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Mpox 1b: Upstanders for Science in Western and Chinese Social Media

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Abstract

At the beginning of the COVID-19 pandemic, scientific literature published research about the presence of hoaxes and evidence in diverse social media, with a huge scientific and social impact. The main results showed that while in Western social media like X there was more false information and less scientific evidence than in the Chinese platform Weibo, but scientific evidence was more retweeted than hoaxes. This research allowed the identification of social activists for science in the social media, who multiplied their impact when scientists provided them with evidence. Mpox clade 1b outbreak, which has now been declared a global public health emergency by WHO, requires a fast reaction from science, already taking place. This article analyzes information disseminated in X and Weibo about mpox. 3089 messages published between 12 and 16 of August 2024 have been analyzed. The results show that while hoaxes around mpox are prevalent in social media, posts containing scientific evidence do receive more interaction. Such findings contribute to the understanding of the health crisis and underscore the need for health authorities to join efforts with citizens to co-create evidence-based communication strategies.

Keywords

Mpox 1b, social media, evidence, hoaxes

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Mpox 1b: Defensores de la Ciencia en las Redes Sociales Occidentales y Chinas

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Resumen

Al comienzo de la pandemia de COVID-19, se publicaron investigaciones sobre la presencia de bulos y evidencias en diversas redes sociales, con un enorme impacto científico y social. Los principales resultados mostraron que, si bien en redes sociales occidentales como X había más información falsa y menos evidencias que en la china Weibo, donde las evidencias predominaban a los bulos. Esta investigación identificó activistas sociales que multiplicaban su impacto cuando los científicos proporcionaban evidencias en redes. El brote de Mpox clade 1b, ya declarado emergencia de salud pública mundial por la OMS, requiere una rápida respuesta científica que ya se está produciendo. Este artículo analiza la información difundida en X y Weibo sobre el mpox. Se han analizado 3089 posts publicados entre el 12 y el 16 de agosto de 2024. Los resultados muestran que, si bien los bulos sobre mpox son frecuentes, los mensajes que contienen evidencias científicas reciben más interacción. Estos hallazgos contribuyen a la comprensión de la crisis sanitaria y subrayan la necesidad de que las autoridades sanitarias aúnen esfuerzos con la ciudadanía para co-crear estrategias de comunicación basadas en la evidencia.

Palabras clave

Mpox 1b, redes sociales, evidencia, bulos

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he recent global declaration by WHO (WHO, 2024) of mpox clade 1b as a Public Health Emergency of International Concern (PHEIC), as well as the previous experience during the COVID-19 pandemic, urge researchers to act, in co-creation with citizens, to contribute to achieve social impact in overcoming the emergency. Following this call, the scientific community has reacted stressing the importance of global collaboration, urging healthcare agencies, researchers and governments to join forces (See the recent The Lancet editorial (The Lancet (editorial), 2024). Obviously, diverse teams of researchers were already working before the WHO declaration, on the basis of previous scientific actions during coronavirus and other previous health crises.

Just at the beginning of the COVID-19 pandemic, two scientific articles opened the path to contributions to these efforts from the analysis of social media interactions about health and the interventions that are successful in improving them. The first research found that less false information circulated on Sina Weibo than on Twitter (Pulido Rodríguez et al., 2020). The second research (Pulido et al., 2020b) showed that even though more tweets containing hoaxes were being published, tweets containing scientific evidence accumulated more retweets than those containing hoaxes. Both studies were carried out in a *Pegasus* scientific mode. *Pegasus research* is the one that can be done and published as fast as needed by health or other societal emergencies when there are three preexisting conditions: the adequate methodology already published and disseminated, the updated theoretical background about current society, and teams with a long experience of collaboration among diverse scientists from different cultures and disciplines.

The research on the interactions between scientists and citizens about COVID-19 started on January 13, 2020, with the methodology of Social Media Analytics (SMA), which had been deeply tested and implemented since 2011 for the development of the new requirements of social impact and co-creation in the scientific programmes of research. At the International Conference on Social Impact of Science, SIS2016, with the participation of three Nobel Prizes, the representative of the European Commission declared about this methodology: "We found the perfect machinery fully oiled when we needed them". The publication of this methodology applied to social impact (Social Impact in Social Media, SISM) in official research documents (European Commission, Directorate-General for Research and Innovation et al., 2018) disseminated it among scientists and policy makers. Its publication in scientific journals lead to relevant dissemination and transference. For instance, one article in PLoS One (Pulido et al., 2018) obtained more than 140.000 views and downloads.

Based on this background, *Pegasus* research to prevent infodemic in the social media on the COVID-19 outbreak could be initiated that January 13, 2020, facilitated by three previous contributions: 1) the pre-existing development and dissemination of the SMA methodology (Pulido et al., 2018; Pulido & Flecha, 2017; Pulido Rodriguez et al., 2021), 2) the established theoretical framework of dialogic society (Flecha, 2022), which underpins the concepts of co-creation and social impact, and 3) the collaborative efforts of a diverse research team.

This pioneer research was followed by many and diverse studies about the relevance of for health of the analysis and interventions in the social media. Research unveiled the need to provide citizens with factual information based on scientific evidence as part of the joint effort to overcome the health emergency. Citizens did not only have to navigate the complexities of a pandemic, but also those of an "infodemic" (Pulido et al., 2020b). Tactics such as the spread of overgeneralized claims, distorted scientific findings or outright fabrications were employed to generate hoaxes that misled the public (León et al., 2022). This situation had negative consequences such as the resistance to public health measures (Sachs et al., 2022), with misinformation hindering healthy behaviors like social distancing and handwashing, and conspiracy theories encouraging unhealthy practices that increased the risk of infection (Tasnim et al., 2020). Nevertheless, the "The Lancet Commission on lessons for the future from the COVID-19 pandemic" (Sachs et al., 2022) identified that in countries with previous pandemic experience, such as the Western Pacific, public health measures such as the use of face-masks were rapidly adopted thanks to information shared on social platforms. Similarly, other research found that the dissemination of accurate scientific information via Sina Weibo and WeChat during the COVID-19 pandemic contributed significantly to positive public health outcomes by promoting informed behaviors and mitigating the virus' spread (Quan & Zhang, 2024).

Citizens are increasingly looking for health information on social media platforms, where both accurate data and misinformation can be found. Research on the 2022 outbreak, revealed a strong correlation between search trends for "monkeypox" and outbreak occurrence, with over 1.6 billion views on related content on TikTok (Comeau et al., 2023). Their findings also highlighted that the quality of content varied significantly, depending on whether this content was created by physicians or non-physicians. Thus, while public health messages are disseminated on social media such as Twitter and Instagram, fostering community engagement around health issues (Engebretsen, 2023; Ola & Sedig, 2020), social media platforms need to be carefully monitored to ensure reliability and safety of shared information.

The study of inclusive communication of science (FECYT, 2022) has shown that people from minorities seek to challenge stereotypes, advocate for their health needs and rights and co-create effective solutions together with researchers and other citizens. This study demonstrates that some of those minorities get online the scientific evidence about their situation quicker than governments and universites. Along these lines, during the 2022 mpox outbreak, a pioneer study showed that social media platforms emerged as spaces in which individuals and organizations mobilize around public health issues, challenge misinformation and promote evidence-based information. Through the analysis of 2,313 related posts, the research uncovered a strong public response against stigmatization of the LGBTQ community (Rios et al., 2023). The authors report that uses emphasized the importance of rigorous data and scientific evidence to ensure effective public health communication and prevent stigmatization. Following this approach, other Twitter analyses of the 2022 mpox outbreak revealed the presence of both accurate and misleading information in the social platform (Cooper et al., 2023). According to this study, while public health guidance on symptoms, vaccines and prevention circulated, the social media platform was also filled with misinformation, including conspiracy theories linking the new virus to COVID-19 and to stereotypes concerning the LGBTQ+ community. Other research about the 2022 mpox outbreak in relation to sexual minorities found that tweets often contained stigmatizing language, including statements such as "gay disease" and other negative terms towards gay and bisexual men (Gim, 2023).

These research shows that social media can be platforms for infodemic but also powerful tools for advocating against stigma and promoting evidence-based public health information. The aforementioned research on the public response (Rios et al., 2023) provides answers to the problem of visibility of LGBTQ in science (Freeman, 2018) and reinforces the legal protection for LGBTQ people against hate crime, hate speech and violence, strengthening measures to combat anti-LGBTQ online hate speech and disinformation (Directorate-General for Justice and Consumers, 2023).

While understanding how information is shared in the context of the mpox clade 1b emergency is essential for developing effective countermeasures that help contain the outbreak and safe lives, understanding how citizens can join efforts in the co-creation of effective solutions to overcome the emergency can maximize the sought outcomes. Moreover, minority communities, including the LGTBQ, have traditionally been disproportionately affected by health crises and misinformation. Over 40 years ago, the AIDS crisis already highlighted the significant health disparities faced by the LGBT community, due to stigma, discrimination and limited access to healthcare (Zeeman et al., 2019). More recent health crises, such as the COVID-19 pandemic, have also disproportionately impacted sexual minorities, who experienced greater levels of distress, increased social distancing and overall compromised wellbeing (Baumel et al., 2021). Thus, research specifically empowered citizens to break with these cycles of stigmatization and discrimination is of utmost relevance.

In order to contribute to addressing the mpox clade b1 outbreak and contribute to health prevention and improvement for all, the current research aims at identifying the prevalence of scientific evidence and misinformation in the published posts around the outbreak, as well as at unveiling whether hoaxes are being debunked in a joint effort between researchers, health authorities and citizens.

Methodology

This article presents research conducted under the orientation of the dialogic society theory, using Social Media Analytics (SMA) as the methodology for the analysis. The dialogic orientation stresses the relevance of bottom-up co-creation of knowledge, oriented towards social impact, understood as improvements for citizens' lives. Previous research about information and misinformation during the COVID-19 outbreak using SMA achieved highly relevant scientific and social impacts, especially during the early weeks of the pandemic (Pulido, et al., 2020a; Pulido et al., 2020b; Pulido Rodríguez et al., 2020). This is therefore the optimal orientation and methodology for research on the current public health emergency on mpox.

Data Collection

For the current study, information disseminated in X and Weibo about the mpox has been analyzed. These two social networks have been selected due to their widespread use and outreach: as of April 2024, there are 611 million users in X and 598 million users in Weibo

(Statista Research Department, 2024). The data extraction was conducted on August 16 and 17, 2024, using a Python API for X and Octopus for Weibo. Several keywords were selected bottom-up after a first screening about the mpox clade 1b outbreak. The 7 keywords were:

- mpox 1b
- mpox 1b WHO
- mpox
- monkeypox
- monkeypox 1b WHO
- viruela del mono (monkeypox in Spanish, only in X)
- 猴痘 (monkeypox in Chinese, only in Weibo)

Besides the keywords in English, widely used worldwide, the term has also been searched in Spanish and in Chinese, to capture different ways of referring to mpox 1b in non-English native speaking countries.

All posts found in each keyword have been extracted and copied into an excel sheet, copying the text of the post itself, its id, the number of likes, quotes, replies and reposts achieved, the keyword with which each post has been found, the timestamp and the url.

Data Analysis

In all, 4,702 posts retrieved for analysis were 4,176 from X and 526 from Weibo. The total number of posts considered valid for further analysis was 3,089, of which 2,886 were extracted from X and 203 from Weibo. The data analysis has been conducted in dialogue among several researchers, some were Spanish (Western) and others were Chinese, with this greater diversity supporting more rigor and comprehensive understanding of the posts analyzed from the two social media platforms. It has been highly relevant for the analysis of each post to be conducted by the researchers themselves rather than by programs based on Artificial Intelligence. Indeed, the posts are very diverse, and it is impossible to not make mistakes in their analysis unless it is done by researchers.

The unit of analysis is the entire post, including the text and, if any, the images and/or links included in the post. As a result of the first screening and the dialogue among the diverse researchers, two main predefined categories and two subcategories emerging from the data have been co-created. The following table illustrates the categories of analysis:

Table 1

Categories of Analysis

Hoaxes	Posts on mpo misinformation.	x clade	b1	containing	false	information	or
Scientific evidence	Posts on mpox of evidence.	ade b1 co	ontair	ning factual in	nformat	tion and scient	ific

Homophobic hoaxes	Posts on mpox clade b1 containing false information or misinformation that is homophobic.
Social activism supporting science	Posts on mpox clade b1 containing factual information and scientific evidence posted to debunk hoaxes.

In order to determine whether posts report information based on scientific evidence or otherwise they report hoaxes, the following criteria have been used: a) whether they contain references to scientific articles indexed in Web of Science (WoS) or Scopus - while there are different databases that contain scientific publications, WoS and Scopus are currently the ones most recognized in the diverse countries; b) whether they include information supported or refuted by scientific articles indexed in WoS or Scopus; or c) whether they include information supported or refuted by international health and/or research organizations, such as the World Health Organization. The number of interactions at each post within each category has been analyzed, disaggregated by the number of likes, reposts, and comments received.

Ethical Requirements

This study has been conducted following ethical criteria agreed by the international scientific community, including the EU Charter of Fundamental Rights and the UNESCO Universal Declaration of Human Rights. The study has received ethical approval by the Community of Research on Excellence for All Ethics Committee, with approval number 20240816. In addition, each social media platform's Terms and Conditions and Regulation (EU) 2016/679 (General Data Protection Regulation) have been followed. In this regard, only public data from each platform has been extracted. In addition, to ensure users' anonymity, social media users' profiles have not been accessed, and no post has been reproduced literally in this manuscript.

Results

The results show the four following trends: 1) the proportion of hoaxes about mpox 1b is higher on the Western platform X as compared to the Chinese Weibo, 2) posts containing scientific evidence in X are more reposted than hoaxes in X, 3) homophobic hoaxes have persisted from the AIDS crisis to the current mpox b1 outbreak in both X and Chinese Weibo, and 4) social activists supporting science are present in both Western X and Chinese Weibo.

The following table presents the results of the analysis conducted across different social media platforms, X and Weibo. It shows the total number of items extracted and analyzed, those considered for analysis, the total number of evidence and hoaxes identified, as well as the number of homophobic hoaxes and post on scientific activists supporting science detected.

Overview of the Results

Description	X	Weibo	Total
Extracted and analyzed posts	4,176	526	4,702
Posts considered for analysis	2,886	203	3,089
Hoaxes (including homophobic hoaxes)	1,275	74	1,349
Scientific Evidence (including Social activism supporting science)	1,611	129	1,740
Homophobic hoaxes	305	18	323
Posts Social activism supporting science	26	1	27

An overview of the results shows that out of the 3,089 posts retrieved, 2,886 were published on X and 203 on Weibo. Regarding the first platform, 1,611 (55.8%) of the posts were classified as scientific evidence and 1,275 (44.2%) as hoaxes. As for Weibo, 129 (63.5%) of the analyzed posts were classified as scientific evidence and 74 (36.5%) as hoaxes. Table 3 illustrates these results:

Table 3

Post	Containing	Either	Hoaxes of	r Evidence:	Weibo vs.	X
1 051	Containing	Linci	110unes of	Drachee.		11

		Weibo			X						
Total	Hoax		Evidence		Total	Hoax		Evidence			
f	f	%	f	%	f	f	%	f	%		
203	74	36.5%	129	63.5%	2,886	1,275	44.2%	1,611	55.8%		

More Proportion of Hoaxes about Mpox 1b in Western X than in Chinese Weibo

A total of 1,349 out of 3,089 of the posts analyzed in both platforms made reference or contained hoaxes around mpox. Of these, 1,275 (44.2%) were published on X and 74 on Weibo (36.5% of valid posts). The posts including hoaxes published on X accumulated a ratio per post of 1,037.23 likes, 341 reposts and 79.68 comments, while the ones published on Weibo accumulated a ratio per post of 36 likes, 3.1 reposts and 5.7 comments. Thus, a higher proportion of posts containing hoaxes were found in X and these received more interactions in the Weibo social network. Table 4 presents these data:

Types of	<i>Types of Interactions with Hoaxes on Weibo vs. X</i>												
Weibo						X							
Lik	Likes Repost Comments		Like	Likes		Repost		Comments					
f	$\overline{\mathbf{X}}$	f	$\overline{\mathbf{X}}$	f	$\overline{\mathbf{X}}$	f	$\overline{\mathbf{X}}$	f	$\overline{\mathbf{X}}$	f	$\overline{\mathbf{X}}$		
2,665	36	31	3.1	23	5.7	1,322,466	1037.2	34,778	41	101,595	79.7		

Scientific Evidence in X is More Reposted than Hoaxes in X

Out of the 3,089 posts considered for analysis, 1,740 contained scientific evidence on mpox. Of these, 1611 (55.82%) were published on X and 129 (63.55% of valid posts) on Weibo. Posts sharing scientific evidence on X garnered a ratio per post of 1,205.83 likes, 359.72 reposts and 128.54 comments, while the posts shared on Weibo garnered a ratio per post of 72.3 likes, 7.1 reposts and 7.2 comments. Thus, posts sharing scientific evidence on Weibo received more than twice of reposts, more comments and more than twice of likes than posts containing hoaxes. On X, posts containing scientific evidence received a higher proportion of reposts than those containing hoaxes, while this was not confirmed for Weibo. Table 5 shows these findings:

Table 5

		W	eibo			X						
Likes Repost		st	Comments		Likes		Repost		Comments			
f	$\overline{\mathbf{X}}$	f	x	f	x	f	x	f	$\overline{\mathbf{X}}$	f	x	
9,328	72.3	921	7.1	926	7.2	1,942, 596	1205. 83	579,5 04	359.7 1	207,0 81	128.5 4	

Types of Interactions with Scientific Evidence on Weibo vs. X

Persistence of Homophobic Hoaxes since AIDS until Mpox 1b, more in Weibo

Homophobic hoaxes were present both in posts published on Western X and Chinese Weibo. Out of the 1,275 (23.9% of posts containing hoaxes) posts containing hoaxes published in Western X, 305 disseminated homophobic hoaxes, while 18 posts published on Weibo contained homophobic hoaxes (24.3% of posts containing hoaxes). Table 6 shows these trends:

	Weibo		X					
Hoaxes	Homo	phobic hoaxes	Hoaxes	Нотор	hobic hoaxes			
f	f	%	f	f	%			
74	18	24.3%	1,275	305	23.9%			

Homophobic Hoaxes on Weibo vs. X

Homophobic hoaxes on X received a ratio of 929.73 likes, 260.75 reposts and 42.71 comments. On Weibo, homophobic hoaxes accumulated 40.9 likes, 2.4 reposts and 6.4 comments. Thus, on Weibo, posts containing homophobic hoaxes were not more reposted than posts containing hoaxes, but did receive more comments and likes, while on X they only received more likes. Table 7 presents these data:

Table 7

Types of Interactions with Homophobic Hoaxes on Weibo vs. X

		W	eibo		X						
L	Likes Repost Comments		Likes		Re	post	Comments				
f	\overline{x}	f	\overline{x}	f	\overline{x}	f	\overline{x}	f	\overline{x}	f	\overline{x}
736	40.9	44	2.4	115	6.4	283,5 68	929,7 3	79,52 9	260.7 5	13,02 7	42.71

Identification of Social Activists Supporting Science in both Western X and Chinese Weibo

Posts categorized as social activism bring forward evidence-based and factual information. The objective is that citizens stay well-informed and that the information they provide is up to date and based on scientific evidence.

A total of 26 posts were identified in Western X (1.61% of posts containing SE) published on X and 1 (0.8%) of the posts published on Weibo containing scientific evidence were categorized as social activism. Table 8 reflects these results:

	Weil	00	X					
Scientific evidence	Social act	tivism supporting science	Scientific evidence	Social activism supporting science				
f	f	%	f	f	%			
129	1	0.8%	1,611	26	1,6%			

Social Activists Supporting Science on Weibo vs. X

For Weibo, these posts accumulated a ratio of 49 likes, 13 reposts, and 7 comments, while the posts on X garnered a ratio of 1,513.12 likes, 262.88 reposts, and 53.65 comments. These results show that Weibo social activists supporting science are barely present on the social platform. However, on X, posts under this category received more likes than posts containing scientific evidence, and more likes, more comments and more reposts than homophobic hoaxes. Table 9 summarizes these findings:

Table 9

Types of Interactions with Social Activists Supporting Science on Weibo vs. X

		Wei	bo		X						
Likes Repost		Com	Comments		Likes		Repost		Comments		
f	x	f	$\overline{\mathbf{x}}$	f	$\overline{\mathbf{x}}$	f	$\overline{\mathbf{x}}$	f	$\overline{\mathbf{X}}$	f	$\overline{\mathbf{x}}$
49	49	13	13	7	7	39,34 1	1,513. 11	6,835	262.8 8	1,395	53.65

Discussion and Conclusions

Beyond the common debates about the positive or negative role of social media, empirical research through Social Media Analytics allows more accurate analyses of real facts and actions oriented to improve health through overcoming hoaxes (Pulido et al, 2020a). More than 60% of the world population are on social media, and most of them do not regularly consult the official top-down information about health emergencies from official sources. Therefore, a very significant part of citizens in the world are being left to the influence of hoaxes widely disseminated in social media. In the face of international health crises, like a pandemic, such a situation hinders the implementation of needed preventive measures advised by official international organizations. The scientific knowledge about how misinformation is dealt with in social media, as well as how to take action to improve it, is one of the requirements for the success of preventive action and response in health emergencies at local and global levels. The

research reported in this article comes to respond very soon and in a timely manner to this need at a time when a new international public health emergency has been raised, related to the very recent outbreak of a new and more deadly strain of mpox.

Our analysis has shed light on some important findings that can help citizens to tackle this new international health emergency in an informed manner, as well as the reported results can be helpful for international health organizations to support their task of motivating the implementation of preventive actions. First, like it happened during the COVID-19 pandemic (Pulido Rodríguez et al., 2020), there were less posts -out of the total of posts analyzed-disseminating hoaxes in Chinese Weibo than in Western X. One way for the Western world to improve this negative outcome is to make scientific analyses of what is happening, what is being communicated and how, in social media (Pulido et al, 2020a; Pulido et al, 2020b), and to implement successful actions to improve it. Today this is even more important, as populists criticize democracy as inefficient for solving citizens' problems.

One current widespread hoax is that the present mpox Public Health Emergency of International Concern is a problem of and for Africa, ignoring existing evidence on disease contagion in a globalized world. As Connell (2012) pointed out in reference to HIV/AIDS more than ten years ago: *It was a world issue and the significance of men's sexuality in the epidemic, cannot be understood without understanding gender relations in both local and transnational arenas* (p11). Along the same line, Beck-Gernsheim et al (2003, p.14), when analyzing globalization, pointed out the importance for feminists to find out more about concrete lives of other women who are being affected by global processes and the need of a transnational feminism.

Another outcome is that the present posts on mpox that were part of the poll of analyzed posts in our study reproduce homophobic hoaxes, blaming homosexuals for the current mpox outbreak. This type of homophobic hoaxes shows strong persistence since AIDS in the 1980's until mpox today (Ríos et al., 2023). For the present case of the mpox outbreak, such misinformation can be easily contrasted with recently released data from the Democratic Republic of Congo on which UNICEF warned: "Since the start of the year, an estimated 8,772 children have contracted the disease in the DRC – more than half of the country's 15,664 total reported cases – according to the latest available data. A total of 548 people have died, an estimated 463 of those were children."¹ Also, as the *Lancet* editorial (2024) has published: "The weight of stigma, particularly in settings where populations such as LGBTQ+ communities might avoid seeking help due to fear of criminal prosecution, is a danger that needs to be addressed. Disinformation and misinformation must be forestalled (p.1)".

This finding informs of the need for further research to explore what is failing in current scientific communication that allows such persistence. It may be the case of publishing scientific evidence not being enough to overcome ideological emotional resistance. Some actions such as the Dialogic Scientific Gatherings are proving successful in health literacy as they foster dialogues among participants always grounded in the evidence shared in the readings discussed (Flecha et al., 2011). Analyzing these successful actions for scientific communication is another promising line of research.

Finally, it is good news that our study found social activists supporting science in both Western X and Chinese Weibo. In previous studies on COVID-19 misinformation and online

hate speech (Pulido et al, 2020b; Pulido Rodríguez et al., 2020) was found that providing social activists in social media with scientific evidence multiplies their social impact -in terms of disseminating evidence-based information among social media users- with more success than the top-down traditional scientific communication (Pulido et al, 2020b; Pulido Rodríguez et al., 2020). In the new Public Health Emergency of International Concern related to mpox, it is very necessary to explore whether the same increase of efficiency can be obtained now.

As a whole, the findings reported in this article contribute to a better understanding of the current health crisis related to mpox 1b and underscore the need for health authorities to join efforts with citizens to co-create evidence-based communication strategies. Following recommendations from the European Commission (2021), further research should identify and analyze these and related data disaggregated by diversity of features (sex, gender, etc.), breaking down the data further to explore the intersectionality of gender with other characteristics and potential grounds for discrimination which can highlight specific areas requiring attention. As the dialogic society theory notes (Flecha, 2022), such type of analysis allows the recovering of excellent elaborations that were invisibilized due to gender and race discriminations, among others.

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Notes

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