change of the name from 'monkeypox' to 'mpox' would mitigate this discursive escalation:[77]

[77] The document can be found online at https://www.who.int, accessed 2 May, 2024.



WHO recommends new name for monkeypox disease

Following a series of consultations with global experts, WHO will begin using a new preferred term "mpox" as a synonym for monkeypox. Both names will be used simultaneously for one year while "monkeypox" is phased out.

When the outbreak of monkeypox expanded earlier this year, racist and stigmatizing language online, in other settings and in some communities was observed and reported to WHO. In several meetings, public and private, a number of individuals and countries raised concerns and asked WHO to propose a way forward to change the name.

Fig. 18: An extract from the WHO's document recommending the adoption of the word 'mpox' as a preferred term for monkeypox.

The WHO's recommendation that the word 'mpox' be adopted instead of the term 'monkeypox' to refer to the virus was made following consultations with global experts and considerations including scientific appropriateness and usability in different languages. However, one of the main reasons prompting such a suggestion was to avoid stigmatising specific regions of the world (specifically, African countries). Therefore, by introducing the term 'mpox', the WHO aimed to mitigate the concerns raised by experts addressing the observed racist and stigmatising language associated with the original term in the midst of a global outbreak. Nonetheless, the following example taken from the concordance lines of the word 'African' illustrates the type of reaction coming, for instance, from Fox News at the name change, also showing the type of close association that mpox was discursively linked to:

(14) Will the pox get renamed so monkeys won't feel ashamed? The WHO gets bitter about diseases named after a critter. The World Health Organization is changing the name of monkey pox because name shouldn't reference places or animals and it could be stigmatizing. True. But what exactly is stigmatizing? The monkey part or the pox part? Or the fact that you got infected from anonymous depraved sex at outdoor concerts? It's why I stopped eating bananas at Lollapalooza. But it's the name they got a problem with. Virologist saying in the context of the current global outbreak continued reference to and nomenclature – scroll that back there – of this virus being African is not only inaccurate, but it's also discriminatory, and stigmatizing. How could it be discriminatory?

As evident, the commentary trivialises the name change, making light of the situation and potentially contributing to the stigmatisation of those affected. Indeed, it stigmatises individuals who may have contracted mpox by associating it with 'anonymous depraved sex at outdoor concerts'. This not only perpetuates negative stereotypes but also deflects from the seriousness of the health issue by focusing on sensationalised aspects.

5.2. Discursive representation of the mpox outbreak in the VSC

In this section, we will now move on to the analysis of the media representation of the mpox outbreak in Italian news reporting. Therefore, in Table 4, a word frequency list of the VSC is offered, displaying the first twenty content words most frequently used in the corpus. Also in this case, next to the raw and

relative frequency of each item in the list, we have decided to also include the relative document frequency, thus implying that these are words that are well-distributed in the corpus under investigation.

#	**Item**	**Raw frequency**	**Normalised frequency (pmw)**	**Relative document frequency**
1	*vaiolo*	2,000	7,985.69	100%
2	*scimmie*	1,655	6,608.16	100%
3	*casi*	1,635	6,528.30	100%
4	*virus*	914	3,649.46	100%
5	*persone*	573	2,287.90	100%
6	*vaccino*	546	2,180.09	100%
7	*salute*	501	2,000.41	100%
8	*rischio*	495	1,976.46	100%
9	*malattia*	491	1,960.49	100%
10	*oms*	405	1,617.10	100%
11	*paesi*	375	1,497.32	100%
12	*dosi*	373	1,489.33	100%
13	*vaccinazione*	360	1,437.42	100%
14	*ministero*	346	1,381.52	100%
15	*regione*	339	1,353.57	100%
16	*infettive*	337	1,345.59	100%
17	*primo*	335	1,337.60	100%
18	*uomini*	313	1,249.76	100%
19	*sintomi*	302	1,205.84	100%
20	*contatti*	292	1,165.91	100%

Table 4: First twenty content words in the word frequency list extracted from the Vaiolo delle Scimmie Corpus (VSC).

As can be noticed, the word frequency list is extremely similar to the one already commented on for the MMC. However, a notable peculiarity merits our attention, represented by the term 'rischio' (translation: 'risk'; r.f.: 495; n.f.: 1,976.46). A word sketch visualisation of the term shows that the word is typically used to assess the situation and/or instruct specific measures to curb the outbreak:

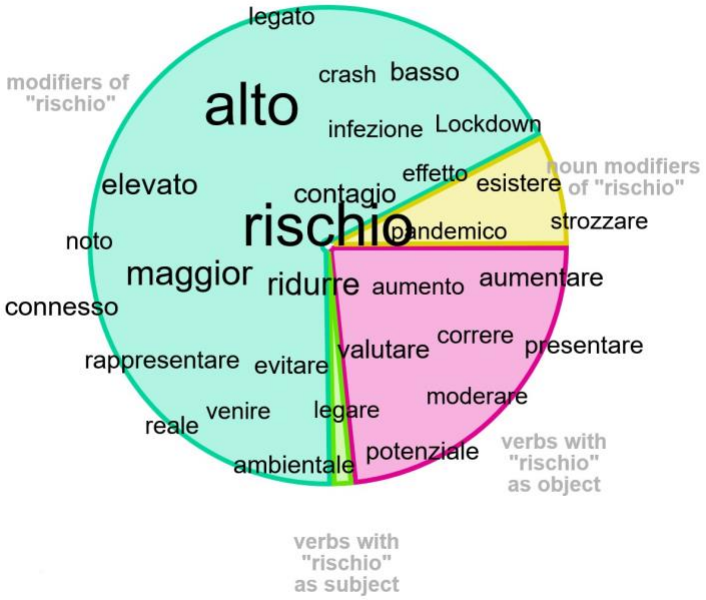


Fig. 19: Visualisation generated via Sketch Engine of the word sketch for the term 'rischio' in the Vaiolo delle Scimmie Corpus (VSC).

Nonetheless, what Figure 19 fails to show is that, among the strongest collocates of the term 'rischio', we have items such as 'categorie' (translation: 'categories'; MI3: 21.03; Log Likelihood: 842.12; LogDice: 12.03), 'soggetti' (translation: 'subjects'; MI3: 20.79; Log Likelihood: 805.87; LogDice: 11.99), and 'persone' (translation: 'people'; MI3: 17.32; Log Likelihood: 347.63; LogDice: 10.77). More specifically, the term 'rischio' is found in phrases of the type 'categorie a rischio' (r.f.: 42; n.f.: 167.7), 'soggetti a rischio' (r.f.: 39; n.f.: 155.72), and 'persone a rischio' (r.f.: 28; n.f.: 111.8). These general expressions, therefore, do not necessarily refer to who these individuals are; these risk categories, however, are clearly defined by the ministerial guidelines and, therefore, the ideological value linked to the scapegoating technique used is hidden thanks to this linguistic strategy. However, as the following examples show, it is clear who these categories are from the concordance lines extracted from the corpus, and how they are constructed discursively:

(15) In accordo con la circolare del ministero della Salute, la vaccinazione non ha carattere di massa ma è diretta alle persone a maggior *rischio* di infezione da Monkeypox virus, come le persone gay, transgender, bisessuali e altri uomini che hanno rapporti sessuali con uomini, che rientrino in una serie di criteri di rischio, e il personale di laboratorio con possibile esposizione diretta a orthopoxvirus.[78]

(16) Il Ministero [della Salute] ha individuato poi, tra le categorie a *rischio*, le persone gay, transgender, bisessuali e uomini che abbiano avuto rapporti sessuali a *rischio*. Vista l'esigua quantità di dosi a disposizione non si sta ancora ragionando in termini territoriali, e l'auspicio è che arrivino al più presto nuovi rifornimenti. Riguardo invece all'individuazione dei soggetti a *rischio*, la valutazione verrà fatta

[78] Translation: "As per the Ministry of Health directive, vaccination efforts are not aimed at mass immunisation but rather at individuals at higher risk of Monkeypox virus infection, such as gay, transgender, bisexual people and other men who have sex with men, meeting specific risk criteria, as well as laboratory personnel potentially exposed to orthopoxvirus".

dai medici dei reparti delle malattie infettive, saranno loro a stilare gli elenchi e a inviarli nel laboratorio di Forlì, sempre ovviamente nel rispetto della privacy.[79]

(17) Per esempio, affermano gli autori dell'editoriale, potrebbe non essere sufficiente la cosiddetta vaccinazione 'ad anello' offerta ai contatti di una persona positiva, ma per contrastare l'infezione potrebbe rendersi necessario un approccio più aggressivo che offra la vaccinazione a tutte le persone ad alto *rischio*.[80]

(18) Le strutture di Malattie infettive e Igiene hanno già degli elenchi di persone a *rischio* che verranno chiamate direttamente; inoltre, i cittadini che ritengono di dover fare il vaccino potranno fare riferimento, in specifici orari, direttamente ai numeri di telefono delle Malattie infettive presenti nelle due Aziende: qui troveranno anche una sorta di servizio di "counselling" per spiegare la loro situazione e per un eventuale inserimento nelle agende per la vaccinazione.[81]

As can be observed in the examples provided, the word 'rischio' plays a pivotal role in constructing the discursive categorisation of individuals and groups identified as vulnerable to the mpox virus. Indeed, the term is not only employed to assess the epidemiological situation but also to delineate specific social groups considered at higher risk of infection. These groups – particularly gay, transgender, bisexual individuals, and men who have sex with men – are therefore singled out as the primary focus of public health interventions, such as vaccination, as seen in examples (15) and (16). This linguistic strategy effectively highlights the marginalisation of certain populations by linking them explicitly to the notion of risk. For instance, in example (15), 'rischio' is used to create a hierarchy of vulnerability, with GBMSM placed at the forefront of those deemed in urgent need of protection. The explicit mention of this group reinforces their status as a high-risk category, implicitly connecting their sexual practices to the spread of the virus. Example (16) further emphasises this categorisation, with the phrase 'categorie a rischio' (trans.: 'risk categories') directly associating this population with the threat of infection. The discourse here normalises the identification of GBMSM as inherently more susceptible, without providing a deeper explanation of the virus's transmission mechanisms that might otherwise neutralise such a targeted focus. In examples (17) and (18), 'rischio' continues to function as a tool for justifying public health measures, such as expanded vaccination efforts. These examples, therefore, demonstrate that the repeated use of the word 'rischio' in the VSC constructs a narrative that aligns risk with particular identities, behaviours and 'mating' strategies (see Section 4), thereby reinforcing social and sexual stereotypes. While this linguistic framing aims to target high-risk groups for medical intervention, it simultaneously perpetuates stigmatising associations between sexual orientation, behaviour and disease, which risks undermining broader public health awareness.

A contrastive analysis of the term 'risk' in the MMC has shown a difference in the discursive representation of how the concept of danger linked to the spread of the virus is constructed. Indeed, in international news reporting, the notion of risk is linked to general public concerns (e.g., from the

[79] Translation: "The Ministry [of Health] has then identified gay, transgender, bisexual individuals, and men who have engaged in risky sexual behaviour as risk categories. Due to the limited availability of doses, vaccination territorial distribution planning has not yet commenced, with hopes resting on the swift arrival of new supplies. As for identifying at-risk individuals, this falls to doctors in infectious disease departments, who will compile the lists and forward them to the laboratory in Forlì, all while ensuring utmost privacy, of course".

[80] Translation: "For instance, the authors of the editorial suggest that relying solely on the so-called 'ring' vaccination, provided to the contacts of a positive individual, may not suffice. Instead, a more assertive approach, encompassing vaccination for all high-risk individuals, might be necessary to effectively combat the infection".

[81] Translation: "Infectious Diseases and Hygiene facilities already keep lists of at-risk individuals who will be contacted directly. Additionally, citizens wishing to receive the vaccine can refer to specific phone numbers during designated hours at the Infectious Diseases departments of the two Health Authorities. Here, they will also find a 'counselling' service available to explain their situation and potentially schedule their vaccination appointments".

concordance lines: '(overall) risk to the general public', 'the risk of transmission to the general population', 'the risk to the population', etc.), highlighting potential impacts on society as a whole. In contrast, Italian press coverage emphasises that the concept of risk is associated with individuals who can contract and spread the virus. 'Risk', therefore, is no longer an abstract notion but is linked to animated actors who may be considered responsible for the outbreak. This subtle shift in emphasis signifies a crucial aspect in the portrayal of the outbreak in Italian news reporting, focusing on the individual implications rather than the broader societal impact.

#	**Item**	**Raw frequency**	**Normalised frequency (pmw)**	**Relative document frequency**
1	*primo*	735	2,934.74	100%
2	*sanitario*	447	1,784.80	100%
3	*infettivo*	381	1,521.27	100%
4	*nuovo*	374	1,493.32	100%
5	*ultimo*	350	1,397.50	100%
6	*sessuale*	350	1,397.50	100%
7	*europeo*	312	1,245.77	100%
8	*stretto*	239	954.29	100%
9	*possibile*	226	902.38	100%
10	*mondiale*	192	766.63	100%
11	*scorso*	186	742.67	100%
12	*alto*	186	742.67	100%
13	*cutaneo*	182	726.70	100%
14	*generale*	159	634.86	100%
15	*grave*	156	622.88	100%
16	*noto*	148	590.94	100%
17	*italiano*	148	590.94	100%
18	*positivo*	147	586.95	100%
19	*diverso*	144	574.97	100%
20	*africano*	139	555.01	100%

Table 5: First twenty adjectives in the word frequency list extracted from the Vaiolo delle Scimmie Corpus (VSC).

In order to further contrast the MMC and the VSC, Table 5 shows the list of adjectives that are most frequently used in the corpus representative of Italian news reporting. As can be seen, also in the case of the modifiers that are usually employed in connection with the mpox outbreak, there are no striking differences if compared to the list of most frequently used adjectives in the MMC (see Table 4). Some noteworthy absences are represented by the terms referring to gay, bisexual and men who have sex with other men (GBMSM) individuals, even though, as previously discussed, these are still included in the Italian discursive representation of mpox through a peculiar linguistic strategy found in the VSC. However, the same racist discourses can also be found in the Italian press, with the adjective 'africano' (translation: 'African'; r.f.: 139; n.f.: 555.01) used to describe the provenance of the virus and, therefore, linking the outbreak to this geographic area. This linguistic strategy therefore perpetuates biased representations also within the Italian press coverage of the mpox outbreak.

6. Conclusion

In the light of the multiple analyses reported in the previous sections, it is now clear how mpox was selected as a 'stigmatising attribute' and arbitrarily attached to a minority group, GBMSM, resulting in

their discursive representation as a 'health threat' and their subsequent 'status loss', as described in Section 2. This has led us to the critical question of how lexical choices and linguistic patterns in media and governmental discourse shape public perceptions of the mpox outbreak, particularly in relation to the stigmatisation of specific social groups (RQ3). In this respect, it can be argued that, in our case study, stigma subtly trickles not only across news discourse, biased by nature and thus less surprisingly,[82] but it also slithers its way into official governmental guidelines, which are supposed to maintain neutrality.

Additionally, the cross-linguistic analysis of governmental guidelines opened a window on the key discursive strategies employed by governmental and health organisations in languaging, representing and managing the mpox outbreak (RQ1), as outlined in Section 4. The differences in how the UK, US and Italian guidelines address mpox transmission and risk groups reveal not only variations in policymaking styles but also underlying cultural attitudes towards healthcare communication. The linguistic choices made in these guidelines mirror broader societal dynamics, with officialdom strongly echoing the culture and ideology of the contexts of reference.

Finally, this study has also begged the question as to how global and Italian media differ in their discursive representation of the mpox outbreak, and what factors may predict variation in news coverage (RQ2). As discussed in Section 5, a comparative analysis of the MMC and VSC revealed that global media wove a strong connection between GBMSM-specific sexual behaviour and the contagious nature of the disease, resulting in stigma-ridden discourses surrounding the social category targeted. On the other hand, Italian media reproduced discursively such narratives shifting responsibility onto governmental guidelines, thus avoiding commitment and lowering epistemic modality. Both contexts, however, contributed to framing GBMSM as at the root of the outbreak, reinforcing broader discourses of racial and sexual marginalisation.

In addition, it can be concluded that the stigma formation process here in play developed out of a problematic interaction, or perhaps a 'perverse dialogue', between news reporting and the institutional domain. In fact, this analysis has shown that mpox-related stigma began to surface in news reporting when official websites linked to the UK, US and Italian governments released their guidelines on how to avert the risk of contagion. For example, a linguistic shift in support of this can be seen in the transition indicated in Section 4 and Section 5 from the construction of mpox as a people-oriented to a GBMSM-oriented disease. This conceptual fallacy arises from a glaring inconsistency between the scientific evidence regarding mpox transmission methods – primarily skin-to-skin contact and contact with infected lesions – and its intra-linguistic misguided translation, so to speak, which categorises GBMSM individuals as a high-risk group. Ever since that moment, and on the strength of the AIDS pandemic decades before, mpox has come to be discursively (mis)portrayed as a 'new gay plague', as Shah maintains,[83] rooted in deviant 'mating strategies' whereby non-straight male individuals develop intimacy with each other. This process shows the dangers underlying the overlapping between scientific communication and stigma, where the influence of stigma on scientific discourse can engender biased narratives that deeply embed themselves into societal consciousness, shaping our perceptions of reality.

Besides, the cross-linguistic contrastive comparison of the UK, US and Italian official guidelines on mpox transmission methods not only reveals slight information mismatches but also divergent manners of information distribution across the texts, alongside diverse approaches to healthcare issues and underpinning cultural-laden aspects. In summary, based on this investigation, it can be argued that (i) the UK guidelines highlight the rarity of mpox transmission, seemingly with the intent of mitigating potential worry or apprehension among people, which embodies a culture-specific 'policy style' (see Section 4) unique to the UK government; (ii) inconsistencies arise in how the three guidelines address

[82] Flavia Cavaliere, *The Shaping of the News: How Information Can Be Moulded by the Press* (Rome: Edizioni Nuova Cultura, 2012).
[83] Shah, "'The New Gay Plague'".

sex as a transmission factor: while NYC places sexual intercourse in top-of-the-heap position in the risk factors list and fleshes it out with an array of practices purportedly responsible for infection transmission, the UK and Italy use linking words such as 'including' and 'compreso' when referring to sex as a risk factor, thereby reducing its prominence compared to the NYC guidelines; (iii) the mention of pregnancy solely in the Italian guidelines prompts reflections on the significance attributed to motherhood within the culture of reference, Italy, as this theme remains completely unaddressed in the other two guidelines. In view of this, our study suggests that despite the official and government-bound nature of guidelines, these will invariably carry culture-dependent elements that undermine the outer veneer of objectivity of officialdom.

This analytical background thus leads us to question the validity and legitimacy of the anti-mpox vaccination campaign management, primarily in its targeting risk groups who have been defined as such on less than scientific grounds. Erroneous and biased premises, which falsely suggest that GBMSM are more inclined to certain 'mating strategies' (see Section 4) have mistakenly caused the viral spotlight to be cast on them, once again fortifying the stigmatisation of non-straight men as social pariahs. From this standpoint, illness, mpox in this case, turns into an instrument to deepen the roots of stigma by projecting the idea that GBMSM are inherently more vulnerable to infection, as discussed in Section 4 and Section 5. It can be noticed that the medical domain is engaged to produce a 'dialogic expansion'[84] of the false narratives surrounding the long-established and cemented link between homosexuality and promiscuity, all too often held accountable for the spread of viruses.

While this study provides a detailed analysis of how news reporting and governmental guidelines (mis)represented the onset and spread of mpox at an international and national level, resulting in biased narrations redolent of homophobic and racist discourses (see Section 5), its analytical scope does not extend to its construction across social media platforms such as Facebook, Instagram, X and TikTok. By collecting a corpus representative of the social media construction of this phenomenon, it would be possible to gain deeper insights into how public perceptions and reactions were influenced and how misinformation or alternative viewpoints may have proliferated in these digital spaces.

[84] James R. Martin and Peter R. R. White, *The Language of Evaluation: Appraisal in English* (Basingstoke: Palgrave Macmillan, 2005).