ICONO14

Universidad Rey Juan Carlos

Disinformation in health: the perception of specialist journalists

Desinformación en salud: la percepción de periodistas especializados

Desinformação na saúde: a percepção dos jornalistas especializados

Aitor Ugarte Iturrizaga[1*]

Mariola Moreno[2**]

Laura Gutiérrez-Ibañes[1***]

[1] Universidad Carlos III de Madrid, España
[2] Universidad de Navarra, España
[*] Professor of Journalism and Communication at Universidad Carlos III de Madrid, Spain. Email: augarte@hum.uc3m.es
[**] Researcher at the Institute for Culture and Society (ICS) of Universidad de Navarra, Spain. Email: mmorenoc@unav.es (corresponding author)
[***] Professor of Scientific Journalism and Data Journalism at Universidad Carlos III de Madrid, Spain. Email: laugutie@hum.uc3m.es

Received: 10/11/2025; **Revised:** 30/12/2025; **Accepted:** 24/03/2026; **Published**: 28/05/2026

Translation to English: Ann Marie Merry

To cite this article: Ugarte Iturrizaga, Aitor; Moreno, Mariola; & Gutiérrez-Ibañes, Laura. (2026). Disinformation in health: the perception of specialist journalists. *ICONO 14. Scientific Journal of Communication and Emerging Technologies*, *24*(1): e2345. https://doi.org/10.7195/ri14.v24i1.2345

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Abstract

Purpose: This study analyses the perception of specialist journalists regarding media disinformation on health issues, its frequency, challenges, actors, and possible solutions. **Methodology:** Qualitative saturation point was achieved through 21 semi-structured interviews. The responses were analyzed by two researchers to ensure the validity of the research. The data underwent a three-stage analysis. **Results:** Although specialist journalists claimed to have a medium-high level of trust in health information in the media, complacent tendencies also emerged, such as citing their own media outlet as an example of good practice and attributing bad practices to social media in a generic way, without going into depth in their analysis. It was also significant that there was no unanimity in the rejection of homeopathy and that among the most frequently cited sources were other media outlets, with little mention of patients. **Conclusions:** These patterns can be interpreted as a manifestation of the third-person effect, understood as the belief that others are more vulnerable than oneself to the influence of external forces, in this case, disinformation.

Keywords
Health communication; Disinformation; Specialized Journalism; Third-Person Effect; Mass Communication; Media literacy.

Resumen

Propósito: Este estudio analiza la percepción de periodistas especializados sobre la desinformación mediática en temas de salud, su frecuencia, retos, actores y posibles soluciones. **Metodología**: Mediante 21 entrevistas semiestructuradas se logró el punto de saturación cualitativo. Las respuestas fueron analizadas por dos investigadores para garantizar la validez de la investigación. Los datos pasaron por un triple ciclo de análisis. **Resultados**: Aunque los periodistas especializados afirmaron tener una confianza media-alta en la información sobre salud de los medios, emergieron también tendencias autocomplacientes, como la de citar su propio medio como ejemplo de buena práctica y atribuir las malas prácticas a las

redes sociales de manera genérica, sin profundizar en el análisis. Resultó significativo igualmente que no existiera unanimidad en el rechazo de la homeopatía y que entre las fuentes más usadas se citara con alta frecuencia a otros medios y apenas se mencionara a los pacientes. **Conclusiones**: Estos patrones pueden interpretarse como una manifestación del efecto tercera persona, entendido como la creencia de que los demás son más vulnerables que uno mismo a la influencia de fuerzas externas, en este caso, la desinformación.

Palabras clave
Comunicación y salud; Desinformación; Periodismo especializado; Efecto tercera persona; Medios de comunicación; Alfabetización mediática.

Resumo

Objetivo: Este estudo analisa a percepção de jornalistas especializados sobre a desinformação midiática em temas de saúde, a sua frequência, desafios, atores e possíveis soluções. **Metodologia:** Através de 21 entrevistas semiestruturadas, alcançou-se o ponto de saturação qualitativa. As respostas foram analisadas por dois investigadores para garantir a validade da investigação. Os dados passaram por um triplo ciclo de análise. **Resultados:** Embora os jornalistas especializados afirmaram ter uma confiança média-alta nas informações sobre saúde veiculadas pela mídia, também surgiram tendências complacentes, como citar o próprio meio de comunicação como exemplo de boa prática e atribuir as más práticas às redes sociais de forma genérica, sem aprofundar a análise. Também foi significativo que não houvesse unanimidade na rejeição da homeopatia e que, entre as fontes mais utilizadas, fossem citados com alta frequência outros meios de comunicação e quase não fossem mencionados os pacientes. **Conclusões:** Estes padrões podem ser interpretados como uma manifestação do efeito terceira pessoa, entendido como a crença de que os outros são mais vulneráveis do que nós próprios à influência de forças externas, neste caso, a desinformação.

Palavras-chave
Comunicação e saúde; Desinformação; Jornalismo especializado; Efeito terceira pessoa; Meios de comunicação; Literacia mediática.

1. Introduction

The phenomenon of disinformation is not new, although the growing use of digital media and devices has greatly accelerated its spread. Disinformation has become particularly relevant in the area of health communication, where not only the challenge of containing falsehoods must be met, but also that of correcting mistaken beliefs that are deeply entrenched among the public (Krishna & Thompson, 2019). When natural disasters and other crises occur that could result in high morbidity and mortality rates, a scenario is created that is ripe for the spread of disinformation and proliferation of conspiracy theories that lead to mounting uncertainty and fear among consumers of health-related information (Sánchez-Torres et al., 2025; López-García et al., 2021). Many disinformation campaigns seek to involve or make use of health practitioners in their narratives, which represents an additional challenge for achieving clear, reliable and effective health communication (Neylan et al., 2022). The field of science is also commonly targeted by actors of disinformation (Molina-Cañabate & Magallón-Rosa, 2020).

At the same time, the impact of disinformation has a broader reach, due to the changes that have taken place in information consumption, and where it is important to distinguish between traditional media and social media. While in the former, information is transmitted in a unidirectional way, that is, from the professional to the public, in the latter case, this unidirectionality is diluted, enabling users not only to receive news, but also to produce and disseminate content. This change in the communicative flows has become even more complex with the advancements in emerging technologies, such as generative artificial intelligence, where techniques such as deepfake make it possible to create highly realistic images, videos, and audio, thus increasing information insecurity (García-Ull & Quirós-Fons, 2022).

Additionally, many users share unverified medical information, whether intentionally or not, on closed social networks such as WhatsApp, the principal type of platforms that circulate these hoaxes (Salaverría et al., 2020). This possibility to share information makes it difficult to detect and manage, although some fact-checking platforms have successfully used WhatsApp channels to compile searches and dismantle disinformation chains through dissemination of informational texts (López-García et al., 2021). An example illustrating this situation is

the COVID19 pandemic, where López-Martín et al. (2023) found that most hoaxes were spread through social media.

This new ecosystem poses a risk scenario, but it is also an opportunity for journalism, which must rely on digital tools - especially social networks - to implement rigorous fact-checking practices and foment use of reliable and credible sources (Paniagua-Rojano y Rúas-Araújo, 2023). In this way, journalists contribute to counteracting the harmful effects of disinformation on public health.

Given this scenario, it is thus pertinent to better understand the journalistic routines of healthcare professionals, as well as their perceptions on different aspects related to the problem of disinformation.

1.1. The health disinformation ecosystem

The digital age has brought about a constant flow of online messages and transformed the Information Society, amplifying the number of producers of content not created in accordance with journalistic ethics and standards. In matters of health, Catalán-Matamoros (2021) underlined that the public has been turning less and less to health professionals while consulting communication media and the internet more.

In situations of crises or catastrophes, disinformation increases considerably, and as highlighted by Martín-García y Buitrago (2023), the response of journalists becomes even more critical for minimizing the effects of false content. Given that the effects of information disorder can range from generating mistrust to producing social alarm (Salaverría, 2021), it is essential to ascertain what indicators might be relevant for understanding what leads people to share disinformation. According to research carried out by Weedon et al. (2017), humans continue to be the main spreaders of information disorder. A more recent study published in *Science* found outrage to be the chief emotion that leads one to share disinformation (McLoughlin et al., 2024).

Wardle and Derakhshan (2017, p. 20) distinguish between *mis-information*, *mal-information* and *dis-information*, based on how the concepts of false content and intention to cause harm are intertwined (Table 1).

Table 1. *Types of information disorder*

	False content	Intended to cause harm
Mis-information	Yes	No
Mal-information	No	Yes
Dis-information	Yes	Yes

Source: *prepared by the author based on Wardle and Derakhshan (2017, p. 20).*

A study by Salaverría et al. (2020) on the type of hoaxes regarding COVID19 spread In Spain found that the majority came from social networks (with WhatsApp being of special importance) with only 4% coming from the media sphere, indicating that disinformation disorder mainly occurs outside of the communication media. For this reason, it is important for traditional media to maintain credibility with society and not allow it to deteriorate further (Martín-García & Buitrago, 2023).

Journalists play an important role in health communication. Effective communication not only contributes to reducing the risk of inappropriate behavior, such as unnecessary visits to healthcare facilities, but also helps to eliminate misinformation. Media literacy is, in this context of health, an aspect to be taken into account. Limited knowledge on health is associated with high rates of hospitalization and fewer preventative practices. Accordingly, promoting health education is essential for the improved use of the healthcare system and to safeguard the overall well-being of the public.

1.2. Specialized health journalism in the face of disinformation

Within the disinformation landscape, the role of the fact-checker has become increasingly important, as highlighted by Tuñón-Navarro & Sánchez-Del-Vas (2022). This professional profile has become a key actor in the fight against disinformation, upholding the journalism code of ethics to ensure the truthfulness and accuracy of the information reported. This requirement is even more vital in the field of health, where the spread of inaccurate or manipulated information can have direct consequences on personal and collective decision-making. Evaluating

sources, consulting with experts, and reviewing scientific-medical literature are of paramount importance (Saavedra-Llamas et al., 2019).

In addition to these practices and to ensure information accuracy, journalists are increasingly compelled to master techniques and tools for data-structuring, as well as understand the logic of algorithms that lead to viralyzing fake content and how they affect the interplay of facts, emotions and beliefs, which directly influences the receipt and social appropriation of scientific knowledge (Castillo-Lozano et al., 2023; Nguyen & Catalán-Matamoros, 2020).

Furthermore, a critical and reflexive attitude regarding the use of social networks is essential. Although they provide an opportunity to interact with audiences and publish content, they also threaten journalistic quality due to the spread of sensationalist contents, particularly in relation to illnesses and disease. As López-Doblas et al. (2022) cautioned, the new information ecosystem imposes a responsibility on the journalist to resist the temptation to engage superficial work and to reaffirm their commitment to accountability and professional ethics. However, the immediacy and budget cuts in health sections negatively affect the capacity for verification and deep analysis of information (Ferrer-Pérez & Peñafiel-Saiz, 2024). These critical contextual, professional and financial factors, nevertheless, should not keep professionals from reflecting on disinformation, and ultimately on the role that they can play in the ecosystem. Several international studies have pointed out the importance of such awareness, not only for reporters but for society in general, in relation to the so-called third-person effect: the belief that others are more vulnerable than oneself, in this case, to disinformation (Stefanita et al., 2018; Corbu et al., 2020; Liu & Huang, 2020).

2. Material and methods

2.1. Research objective and questions

The purpose of this research is to understand the perception of specialist journalists regarding harmful disinformation on health, taking into account aspects such as frequency, challenges, actors involved and possible solutions.

In order to gain a deeper understanding, four research questions are posed.

1. What are the characteristic features, frequency and main media that make up the disinformation ecosystem in the area of health?
2. What challenges do journalists face to ensure accuracy and rigor in reporting information on health issues?
3. How has health information changed after the COVID19 pandemic?
4. What training needs and additional resources could contribute to improving the quality of health journalism?

2.2. Methodology

2.2.1 Design of study

In this study a qualitative methodology was used aimed at determining the effects of disinformation on the professional work of specialist health journalists. For that purpose, the semi-structured interview technique was used to create a space for dialogue where the interviewee could freely and voluntarily express their views on questions posed. According to Villareal-Puga & Cid-García (2022), this is a useful tool for qualitative research, enabling knowledge to be constructed through the interaction of two people. It also makes it possible to explore different points of view in a subjective manner and gain insight into the individual experiences of the interviewees (Jorrín-Abellán et al., 2021).

The interviews took place online and lasted approximately 20 minutes, with the questions organized into several thematic sections. The first section included questions of a sociodemographic nature, aimed at obtaining information about the personal profile of the participants, such as gender, age and level of education. The second dealt with general aspects related to health information and disinformation. Finally, the third section was focused on specific issues related to journalistic routines in the area of health, as well as the main challenges faced by the journalists in the context of information disorder.

2.2.2 Data sampling and analysis

Qualitative research tends to employ relatively small samples since its objective is not to generalize results, but rather to obtain deeper insight into the social phenomenon being examined. In this study, interviews were carried out until

saturation point was reached, that is, the moment in which "new cases tend to repeat the content of previous information" (Mejía Navarrete, 2000, p. 171). The 21 informants in this study were contacted through different channels, including email, telephone calls, and direct contact. The participants were chosen based on the principles of appropriateness and sufficiency (Morse & Field, 1995), specified in two inclusion criteria: 1) actively exercising the profession of journalist in Spain and 2) being focused on the coverage of health-related issues. No distinction was made by type of media, given that the main interest lay more in the journalistic practice itself than on how content is distributed. As for the sample profile, there is a majority of women (59%), the average age is 47, and the level of education is a bachelor or master degree in Social Sciences or Humanities (68%).

According to Maxwell's criteria (2019) to ensure the validity of the results, two of the study's authors participated in the data analysis, which Dezin & Lincoln (2003) term researcher triangulation. The informants' responses went through a three-stage analysis. In the first one, an open coding was carried out to label the text fragments. In the second stage, relationships were established between the labels, to form categories and observe connections, similarities, differences and nuances in the responses of the 21 informants. In the third stage, the results were interpreted and linked to the research questions. Atlas.ti 25 software was used for the coding.

2.2.3 Ethical considerations

Measures were adopted to ensure anonymity, information confidentiality, and informed consent. The individuals were informed of the study's reach and objectives, and were given complete freedom to respond or not to the questions, as well as being assured that their personal data was anonymized. Accordingly, in the "Results" section, the informants are referred to as INF1, INF2 and so on, up to INF21. To comply with ethical considerations, the study was approved by the Ethics Committee of Universidad Carlos III de Madrid.

3. Results

For ease of reading and understanding, the results have been structured according to the three research questions.

3.1. Characteristic features, frequency, and main actors in the health disinformation ecosystem

A majority of the specialist journalists state they have a medium-high level of confidence in the health information published by the communication media, although five of them responded *it depends* to the question. These informants state they trust media outlets that have a "journalist behind them" (INF3) or "media outlets of reference" (INF4) and observed that "the same media might report accurate information alongside news stories that are solely aimed at attracting an audience" (INF18).

When questioned about media that carried out "exemplary" news coverage on health, a tendency for self-citation emerged: 7 informants singled out their own media outlet as exemplary. Leaving aside self-citations, *El País* (or its *Materia* section) was mentioned on 4 occasions, *Diario Médico* twice, while the *The New York Times*, *SINC* (*Servicio de Información y Noticias Científicas* (the science section). and *Science Media Center* were each mentioned once.

When asked which media outlets they would highlight as being disinformers regarding health *OKDiario*, was singled out as "dangerous" on 5 occasions.

The majority indicated that they had recently identified cases of disinformation, pseudoscience or conspiracy theories. Among these informants, two patterns could be observed:

1. A minority responded tersely that the frequency was very high and pointed to social networks as where the disinformation was found.
2. Those giving a somewhat longer response mentioned topics such as cancer, food, vaccines and pseudo therapies (Table 2).

Table 2. *Examples of health disinformation identified by the informants*

Informant code	Description
INF1	False treatments for cancer.
INF2	Incomplete or biased information, especially in cases regarding new directions for using medications.
INF4	People swallowing bleach to treat cancer.
INF5	False side effects of the COVID vaccine.

INF9	Pseudoscientífic therapies.
INF11	Cancer and diet.
INF12	The Hospital de la Fe de Valencia was asking for type AB blood for a child ill with leukemia, and that the nationwide blackout led to several deaths in the Hospital de Toledo.
INF14	Water doesn't hydrate, 3D collagen
INF18	Vaccines or cures of all types, anything related to miraculous diets…Those have a lot of appeal. People love to read that crap.
INF19	Natural therapies.

Source: *prepared by the authors.*

It is worth mentioning that a few did not respond or responded *no* about having recently observed an example of health disinformation. Along these same lines, 8 informants answered a question that related with the previous one: How did you recognize the disinformation? Two simply stated that it was easy to recognize. The 6 others did not give any consistent responses beyond 2 coinciding that they often refer to results/properties that are amazing/miraculous (Table 3).

Table 3. *Criteria used by informants to identify health disinformation*

Informant code	Description
INF3	It usually has to do with products producing exceptional results without any scientific backing, or at least, without proven effectiveness.
INF10	By the source and the focus.
INF12	Thanks to fact-checking agencies like Maldita.es.
INF16	Mainly that it's opinion.
INF19	By the language and by what is supposedly offered.
INF21	You can tell when they say a certain food or a certain compound has fantastic and miraculous properties.

Source: *prepared by the authors.*

When asked about a specific pseudo-therapy, homeopathy, there was greater participation from the journalists. Twenty out of 21 responded, and 17 stated that it is not a good treatment for curing illnesses. Some emphatic responses of the journalists stood out: "absolutely not" (INF4, INF7, INF10, INF14 e INF18), "it is good for nothing

(INF1), and "it's basically water" (INF16). Of the 3 respondents who did not reject homeopathy properties outright, only one responded with a clear *yes* about its therapeutic effects (INF17), while INF11 indicated that "it could help, but not cure; I have used it occasionally for my children", and INF19 said "I used it many years ago for a cold and it wasn't effective. They had sold it to me at a pharmacy".

3.2. Challenges faced by journalists to ensure accuracy and rigor in their health reporting

Three patterns were observed in the challenges mentioned by the health journalists:

1. Access to reliable information
2. Journalistic routines: verifying information, evaluating its importance, and reporting it accurately
3. Contextual issues: information overload (infoxication), lack of time and job insecurity

References to "reliable", "accurate", "authorized", "primary" or "specialized" sources appeared spontaneously in 15 answers to the question about mechanisms that they habitually employ to prevent the spread of pseudoscience or conspiracy theories in their contents.

- INF4: "Always relying on trustworthy sources. Journalists are not experts, but we do have many experts at our disposal, who are usually happy to explain everything in great detail to refute anything that needs to be denied or clarified"
- INF12: "Checking information in various sources. If I don't find it in other places, or if I find it in places that don't inspire a lot of trust, I check it with my colleagues. If no one has heard of it or if it doesn't sound right, I get rid of it"

Although in a minority, some journalists also mention the difficulty in reaching out to some of the reliable sources (INF19 and INF20), who are not always available or who may be slow to respond. INF21, for example, lamented not having "direct information with questions and answers beyond voice notes and prerecorded statements".

In contrast to sources that guarantee rigor, reference was also made to the presence of sources with "vested interests" (INF21) that try to get coverage for their "topics of interest, be it from companies, entities or administrations…" (INF18).

- INF3: "The challenge I face is the political use of very biased information"

Upon being questioned about their chief sources of information, the majority point to a diversity of sources. Among them, they mention scientific journals and societies, research repositories, experts, hospitals, and official entities. However, one third of those interviewed cite one only type of source: specialized websites, Ayurveda philosophy, internet, the mainstream press, newspapers, the Ministry of Health and scientific societies. Another 5 journalists only mention two types of sources. As a significant example of this tendency, INF5 states that their only sources are the "press and social networks". Four respondents referred to verbatim transcripts as "press conferences", "press releases", "teletype messages" or "emails from healthcare actors", while 2 journalists mentioned patients as being among their sources (INF13 and INF14).

As for checking and prioritizing information, the journalists stated that they face challenges such as "countering pseudoscience" (INF13), "determining when a social media trend has a scientific basis or not" (INF5), "comparing statements made by sources with studies" (INF7), and identifying "methods to heal or cure that are not purely scientific" (INF17). After the verification process, they stated that their next challenge is to report in a clear and coherent way: "not falling into the trap of alarmist or viral headlines" (INF11), "not creating false hopes" (INF14), and "conveying information in an intelligible way without distorting its essence" (INF19), especially in the case of journalists from non-generalist media outlets who specialize in health.:

- INF12: "My reader is a healthcare professional, with many years of education and training in specific areas, and so I have to be as accurate as possible when using concepts, and understand them well so that I can explain them"

With respect to related issues, the informants describe themselves as being infoxicated by information, pressed for time, and having precarious employment. They see themselves as professionals who work in a field where there is "an avalanche of topics" (INF6) and "an ever growing amount of information" (INF9), to which is added "the speed in everything" (INF4) and the "immediacy required by many issues" (INF9), in an environment of job insecurity that "keeps one from

having time for investigation" (INF6), "to check all the facts" (INF18) and one in which "it is almost impossible to make a living" (INF1).

- INF16: "There is less and less time to do our jobs, with fewer hands, more issues to be covered, and there isn't time to verify or to ask other sources, many times you just limit yourself to reflect press releases, and lose quality in the process (and accuracy, of course)"

In addition, the journalists were asked if they had been pressured to engage in giving a false balance for unscientific views on health matters. Six answered *yes* and 2 of them said that the pressure came from the food industry and homeopathy. Also mentioned among the challenges was a single yet noteworthy statement, "publishers who lack the responsiveness to make more space for health issues" (INF3).

3.3. Changes in health information after the COVID19 pandemic

With regard to COVID19, the study sought to determine if changes in health information after the pandemic were perceived. The responses varied greatly: 5 said *no*; 3 noticed that "the paradigm" had changed, "a lot" or "completely". Among the most nuanced responses, one recognized that they were now "more critical" and "mistrustful" (INF2, INF13, who "always was clear about its importance" (INF14) and who were now more interested because of it (INF3, INF11, INF12 and INF16).

Continuing with the diversity of perceptions about the pandemic, there were six verbatim responses of special interest that referred to polarization, news saturation, fatigue, the credibility of some sources, the need to respect the pace of science, and the fragility of the human condition (Table 4).

Table 4. *Perception about changes in health information after the COVID19 pandemic*

Informant code	Description.
INF1	It has polarized things. And it has increased harassment of some reporters. Because there are no legal consequences for harassment.
INF3	Everything has gotten diluted and health information isn't getting the attention it deserves. But it is also true that when we do hit a wellspring … it just seems boundless and then we overdo it, such as, for example, with mental health.

INF21	I think most people got tired of all the disinformation that was going around.
INF6	Less credibility for Spanish public health organisms, the Health Ministry and the regional health ministries.
INF18	With the pandemic we learned that things need time, especially when they are new and still being studied, and even if a source is very reliable, that data might not be conclusive or definitive and you have to know how to give it time.
INF19	It's provided us with more knowledge about Public Health and Epidemiology. It has showed us how fragile we are.

Source: *prepared by the authors.*

3.4. Training needs and other resources to improve health journalism quality

Questioning about training as a way to improve health information quality and rigor was included in the researchers' guide, in order to have the journalists specify the training they considered to be most necessary. Among the highlighted responses, INF2 proposed "training in independent organizations and opinion leaders", INF6 "specialization in healthcare and scientific journalism", INF9 "understanding how science works", INF10 training in "reliable databases and sources", INF12 "in aspects of health that require scientific rigor", and INF21 in "basic health topics to understand what is being discussed".

Two informants added a conditioning factor in real world employment that could affect the journalists' possibilities for training. INF3 stated that "specialization is the key, but in health and mainstream media, it's a pipe dream", and INF16 held the view that "the problem is how to justify with your bosses going to a training session in the morning if you don't cover that topic".

- INF16: "Training is important, although in journalism, just like other fields, you acquire it through working on specific topics. What some laboratories and organizations are doing is interesting, offering training for journalists on specific topics"

Four informants complained about needing to have more time for training, and more time in general to do their jobs.

As to the importance given to media literacy as a means of collective social protection against disinformation, clickbait and fake news, 17 out of 21 gave it "quite a lot" or "very much".

- INF12: "It's fundamental. Every citizen needs to be able to identify whether it is true or false news, to be mistrustful, and don't just share it. But it is a really complicated issue"

Some other anti-disinformation mechanisms also came up such as "legal measures" (INF1).

4. Discussion and conclusions

The results obtained reflect the diversity of perceptions of specialist health journalists regarding the challenges of disinformation and ways of confronting them to ensure quality of media contents. The majority state that they use reliable sources, and that they trust, with some nuances, health information published by the media outlets. At the same time, some tendencies emerge that might reveal a certain self-complacency regarding the role journalism plays in the face of the burgeoning disinformation ecosystem. Included among them is citing one's own media outlet as an example of good practice in reporting and attributing bad practices to other actors, especially social networks, without more in-depth analysis. According to Davison (1983), this pattern can be interpreted as a manifestation of the third-person effect, understood as the belief that others are more vulnerable than oneself to the influence of outside sources, in this case, disinformation.

This disconnect can lead to professional overconfidence, which can cloud self-criticism, and consequently limit a journalist's capacity to reflect on their own susceptibility to bias, pressure, or errors in verification. The fact that a significant part of the informants did not cite recent examples of disinformation or responded with generalities about criteria used to recognize it, reinforces this interpretation. It is likewise significant that, 1) homeopathy is not unanimously rejected, 2) that the majority of the journalists only cited one or two types of sources when asked about how they obtained information on health and 3) that references to other media outlets are frequently among those sources, with scant mention made to patients as a source..

This self-referring tendency to seek out other journalists as an information source becomes especially relevant in a context of infoxication, job insecurity and the pressure of immediacy, in which rigorous fact-checking gets compromised. The self-confidence expressed by some of the informants contrasts with the structural limitations that they themselves recognize and the public's declining trust in the communication media. In this vein, Sierra et al. (2025) observed that Spaniards' trust in the news has consistently fallen since 2017: only 31% trust information that they habitually receive. This trend is not observed at the global level.

The findings of this research prompt us to reconsider the relationship between professional self-perception and the sense of social responsibility. Although there is abundant evidence that the chief way disinformation is spread is through social networks and other digital platforms (Salaverría et al., 2020; Sánchez-Duarte & Magallón-Rosa, 2020; López-Martín et al., 2023), the belief that *others disinform* but *we inform properly* can reinforce a perception gap that impedes the much-needed training, a need strongly voiced by the journalists in this study, along with improvement in reporting practices. Approaches aimed at instilling humility and reconnecting with the basic principles of democratic and public service of the journalist profession are likely to be a more productive path to reconnect with audiences. This is especially true for the younger public, who for the most part get their news from social networks (Ceballos-del-Cid et al., 2025) and who seem disinclined to check the truthfulness of news stories (Farias-Batlle et al., 2024).

The need for training in the areas of health, science, and data management to confront disinformation in health more effectively, acknowledged by the journalists, is once again influenced by the factors of the media crisis: lack of time and the reluctance of superiors to make time for training. In this vein, the testimonies bring to light irrefutable and widely criticized (APM, 2024; ANIS, 2024) job insecurity, information overload, and the atmosphere of polarization in which they work; in addition to the loss of trust in official sources, revealed in recent studies (Ugarte Iturrizaga & Catalán-Matamoros, 2024). It is no less true that despite these contextual uncertainties several journalists recognize that, thanks to the COVID19 pandemic, they have developed greater awareness about scientific processes and the limits of knowledge that is still evolving.

This experience, although once again diverse, points to the need to incorporate spaces for reflection within the practice of journalism, to foment responsible

self-criticism that goes beyond the understandable complaints about job uncertainty and pressure. In Spain, for example, the Asociación Nacional de Informadores de la Salud (ANIS) (National Association of Health Reporters) facilitates these spaces by offering conferences, seminars, and workshops specifically aimed at specialist journalists. Recently, ANIS (2025) also proposed that disinformation be recognized as a problem of public health, in line with what the World Health Organization did with the infodemic at the start of the pandemic (OMS, 2020).

At the same time, the importance that the majority of respondents give to media literacy as a collective defense tool against disinformation underlines the idea that the fight against fake news cannot be the sole responsibility of journalists, but instead requires an educated citizenry that is critical and aware (Herrero Curiel, 2025). However, this social demand could be undermined if journalists themselves do not recognize their own possible biases or professional vulnerabilities. This discussion of research results has sought to highlight this issue to help journalism truly serve to stem the overwhelming tide of disinformation.

As for the limitations of the study, we first must point out the impossibility of generalizing the results, inherent to the qualitative nature of the research. Secondly, there are geographic limitations, as the sample is made up solely of journalists who work in Spain. Third, the curt answers from some of the journalists should be noted, which could reflect fatigue from being repeatedly called to participate in academic or professional studies.

Regarding future study, the results of our research raise an interesting question about measuring the third-person effect in the issue of disinformation, and specifically within the professionals of journalism specialized in health. In line with Perloff & Shen (2023), new studies on the third-person effect should focus on how the disparities between *I* and *the others* are reproduced in fragmented and polarized media environments especially regarding health issues, where the consequences of disinformation can be critical.

This research, in conclusion, has asked specialist journalists to reflect on their role and their perception of the media ecosystem of health disinformation. For the most part, the responses of the journalists have focused on underlining the responsibility of third- parties in disinformation and have voiced their grievances about the problems in their profession (lack of time, job insecurity, and lack of resources) to take on the challenge of investigating, verifying, and reporting

accurate news. To a lesser extent, some self-criticism was reported regarding how the journalistic profession is being practiced, with a minority explicitly questioning the position of some of the participants on some important issues. These include the capacity to identify misleading messages, and using homeopathic pseudo-therapy, or at any rate, not expressly rejecting its use. Scientific evidence demonstrates that homeopathy does not work (beyond a mere placebo effect) and there have been numerous cases of patients who stop essential medical treatments to substitute them for homeopathic products. Thus, the fact that there are viewpoints that accept this pseudo-therapy is highly significant, even though they are a minority among the collective of specialist health journalists, and reveals the need for ethnographic studies to explore this aspect further in future research.

A critical analysis of the findings of this study raises questions about the third-person effect in the area of specialized health journalism as a form of self-exclusion from the possibility of making errors or contributing to disinformation. Future research could explore this provisional finding through studies that examine the relationship between professional self-perception and vulnerability to disinformation. In this way, progress could be made toward a more in-depth understanding of the role that journalists see themselves playing in a media ecosystem that is experiencing a critical crisis of trust, and that is facing the rise, and possibly a contagious effect from those who professionally misinform.

Author contributions

Aitor Ugarte Iturrizaga: Conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing – original draft, and writing – review and editing. **Mariola Moreno:** Conceptualization, data curation, funding acquisition, project administration, resources, supervision, validation, writing – original draft, and writing– review and editing. **Laura Gutiérrez-Ibañes**: Data curation, formal analysis, funding acquisition, investigation, resources, validation, and writing – original draft. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare they have no conflict of interest.

Funding

This research has been financed by the UC3MmediaLab research group with funds from the COMSALUD project "Pseudociencia, teorías conspirativas, fake news y alfabetismo mediático en la comunicación en salud", ID: PID2022-1427550B-I00, periodo 2023–2027, funded by the Ministerio de Ciencia e Innovación.

Data availability statement

The data of this research are available, permanently anonymized, and in accordance with the final decision of the Ethics Committee of Universidad Carlos III de Madrid.

References

ANIS. (2024). *IV Barómetro de Periodismo Sanitario de la Asociación Nacional de Informadores de la Salud*. https://bit.ly/4crlq2s

ANIS. (2025, 11 de septiembre). *ANIS traslada a la ministra de Sanidad la importancia de reconocer la desinformación como un problema de salud pública*. [Nota de Prensa] https://l1nk.dev/zxic4bg

APM. (2024). *Informe Anual de la Profesión Periodística 2024*. https://bit.ly/49pYdyq

Castillo Lozano, Eduardo; Herrero de la Fuente, Mercedes; & Saavedra Llamas, Marta. (2023). La formación en verificación en España: análisis de la demanda profesional frente a la oferta de grado. *Textual & Visual Media: revista de*

la Sociedad Española de Periodística, *17*(2), 4-21. https://doi.org/10.56418/TXT.17.2.2023.1

Catalán-Matamoros, Daniel. (2021). Las fake news y desinformación en el ámbito de la salud. En C. Elías y D. Teira (Coords.), *Manual de periodismo y verificación de noticias en la era de las fake news*, 207-225. UNED. https://doi.org/10.5944/m.periodismo.verificacion.2021

Ceballos-del-Cid, Yaiza; Gómez-Calderón, Bernardo; & Córdoba-Cabús, Alba. (2025). Social Media and News Consumption among Young Spaniards: A Diachronic Analysis (2021-2023). *Mediterranean Journal of Communication*, *16*(1), e28010. https://www.doi.org/10.14198/MEDCOM.28010

Corbu, Nicoleta; Oprea, Denisa-Adriana; Negrea-Busuioc, Elena; & Radu, Loredana. (2020). 'They can't fool me, but they can fool the others!' Third person effect and fake news detection. *European Journal of Communication*, *35*(2), 165-180. https://doi.org/10.1177/0267323120903686

Davison, W. Philips. (1983). The third-person effect in communication. *Public Opinion Quarterly*, *47*(1), 1–15. https://doi.org/10.1086/268763

Denzin, Norman K.; & Lincoln, Yvonna S. (2003). *The Landscape of Qualitative Research. Theories and Issues*. SAGE Publications.

Farias-Batlle, Pedro; Córdoba-Cabús, Alba; & Gómez-Calderón, Bernardo. (2024). Young people and social networks: news consumption habits and credibility of the news. *Comunicar*, *78*(1), 155-165. https://doi.org/10.58262/V32I78.13

Ferrer-Pérez, Sergio; & Peñafiel-Saiz, Carmen. (2024). Información sobre salud. La función del periodista. *Infonomy*, *2*(1). https://doi.org/10.3145/infonomy.24.005

García Ull, Francisco José; & Quirós Fons, Antonio. (2022). Deepfake como táctica de desinformación y ciberguerra: el caso de la guerra de Ucrania. En F. J.

García Ull & A. Quirós Fons, *Poder y comunicación: historia, estructura y nuevos retos en la sociedad digital*. Libro de resúmenes del VII Congreso Internacional Comunicación y Pensamiento.

Herrero Curiel, Eva. (2025). Alfabetización Mediática, clave para recuperar la credibilidad en el periodismo. En R. Magallón-Rosa (Coord.), *Comprometidos con la verdad. Propuestas para la mejora de la calidad del periodismo*, 83-87. CLABE.

Jorrín Abellán, Iván M., Fontana Abad, Mónica; & Rubia Avi, Bartolomé. (2021). *Investigar en educación: Manual y guía práctica*. Síntesis.

Krishna, Arunima; & Thompson, Teresa L. (2019). Misinformation About Health: A Review of Health Communication and Misinformation Scholarship. *American BehavioralScientist*,*65*(2),316-332.https://doi.org/10.1177/0002764219878223

Liu, Piper L.; & Huang, Lei Vincent. (2020). Digital Disinformation About COVID-19 and the Third-Person Effect: Examining the Channel Differences and Negative Emotional Outcomes. *Cyberpsychology, Behavior, and Social Networking*, *23*(11), 789-793. https://doi.org/10.1089/cyber.2020.0363

López Doblas, Manuela; Gómez Domínguez, David; Pérez Corral, Olivia Raquel; & Danet Danet, Alina. (2022). Comunicar en tiempos de pandemia: Uso de las redes sociales y papel de las unidades de comunicación en cinco hospitales andaluces. *Revista Española de Comunicación en Salud*, *13*(2), 155-172. https://doi.org/10.20318/recs.2022.6630

López-García, Xosé; Costa-Sánchez, Carmen; & Vizoso, Ángel. (2021). Journalistic fact-checking of information in pandemic: Stakeholders, hoaxes, and strategies to fight disinformation during the COVID-19 crisis in Spain. *International Journal of Environmental Research and Public Health*, *18*(3), 1227. https://doi.org/10.3390/ijerph18031227

López-Martín, Álvaro; Gómez Calderón, Bernardo; & Córdoba Cabús, Alba. (2023). La desinformación en auge: un Análisis de los bulos sobre política española.

*VISUAL REVIEW: International Visual Culture Review / Revista Internacional de Cultura Visu*al, *14*(1). https://doi.org/10.37467/REVVISUAL.V10.4596

Martín García, Alberto; & Buitrago, Álex. (2023). Valoración profesional del sector periodístico sobre el efecto de la desinformación y las fake news en el ecosistema mediático. *ICONO 14. Revista Científica de Comunicación y Tecnologías Emergentes*, *21*(1). https://doi.org/10.7195/ri14.v21i1.1933

Maxwell, Joseph A. (2019). *Diseño de investigación cualitativa: Un enfoque interactivo*. Gedisa.

McLoughlin, Killian L.; Brady, William J.; Goolsbee, Aden; Kaiser, Ben; Klonick, Kate; & Crockett, M. J. (2024). Misinformation exploits outrage to spread online. *Science*, *386*(6725), 991-996. https://doi.org/10.1126/science.adl2829

Mejía Navarrete, Julio. (2000). El muestreo en la investigación cualitativa. *Investigaciones Sociales*, *4*(5), 165-180. https://doi.org/10.15381/is.v4i5.6851

Molina-Cañabate, Juan-Pedro; & Magallón-Rosa, Raúl. (2020). Desinformación y periodismo científico. El caso de Maldita Ciencia. *Revista Mediterránea de Comunicación*, *11*(2), 11–21. https://doi.org/10.14198/MEDCOM2020.11.2.4

Morse, Janice; & Field, Peggy Anne. (1995). *Qualitative Research Methods for Health Professionals* (2nd ed.). Sage.

Neylan, Julian H.; Patel, Sonny S.; & Erickson, Timothy B. (2022). Strategies to counter disinformation for healthcare practitioners and policymakers. *World Medical & Health Policy*, *14*(2), 428–436. https://doi.org/10.1002/wmh3.487

Nguyen, An; & Catalan-Matamoros, Daniel. (2020). Digital mis/disinformation and public engagement with health and science controversies: Fresh perspectives from Covid-19. *Media and Communication*, *8*(2), 323–328. https://doi.org/10.17645/mac.v8i2.3352

OMS. (2020, 2 de febrero). *Novel Coronavirus (2019-nCoV). Situation Report 13*. OMS. https://sl1nk.com/lf6jngz

Paniagua Rojano, Francisco Javier; & Rúas Araujo, José. (2023). Aproximación al mapa sobre la investigación en desinformación y verificación en España: estado de la cuestión. *Revista ICONO 14. Revista científica de Comunicación y Tecnologías Emergentes*, *21*(1). https://doi.org/10.7195/ri14.v21i1.1987

Perloff, Richard M.; & Shen, Lijiang. (2023). The Third-Person Effect 40 Years After Davison Penned It: What We Know and Where We Should Traverse. *Mass Communication and Society*, *26*(3), 384-413. https://doi.org/10.1080/15205436.2022.2134802

Saavedra-Llamas, Marta; Herrero-De-la-Fuente, Mercedes; Rodríguez-Fernández, Leticia; & Jiménez-Narros, Carlos. (2019). Información de salud: Fuentes periodísticas y desafíos profesionales. *El Profesional de la Información*, *28*(2), e280208. https://doi.org/10.3145/epi.2019.mar.08

Salaverría, Ramón. (2021). Veinticinco años de evolución del ecosistema periodístico digital en España. En R. Salaverría, y M. P. Martínez Costa (Coords.), *Medios nativos digitales en España*. Comunicación Social Ediciones y Publicaciones.

Salaverría, Ramón; Buslón, Nataly; López-Pan, Fernando; León, Bienvenido; López-Goñi, Ignacio; & Erviti, María-Carmen. (2020). Desinformación en tiempos de pandemia: Tipología de los bulos sobre la COVID-19. *El Profesional de la Información*, *29*(3), e290315. https://doi.org/10.3145/epi.2020.may.15

Sánchez-Duarte, José Manuel; & Magallón Rosa, Raúl. (2020). Infodemia y COVID19. Evolución y viralización de informaciones falsas en España. *Revista Española de Comunicación en Salud*, 31-41. https://doi.org/10.20318/recs.2020.5417

Sánchez Torres, Mabel; Pastor Marín, Francisco; & Magallón Rosa, Raúl. (2025). Desinformación y catástrofes naturales. El caso de la Dana de Valencia en 2024: Análisis de los bulos difundidos a partir de las publicaciones de cuatro

verificadores españoles. *AdComunica*, *30*. https://dx.doi.org/10.6035/adcomunica.9015

Sierra, Aurken; Labiano-Juangarcía, Roncesvalles; Novoa-Jaso, María Fernanda; & Vara-Miguel, Alfonso. (2025). *Digital News Report España 2025. Periodismo y democracia: confianza, comunidad y narrativas innovadoras*. Servicio de Publicaciones de la Universidad de Navarra. https://doi.org/10.15581/019.2025

Ștefăniță, Oana; Corbu, Nicoleta; & Buturoiu, Raluca. (2018). Fake News and the Third-Person Effect: They are More Influenced than Me and You. *Journal of Media Research*, *11*, 35-23. https://l1nq.com/htm2fjx

Tuñón-Navarro, Jorge; & Sánchez-Del-Vas, Rocío. (2022). Verificación: ¿la cuadratura del círculo contra la desinformación y las noticias falsas? *AdComunica*, (23), 75-95. https://doi.org/10.6035/adcomunica.6347

Ugarte-Iturrizaga Aitor; & Catalán-Matamoros Daniel. (2024). "Contacta con expertos y pacientes": evolución de las fuentes periodísticas de las informaciones de salud tras la COVID19. *Estudios sobre el Mensaje Periodístico*, *30*(2), 387-397. https://doi.org/10.5209/esmp.95521

Villarreal-Puga, Josué; & Cid García, Magdalena. (2022). La Aplicación de Entrevistas Semiestructuradas en Distintas Modalidades Durante el Contexto de la Pandemia. *Revista Científica Hallazgos21*, *7*(1), 52-60. https://doi.org/10.69890/hallazgos21.v7i1.556

Wardle, Claire; & Derakhshan, Hossein. (2017). *Information disorder: Toward an interdisciplinary framework for research and policy making. Council of Europe report DGI(2017)09*. Consejo de Europa. https://edoc.coe.int/en/media/7495-information-disorder-toward-an-interdisciplinary-framework-for-research-and-policy-making.html

Weedon, Jen; Nuland, William; & Stamos, Alex. (2017). *Information operations and Facebook. Facebook Report.* https://bit.ly/3PZXSLy