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Infodemia – an analysis of fake news in Polish news portals and traditional media during the Coronavirus pandemic

Abstract

The article addresses the issue of the presence of false information on coronavirus in the Polish news media between January and September 2020. The research aimed to check the extent to which traditional media participate in disinformation processes during the pandemic. An attempt has also been made at explaining the reasons for the publication of fake news in these media. Sources of information that Poles use most often were examined: popular information portals, traditional media websites, and social media (Facebook and Twitter). The article analyses false information in both quantitative and qualitative terms. A total of 101 pieces of false information made available online were diagnosed, of which every fourth news item (25.74%) appeared in opinion-forming media (three most popular news portals and all traditional media were taken into account). The qualitative analysis shows that publishing false information in the opinion-forming media is the result of changes in the journalistic work environment (especially declining standards of work, a desire to attract the attention of the media audience and the pursuit of the media organisations' own interests). However, this issue requires further research in editorial offices and among journalists.

Keywords

Fake news, coronavirus, disinformation, media, news, infodemia.

1. Introduction

The problem of disinformation, misinformation and the presence of fake news in the media is a topic frequently discussed by both media researchers and representatives of other disciplines. As follows from the research, an increasing prevalence of social media tools transpiring in recent years does not remain without influence on disinformation processes (Allcott & Gentzkow, 2017; Vosoughi *et al.*, 2018; Buchanan & Benson, 2019). The dynamic proliferation of fake news can be observed – those of a political nature (Gorwa, 2017; Farkas & Schou, 2018; Grinberg *et al.*, 2019) but, for example, also those related to health (Dhoju *et al.*, 2019; Waszak *et al.*, 2018; Naeem *et al.*, 2020), or all types of diverse pseudo-scientific theories (Scheufele & Krause, 2019). Dissemination of false information on social media is increasingly more often becoming a subject of research worldwide (Yang & Horning, 2020). Yet, the contemporary dis- and misinformation is not, as it might seem, an exclusive domain of Web 2.0 space, because as results of the research conducted hitherto indicate, the mainstream

media also happen to be a source of inaccurate or fake news, however, this problem is analysed significantly less frequently than the disinformation in the social media (Tsfati *et al.*, 2020).

Literature divides media into three categories (Daniel, 2018):

- Unreliable media – this category includes all types of internet media and portals which specialise in publishing made-up content, most often humoristic or satirical, which are not and should be not treated as reliable sources of information. Their objective is to provide entertainment.
- Tabloid media – conducting news activities, however, characterised by a specific manner of communication, oriented at simplicity, sensation, scandal, and entertainment.
- Serious, opinion-forming media – declaring that their main objective is to provide the society with information on current events, selecting and verifying the published content, considered to be serious and reliable sources of information.

The problem of participation of the serious media in disinformation or misinformation processes seems particularly significant. To correctly realise the informative function, media organisations are obligated (also by the law) to carefully verify facts and provide reliable information (Chyliński, 2014; Guzek, 2013). Their social responsibility in this scope is enormous. Meanwhile, as results from the research (Tsfati *et al.*, 2020), they also happen to be a source of fake news. As Witschge and Nygren note:

The journalistic process has three parts: newsgathering, evaluation and production. The constant deadline in online media compacts these three parts, and the phase of evaluation is often carried out in front of the audience; “facts” are published, only to be checked retrospectively and new information is published on the site as “ongoing news.” The responsibility for accuracy is to an increasing degree given to the sources and the public, as journalists often do not check the facts before publishing (Witschge & Nygren, 2009).

This is a symptom of changes in today’s journalistic work environment, but it is not the only problem. There are many more sources of the crisis: growing pressure to create more articles in less and less time, work automation, multi-tasking, loss of job security or work limited to activities performed from behind the desk (Gunter, 2003; Wahl-Jørgensen *et al.*, 2016; Czarniawska, 2011; Fenton, 2010a; Steensen, 2009; Steensen, 2018). All this can degrade the quality of the media content and generate inaccuracy. Providing access to untrue content in the opinion-forming media may in turn facilitate its further dissemination because they can be invoked as a source considered to be reliable (Lipiński, 2018).

In a situation of crisis that the coronavirus pandemic is, the social demand for information is very high. In the era of common and widespread use of Web 2.0 tools, the number of information sources is also increasing, while processes related to their proliferation have bottom-to-top characteristics. High demand for current news and rapidly changing pandemic situation generate extremely difficult conditions for media content creators who have very little time to fully verify all materials. From the Internet, fake news may penetrate into the traditional media constituting a basic source of information for many. Due to the protracted process of media content creation, the COVID-19-related news items quickly become outdated and obsolete and for this reason for many individuals, the Internet is the basic, if not only source of knowledge. From the latest research, it follows that in the years 2015-2019 the Internet (including the popular portals such as Onet.pl, WP.pl, or Interia.pl) and TV have remained the most important sources of news for Poles (Newman *et al.*, 2020). Considering the above, the paper focused on the mainstream media (opinion-forming news media), but only on the content they publish on the Internet (news portals, websites of traditional media: press, radio, and TV, traditional media fan pages in social media).

Hence, this paper aims to present the dis- and misinformation processes in Poland during the pandemic period. An attempt was made to analyse the phenomenon of fake and inaccuracy news in the so-called serious media (Daniel, 2018). The content of individual fake news was also analysed in terms of potential causes for their publication. Considering the dynamics of the present news space, the following research questions were posed:

RQ1. How often do opinion-forming news media in Poland publish false coronavirus information? How do they compare with other sources such as social media, tabloid media, entertainment, and gossip portals in this respect?

RQ2. What are the reasons for publishing fake news in the opinion-forming media during the pandemic? Are these errors due to journalistic unreliability caused by a lack of time to verify the content or other reasons?

RQ3. What could the consequences of publishing untrue coronavirus-related content in opinion-forming news media be?

The study took into consideration the news to have appeared on the Internet from January to September 2020. First, all the fake news were analysed, and subsequently, those fake news items which had been published by the opinion-forming media were selected. These news items were subjected to detailed qualitative analysis which allowed the researchers to assess whether a given piece of fake news was a result of interference in the process of communication, journalistic errors, or a deliberate and intentional act of disinformation.

2. Types of fake news and the problem of journalistic reliability in the web 2.0 era

Social media are frequently a source of information also for journalists. The research into fake news has been developing all over the world and various theoretical takes on the subject are constantly forming (Quandt *et al.*, 2019). From the point of view of its construction, fake news is, therefore, a piece of information comprised of unreliable and misleading content disseminated intentionally or non-intentionally by traditional media or via the Internet. Many studies defining fake news investigate this phenomenon in the context of manipulation, thus emphasising the aspect of the sender's intention whose goal is to mislead the recipient (Allcott & Gentzkow, 2017). It is, however, worth indicating that fake news is not always generated intentionally, sometimes it may be an outcome of 'Chinese whispers,' or journalistic carelessness and negligence (Chyliński, 2018).

There are numerous ways in which to define the content of this type. These definitions differ depending on what constitutes the point of gravity in a given typology, however, the question primarily concerns three aspects such as authenticity, intention, and whether the information is news (Zhou & Zafarani, 2020).

Fake content may be divided into two general groups: disinformation and misinformation. The difference consists in the fact that misinformation is an effect of interferences in the process of communication, whereas disinformation is a deliberate and intentional activity (Stahl, 2009). Some authors (Wardle, 2017) add yet another third type, malinformation, which does not signify generating fake content, but sharing and disseminating the already existing fake news with the intent to cause harm. In the context of the research presented hereby, it is important to emphasise the difference between intentional content (disinformation), and the content which is an outcome of interference in journalistic work processes (misinformation).

The standards of journalistic work have changed a lot recently. Today, media content creators work differently than decades ago: they work as freelancers, perform less creative tasks, work much less in the field, or rely on content provided by PR agencies. This change means that today we are dealing more often with the so-called 'media workers' than with fully professional journalists (Deuze, 2007). Internet and web 2.0 tools also enables them to get to data without having to leave the newsroom (Quinn, 2002). Working in the field and verifying

the reliability of sources are much more time-consuming and costly activities than automated work “from behind the desk.” This shows that, even though there is no intention to mislead, the work takes place under conditions which generate high risk of mistakes and inaccuracies.

Additionally, the reasons for publication may be rendered more specific. In the fake news analysis this paper employed the support of classification by Daniel (2018) and presented it in Table 1:

Table 1: Typology of reasons for the publication of fake news in serious media (opinion-forming news media).

Reason for fake news publication in the mainstream media	Description
Realising the informative function	It results from the function the media perform in society, they are obligated to provide information about current events, so they do so even despite the lack of time for full verification of information (information must be up-to-date).
Professional necessity	It stems from a sense of duty to fulfil one’s journalistic duties. Journalists decide to publish information, even if they have not had the opportunity to fully verify it (a specific topic must be covered on a given day).
Proving loyalty	Proving loyalty to the idea of freedom of speech, press, and democratic values can lead to the disclosure of various types of events (especially political scandals or crimes) even if no proper verification is possible.
Need to have one’s own opinion (one’s own interpretation)	The opinion-forming media engage particular subjects to demonstrate that they have their own point of view as regards a given matter. Therefore, they address matters and information that was not unequivocally confirmed.
Realising one’s own interests	This objective is related to exercising influence on public opinion. The media may resort to manipulation and misrepresentation (e.g., framing) in order to pursue their own interests.
Competition with other media	The media decide to publish unverified content in order to be the first and most frequently quoted source of information on a given topic.
Realising the 4th power function	Politically involved media can provide fake news to the detriment of individual political actors (sometimes in the context of pointing out a mistake to other editorial offices) in order to sustain the effect of political discussion. The strong political commitment of journalists may also cause their vision of the world to distort their judgments.
Supplementing a news set	To increase the attractiveness of the message, editorial offices may supplement the content with fake news items (e.g., satirical news), which in many cases are attractive media trivia.
Attracting the audience’s attention	Particularly shocking or media-attractive fake news can quickly increase the market share of a given medium, gaining new customers (clickbait).
Revenge	Sometimes the media take the opportunity to spite a politician, a group, or a government by quoting questionable sources while doing so. This may be due to an actual experience (e.g., revenge for the persecution of journalists, etc.)
Discrediting of competing media	Politically involved media (with a high degree of political parallelism) are keen on criticising and discrediting entities and individuals who represent different or competing positions.
Error	Effect of overlooking or misleading a journalist (e.g., by an informant).

Source: Daniel (2018).

Polish law obligates journalists to maintain integrity (Chyliński, 2014). According to the Polish case-law,

a given piece of news may be recognised as reliable when it is substantiated by both the subjective and objective elements. The subjective element expresses the necessity for the holder of a given piece of information to find it reliable while the objective element contains a requirement for it to be reliable in the opinion of each reasonable human (*Judgment of the Court of Appeals in Warsaw of 18 April 2017*, n.d.).

Misleading may constitute a consequence of, for example, the lack of possibility to verify the content's subject-matter or reliability of the source of information. In practice, one of the fundamental assumptions is to draw the public attention to a problem indicated in the content, which has become particularly manifest during the COVID-19 pandemic. Building false hope for its speedy ending or offering miraculous medications counteracting the virus are but some examples illustrating certain curios from the fake news' content.

In Poland the press is obligated to "truthfully represent the discussed phenomena" (Article 6 (1) of the Press Law, hereinafter: PL), whereas journalists are obligated to maintain utmost diligence and reliability in using press materials, especially to verify the veracity of the obtained information or provide the source thereof (Article 12 (1) PL) (*Act of January 26, 1984 Press law*, n.d.). However, as Chyliński notes, even though the legislator imposes on the press the obligation to truthfully represent phenomena, in determining the journalist's obligations the legislator did not provide for the obligation to truthfully present phenomena. Thus, the journalist's obligations were clearly defined by indicating the principles of their operation (utmost reliability and diligence) while not the outcome thereof. An appropriate assessment of journalists' publications is, therefore, possible only when not only the publication itself but also the entirety of the journalist's conduct related to obtaining and using press materials is subject to analysis (Chyliński, 2018).

3. Research methods and description

Coronavirus-related fake news appearing on the Polish Internet were analysed with a particular emphasis on the content to be found in social media (Facebook, Twitter), the most popular Polish news portals (Onet.pl, Interia.pl, Wp.pl), and websites of media organisations and institutions (public radio and TV, private radio and TV stations, internet press websites). The study took into account the fake content to have appeared from January¹ until September 2020. In searching for fake news, Polish fact-checking websites such as www.fakenews.pl, www.cyberdefence24.pl/fake-news/, www.demagog.org.pl/fake_news/ were used. A total of 101 separate fake news items on coronavirus and COVID-19 was diagnosed².

The individual pieces of fake news having been distinguished, they were analysed in qualitative and quantitative terms. During the qualitative analysis, all the fake news content was mapped by allocating the analysed research material to thematic categories. Moreover, it was also noted that the news items are inscribed in certain specific narratives, hence, a separate criterion in the form of media narrative was distinguished. Such media narratives were also distinguished in terms of type. An attempt was made at defining the causes for the emergence of fake news dividing them into disinformation (effect of deliberate action) and misinformation (effects of communication interference). Due to the varied character of non-intentional fake news, a decision was made to distinguish two sub-categories in the case of misinformation: gossip (Zubiaga *et al.*, 2018) and journalistic unreliability.

From among all the fake news items, the content found on the most read Polish news portals (Interia.pl, Onet.pl, WP.pl) and websites of the traditional media, considered to be the sources of major social importance was isolated and subjected to additional detailed analysis. The research process proceeded in the stages distinguished in Figure 1.

¹ It was then that the first coronavirus-related news appeared.

² Some of the news were very similar in terms of content, at that time they were not treated as separate news, but as part of a single whole (one piece of news).

Figure 1: Subsequent stages of the research.



Source: Own elaboration.

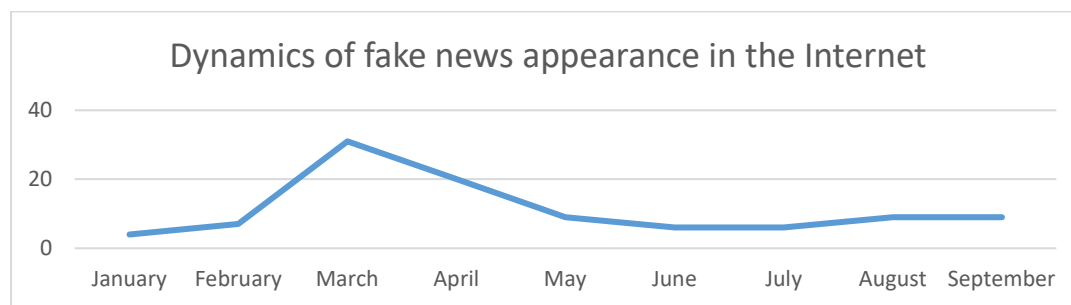
Fake news items were first subjected to quantitative analysis at the angle of their incidence and the general scale of the phenomenon. Subsequently, a qualitative analysis of all fake news with researcher triangulation was performed. Two coders independently categorised the content considering the following criteria: news item subject and type (in terms of the possible causes of emergence). In the qualitative analysis, the typology proposed by Daniel (2018) which provided the basis for analysing the potential causes of publication was taken into account.

4. Results

4.1. General characteristics

The research material collected from January to September 2020 covered 101 fake news items. The first fake content on the pandemic appeared in January 2020. 3.96% of all the fake news analysed in this paper were published in this period. In February it was 6.90%, in March 30.69%, in April 19.80%, in May 8.91%, in June 5.94%, in July 5.94%, in August 8.91%, and in September 8.91%. The frequency dynamics was presented in Figure 2.

Figure 2: Dynamics of the appearance of fake news on the Internet.



Source: Own elaboration. The data in the graph refer to 2020.

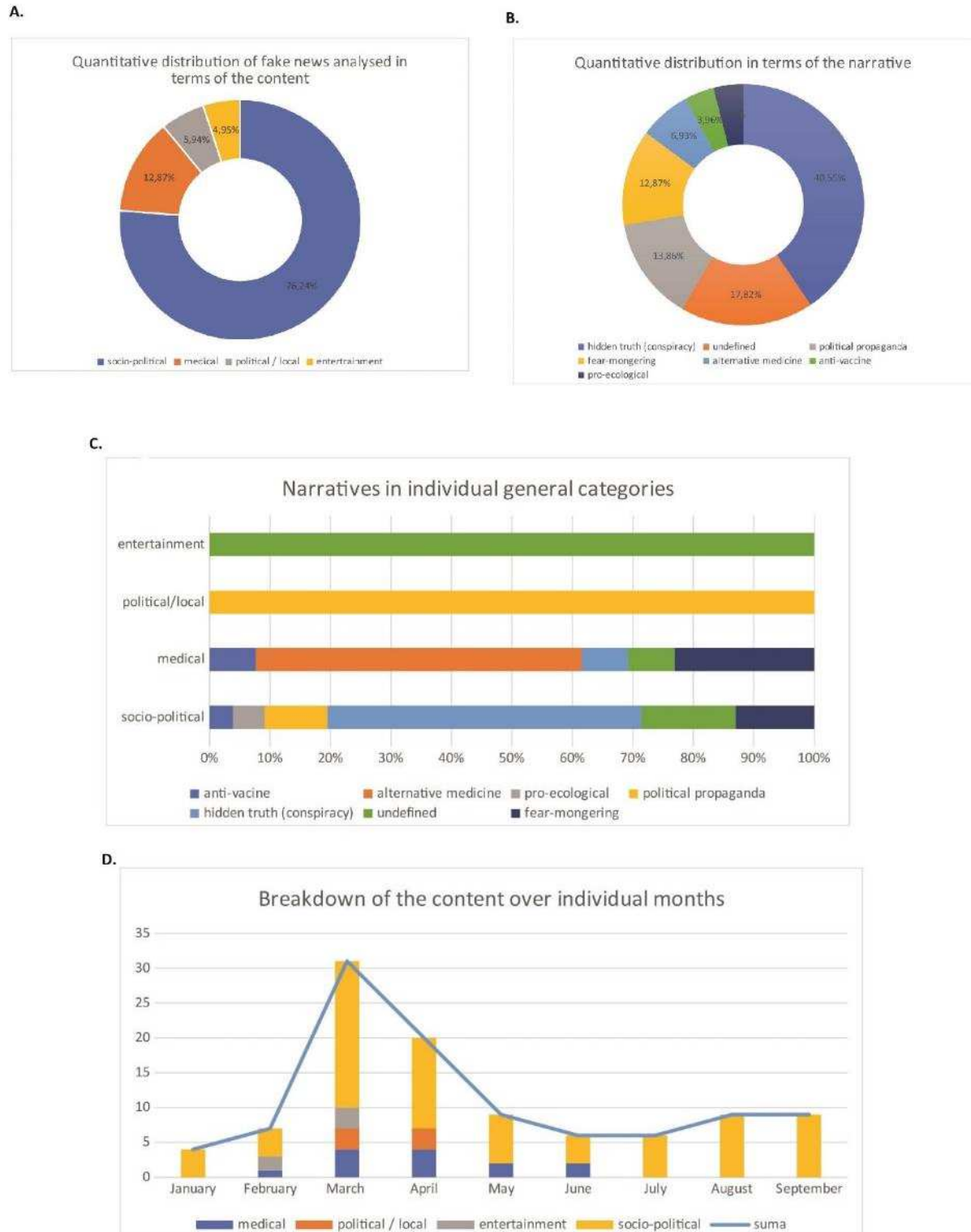
The number of fake news rapidly increased in March. It is most probably due to the fact that the first official case of coronavirus infection in Poland was announced on 4 March 2020. Since 20 March, under the regulation of the then Minister of Health Łukasz Szumowski the state of epidemic was introduced in Poland. Since May 2020, the increment of false information has remained on a relatively stable level.

A qualitative analysis of the content of all the published fake news was performed allocating the analysed research material to the isolated categories. The content analysis allowed for distinguishing the following thematic categories: socio-political news, medical news, news related to local politics³, and entertainment news.

³ This category is treated separately because of the Poland's specific situation at the time. The presidential election in Poland was planned for May 2020, but due to the existing epidemic conditions it was finally postponed to June 2020.

Performing an analysis in terms of the content, from among 101 fake news items 77 (76.26%) were classified as socio-political, 13 (12.87%) as medical, 6 (5.94%) as political (local), and 5 (4.95%) as having an entertainment character (Figure 3A).

Figure 3: Fake news – research results.



Source: Own elaboration. The data in the graph refer to 2020.

Moreover, in the course of the analysis, it was noted that fake content is frequently inscribed in diverse narratives. It was noted that much of the content constitutes a peculiar continuation of the threads which had also appeared before in the news unrelated to the pandemic. The following narratives were distinguished:

- Anti-vaccine – content related to vaccination, suggesting that a coronavirus vaccine is dangerous and possible vaccine tests pose a threat to health or life.
- Content suggesting treatments alternative to traditional medicine in case of COVID-19 symptoms.
- Pro-ecological – content suggesting that the coronavirus is the result of human activity, which has a negative impact on the environment, and the introduction of lockdown in various countries, resulting in reduced human activity, has positive effects on the environment.
- Political propaganda – propaganda content, mainly concerning local politics in the run-up to the presidential elections.
- Hidden ‘bitter’ truth (conspiracy) – content suggesting that the pandemic is a global conspiracy and that the truth about it is hidden from the public. This includes, for example, content on the 5G harmfulness, making money from the pandemic, and so on.
- Fear-mongering – content aimed at triggering fear in the audience, it mostly functions as bait (clickbait).

Next to those above-mentioned, some were diagnosed as impossible to allocate to any of these narratives⁴. The quantitative distribution for specific narratives is presented in Figure 3B.

Analysis of the content in terms of the applied narrative demonstrated that 40.59% of fake news may be classified in the hidden truth (conspiracy) category, 13.86% is political propaganda, 12.87% was to intimidate the recipient (fear-mongering), 6.93% was related to alternative medicine, 3.96% used the anti-vaccine narrative, 3.96% may be classified as a pro-ecological narrative. The remaining 17.82% may not be classified as belonging to one of the above-mentioned narratives distinguished by the authors. For this reason, these news items were classified as ‘undefined’.

As Figure 3C demonstrates, the analysis of the collected fake news content has shown that in the case of the news of the socio-political character, in 3.90% the narrative focused on the anti-vaccine movement, 5.19% on pro-ecological issues, 10.39% of the given category was political propaganda, 51.95% a hidden truth (conspiracy), whereas 12.99% of such news was classified in the fear-mongering category, with 15.58% not ascribed to any of the distinguished narratives (undefined).

From among the medical content, 1 fake news item (7.69% of the given category) was related to anti-vaxxers, 7 (53.85% of the given category) –alternative medicine, 1 (7.69%)–hidden truth (conspiracy), 3 (23.08%) fear-mongering, while 1 (7.69%) was not classified in any of the narratives.

100% (6 items) of the content with the political (local) character was defined as narratives being political propaganda. The content from the entertainment category was in 100% (5 items) classified in the ‘undefined’ narrative.

The data collected in the course of the research process allowed for performing an analysis of the types (categories) of the content published in individual months (Figure 3D). The analysis demonstrated that in January the content of an exclusively socio-political character appeared (4, i.e., 3.96%). In February, next to the socio-political (4 items, i.e., 3.96% of the collected fake news) also 2 (1.98%) of the entertainment character and 1 (0.99%) with

⁴ This was, for example, satirical content concerning current social events. Also, the content characterised by the predominance of facts over opinions and a reporting formula.

medical content were published. The month of March recorded 21 (20.79%) socio-political, 3 (2.97%) entertainment, 3 (2.97%) political (local) and 4 (3.96%) medical fake news items. The content of the 13 (12.87%) pieces of fake news published in April was socio-political in nature, 3 (2.97%) were related to political (local) content, whereas 4 (3.96%) had medical content. May brought 7 (6.93%) socio-political and 2 (1.98%) fake news items with medical information. June recorded 4 (3.96%) socio-political and 2 (1.98%) medical fake news items. July recorded 6 (5.94%) fake news items on socio-political issues. August recorded 9 (8.91%) fake news items on socio-political issues. September recorded 9 (8.91%) fake news on socio-political issues.

As we can see, the dominant type of false content is information about socio-political issues. The content of local politics appeared mainly in the run-up to the presidential elections in Poland. It is also interesting that entertainment content appeared only in the initial stage of the pandemic, and this type of fake news was not diagnosed later.

4.2. Characteristics of the fake news to have appeared in traditional media and on web portals

The news media (so-called serious) published 25.74% of all the analysed fake news. Every fourth news item had been published on news portals or traditional media web pages, hence in the sources that should apply particular diligence in terms of information reliability.

Individual fake news items published by such media are presented in Table 2, taking into consideration the type of the media where they appeared, and categorisation of causes proposed by Daniel (2018):

Table 2: Fake news in traditional media with a breakdown into the type of medium in which it appeared and the cause.

No.	Fake news content	News portals		Traditional media		Possible cause (Daniel, 2018)
1	Bat soup is the cause of the emergence of the coronavirus	Onet.pl		Press	X	Realising the informative function
		Wp.pl		Radio	X	
		Interia.pl		TV		
2	Coronavirus was created in a laboratory	Onet.pl		Press		Attracting the audience's attention
		Wp.pl	X	Radio		
		Interia.pl		TV		
3	Dean Koontz predicted he coronavirus in his book "Eyes of Darkness"	Onet.pl		Press		Supplementing a news set
		Wp.pl	X	Radio		
		Interia.pl		TV		
4	Comoros contributed EUR 100 to the fight against the coronavirus	Onet.pl	X	Press		Supplementing a news set
		Wp.pl		Radio		
		Interia.pl		TV	X	
5	Smoke from crematories over Wuhan	Onet.pl	X	Press	X	Attracting the audience's attention
		Wp.pl		Radio		
		Interia.pl		TV		
6	Vitamin C therapy can stop coronavirus	Onet.pl		Press		Attracting the audience's attention
		Wp.pl		Radio	X	
		Interia.pl		TV		
7	Coronavirus patients must pay PLN 500 for a test	Onet.pl		Press	X	Realising the 4 th power function/Realising one's own interests
		Wp.pl	X	Radio		
		Interia.pl		TV		
8	Before he died, Rev. Berardelli resigned from the respirator to help another person	Onet.pl		Press	X	Supplementing a news set/Error
		Wp.pl		Radio	X	
		Interia.pl		TV	X	

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9	Hantavirus – a new more dangerous virus in China	Onet.pl	X	Press	X	Attracting the audience's attention
		Wp.pl		Radio		
		Interia.pl		TV	X	
10	22 million mobile phone users disappeared in China	Onet.pl		Press		Attracting the audience's attention/Proving loyalty
		Wp.pl		Radio		
		Interia.pl		TV	X	
11	Coffins in a church in Bergam (graphic image)	Onet.pl		Press		Attracting the audience's attention/Competition with other media
		Wp.pl		Radio		
		Interia.pl		TV	X	
12	A species that was considered to be extinct appeared on the streets of India (Malabar large-spotted civet)	Onet.pl	X	Press	X	Error/Realising one's own interests
		Wp.pl	X	Radio		
		Interia.pl		TV		
13	Unequal treatment of EU countries in connection with the blocking of export of protective and medical products.	Onet.pl		Press		Realising the 4 th power function
		Wp.pl		Radio		
		Interia.pl		TV	X	
14	The Antonov aeroplane delivered approx. 400 tonnes of medical equipment	Onet.pl		Press	X	Realising the 4 th power function/Error
		Wp.pl		Radio		
		Interia.pl		TV		
15	The Islamic Revolutionary Guard Corps (IRGC) demonstrated a device designed to remotely detect people infected with the new coronavirus, as well as contaminated areas within a range of 100 metres.	Onet.pl		Press		Realising the informative function/Error
		Wp.pl		Radio	X	
		Interia.pl		TV		
16	In Turkmenistan, the authorities banned the use of the word 'coronavirus.'	Onet.pl		Press		Realising the informative function/Error
		Wp.pl		Radio	X	
		Interia.pl		TV		
17	People who died of coronavirus will be buried in Central Park	Onet.pl		Press		Attracting the audience's attention/Error
		Wp.pl		Radio	X	
		Interia.pl		TV		
18	The number of tests for coronavirus in Poland is decreasing	Onet.pl		Press		Realising the 4 th power function
		Wp.pl		Radio		
		Interia.pl	X	TV		
19	Liechtenstein introduces mandatory biometric bracelets	Onet.pl	X	Press		Realising the informative function/Error
		Wp.pl		Radio		
		Interia.pl		TV		
20	The first dog infected with coronavirus died (in the USA)	Onet.pl	X	Press	X	Supplementing a news set/Attracting audience's attention
		Wp.pl		Radio		
		Interia.pl		TV	X	
21	Grodzisk Mazowiecki bought machines for coronavirus tests, which were requisitioned by the government	Onet.pl		Press	X	Realising the 4 th power function/Error
		Wp.pl	X	Radio		
		Interia.pl		TV		
22	Risk of death from influenza twice as high as from coronavirus	Onet.pl		Press		Error
		Wp.pl		Radio	X	
		Interia.pl		TV	X	
23	One million (or one and a half million) Germans participated in an anti-mask protest	Onet.pl		Press	X	Realising the informative function/Error
		Wp.pl		Radio		
		Interia.pl		TV		
24	Journalist Barbara Stanisławczyk-Żyła questioning	Onet.pl		Press		Realising one's own interests
		Wp.pl		Radio		

	the pandemic (more than 3 minutes of the journalist's statement, with a lot of false content)	Interia.pl		TV	X	
25	Covid-19 - some recent but inconvenient news	Onet.pl		Press	X	Attracting the audience's attention
		Wp.pl		Radio		
		Interia.pl		TV		
26	A coronavirus-infected dog died in Hong Kong	Onet.pl	X	Press	X	Attracting the audience's attention/Competition with other media
		Wp.pl		Radio		
		Interia.pl		TV		

Source: Own elaboration.

As demonstrated, the news portals jointly published 13 fake news items, whereas the traditional media released 28 such publications (12 in the press, 7 – on the radio, and 9 on TV). Analysing the content of the table, one may note that some fake news appeared in more than one source of information, and interestingly, the traditional media published fake news more often than news portals. The majority of such news should be considered as the content created intentionally to attract the audience's attention (10 out of 26) or in connection to the realisation of the editorial office's interests (visible attempts at manipulating the public opinion: realising the 4th power function, realising one's own interests). The coders classified a substantial part of the news (10/26) as errors (an outcome of journalistic unreliability). In the majority of cases, the errors contained in the original news item were corrected. The research has also revealed that some of the fake news items have been neither removed nor rectified by website administrators. This is particularly pertinent to those items which did not result from a mistake or a journalistic error.

5. Discussion of Results

The study described herein shows that in the analysed interval (January–September 2020) every fourth fake news item related to the coronavirus was published by the serious media. It seems to be disquieting, all the more so that –as already indicated– for the majority of the Polish society they are the main source of information (Newman *et al.*, 2020). Along with the development of Web 2.0, journalists and traditional media have lost the monopoly on providing information (Allan, 2006), however, in such a crisis situation as the pandemic, the demand for professional sources has visibly increased. The research conducted in 2020 indicates that in March 2020 the Onet.pl portal had 19.83 million users, hence it recorded an increase of more than 15% compared to February. It is similar in the case of WP.pl, where the user number increased by more than 10% (18.45 million), and Interia.pl (an increase of almost 8% to 14.19 million users). The trend of a return to the traditional media is even more visible. The interest in the services offered by the commercial broadcaster TVN24.pl increased by 44.6% (11.4 million) (*Raport: Rewolucja Cyfrowa w mediach <Report: Digital Revolution in Media>*, 2020). It seems that such a tendency constitutes a chance for mainstream media to recover their position and reinforce credibility. This is why due diligence in terms of the quality of published content is particularly relevant in this case.

Responding to the research question posed in the introduction, one should state that the serious media in Poland may be a source of fake news whereas, in the period from January to September 2020, they published 1/4 of all fake news items identified in this time interval. It seems to be a relatively large number, even more so that not all the fake news items have been removed or retracted. Also, the fact that the traditional media published more fake news than information portals seems to be symptomatic.

5.1. Causes

The causes of untrue, inaccurate and false news appearing in reliable media should be considered in the context of multidimensional changes in the whole media environment. Media organizations operate in a difficult conditions. The emergence of platforms such as Facebook, Twitter and Google has changed the rules of the advertising market. The media, losing ad revenue and had to reorganize their work, reducing their investment in investigative journalism, special correspondents, and local news. This lowered the standards of journalistic work and increased the participation of citizen journalism (Fenton, 2012). The aspect of media audience is particularly important here, due to the fact that, they are much more involved in content creation processes today than ever before (Jenkins & Deuze, 2008). User-generated content from Twitter, Facebook, Instagram or similar platforms, is frequently the source of journalistic information. Web 2.0 (prod)users generate traffic and audience interest, by sharing content and following the news providers. They are also watching over the news veracity, and reacting in case of inaccuracies. Democratization in this area is visible, (Fenton, 2012). On the one hand it empowers the audience, but on the other hand it favors misinformation. It should be remembered that this flow of information also involves entities whose purpose is to manipulate information. Among them are bots that can spread disinformation (Shao *et al.*, 2018, 2007; Wang *et al.*, 2018).

The newsroom organisation also have changed significantly, as shown by various studies (Fenton, 2010b). New technologies allow for the automation of journalistic work. It can be a great help, not only to speed up the work, but also to increase the richness of media content (Broussard, 2015), especially since such content is expected by the modern audience. As Danish researchers note:

[...] traditional news reports are declining. They are replaced by new, alternative forms of communication such as lives and more elements like soundbites, graphics, voice-overs, etc., so-called “packages,” where the presenter guides the viewer through a story. This attempts to create a higher degree of dynamic, flow and flexibility in news coverage and to be able to work with various new ways and tools to tell each story. This way, news coverage is going through a transition from being pre-edited news reports –to consisting of fragments or parts that the presenter delivers live using a carefully planned sequence and choreography, which together convey the story. The content analysis shows that this development started before the implementation of the news engine, but management have prompted the development by introducing new workflows (Bro *et al.*, 2016).

On the other hand, work automation often means deskilling, understood as a process in which qualified staff is replacing by technology used by insufficiently experienced or even unskilled workers. Some journalists experience reduction of their autonomy, they have less work and it consists of simple activities. Media workers are often expected to be multi-tasking to cope with the creation of rich and attractive content (Bro *et al.*, 2016).

Attempting to provide an answer to the question inquiring about the causes of large amount of false news in Polish media it is supposed to be the result of this complexity mentioned above. In majority it is an outcome of activities aimed at attracting the audience's attention and realising editorial offices' interests. As regards attracting attention, it is a rather frequent phenomenon, not only in Poland. As demonstrated in research, various techniques of public attention management, among others the so-called clickbaits in particular, are quite commonly used by contemporary journalists. Most clickbait features lead to a statistically significant increase in the number of clicks (Kuiken *et al.*, 2017) The research confirms the presence of clickbaits in the majority of press titles in the EU, which occurs with a detriment to traditional journalistic values applicable to writing and wording of headlines. Newspapers in 28 EU Member States generate clicks not thanks to high-quality content but using catchy, provocative, and sensational first page headers aimed at taking advantage of user curiosity (García Orosa *et al.*, 2017). The sample presented herein that the desire to attract the

audience's attention was a frequent reason for the publication of news also in the case of the traditional media.

However, to formulate the final conclusions also the work in editorial offices should be investigated, journalists interviewed, and the result of such studies confronted with journalist's declarations. To be able to check what the situation is like in relation to other types of content, it would be worth analysing all the fake news, not only those coronavirus-related. To take a better look at this issue, available reports and other studies into the subject were analysed. In 2017, commissioned by the Public Dialog agency, ARC Rynek i Opinia conducted among Polish journalists a study into fake news. Its results indicate that journalists encounter false information in their daily work: while searching for topics or verifying the created news bits and the information received. Additionally, not seldom do they experience difficulties in distinguishing between true and false news (43% of respondent journalists admitted to having believed at least one item of false information within a period of one month) (*Raport: Fake news z perspektywy polskich dziennikarzy <Report: Fake news from the perspective of Polish journalists>*, 2017). It is also confirmed by the later studies from which it follows that contemporary journalists consider fake news to be one of the most serious threats for journalism. They do not know how to deal with this problem, they are also afraid they may fall prey to disinformation (Skuzza *et al.*, 2019). Similar sentiments were declared by students of journalism in the study conducted by Hapek and Kreft (Kreft & Hapek, 2019) where 2/3 of the respondent students declared that they were incapable of distinguishing between true and false information, while only every 12th respondent was capable of indicating the content verification tools.

Polish journalists express an opinion that the causes for the appearance of false communication are first and foremost tabloidization (67%) and huge competition between the media (66%) with that result that individual entities try to outrun one another in publishing news. Excess of information and lack of time for its verification it is also conducive to the appearance of untrue content (53%). The vast majority of respondents (more than 90%) thought that the phenomenon of fake news would only become more serious in the future, whereas one-fourth of the respondents noted that the current provisions of the Press Law are insufficient and should be brought up-to-date (*Raport: Fake news z perspektywy polskich dziennikarzy <Report: Fake news from the perspective of Polish journalists>*, 2017). Both of the above-invoked studies were carried out on non-representative samples, yet they yield similar results. This corresponds with the results of our study from which it follows that the economics of attention and the desire to attract recipients prove to be more important than adherence to journalistic standards whereas a permanent lack of time for verification, characteristic for the state of the pandemic, and competing with other sources of information are additional causes of mistakes, thus aggravating the problem.

5.2. Consequences

Systematic monitoring of the media shows that the trust in the news media is on the decrease. Every second participant of the study conducted in 2019 by the Reuters Institute claims they do not trust the media. In Poland, 48% of the respondents declared trust in the media. Simultaneously, on a global scale, the number of people avoiding online news due to the excess of information is growing. Since 2017 the number of respondents avoiding news on the internet increased (by 3%), currently reaching 32% (Newman *et al.*, 2020). As follows from the annual study conducted in 27 countries (*Trust in the Media*, 2019) by Ipsos, the spread of false information is a substantial cause of the decreased trust in the media, both internet and traditional. The study shows that while consuming the content, 43% of respondents in Poland experience difficulties with assessing whether a given news item is true or fake news. Moreover, 62% do not trust the information posted by Internet portals (with 52% respondents

who do not trust, and 10% who ‘definitely do not trust’) (*Trust in the Media*, 2019). It is more than half of the society; therefore, it seems that the crisis of trust is substantial.

Almost half (47%) of respondent Poles claim that they detect fake news published in the press (the study average – 52%), 53% identify fake news items on television and radio (here the average is also 52%), whereas 56% Poles identify fake news on the Internet (with the general average 62%). The respondent Poles put much higher trust in the content transmitted to them by people they know (almost 56% respondents) (*Trust in the Media*, 2019). The state of pandemic seems to be an opportunity for the serious media because the disoriented media audience needs reliable content. Yet, it seems that a relatively large number of false information will cause the opinion-forming news media to waste this opportunity. This pertains in particular to the traditional media which may lose users in favour of news portals or, worse, sources with even lower credibility.

6. Summary, conclusions, and recommendations for further research

As Natalie Fenton notices:

News is [...] what journalists make it. How journalists make news depends on their working environment. Their working environment is shaped by economic, social, political and technological factors, all of which form a dense inter-meshing of commercial, ethical, regulatory and cultural components. If we are to understand the nature of news in contemporary societies then we must interrogate news in all of its contextual complexity (Fenton, 2010a).

As noted by the researchers observing the increasing number of fake news on the Internet, this problem is to a large extent due to the economic model common in the technology sector. If the fake news is understood as a phenomenon arising out of business models related to technology, then social responsibility is pushed into the background. Internet (digital) platforms do not focus on actions oriented at the cultivation of ideals because their organisational culture is fuelled mainly by attracting attention (attention economics). Commentators and researchers note that the same conditions which resulted in the emergence of fake news motivate the digital advertising markets, therefore fake news become a problem that technology companies are too seriously engaged in to try and look for a solution to (Creech, 2020). Nowadays, such a model of functioning applies also to traditional media. Attracting attention is a guarantee of profit.

Moreover, the creation of credible and reliable content requires much more effort, especially time and expenses. This often makes media a choice that determines their survival in the market. Fake news proliferates on the Internet much better than true news (Shu *et al.*, 2017). Hence, the media use such news items for a variety of reasons aimed at furthering and accomplishing their goals –they want to increase traffic on their websites, they seek to reinforce the media narrative, etc. It is particularly dangerous if we take into account the fact that media audiences in face of disinformation apply the criterion of the source authenticity assessment (Tandoc *et al.*, 2018), and in this context, the opinion-forming news media in Poland continue to be perceived as more reliable than the others. Immediate benefits achieved by using fake news may prove to be very short-lived. This is because constant publication of fake content may cause a durable loss of trust in the opinion-forming media. Therefore, if the news media, whose importance is growing in the times of the pandemic, fail in this respect, there is a huge risk that they will lose their (already weakened) position while the trust will be difficult to recover.

The first months of the pandemic demonstrated that counter-acting disinformation on the Internet became equally important as guaranteeing necessary medical supplies and equipment for health service professionals. In the case of many governments worldwide, the priority activities related to COVID-19 included also such measures as the formation of special units to combat disinformation (i.e., EU, UK) (Radu, 2020). The causes of increasing

interference in the information-communication space are to be sought mainly in the decreasing level of professional journalistic practice. The level of the network society's informational complexity may cause difficulties in distinguishing between true and false information (Chyliński, 2018), and this issue applies not only to recipients but to journalists who increasingly more often unable to verify the content, especially in situations of an increased information intensity, while the pandemic is an example of such a situation.

It is worth remembering, however, that the internet media (including the internet equivalents of the traditional media) are oftentimes culprits but also an antidote for disinformation. They allow a possibility to promptly publish a *démenti* and correct a potential error. In the long-time perspective, it would therefore be worth considering the employment of professional fact-checkers in the professional media. Admittedly, their work requires more time than the time required to prepare a news item, yet the care for reliable content seems to be of key importance.

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