Ibero-American journalism in the face of scientific disinformation: Factcheckers' initiatives on the social network Instagram

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Abstract

The fight against disinformation is one of the major battles that journalism has had to face in recent years, especially after the coronavirus pandemic. As a counterbalance, "fact-checker" news media –platforms that have an important role in verifying whether or not the content circulating is true and that have harnessed the benefits of social networks, in spite of the difficulties inherent in these applications, to disseminate reliable and fact-checked content—have emerged. This study aims to explore how 10 prominent fact-checking accounts in Ibero-America use the social network *Instagram* to debunk false information, focusing in particular on the field of science and health. Applying a content analysis method using a checklist with quantitative and qualitative indicators, a total corpus of 240 posts from the first half of 2022 was obtained. The results allow us to determine which type of hoax has been used most as well as whether Twitter, Facebook, and WhatsApp are used for its dissemination. It was observed that health topics are the ones that attract the greatest interest from fact-checker accounts when it comes to creating fact-checks, and they tend to use static images or slide mode as opposed to video. In addition, they tend to use formal language in their presentation. This study also reveals that there were no instances of interaction with followers. While fact-checker accounts extensively use *Instagram* owing to its visual capabilities, they do not necessarily take advantage of its graphic potential. In addition, it was concluded that coronavirus is still a relevant topic for fact-checker media outlets, which must constantly refute the hoaxes that are mostly spread through social networks.

Keywords

Social networks; Social network analysis; Disinformation; Fake news; Instagram; Science journalism; Verification; Ibero-America; Social media; Infodemic; Health information; Coronavirus; Covid-19.



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1. Introduction

Disinformation has become a major problem for today's digital, globalized, and hyperconnected society. With the amplifying effect of the coronavirus disease 2019 (Covid-19) pandemic, the transmission of hoaxes through digital platforms has increased exponentially, undermining informational veracity and even impacting the social role of the media -so much so that it has come to be considered a "key problem for contemporary democratic societies" (Sádaba; Salaverría, 2023, p. 18). If we add to this scenario the phenomenon of information overload or infodemic (WHO, 2020), it is understandable that it is not easy to determine what is accurate and what is false (Masip et al., 2020). Indeed, so-called post-truth, almost always linked to the political sphere (Capilla, 2019; Rodríguez-Ferrándiz, 2019), has given rise to concepts such as misinformation and fake news, although the latter is not the most appropriate term (Maldita, 2021; Ferreras-Rodríguez, 2022). It could be said that fake news is considered a type of hoax that takes on the format of a news item and whose objective is disinformation.

Although disinformation campaigns tend to be centered on political and social messaging, science and health content is increasingly subject to such information disorders (Almansa-Martínez; Fernández-Torres; Rodríguez-Fernández, 2022). Clear proof of this can be seen in the Covid-19 situation, where the misleading information that has appeared on various digital platforms has been a central concern not only for the media but also for authorities and organizations (Greene-González; Cerda-Diez; Ortiz-Leiva, 2022). This circumstance has even created a mistrust of things that have been posted on social networks, thus fostering an environment in which public scares thrive (Ferreras-Rodríguez, 2022).

Examples of the fallacies that spread rapidly through various information channels are the hoaxes propagated by anti-vaxxers (García-Marín; Merino-Ortego, 2022) or the erroneous information about the harms of mask use (Villa-Gracia; Cerdán-Martínez, 2020). Part of the current information crisis, along with the scientific disinformation associated with health issues, are the nonsensical flat earther theories (Rodríguez; Giri, 2021) and fake content that have run rampant, casting doubt on climate change (León; López-Goñi; Salaverría, 2022).

In the face of this media, political, and social challenge, the considerable increase in the number of media outlets and journalists specialized in fact-checking data (Fernández-Barrero; López-Redondo, 2022) has helped, at least in part, to mitigate this reality. Whether generalist websites or independent sites, fact-checkers have embraced the opportunities provided by the Internet –in particular social networks– to cut through the noise and disseminate fact-checks to an important part of the population (Míguez-González; Abuín-Penas; Pérez-Seoane, 2021) that tends to be informed through social applications rather than through traditional media (Newman et al., 2022).

This paper poses the following research questions:

- Q1. How do fact-checkers leverage Instagram's functionalities to debunk scientific hoaxes?
- Q2. What are the characteristics of disinformation content, and how does it go viral in the digital ecosystem?
- Q3. What specific and unique elements stand out in the use of the platform *Instagram* as a tool to combat disinformation?

Thus, the main objective is to identify and analyze the strategies used by science journalism to combat disinformation in the context of today's infodemic. To that end, we analyze notable fact-checker accounts from Ibero-America on the social network Instagram who use this platform to debunk scientific hoaxes, and evaluating the ways in which their professionals use the platform and the main aspects of the posts' content.

2. Context: Science journalism's role when it comes to disinformation

"Hoax", a very widespread term, refers specifically to

any intentionally false content that appears true that has been designed for the purpose of misleading the public" and that is publicly disseminated by any platform or social media outlet" (Salaverría et al., 2020, p. 4).

Indeed, disinformation uses lies as a persuasion technique and, therefore, is a dangerous tool that can break down societies' frameworks of belief (Rodríguez-Fernández, 2019).

In the context of the pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus, the management of information being posted and the imperative to provide objective and truthful content are a challenge for journalism (Aleixandre-Benavent; Castelló-Cogollos; Valderrama-Zurián, 2020). The uncontrolled rise of disinformation (López-Pujalte; Nuño-Moral, 2020) has the media and fact-checkers —who have seen how hoaxes disseminate through different platforms- up against the ropes. Even journalists themselves have helped spread erroneous information by various means, often owing to the pressure of immediacy (Mellado et al., 2021).

Often, we are faced with news items that are created "without the intention of deceiving, but end up misinforming" (Gutiérrez-Coba; Coba-Gutiérrez; Gómez-Díaz, 2020, p. 238) and that are also given preference owing





to excessive use of clickbait to attract audience, which ends up affecting the journalism (Maniou; Papa, 2023). García--Galera, Del-Hoyo-Hurtado, and Blanco-Alfonso (2020, p. 109) distinguish three intentions when it comes to disinformation in journalism:

- the journalist tries to deceive with invented or fabricated news items;
- the journalist tries to manipulate with inaccurate or biased news items; and
- the journalist tries to inform with wrong or erroneous news items.

However, regardless of these limitations as well as the targeted research on intentionality that could be carried out in addition to the present study, citizens are aware that, in times of crisis, it is imperative to rely on authorized sources (Fernández-Barrero; López-Redondo, 2022), and they still consider journalism to be responsible for tackling the challenges associated with misleading content (Rodríguez-Pérez, 2020).

Thus, although in some respects journalism is in the midst of an unprecedented crisis, the work of journalists and the media in combatting false information is crucial. In fact, the state of affairs has served as the impetus to

"protect and defend the quality and veracity of professional information" (Palomo; Sedano-Amundarain, 2018, p. 1,385).

In this way, science and fact-checking journalism have taken on a prominent role. It is more and more necessary to debunk the lies (Maiden et al., 2020; Dunwoody, 2020), given that, since the beginning of the coronavirus pandemic, a growing audience has been consuming science journalism (Post; Bienzeisler; Lohöfener, 2021). This has enabled it, together with scientists and health personnel, to become one of the major sources of information (Massarani et al., 2021), highlighting this discipline's relevance when it comes to understanding what is happening in the world of science (Lobato-Martínez; Monjas-Eleta; Gómez-García, 2022).

This influence goes hand in hand with the important role that journalism plays in providing accurate science communication for the public, allowing all people to have access to knowledge and reliable information (Vernal-Vilicic; Valderrama-Zenteno, 2022). From this perspective, it is essential for society to have good scientific literacy (Díaz-Moreno, 2019; Jarreau; Dahmen; Jones, 2019), which will ultimately lead journalism to effectively carry out its mission to mainstream and disseminate messages about science (Hu, 2022) without providing space for false information.

However, the battle against disinformation is often seriously affected by the viral strength of fallacies in the media, in particular on social networks, which allow hoaxes to spread easily (Costa-Sánchez; López-García, 2020; Montemayor-Rodríguez; García-Jiménez, 2021). Certainly, the overabundance of information -truthful or not- that society receives (Herrero-Diz; Pérez-Escolar, 2022) and the new platforms' potential for dissemination, having audiences that increasingly use social networks to stay informed (Newman, 2022), make it easier for hoaxes to go viral even faster than truthful messages (López-Pan; Rodríguez-Rodríguez, 2020).

The immediacy and the lack of geographical borders on the Internet (Gutiérrez-Coba; Coba-Gutiérrez; Gómez-Díaz, 2020) make it difficult to identify false content's origin or classify what the level of intentionality was. For this reason, many journalists warn that these applications are detrimental to the dissemination of truthful information (Varona-Aramburu; Sánchez-Muñoz, 2016), progressively causing a "lack of trust in the media" (Marta-Lazo; Rodríguez-Rodríguez; Peñalva, 2020, p. 62).

However, from the critical but also constructive perspective that underpins this research, we maintain that it is possible to find ways and solutions to address the problem of false information on these very platforms.

2.1. Social media as a platform for combatting hoaxes

In the last decade, a growing number of positive initiatives developed by social networks to debunk potentially false information has been documented. These initiatives are often linked to an increase in the number of fact-checking accounts on these platforms. Fact-checking journalism refers to initiatives focused on fact-checking data, statements, or news items circulating in the media or through networks (Míguez-González; Abuín-Penas; Pérez-Seoane, 2021) and, during the pandemic, gained importance as an essential resource for checking the veracity of information (Guallar et al., 2020; Ferreras-Rodríguez, 2022).

These media outlets or fact-checking journalists have leveraged the benefits offered by social applications to combat disinformation, given the fact that these platforms are presented as "main outlets for interactive and multimedia content for rapid consumption" (Sánchez-González; Sánchez-Gonzales; Martos, 2022, p. 137). They employ esthetic, simple, colorful, and informatively direct elements (Fernández-Barrero; López-Redondo, 2022) and also engage audiences in the work of fact-checking (Aguado-Guadalupe; Bernaola-Serrano, 2020). In addition, since the information crisis arose after the pandemic (Azer; Blasco-Arcas; Harrigan, 2021), it has been observed how massive networks such as Facebook, Twitter, or TikTok have implemented coordinated actions

"to disprove false content on their own platforms" (Sidorenko-Bautista; Alonso-López; Giacomelli, 2021, p. 90), which has supported the work of fact-checker accounts.

In this regard, Instagram stands out for the key role it is playing in terms of posting and fact-checking strategies. Thus, since the recent pandemic, this network has experienced enormous growth both in the volume of posts related to fact-checking, with an average of 1.3 posts per day, as well as in its own user community (Míguez-González; Abuín-Penas; Pérez-Seoane, 2021). Indeed, it is one of the platforms with the greatest increase in number of Internet users, and numerous journalistic accounts use it to disseminate information owing to its graphic and interactive potential (Martín-Neira; Trillo-Domínguez; Olvera-Lobo, 2022). Likewise, fact-checker accounts prefer it to other networks because it has high levels of interaction and allows for the formation of communities of followers (Sánchez-González; Sánchez-Gonzales; Martos, 2022). This highlights the fact that, owing to its ability to reach audiences who are young and do not necessarily obtain information from traditional media, *Instagram* is an ideal application through which to provide accurate information and guide users to credible sources (Malik; Khan; Quan-Haase, 2021).

Additionally, many of the most important fact-checker accounts have focused their activity on this platform (Dafonte-Gómez; Míguez-González; Ramahí-García, 2022). They opt for audio and video formats in line with what the market currently offers (Dafonte-Gómez; Corbacho-Valencia; García-Mirón, 2021) and make use of the tools within the application, such as featured stories or live broadcasts, as a fact-checking strategy (Sánchez-González; Sánchez-Gonzales; Martos, 2022).

2.2. Fact-checking and social networks: The case of Ibero-America

Although the issue of disinformation is a global phenomenon, it is no secret that local contextual factors determine how false content is dealt with (Herrero; Herrera-Damas, 2021). As Ibero-America has two closely related languages, Spanish and Portuguese, as well as similar cultural elements (García-Crespo; Ramahí-García; Dafonte-Gómez, 2021), in addition to the obvious geographical proximity, it is an interesting zone to analyze. Another common characteristic is that most of the content verification initiatives that have emerged in these countries were created outside of the traditional media and the legacy media system (Rodríguez-Pérez et al., 2022). Adding to this the sustained rise in Ibero-America in news consumption through social networks (Gutiérrez-Coba; Coba-Gutiérrez; Gómez-Díaz, 2020) makes this group of countries an interesting object of analysis within the framework of fact-checking strategies used in these applications.

Guallar et al. (2020), with their review of posts on disinformation and hoaxes in Ibero-America, highlight the existing interest in this topic and the proliferation of different types of analysis –some focused on different fact-checking platforms or specific case studies. In this context, the work carried out by leading platforms in this area, such as Chequeado (Argentina) -which has taken on a significant role in the development of training workshops aimed at counteracting information hoaxes—stands out (García-Crespo; Ramahí-García; Dafonte-Gómez, 2021). In this way, media outlets from Spain, Argentina, Colombia, Brazil, Mexico, and Ecuador have taken the lead in this geographic area with respect to posting fact-checks, thus bringing the content generated to millions of people (Martínez-Rolán; Dafonte-Gómez, 2022).

Fortunately, therefore, in this geographical environment there were well-established leading fact-checkers when the health crisis caused by Covid-19 and the disinformation problems it created occurred. In this sense, words such as "plandemia" and other "anti-scientific" concepts were the focal point of conversations on social networks and in the false content that were being spread in Ibero-America (García-Marín; Merino-Ortego, 2022). At the same time, on numerous occasions the disinformation became "transnational," and the hoaxes circulated more widely, and as a result, they tended to be echoed across the different countries of Ibero-America, although the way they were presented varied (Gutiérrez-Coba; Coba-Gutiérrez; Gómez-Díaz, 2020).

In a recent study on the perceptions of fact-checking journalists in Ibero-America (Rodríguez-Pérez et al., 2022), which identifies a set of characteristics that these professionals have that enable them to undertake activities in these countries, most of the fact-checkers surveyed point out that the discipline in Ibero-America has the aim and purpose of combatting the disinformation disseminated through social networks. This circumstance, together with the high penetration of these applications and the growing consumption of news, makes it interesting to delve into fact-checking initiatives in this geographical area and their role in combatting scientific disinformation in social networks.

Owing to fact-checker accounts' growing use of the platform *Instagram* to debunk scientific hoaxes, and the fact that there is no clear systematization of the most appropriate posting strategies, formats, narratives, and styles for the dissemination of fact-checking information, an important space for exploration and analysis has opened up, and this is

the focus of our research. In addition, the expertise of the teams of fact-checking professionals with health, science, or environmental content on *Instagram*, which could even be transferred to practices in other newer networks such as TikTok or Twitch, provides an opportunity to explore this field of study in greater depth.

Thus, since the recent pandemic, *Instagram* has experienced enormous growth both in the volume of posts related to fact-checking



3. Methodology

The work presented here provides a constructive view of the use of Instagram as a tool to combat disinformation, rigorously analyzing initiatives focused on solving social and public problems, presenting work praxis and results, and setting out achievements and limitations (Casares-Corrales, 2021). The methodology used includes analyzing prominent Ibero-American accounts with fact-checker content that are present on the social network Instagram along with their posts on fact-checked disinformation. Thus, we used the technique of content analysis (Andréu-Abela, 2000), which enabled us to interpret and systematize communicative content

"with the aim of making justified logical deductions concerning the source" (Andréu-Abela, 2000, p. 3).

The study focuses specifically on the social network *Instagram* because this application has more than 1 billion users and has become an important platform for communicating science (Caspari, 2022). In addition, according to the latest Digital News Report (Newman, 2022), young people are increasingly accessing news using this platform, at the expense of traditional media such as television or the printed press. It has also been pointed out that this network allows information fact-checkers to work in a "more constructive" space and gives them the opportunity to develop more educational content (Sánchez-González; Sánchez-Gonzales; Martos, 2022, p. 153).

The sample of media and communication accounts included in this study (Table 1), following works such as that of Dafonte-Gómez, Corbacho-Valencia, and García-Mirón (2021), is made up of Ibero-American journalistic initiatives recognized for their work in data verification and for being reliable sources in the face of disinformation. For this purpose, the inclusion criterion used was that, between January and June 2022, the selected media outlet was an active signatory of the codes of principles of the International Fact-Checking Network – the main international fact-checking network in the world (García-Marín, 2020), which promotes excellence in fact-checking (Poynter, 2022). It was decided that, to obtain a more diverse view of existing initiatives in the Ibero-American context, a single account would be selected for each country. Understanding that there are countries in which there may be more than one account that meets the requirements, we chose these accounts by considering the number of followers that each profile had, the frequency of posts, and in particular, the variety of topics that were fact-checked, including science, health, and technology content. Thus, we combined quantitative and qualitative criteria when making our selection.

The posts analyzed were in Spanish or Portuguese and were aimed at explicitly debunking misleading information in the areas of science, health, environment, and technology. In this selection of posts, we have discarded

- news posts on the indicated topics that were not specifically aimed at debunking a hoax spread on the network or through certain media outlets and
- posts that only provided an image and directed users to a website or other type of resource without presenting complete or sufficient information on Instagram to identify the reasons for the debunking -that is, they amplify the message rather than acting as a dedicated communication channel.

The analysis focused on posts from the first half of 2022 (January 1-June 30) and was carried out by the authors of this paper – specialists in information technology, communication, and journalism.

Table 1. Characteristics of the fact-checking accounts on *Instagram* in the study sample

User profile	URL	Country	Date of creation	Followers	Posts
@agencia_lupa	https://www.instagram.com/agencia_lupa	Brazil	July 2018	434,000	3,745
@boliviaverifica	https://www.instagram.com/boliviaverifica	Bolivia	July 2019	1,300	255
@chequeado	https://www.instagram.com/chequeado	Argentina	April 2015	75,600	910
@colombiacheck	https://www.instagram.com/colombiacheck	Colombia	October 2018	20,000	1,452
@cotejoinfo	https://www.instagram.com/cotejoinfo	Venezuela	May 2016	2,300	1,014
@ecuador_chequea	https://www.instagram.com/ecuador_chequea	Ecuador	January 2019	4,200	3,476
@fastcheckcl	https://www.instagram.com/fastcheckcl	Chile	October 2019	250,000	2,020
@jornalpoligrafo	https://www.instagram.com/jornalpoligrafo	Portugal	October 2018	39,900	5,984
@malditobulo	https://www.instagram.com/malditobulo	Spain	March 2017	64,600	755
@pajaropolitico	https://www.instagram.com/pajaropolitico	Mexico	August 2014	101,000	1,673

Data collected in November 2022.

To determine how posts with false content about science are debunked in posts on the *Instagram* feeds of the fact-checker accounts in our study sample, a checklist (Table 2) was designed based on the proposals of Salaverría et al., 2020; Aguado-Guadalupe; Bernaola-Serrano, 2020; Míguez-González; Abuín-Penas; Pérez-Seoane, 2021; Hoyos-Simbaña; Lara-Aguiar; Mila-Maldonado, 2022; Sánchez-González; Sánchez-Gonzáles; Martos, 2022; Martín-Neira; Trillo-Domínguez; Olvera-Lobo, 2022; 2023b.

In addition to journalistic criteria, such as the type of source used to debunk the hoax or the type of disinformation disseminated, the checklist includes indicators and descriptors aimed at identifying the audiovisual characteristics of the posts, such as the way in which the fact-check was presented or the extent to which Insta-



The vast majority (n = 183) of disinformative content in the scientific domain in our sample tended to apply deception tactics



gram features were used. It also notes the platform from which the disinformation began to spread, the main type of topic of the hoax, and other indicators associated with post engagement. In addition, we have considered whether the accounts help users become media literate (Herrero-Diz; Pérez-Escolar; Varona-Aramburu, 2022; Sádaba; Salaverría, 2023), either by offering support tools to address disinformation or by suggesting websites that enrich answers to users' concerns.

It is important to note that all the results obtained in the analysis and the descriptors that were identified in each post were based on what the fact-checker accounts posted, whether that included video, an infographic, slides1, or accompanying text, and only occasionally was information obtained from sources other than Instagram. When in doubt, the analysis carried out by the authors of this study determined which were the prominent ones, and the ones that were the least debatable and that were in line with the indicator proposed in the checklist were chosen. Taking this premise into account, there was no coding based on two types of indicators, and the analyses presented in this study are those that are closest to the established criteria and indicators. For this paper, we did not attempt to analyze the intentions of the hoaxes' disseminators, as we consider this to be an undertaking that would justify a specific study complementary to our focus of study, which, we reiterate, is centered on analyzing the strategies used by the fact-checker accounts to counter disinformative messages.

Table 2. Checklist for analyzing posts from fact-checking accounts on *Instagram*

Indicator	Descriptors	Descriptor explanation	
Characteristics of	Date		
	Number of comments	Elements that make it possible to characterize and describe the post being analyzed.	
Characteristics of the post	Number of likes	the post being unaryzed.	
	Fact-check initiated by the media outlet or by users?	Action that provided insight into whether the audience suggested or previously advised the fact-check.	
	Parody	Dissemination of false content with an intention of mocking (Salaverría et al., 2020).	
	Decontextualization	Facts or real statements in the wrong context (Salaverría et al., 2020).	
Type of disinformation	Deception	Complete falsification of facts, in which content is fabricated with the intention of making the public believe in its truthfulness (Salaverría <i>et al.</i> , 2020).	
	Exaggeration	Has links to the truth, but crosses the limits of the true and enters the realm of falsehood (Salaverría et al., 2020).	
	Astronomy		
	Earth sciences		
Subject of the	The environment and natural sciences	Topics chosen as points of reference for the posts; a distinction is made between (general) health and the coronavirus	
scientific hoax	Health – coronavirus	to understand how Covid-19 has affected the patterns.	
	Health – general		
	Technology		
	Facebook		
	Instagram		
	Traditional (legacy media) or digital media		
	Website	Taking into consideration what the fact-checking accounts	
Platform originally used	Telegram	expressed, either explicitly at a textual level or with the re-	
to spread the hoax	TikTok	ference images used in the post, the platform determined	
	Twitter	to be the origin of the dissemination of the hoax.	
	WhatsApp		
	Other		
	Unidentified		

Indicator	Descriptors	Descriptor explanation	
	Use of text and static infographic image		
	Use of text and static infographic image or video (slide type)	Taking into account the options available on <i>Instagram</i> , the	
How the fact-check is presented	Use of text and explainer video (digital animation)	descriptors established as the basic characteristics that a post can have and that have been seen in posts from the	
presented	Use of text and explainer video with on-camera communicator	fact-checking accounts.	
	Video reused from another platform (e.g., TikTok)		
	1-30 seconds		
If video is the main	31 seconds to 1 minute	The duration intervals that were established to be the ti-	
feature, what is the	1 minute 1 second to 2 minutes	meframes commonly used in videos on social networks	
duration?	2 minutes 1 second or more	(Martín-Neira; Trillo-Domínguez; Olvera-Lobo, 2023b).	
	Not applicable		
Prodominant language	Formal –serious	The two approaches identified in fact-checkers' posts on social networks according to the literature reviewed (Sán-chez-González ; Sánchez-Gonzales ; Martos , 2022): - formal language and serious audiovisual content, avoi-	
Predominant language used to debunk the hoax	Informal –based on humor –meme	ding humor, or - more informal language (visual or textual) and based on humor.	
	Combination of both	A mixture of both (either with image/video and text), was considered a "Combination of both."	
	Comparison with other news items or original posts		
	Documentary sources	According to the posts from the fact-checking accounts	
Type of source used to debunk (may include	Official sources (organizations/institutions)	themselves, they determine how to use these types of	
more than one)	Artificial or fact-checking tools	sources; in some posts, the combination of more than one	
	Expert opinion or source (individuals)	can be seen.	
	Other		
	Presenter overdub and voice-over		
	For video, a thumbnail designed for the feed		
	Static image with design		
Application of audio-	Subtitles (of the voice-over) in the video	Taking the audiovisual characteristics and the elements in-	
visual elements and	Animated text in the video	herent in the network <i>Instagram</i> as a reference, the series	
network languages (may include more than	Use of emojis	of descriptors established that could be used in posts from the fact-checker accounts; more than one can be included	
one)	Use of GIFs	in the different posts.	
	Use of hashtags in text		
	Use of background music		
	Use of video with voice (speaker not seen)		
Level of interaction with	Responded to comments?	Whether there was a dialog with the users and whether in	
users users	Response given and tools and content that allow the user to become media literate provided	those answers other tools were offered to continue providing information to the user.	

Based on: Salaverría et al., 2020; Aguado-Guadalupe; Bernaola-Serrano, 2020; Míguez-González; Abuín-Penas; Pérez-Seoane, 2021; Hoyos-Simbaña; Lara-Aguiar; Mila-Maldonado, 2022; Sánchez-González; Sánchez-Gonzales; Martos, 2022; Martín-Neira; Trillo-Domínguez; Olvera-Lobo, 2022; 2023b.

The analysis of the posts from the fact-checker accounts posted within the established period (N = 3,338) identified a total of 240 posts (7.2%) aimed at debunking hoaxes in the areas of science, health, environment, and technology. It is important to point out that, in the accounts analyzed, several posts were detected that debunked scientific hoaxes but did not offer complete or sufficient information to establish the reasons for the fact-check, with the response leading to the account's website, which means that they did not meet part of the criteria for inclusion in the analysis.

The Instagram accounts in the sample were predominately fact-checks of political information, as well as statements

issued by public authorities, which are outside the scope of this study, although they point to an interesting line of study. However, an overall review of the posts on science, health, environment, and technology showed how initially the fact-checks were related to the coronavirus and these set the tone of the accounts analyzed,

It was observed that almost 83% of the posts were presented as static images or slide-type infographics that in some cases included small videos

even being on par with the political topics that had been the predominant type of information up to that time. However, since the beginning of the war in Ukraine, the agenda had begun to change, with this topic taking center stage in each account's posts, thus adding to the content related to the socio-political situations of these countries.

4. Results

Although political or social issues are the most common topics on the fact-checker accounts, the analysis determined that science and technology are gaining ground in news patterns, especially on accounts such as @fastcheckcl, @agencialupa, @boliviaverifica, or @malditobulo, which have viewed health issues as an important subject for informative review. Table 3 summarizes the sample of analyzed posts from each fact-checker account on Instagram.

The analysis of readers' reactions (Table 4) showed that there were two very marked poles in terms of the number of likes each post received. Thus, more than 40% of the 240 posts analyzed did not receive more than 100 likes, even on accounts that have many thousands of followers. In contrast, over 30% of the posts reviewed had more than 1,000 likes –numbers that generally came from the accounts with the most followers.

Meanwhile, when it came to comments made on each post, the gap between the extremes was greater. Around 60% of the content did not receive more than 20 comments, and even among these, there were many posts that had 1 or no comments from followers. In contrast, a scant 5% of the content examined exceeded the 200-comment barrier.

It should also be noted that in only 2.1% of the posts could it be determined that users or followers had suggested the content used to create the fact-checks,

Table 3. Posts analyzed from each fact-checker account

User profile	Total posts (January–June 2022)	Posts on the selected topics	Percent analyzed out of the total sample
@agencia_lupa	377	46	12.2
@boliviaverifica	135	18	13.3
@chequeado	212	10	4.7
@colombiacheck	183	9	4.9
@cotejoinfo	96	3	3.1
@ecuador_chequea	1,169	65	5.6
@fastcheckcl	342	51	14.9
@jornalpoligrafo	559	16	2.9
@malditobulo	117	17	14.5
@pajaropolitico	148	5	3.4
Total	3,338	240	7.2

Table 4. Readers' reactions and interaction with users regarding posted fact-checks

Indicator	Descriptors	Number of posts	%
	0–100	104	43.3
	101–200	11	4.6
Likes	201–500	25	10.4
	501–1,000	27	11.3
	1,001+	73	30.4
	0–20	146	60.8
	21–50	33	13.8
Comments	51–100	28	11.7
	101–200	21	8.8
	201+	12	5.0
For all and	Media outlet initiative	235	97.9
Fact-check	User initiative	5	2.1
Interaction	No response to comments	240	100

demonstrating a preference for posts generated by the accounts themselves.

Finally, a very striking fact is that, in 100% of the posts reviewed, there was no interaction with users and no response was given to the questions posed by them.

In terms of the disinformation strategies used to produce content confirmed to be false, the vast majority (n = 183) of disinformative content in the scientific domain in our sample tended to apply deception tactics (Table 5). Indeed, although fact-checker accounts are responsible for debunking techniques such as exaggeration or decontextualization, in all the media outlets analyzed, deception was the most recurrent element in the disinformation analyzed. A substantial number (n = 193) of the post showed a direct relationship to Health-coronavirus or general health issues. Specifically, the fact-checker accounts particularly focused on debunking hoaxes associated with vaccines or their effects.

Regarding the source of dissemination, most of the hoaxes came from Facebook and Twitter, being the main disinformation platforms. False information transmitted via email, Twitch, or statements by politicians in public debates or interviews was also found. For a significant percentage (18.3%) of the fact-checks posted on the factchecker accounts analyzed, it was not possible to determine the origin of the hoax because they spoke generically about social networks or did not mention the source. A single case stands out in which the hoax came from a media outlet, which reinforces the argument that most disinformation originates and spreads through the Internet and social networks.

Table 5. Disinformation strategies and source of dissemination of content confirmed to be false

Indicator	Descriptors	Number of posts	%
	Deception	183	76.3
- CH. C.	Exaggeration	34	14.2
Type of disinformation	Decontextualization	22	9.2
	Parody	1	0.4
	Health-coronavirus	138	57.5
	Health-general	55	22.9
Tanda afala da an	The environment and natural sciences	14	5.8
Topic of the hoax	Astronomy	14	5.8
	Technology	10	4.2
	Earth sciences	9	3.8
	Facebook	67	27.9
	Twitter	43	17.9
	WhatsApp	25	10.4
	Instagram	17	7.1
Platform of dissemination	Websites	12	5.0
Platform of dissemination	TikTok	8	3.3
	Telegram	6	2.5
	Traditional (legacy media) or digital media	1	0.4
	Other	17	7.1
	Unable to identify the origin	44	18.3

Taking into consideration that most of the false content posted dealt with issues related to coronavirus and health in general (n = 193), Table 6 details the social platforms on which the disinformation was spread. As can be seen, in both cases Facebook and Twitter were the preferred social networks for the dissemination of hoaxes, although the latter was the most prolific in fact-checked disinformation about Covid-19, with 22.5% of the content. The platforms considered in this analysis were determined by the fact-checker accounts themselves in their posts and, in the case of those posts whose origin could not be established, the "Unidentified" criterion was applied.

In relation to the techniques used on the social network *Instagram* to present debunked disinformation

Table 6. Platforms on which the health hoaxes were posted

·					
Topic		Health – general (<i>n</i> = 55)		Health – coronavirus (n = 138)	
Platform	n	%	n	%	
Facebook	16	29.1	25	18.1	
Twitter	8	14.5	31	22.5	
WhatsApp	3	5.5	20	14.5	
Instagram	3	5.5	14	10.1	
TikTok	2	3.6	5	3.6	
Telegram	1	1.8	5	3.6	
Websites	1	1.8	8	5.8	
Unidentified	12	21.8	24	17.4	
Other	9	16.4	6	4.3	

Table 7. Techniques used on *Instagram* to disprove scientific hoaxes

	Indicator	Number of posts	%
	Use of text and static infographic image or video (slide type)	119	49,6
	Use of text and static infographic image	80	33,3
How the fact-check is presented	Use of text and explainer video with on-camera speaker	17	7,1
presented	Use of text and video explainer (digital animation)	16	6,7
	Video reused from another platform (e.g., TikTok)	8	3,3
	1–30 seconds	8	3,3
	31 seconds to 1 minute	23	9,6
For video	1 minute 1 second to 2 minutes	8	3,3
	2 minutes 1 second or more	3	1,3
	Not applicable	198	82,5
	Formal –serious	226	94,2
Language used	Informal –based on humor –meme	10	4,2
	Combination of both	4	1,6

(Table 7), it was observed that almost 83% of the posts were presented as static images or *slide*-type infographics that in some cases included small videos. Just over 14% of posts used video as the primary means of debunking fake content, and about 3% were repurposed posts from *TikTok*. Only 17.5% used videos as a tool to debunk a hoax on this media outlet. Of the 42 audiovisual posts identified, a large part (9.6%) have a duration of between 31 and 60 seconds.

Regarding the type of language used, the vast majority (94.2%) of the posts were serious in tone and used formal language. About 4% used humor, and less than 2% used a combination of both, for example, a humorous image and serious text. Figure 1 shows an example of a post that mixed a humorous image (meme) with formal and more serious text, after a statement by the president of Colombia (**Torrado**, 2022).

As for the sources used by the fact-checker accounts analyzed to debunk hoaxes (Table 8), it is noteworthy that most of the posts relied on two or more types of sources to verify the information and recognize it as false. Fact-checks based on comparison with other news items or with the original posts on the network were the most common (20.4%). Considering this action individually or combined with other strategies for fact-checking the content, over 55% of the posts were checked against information or news that already existed on the web or on another platform. Similarly, the use of official sources



Figure 1. Combination of serious language with humorous image. ² Source: *Instagram* @colombiacheck

Table 8. Type of sources used to debunk hoaxes

Indicator	Number of posts	%
Comparison with other news items or original post	49	20.4
Comparison with other news items or original post Official sources (organizations/institutions)	36	15.0
Official sources (organizations/institutions)	35	14.6
Comparison with other news items or original post Documentary sources	26	10.8
Documentary sources Official sources (organizations/institutions)	19	7.9
Opinion or expert source (individuals)	18	7.5
Comparison with other news items or original post Opinion or expert source (individuals)	17	7.1
Documentary sources	16	6.6
Opinion or expert source (individuals) Official sources (organizations/institutions)	10	4.2
Opinion or expert source (individuals) Documentary sources	5	2.1
Comparison with other news items or original post Documentary sources Official sources (organizations/institutions)	3	1.3
Comparison with other news items or original post Use of artificial tools or checking tools	3	1.3
Other combinations and types of sources (with a percentage less than 1%)	3	1.3

(from organizations or institutions) and combining these with other fact-checking strategies is another of the most widely used techniques to disprove false content, at almost 44% of the posts.

It is also interesting to note that the use of artificial or screening tools, such as a reverse image search through a platform, was rarely mentioned as a means of corroborating information, and its use was explicitly indicated in only three posts (1.3%).

When creating the fact-checks, the fact-checker accounts used various audiovisual and other features specific to *Instagram* in the way they considered most appropriate. Thus, the analysis of the posts in the sample identified more than 20 different combinations (Table 9). It was observed that 83.4% of the total number of posts consisted of a static infographic image or a static *slide*-type image (and video). This led to the generation of various combinations and the use of diverse graphic and hypertextual elements. Of the posts, 14.2% resorted to the most basic element selected for analysis, which was to create a static image with certain types of design. Meanwhile, 21.3% of the posts also included hashtags in the descriptive text accompanying the static image.

However, the combination "static image with design + use of emojis + use of hashtags in the text" was the strategy most used to tackle disinformation from *Instagram*, at 25.4% of the total analyzed. As for videos, which accounted for less

than 17% (n = 42) of the total number of posts in the sample, there was no clear trend. The vast majority of the accounts had their own way of presenting fact-checks, but it was noted that, over time, they were progressively including new and more numerous elements in their posts. Table 9 summarizes the main indicator combinations used by the fact-checker accounts analyzed in this study.

Table 9. Audiovisual components and *Instagram*'s own features in the fact-checks analyzed

Indicator	Number of posts	%
Static image with design + use of emojis + use of hashtags in text	61	25.4
Static image with design + use of hashtags in text	51	21.3
Static image with design	34	14.2
Static image with design + use of emojis	31	12.9
Static image with design + use of video with voice (speaker not seen) + use of emojis + use of hashtags in the text	22	9.2
Use of emojis + use of hashtags in text + animated text in video	7	2.9
Use of emojis + presenter overdub and voiceover + use of hashtags in the text + thumbnail in the feed for videos + use of background music	6	2.5
Use of emojis + use of gifs + presenter overdub and voiceover + subtitles (of the voiceover) in the video + use of hashtags in the text + use of background music	4	1.7
Use of gifs + presenter overdub and voiceover + subtitles (of the voiceover) in the video + use of hashtags in the text + thumbnail in the feed for videos + use of background music	4	1.7
Use of emojis + presenter overdub and voiceover + use of hashtags in the text + thumbnail in the feed for videos + use of background music + animated text in the video	3	1.3
Use of emojis + presenter overdub and voiceover + use of hashtags in the text + use of background music + animated text in the video	3	1.3
Other combinations (with a percentage less than 1%)	14	5.6

By independently considering each fact-checking account analyzed, it is possible to determine the main combinations of audiovisual features and *Instagram*'s own features that apply when posting fact-checks (Table 10).

Table 10. Audiovisual elements used by fact-checking accounts to post fact-checks

Instagram account (total posts)	Indicator	Number of posts	%
@agencia_lupa	Static image with design + use of video with voice (speaker not seen) + use of emojis + use of hashtags in the text	22	47.8
(n = 46)	Static image with design + use of emojis + use of hashtags in text	21	45.7
@boliviaverifica	Use of emojis + presenter overdub and voiceover + use of hashtags in the text + thumbnail in the feed for videos + use of background music	6	33.3
(n = 18)	Use of gifs + presenter overdub and voiceover + subtitles (of the voiceover) in the video + use of hashtags in the text + thumbnail in the feed for videos + use of background music	4	22.4
01	Static image with design + use of emojis + use of hashtags in text	4	40.0
@chequeado (n = 10)	Use of emojis + use of gifs + presenter overdub and voiceover + subtitles in the video (of the voiceover) + use of hashtags in the text + use of background music	4	40.0
@colombiacheck	Static image with design + use of hashtags in text	8	88.9
(<i>n</i> = 9)	Static image with design	1	11.1
@cotejoinfo ($n = 3$)	Static image with design + use of emojis + use of hashtags in text	3	100
@ecuador che-	Static image with design + use of hashtags in text	36	55.4
quea (n = 65)	Static image with design	22	33.8
@fastcheckcl	Static image with design + use of emojis	31	60.8
(n = 51)	Static image with design	11	21.6
Ola was last lisus fo	Static image with design + use of emojis + use of hashtags in text	11	68.8
@jornalpoligrafo (n = 16)	Use of emojis + presenter overdub and voiceover + use of hashtags in text + use of background music + animated text in the video	3	18.8
@malditobulo	Static image with design + use of emojis + use of hashtags in text	9	52.9
(n = 17)	Use of emojis + use of hashtags in text + animated text in video	7	41.2
@pajaropoliticao (n = 5)	Use of video with voice (speaker not seen)/ use of gifs + presenter overdub and voice-over + subtitles (of the voice-over) in the video + use of hashtags in the text + thumbnail in the feed for videos + use of background music + use of animated text in the video	2	40.0
	Static image with design + use of emojis + use of hashtags in text	2	40.0



Figure 2. Posts of fact-checked information from *Agência Lupa* with video incorporated.³ Source: *Instagram @agencia_lupa*

The analysis of each individual account shows that a high percentage of *slide*-type posts displayed content as a static image, in addition to using elements such as hashtags and emojis in the text. However, the tactic applied by *Agência Lupa*, which incorporates video in a high percentage (47.8%) of these static *slide*-type posts as an audiovisual support to the informative fact-checking, stands out (Figure 2). Also refreshing are the offerings of *Bolivia Verifica*, which favors the use of video to debunk hoaxes, or *Animal Político* (@pajaropolitico), which relies on creating extensive reports as a strategy to counter disinformation.

5. Discussion

Instagram has positioned itself as a well-established platform for combatting this fake content (Míguez-González; Abuín-Penas; Pérez-Seoane, 2021). This study has made it possible to identify the way in which the fact-checker accounts on this social network are using this platform to debunk scientific hoaxes and how they have applied the features of this application to produce posts that effectively reach their followers and also apply journalistic rigor to debunk the different types of hoaxes that circulate on the network.

In response to the research question (Q1)

How do fact-checkers leverage *Instagram's* functionalities to debunk scientific hoaxes?

the analysis showed that there was a preference for using static images and *slide*¹ mode over the using videos or the application's famous reels. This is despite the recent popularity of these formats. Therefore, although social networks with audiovisual elements are certainly an ideal place to communicate science (**Zeng**; **Schäfer**; **Allgaier**, 2021), the results confirm previous studies because on *Instagram* static images are still preferred over posting videos (**Habibi**; **Salim**, 2021), even by science journalists, who do not make use of much of this social network's potential (**Martín-Neira**; **Tril-Io-Domínguez**; **Olvera-Lobo**, 2022).

This research has revealed that the average length of the videos used for the debunking of hoaxes –from 31 seconds to 1 minute– corresponds to the time considered appropriate for audiovisual products in the field of science or health (Habibi; Salim, 2021; Gurler; Buyukceran, 2022). Regarding the use of elements that accompany the text of each post, such as hashtags and emojis, it is evident that 85% of the posts include one or both elements. Indeed, these hashtags and symbols, when used appropriately, can help improve posts' engagement levels (Jiang; Guo; Ma, 2020). Even so, using hashtags does not guarantee higher traffic or readership, as experiments show that there are no specific strategies for boosting the visibility of science content when using hashtags (Sidorenko-Bautista; Cabezuelo-Lorenzo; Herranz-de-la-Casa, 2021).

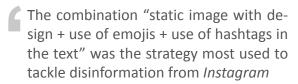
When answering the research question (Q2)

What are the characteristics of disinformation content and how does it go viral in the digital ecosystem?

it can be determined that the topic "Health-coronavirus" was the subject that attracted the most interest when it came to debunking hoaxes, also conditioned by the date of sample selection, a time when the pandemic was still one of the central issues on the public agenda. This is probably not surprising, since we have all experienced how Covid-19 has brought to the fore an abundance of hoaxes and false content that the media have had to deal with and, at the same time, has driven the creation of various initiatives designed for the fact-checker (Villa-Gracia; Cerdán-Martínez, 2020; Salaverría et al., 2020; García-Marín, 2020; Molina-Cañabate; Sánchez-Duarte; Magallón-Rosa, 2021; Herrero-Diz; Pérez-Escolar, 2022; Almansa-Martínez; Fernández-Torres; Rodríguez-Fernández, 2022; León et al., 2022).

However, the fact that 23% of the hoaxes were related to health (as a general topic) reflects that this is the area of greatest concern to which attention should continue to be paid, beyond the coronavirus contingencies. **Rodríguez-Fernán-**

dez (2019) already warned about this in her research on professional challenges for the communications sector, when she stated that health disinformation was among the disinformation most frequently described by fact-checkers. Something similar was detected by **Montero-Liberona** and **Halpern** (2019), showing how falla-





cies in the area of health were increasing more and more and could induce people to make wrong decisions, worsening their own well-being. In addition, there are warnings about the propagation of hoaxes about vaccines and their effects on people (Espinoza-Portilla; Mazuelos-Cardoza, 2020) or about the false content that may emerge in the field of nutrition and food (Argiñano; Goikoetxea-Bilbao, 2021).

It is also very important to note that only 0.4% of the fact-checks stemmed from hoaxes created in the traditional and digital media. The results of this research concur with **Gutiérrez-Coba**, **Coba-Gutiérrez**, and **Gómez-Díaz** (2020) in that there is a low percentage of fake news that reaches the conventional media and that the fact-checker accounts manage to alert these media outlets in some way so that they do not propagate such content. This reinforces the idea that, in the end, disinformation is disseminated most frequently through social networks (**Salvat**, 2021; **Martínez-Rolán**; **Dafonte-Gómez**, 2022). The media, despite the crisis of confidence and legitimacy that they have been experiencing (**Masip**; **Ferrer-Sapena**, 2021), continue to be a key instrument for professional practice, and journalism continues to be perceived as a source of proven information with high social value (**Sixto-García**; **Vázquez-Herrero**; **López-García**, 2022; **García-Avilés** *et al.*, 2022).

In addition to the efforts that platforms such as *Instagram, Twitter, Facebook,* or *WhatsApp* can make to combat disinformation in relation to science and health, this study demonstrates that there is a real problem with these networks. Although these social applications have developed strategies to eliminate hoaxes that spread on their platforms (**Bustos-Díaz**; **Ruiz-del-Olmo**, 2020; **Ndiaye**, 2021), the efforts appear to be rather meagre when faced with the difficulty of finding a panacea for these content problems, which increasingly threatens the fact-checking systems of these companies (**López-García**; **Costa-Sánchez**; **Vizoso**, 2021; **Ferreras-Rodríguez**, 2022; **Wang** *et al.*, 2022).

In connection with research question (Q3)

What specific and unique elements stand out in the use of the platform *Instagram* as a tool to combat disinformation?

it is pertinent to point out that a considerable number of posts in the analyzed sample acted as a preview of the news item, providing a link to the full content. This has been noted in previous studies (Martín-Neira; Trillo-Domínguez; Olvera-Lobo, 2023a), which point out that, today, certain social network accounts are not seen as media per se and serve more as platforms that lead to a central website where content is developed further, and thus they amplify the message of the media outlet. However, this does not necessarily have an impact on web traffic to the websites, since direct entry to the site or content exploration through Internet search engines is usually the primary means of accessing information (Parra-Valcarce; Onieva-Mallero, 2021).

Furthermore, the results that emerge in terms of interaction with users are telling, since 100% of the posts did not respond to followers' comments. This is a pertinent fact since, although the media and accounts are used to cultivating a spirit of interactivity and creating communities with users in social networks (Swart; Peters; Broersma, 2018; Zurita-Andión, 2019), it was observed that, frequently, there is not adequate staff to carry out these tasks: digital journalists multitask in conditions that are not ideal, or there is no solid strategy that gives purpose to this interactivity (González-Pedraz; Campos-Domínguez, 2017; Cassany; Cortiñas; Elduque, 2018; Costa-Sánchez; Túñez-López, 2019; Grassau; Porath; Ortega, 2021; Greene-González; Cerda-Diez; Ortiz-Leiva, 2022). In this sense, the present research reveals that only 2% of the posts disseminated fact-checks that users explicitly initiated or alerted them to, despite the fact that the lines of communication are open to the public so they can communicate or warn about disinformation.

6. Conclusions

The research described in this paper allowed us through fact-checker accounts' praxis to confirm how social networks have become an active space for disseminating disinformation. However, fact-checking initiatives are emerging from these same platforms to help combat the false content that spreads rapidly through social platforms. The use of *Instagram* was preferred owing to the app's graphic and visual possibilities, despite the fact that, in the analyzed content, static images or *slide* shows were preferred over videos —taking advantage of all of the potential that this social network has to offer has proven to be a challenge.

It is also important to note that most of the hoaxes had a health component, extending beyond issues associated with the coronavirus. Content related to beauty, nutrition, and relevant aspects of health in general are the type of disinformation that most often goes viral, which should lead us to reflect on the problems that this content can create in society if it reaches a significant portion of the population.

In aspects associated with the way in which the fact-checker accounts relate to audiences, it is important to continue promoting collaborative activity that promotes interaction with the public: answering questions or responding to

their concerns. Thus, it is also important to note that, in the scientific field, the media continue to be a reliable source of information, in which disinformative intentions are lower compared with social networks.

This paper is presented as a first step that aims to determine how recognized fact-checking accounts are using *Instagram* to debunk the scientific hoaxes that exist on the network. Future research aims to address other ar-

In the end, disinformation is disseminated most frequently through social networks. The media, despite the crisis of confidence and legitimacy that they have been experiencing, continue to be a key instrument for professional practice



eas of knowledge, including the various branches of science, as well as time periods in which the disinformation associated with the pandemic has diminished. It would also be interesting to analyze how these fact-checker accounts are positioning themselves in more emerging social networks, such as *TikTok* or *Twitch*, which are aimed at a younger audience, and which use a particular audiovisual language and are disconnected from traditional media, or how the media are creating initiatives to make citizens media literate.

As future lines of study, we believe that it would be appropriate to broaden the perspective adopted in this research, focusing on the fact-checking accounts themselves, which is still a good starting point. Thus, specific guidelines could be established to analyze posts' content from a qualitative point of view with the aim of deep-diving into the intentions behind the information analyzed. Finally, we hope that the results of the study will serve as a basis for establishing a body of best practices, in the form of recommendations, for professionals in the field of journalism and science communication.

7. Notes

- 1. *Slide. Instagram* function that allows to create galleries of up to 10 photos and videos that are displayed in a single post as a presentation.
- 2. Translation of the texts of Figure 1.

Duque trying to understand whether abortion terminates the pregnancy	columbiacheck Abortion is not a means of contraception as President Duque said
or is a method of contraception	In a recent <i>Twitter</i> thread, the president @ivanduquemarquez refers to his rejection of the judgement of @corteconstitucional to depenalize abortion before the 24th week of gestation. In his message he says, "This situation cannot turn abortion in Colombia into a means of contraception. We must address this issue with the body truly responsible, which is the Congress of the Republic."
	The president made similar claims in a

3. Translation of the texts of Figure 2.

X		Access LUPA. NEWA	agencia_lupa
It's not true that the German channel dis- played fake cadavers to report deaths from the Omicron variant.	FALSE Theater One of the fake deceased stands up while the reporter announces that many people are dying in Germany from Omicron. Media terrorism. People can see it here.	Like Comment Share Save	agencia_lupa A video is circulating on social media in which a reporter is speaking in front of various bodies in black bags, supposedly in Germany. Suddenly, one of the "cadavers" starts to move and tries to get up. The post's caption suggests that the scene is "theater" and that it has to do with "media terrorism" regarding Covid-19. According to the post's text, the report says that there are many people dying in the country from the Omicron variant.
	111 reactions 31 comments 235 shares		X The information is FALSE. The content of the recording does not say anything regarding the number of deaths from Covid-19 or the Omicron variant in Germany. The recording shows a

8. References

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