



**FRIEDRICH NAUMANN
FOUNDATION** For Freedom.

Western Balkans

DISINFORMATION DURING COVID-19 PANDEMIC



Publisher

Friedrich-Naumann-Stiftung für die Freiheit Bosnien-Herzegowina
Čekaluša Čikma 4
71000 Sarajevo

/freiheit.org

/FNFWesternBalkans

/FNFreiheit

Volume Editor

Adnan Huskić

Study Editor

Tijana Cvjetičanin

Project Lead for the Study

Darko Brkan

Researchers / Authors

Rašid Krupalija, Emir Zulejhić, Darko Brkan, Ajla Škrbić for *Raskrinkavanje*

Tin Puljić for *Faktograf*

Stefan Janjić for *FakeNews Tragač*

Vesna Radojević for *Raskrikavanje*

Milan Jovanović

Theoretical Introduction

Prof. dr. sc. Lejla Turčilo

Dr. sc. Mladen Obrenović

Layout

Jilduza Pajzetović

Selmir Pajzetović

Photos and graphics

Public licence and free to use

First Edition, Sarajevo, 2020.

Note on the use of this publication

All rights reserved. No part of this publication may be copied, reproduced, or distributed without prior written permission from the publisher or copyright holder.

Content

THEORETICAL INTRODUCTION	5
INFORMATION CHAOS DURING THE COVID 19 PANDEMIC – THEORETICAL INTRODUCTION	5
The importance of quality information in times of crisis, and the role of fact-checking in educating and guiding the public	5
COVID19: Fighting disinformation and misinformation to save lives	8
Sources/Literature	12
1 METHODOLOGY	13
SAMPLE	13
RESEARCH QUESTIONS	15
CASE STUDIES	16
Context	17
2 DATA ANALYSIS	18
1. The prevalence of COVID-19 disinformation	18
SCOPE OF PANDEMIC RELATED DISINFORMATION: THE REGION	18
THE SCOPE OF PANDEMIC RELATED DISINFORMATION: INDIVIDUAL COUNTRIES	19
MEDIA SOURCES OF DISINFORMATION: THE REGION	20
MEDIA SOURCES OF DISINFORMATION: INDIVIDUAL COUNTRIES	20
2. Content of disinformation about the COVID-19 pandemic	22
MOST REPRESENTED TOPICS: THE REGION	22
Individual topics of disinformation	24
MOST REPRESENTED TOPICS AND THEIR CREATORS: INDIVIDUAL COUNTRIES	25
3. Intensity of disinformation narratives	28
Differences in article categories on a four-factor solution	29
INTENSITY OF DISINFORMATION NARRATIVES: INDIVIDUAL COUNTRIES	31
4. Character of COVID-19 related disinformation	33
NUMBER AND STRUCTURE OF THE RATINGS: THE REGION	33
NUMBER AND STRUCTURE OF THE RATINGS: INDIVIDUAL COUNTRIES	34
3 “SHELF LIFE” OF COVID-19 DISINFORMATION	37

4	CASE STUDIES	40
1.	Government response	40
2.	Populist science and fringe doctors	42
	What awaits us in 2021	45
3.	COVID-19 Influencers	46
	One Hit Wonders	46
	Boosting Online Influence Through the Pandemic	47
	Politics, Sports, Music – Public Figures Engage in Disinformation	48
4.	Anti-vaccination narratives and the COVID-19 infodemic	49
	Main targets and creators of anti-vaccination narratives.	49
5.	Geopolitical aspect of the infodemic in the region	52
5	CONCLUSION	54

THEORETICAL INTRODUCTION

INFORMATION CHAOS DURING THE COVID 19 PANDEMIC – THEORETICAL INTRODUCTION

Prof Lejla Turčilo, PhD

Mladen Obrenović, PhD

The importance of quality information in times of crisis, and the role of fact-checking in educating and guiding the public

Prof Lejla Turčilo, PhD

It is human nature to have an increased interest and need for information in times of crisis. During earthquakes, floods, wars, etc. people have always taken transistor radios or other devices with them into shelters as a way to keep themselves informed. During periods of “regular” communication, most of us can actually afford to be on an information diet, isolated from media content and abstaining from social networks, but in times of crisis, quality information becomes paramount, and the media grows in significance as a link between public authorities and citizens.

Reporters, as members of a socially responsible profession, are then faced with an additional challenge: to satisfy the interest of citizens, i. e. their increased need for information, while at the same time maintaining the level of quality reflected in accuracy, objectivity, clarity and impartiality of information. In such situations, the media usually initiates specialized programs, breaking news, continuously reporting on events as they develop, and using competent communicators to explain the broader context, i. e. the causes and consequences of events.

During the COVID19 pandemic (which is still ongoing), citizens expected (and received) initial information about the inherent dangers from the media, especially during the lockdown period, when radio and TV, and especially the internet, became not just sources of information, but also sources of education and guidance in a new and unfamiliar situation. At this time, quality information became just as important as food and water.

Precisely because attention was focused on information conveyed by the media, and because people’s behavior depended to a large extent on the information they received, the COVID19 pandemic also saw a multiplication of the negative effects of information that is inadvertently or deliberately false, content containing disinformation that misleads the public, and content containing media spin. This type of content has negative effects on people through three types of impact:

- *cognitive: all the “wrong” information (untrue, half-true, contextualized so as to mislead, etc.) affects the way people perceive reality, how real the danger they have found themselves in will appear to them, and also shapes their response and the response of public authorities to the crisis;*

THEORETICAL INTRODUCTION

- *affective: false or distorted information can cause fear, panic and other negative emotions in individuals or in entire communities, given that crisis situations, especially those impacting human health and lives, always cause heightened emotions;*
- *behavioral: the way people perceive reality and the emotions this causes affects their behavior; if the information they are receiving is false, incorrect or wrongly contextualized, this can lead to behaviors inappropriate for the situation and can put individuals and communities in danger.*

At the time of the pandemic, it was shown that large quantities of false, incorrect, half-true or mis-contextualized information have had definite negative effects on how people understood the danger of the pandemic, as well as the ways to cope with it. This first gave rise to high levels of panic, and then an unwarranted aloofness with respect to the danger, as well as impacting behaviors varying from a frenzied use of medicines or preventive means without any scientific basis, to completely ignoring the virus, safety measures, etc. We call this phenomenon Covid19 information chaos.

Forms of information manipulation in crisis situations do not only include media concealment or distortion of the truth, such as misinformation and spreading fake news, but in particular during this pandemic also included spreading pseudo-scientific information and conspiracy theories. This was done through circulating information with no factual basis, or by framing information in a manipulative context. Ultimately, this was a situation where information was created and conveyed so as to mislead the public, or to portray certain actors, the events they are involved in and their responses to these events in a certain light.

A specific form of misleading the public in crisis situations, which we could also identify during the COVID19 pandemic, is media spin. In previous analyses (Turčilo, 2020), we dealt with the spin phenomenon in detail, but here it is sufficient to clarify that, as opposed to fake news and disinformation that had no basis in objective facts, putting a spin on things entails a manipulative linking of facts or semi-facts into a whole that serves a certain interest.

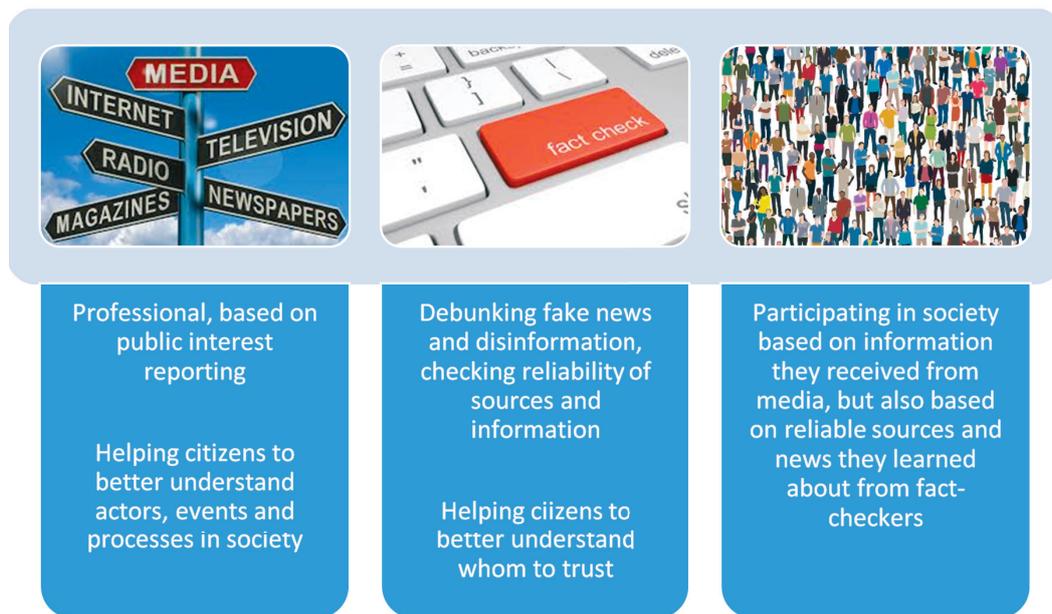
“Media spin is based on two key processes: framing and contextualizing information.

A single set of facts can convey completely different messages depending on how the facts are linked, or how they are framed in a given context. Media often use headings and photos to frame and contextualize, and their predominant approach is one of sensationalism. It should also be noted that media spin is almost never done in a single instance, but through continued activities, i. e. by creating a certain editorial policy. Some examples of media spin during the pandemic relied on ‘tailoring facts’ in order to link certain medicines with Covid19 prevention or treatment, which is not just an example of spreading disinformation, but also gave false hopes to citizens that they could prevent the disease themselves or treat it at home. The fact that these medicines had proven to be successful in treating other viral diseases was connected to the fact that some politicians, such as the US president, publicly stated they were taking them. Information created in this way gave false hope to people, encouraging them to adopt the same practice, which is extremely dangerous. During the Covid19 pandemic, we also saw examples of media basing their editorial policy on, for instance, a spin that the coronavirus had come from a laboratory, selecting as guests exclusively those who would confirm such hypotheses and conveying half-truths and unconfirmed information from unreliable sources in order to prove this hypothesis. This was not a matter of false information, but rather that certain, sometimes even relatively credible interlocutors cherry-picked information implying that the virus was lab-made, while the reporter or media outlet failed to interrogate such theories because they agreed with them. Here, pseudo-science was linked with conspiracy theories in order to create media spin” (Turčilo, 2020).

It is extremely important for the audience to recognize all types of fake information, half-truths, media spin and other forms of manipulation. Various fact-checking portals and their analyses can be most useful in this. They are one way to raise the level of media and information literacy among the general public. When it comes to the media themselves, fact-checking analyses make it possible to distinguish professional media that prioritizes the truth and the public interest from anti-media that uses disinformation and spreads lies that negatively impact the public and its attitude towards the crisis situation.

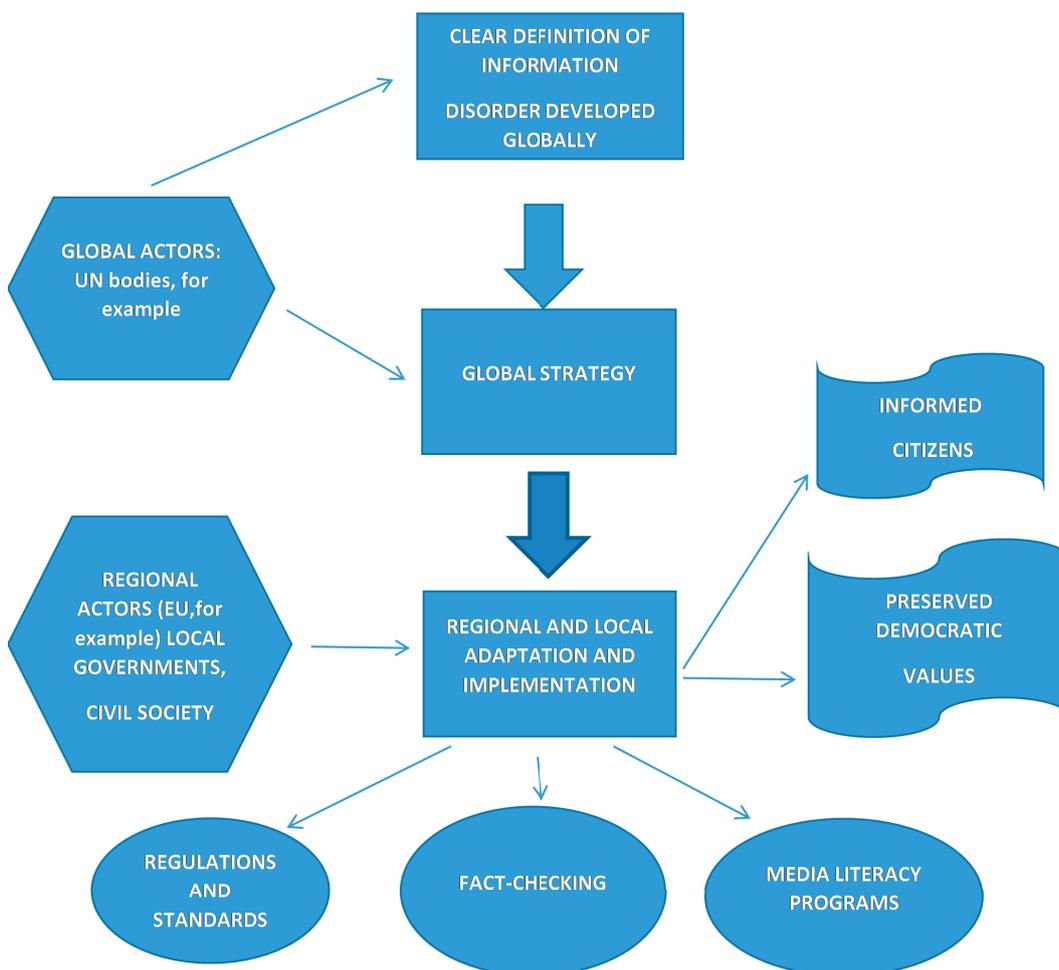
In the context of the COVID19 pandemic, fact-checking enables the audience to objectively view the situation in order to formulate an adequate response to a relatively unfamiliar situation, and to recognize the media that advocates for and defends the public interest, and can therefore be considered credible. The aim of fact-checking is not to create lists of good and bad media, but to recognize manipulation trends in order to enable the public to resist them. Although facts should be checked by media before

they are published (something that credible and responsible media do), once they are published, and given the relatively low level of media and information literacy among the general public, it is good that there is another level of post-hoc fact-checking of information, to help the public get a better sense of



Graph: Intermediary role of fact-checking in the 21st century (Turčilo, Obrenović, 2020).

both the information and what it describes, and to distinguish between those that can be trusted and those that should not be treated as relevant. That is how fact-checking helps provide guidance and



Graph: Global strategy to combat information chaos and the role of fact-checking (Turčilo, Obrenović, 2020)

educate the public, which is extremely important, especially in crisis situations such as the COVID19 pandemic.

It is important to point out that fact-checking is not an end in itself, and does not merely serve to reveal fake information, disinformation, half-truths, etc. Its aim is to develop long-term strategies to combat information chaos at the local, regional and global level.

A global strategy to combat information chaos involves numerous international and regional stakeholders, as well as national stakeholders, and is aimed at better informing citizens and preserving democratic values in society. It is a continuous process that includes creating regulations and standards and their implementation, developing and applying a program of media literacy, and fact-checking.

The COVID19 pandemic has highlighted the need for a global strategy, given that crisis situations such as this pandemic and the infodemic necessarily require synchronized and continuous global approaches and activities.

COVID19: Fighting disinformation and misinformation to save lives

Mladen Obrenović, PhD

The spread of the coronavirus not only threatened the physical and mental health of people around the world, but also contributed to the spread of manipulative media content and caused extensive problems in the functioning of the media and social networks. In this time of crisis – and the COVID19 disease created one of the biggest (public health and economic) crises in the history of humanity to which we still do not have a concrete and efficient response – we are reminded of the need to recognize fake content and manipulated facts in the public space, and to understand the importance of the media in informing and educating the public. Citizens have the right to precise, clear, concrete, reliable and, above all, true information. Times of crisis bring with them an increased need for information, but also the danger that intentionally or unintentionally constructed fake and harmful news will be produced, spread and consumed. It is the task of the media, and even their duty, to provide their users with information from reliable sources. During the pandemic year of 2020, this was not always the case.

It is very important to know the quality of information and the reliability of its source, and the pandemic has demonstrated how much users of the many various media platforms rely on information to survive and cope with the situation [...]. People are liable to believe everything they read, they are easily swayed by disinformation and often fall prey to manipulation [...]. Conspiracy theories, disinformation and propaganda minimising the effects of the coronavirus are a direct threat to human lives (Turčilo, cited in Kuloglija, 2020).

Warnings of this threat to human lives come not just from the scientific community, but also from the world of fact-checking experts whose role is particularly important in times of crisis. They have had their work cut out in the past few months, and there will probably be plenty more work to do in the future when we expect the start of vaccination, one of the new challenges in stopping the spread of the coronavirus: just as the curve depicting the number of cases and fatalities keeps soaring, so will the infestation of content on media and social networks that introduces a hefty dose of chaos into an already chaotic world of media content creation and consumption. As pointed out by researchers from FakeNews Tragač of Novi Sad, we have to clearly distinguish between false and manipulative narratives.

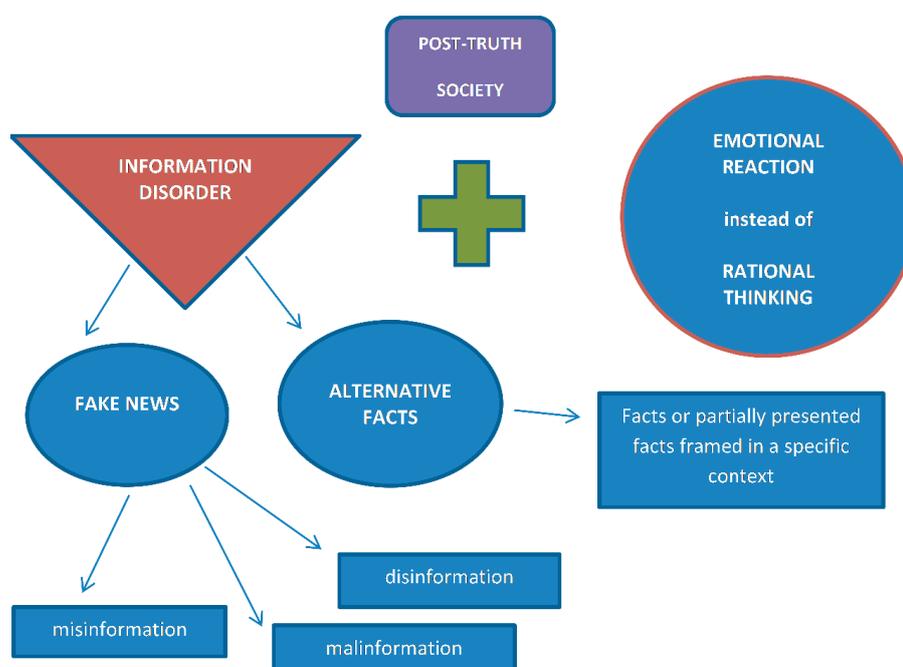
False narratives are those that are primarily based on disinformation, while manipulative ones may contain elements of truth, but their headline or some other element is misleading. In times such as these, disinformation can become quite dangerous and may even endanger lives (Janjić i Femić, 2020: 5).

That is why in crisis situations it is important to suppress false and manipulative narratives, if they cannot be fully eradicated, just as quality and responsible information provision is crucial. The pandemic has demonstrated, and proven, the extensive harmful effects of irresponsibly spreading

content that is of questionable quality, putting citizens in a position where such content, based on lies, generates feelings of fear, anxiety and panic, and may even cost lives.

The European Commission had already stated, earlier in the Spring, that fighting coronavirus disinformation and misinformation “saves lives”. They also advised citizens that it was “important that you get updated information from authoritative sources only” and clearly urged: “You can also help by not sharing unverified information that comes from dubious sources”¹ (European Commission, 2020). Unfortunately, in many cases this advice fell on deaf ears.

During the pandemic, disinformation, misinformation and malicious information, as well as other false, misleading and/or manipulative content spread not only through the media, but also on messaging platforms (specifically through groups on popular apps such as Viber and WhatsApp), and especially on social networks. It was above all Facebook that served as an ideal channel of communication. Within its open and closed groups, through profiles whose owners had gained fame by spreading false and unverified claims, conspiracy theories, pseudo-scientific research and its very dangerous findings and analyses, as well as highly dangerous quackery, and generally by misleading people, Facebook created a whole parallel world of lies and delusions. (Particularly prominent were stories about how the coronavirus was actually man-made in a laboratory, how the 5G network spreads the virus, or how Bill Gates wants to microchip people in order to monitor and control them.) Sometimes, due to the lack of a concrete and clear response from experts that would leave no room for doubt, these “pandemic influencers”, as well as some media outlets, also used all available means to promote their special interests. Whatever an individual’s level of media and information literacy, all of this is difficult to recognize in the sea of information accompanying the pandemic, especially in our post-truth times where emotions trump facts and personal beliefs are more important than the truth.



Graph: Post-truth society (Turčilo, Obrenović, 2020)

The public health crisis brought about by the spread of the coronavirus is marked by a pronounced sense of fear and panic, where people are liable to believe false and unsubstantiated claims rather than official responses, as the psychologist Andrijana Pejaković has pointed out.

“When dealing with emotions of fear and panic, when some of our vital values such as life itself are threatened, we respond emotionally and we unfortunately have a tendency to turn off the rational part of our brain that could receive official, verified information from responsible institutions. The problem is that fake and sensationalist news quickly spread panic, which has a direct impact on our emotions, causing fears that leave us not knowing what to do, instead of us focusing on being rational and following information that is official and accurate” (Pejaković, cited in Komarčević, 2020).

¹ European Commission (2020). Borba protiv dezinformacija [Fighting Disinformation], accessed November 13, 2020 at https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/fighting-disinformation_hr

No matter where they get news and information about the world around them, and how many such sources they follow, the fact is that, especially in times of crisis, people shut themselves off in filter bubbles or echo chambers, as they are called in the relevant literature. Not just media, but also social networks and the above-mentioned messaging platforms are quite conducive to this, leading to what Iva Nenadić describes as “filtering and preferential treatment of information and opinions compatible with views the user has previously expressed” (2017: 18).

Long before the appearance of the coronavirus, its spread and the official declaration of the COVID19 pandemic, Nenadić described two theories that explain the spread of fake news in the context of the echo chamber phenomenon and social contacts. According to research findings published by Adam Kucharski in *Nature* in 2016, “the functioning of fake news and echo chambers bears many similarities to the evolution and transmission of infectious diseases [...] disease strains can evolve and compete in a host population, much like rumours, and infections and opinions are both shaped by social contacts” (Kucharski, 2016; cited in Nenadić, 2017: 18).

Having reduced costs and done away with other barriers, the internet has enabled numerous actors to directly participate in public communication. On the one hand, this opened the door to broader participation, but on the other, it also ushered in manipulation. Both trends were additionally heightened by online social networks through which individuals and organisations can share information of their choice with hundreds or even thousands of their contacts (Bakshy et al, 2012; Goel et al, 2012; cited in Nenadić, 2017: 18).

According to another study, which can also be viewed in the context of the spread of the coronavirus, as well as the spread of fake news, this information disorder “spreads successfully because people tend to trust their friends too much” (Media Insight Project, 2017; cited in Nenadić, 2017: 18).

Whether Americans will trust news found online depends much less on who produced the news content and much more on who shared it. This means that people are more likely to trust an article shared by someone they consider credible even if the article itself comes from an unreliable or unknown source than they are to believe information coming from a reputable media source shared by someone they do not trust (Media Insight Project, 2017; cited in Nenadić, 2017: 19).

In such circumstances, which are not only characteristic of American society, and which can still be observed in the years following the publication of these particular research findings, certain media outlets or those merely identifying themselves as media (though they are not), and especially individuals posting on social networks (as well as platforms such as YouTube, blogs, and some portals) create content that coincides with what Claire Wardle and Hossein Derakhshan have called information disorder².

Many authors will situate the problem of false and manipulative content in the context of media and information (il)literacy. This has been a topic of discussion for years, with both the academic and journalist communities trying to find ways to improve literacy, because, as Zorfa Hrnjić Kuduzović and others have observed, “citizens as users of news are not always able to distinguish unreliable from reliable information, partly because of inadequate media competences and partly because of a superficial approach to news” (2019: 1). She and her associates also note that “the media environment in Bosnia and Herzegovina, as well as in Croatia, Serbia, Montenegro and Macedonia, is conducive to spreading false information” (ibid). This conclusion was drawn almost two years ago, but the situation has not improved in the meantime. On the contrary. The crisis brought on by the pandemic has only further complicated matters, leaving facts in the background, “while their place has been taken up by emotions, especially negative emotions (fear, panic, uncertainty)”, as observed by Jovana Vurdelja (2020: 249). Although her paper focuses on climate change viewed in the context of our post-truth age, her thoughts on the role of fake news, which she believes have “sovereign power to influence and shape public opinion, i. e. the views, opinions and behaviours of people, in order to achieve specific primarily economically, ideologically and politically motivated interests and aims” (ibid), can also be applied to the corona crisis. Especially in view of the fact that fake news “works to delegitimise competent, authoritative institutions, as well as the concept of objective facts, which contributes to social dysfunctionality in perceiving actual scientific facts” (ibid).

When fake news became a hot topic again, along with its concomitant phenomena such as alternative facts, post-truth, prosumers, etc., and we entered the age of information disorder or the infocalypse, as it was even more dramatically baptized by Aviv Ovadya (cited in Kurtić, 2020), what actually started was a further degradation of expert and educated, and especially scientific authorities. Instead, anyone literate enough to enter a term into Google search, that omnipotent source of all answers to

2 Council of Europe: Wardle, Claire and Hossein Derakhshan (2017). Information Disorder: Towards an Interdisciplinary Framework for Research and Policy-Making, accessed November 13, 2020 at <https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-forresearch/168076277c>

any and all questions beginning with “how to”, was able to find an answer compatible with his or her views. These answers are mostly offered by real people, who do not hide their identity or post from fake profiles, but who want to put “their” truth out there and convince people around them that what they have posted is the only truth and they are its only source. Appeals from the scientific community were futile, as were efforts by the media to fulfil their educational role (also essential in addition to their information role), because the truth was somewhere else. Or, the users turned to “truth”, which was actually false or problematic content published by anonymous portals without a clear ownership or editorial structure, but also by those that were clearly identifiable and even by some mainstream media outlets. In any case, something essential was left by the wayside – that facts presented by responsible and reliable media, referring to authorities from the world of science (as well as other areas of human activity), can contribute to overcoming any crisis with the least amount of pain and lingering effects. The media has a crucial role to play, as we are reminded by Sandra Bašić Hrvatín from the Faculty of Humanities in Koper.

The flood of disinformation on social media has created an atmosphere where no one is to be trusted, not science, or experts, or institution, and the media have so far been unable to properly respond to this [...]. The main role of the media in this situation [is] to regain people’s trust in institutions, their trust in science, and to help them not fall for various forms of scandalising or sensationalist information, but instead to offer them official information and expertise to explain what the virus actually is and how they can protect themselves from it (Bašić Hrvatín, cited in Komarčević).

We all find ourselves in a world that offers, as Nenadić observed, “too many opportunities for easy and cheap creation, distribution and promotion of fake news” that cannot be “revealed and stopped by traditional verification techniques”. She believes there is an opportunity

for traditional media organisations to re-examine their position and role in digital participatory culture and, instead of espousing the lost cause of trying to compete with originally digital media and platforms, revive the function of verification to regain lost trust. While fact-checking initiatives are reactive, it is also necessary to proactively invest in digital and media literacy, i. e. a critical understanding of contemporary communication, as the best form of prevention of the negative effects of manipulative content (Nenadić, 2017: 19).

Reminding us that “fake news is not just lies, as absurd as that may sound at first glance,” Lejla Turčilo and Belma Buljubašić note that “the whole concept of fake reporting is a manipulative category aimed at manipulating and overpowering the public” (2019: 43-44). They do not see the solution to this problem solely in improving the media literacy of the public, nor do they believe that “putting the tools of news distribution into the hands of citizens would help create better quality content”.

The only solution is reintroducing professional standards into the media, i. e. insisting on distinguishing media (professional media working in the public interest and upholding ethical norms) from anti-media (those whose priority is a particular interest and that are ‘tools’ in the hands of powerful individuals, and do not uphold ethical norms). Fake news is a serious problem in the media, but it will not go away on their own, not until professionals agree to go back to the essential foundations of their work and the standard invoked by Stjepan Malović: either something is a lie or it is news (2005: 11). Journalism without that foundation, without that essence, is not journalism (Turčilo and Buljubašić, 2019: 49).

Though it may seem we are a long way from implementing such proposals, the survey “Information Disorder in Times of COVID19 Pandemic” conducted by the Regional Network of Fact-checkers (SeeCheck) in Bosnia and Herzegovina, Montenegro, Croatia, Kosovo and North Macedonia is an important step towards diagnosing key problems, providing quality and expert opinions, and developing the right treatments to at least mitigate and one day cure the effects of the fake news pandemic (described by the neologism “infodemic”³ referring to a “media epidemic of falsehoods” (Janjić and Femić, 2020:4)).

3 The term “infodemic” was first used some time before the pandemic was declared, already at the start of the year, by the World Health Organisation (WHO) when it stated that it had “taken steps to ensure that the coronavirus epidemic that has [already at that time] claimed hundreds of lives in central China does not spark a dangerous social media “infodemic” fuelled by false information (Cf. UN News (2020). Coronavirus: UN health agency moves fast to tackle ‘infodemic’; Guterres warns against stigmatization, accessed November 13, 2020 at <https://news.un.org/en/story/2020/02/1056672>)

Sources/Literature

Articles

1. Hrnjić Kuduzović, Zarfa et al. (2019). „Suzbijanje lažnih informacija” [Suppressing False Information], in: *Vjerodostojnost medija: Doba lažnih informacija – zbornik radova Devete regionalne naučne konferencije Vjerodostojnost medija* [Media Credibility: The Age of Fake Information – collection of papers from the Ninth Regional Scientific Conference on Media Credibility], ed. Hrnjić Kuduzović, Zarfa et al., Tuzla: Filozofski fakultet Univerziteta u Tuzli, p. 1-3.
2. Janjić, Stefan and Femić, Tijana ed. (2020). *Korona virus i infodemija u Srbiji* [The Coronavirus and the Infodemic in Serbia], Novi Sad: Novosadska novinarska škola.
3. Nenadić, Iva (2017). „Kako su mainstream mediji otvorili vrata alternativnim činjenicama?” [How the mainstream media opened the door to alternative facts], in: *Političke analize*, Vol. 30, p. 15-21.
4. Turčilo, Lejla and Belma Buljubašić (2019). „Lažne vijesti u 21. stoljeću – da li je javni interes interesantan bosanskohercegovačkoj javnosti i ko i kako kreira agendu?” [Fake News in 21th Century – is public interest of any interest to Bosnian and Herzegovinian public and who creates agendas and how?], in: *Vjerodostojnost medija: Doba lažnih informacija – zbornik radova Devete regionalne naučne konferencije 'Vjerodostojnost medija'* [Media Credibility: The Age of Fake Information – collection of papers from the Ninth Regional Scientific Conference on Media Credibility], ed. Zarfa Hrnjić-Kuduzović et al., Tuzla: Filozofski fakultet Univerziteta u Tuzli, p. 39-51.
5. Vurdelja, Jovana (2020). „Klimatske promene kao fake news u postistinsko doba” [Climate Change as Fake News in Post-Truth Times], in: *Godišnjak*, Beograd: Univerzitet u Beogradu Fakultet političkih nauka, Vol. 14, No. 23, p. 235-253.

Online Sources

1. Council of Europe: Wardle, Claire and Hossein Derakhshan (2017). Information Disorder: Towards an Interdisciplinary Framework for Research and Policy-Making, accessed November 13, 2020 at <https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-forresearch/168076277c>
2. Detektor: Kuloglija, Nermina (2020). Ruski dezinformacijski videi o koronavirusu prevode se i dijele na mrežama u BiH [Russian disinformation videos about the coronavirus are being translated and shared on social networks in BiH], accessed November 13, 2020 at <https://detektor.ba/2020/04/01/ruski-dezinformacijski-videi-o-koronavirusu-prevode-se-i-dijele-na-mrezama-u-bih/>
3. European Commission (2020). Borba protiv dezinformacija [Fighting Disinformation], accessed November 13, 2020 at https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/fighting-disinformation_hr
4. Kurtić, Najil (2020). Predstoji li nam apokalipsa informacija? [Are we heading for an information apocalypse?], accessed November 13, 2020 at <http://najilkurtic.ba/view-more/infokalipsa/223>
5. Mediacentar Online: Turčilo, Lejla (2020). Medijski spin u doba COVID-19: Kako ga prepoznati i kako se oduprijeti [Media spin in the age of COVID-19: How to recognize it and how to resist it], accessed November 13, 2020 at <https://www.media.ba/bs/magazin-novinarstvo/medijski-spin-u-doba-covid-19-kako-ga-prepoznati-i-kako-se-oduprijeti>
6. Radio Slobodna Europa: Komarčević, Dušan (2020). Pandemija pravog virusa i lažnih vesti na Zapadnom Balkanu [Real virus and fake news pandemic in the Western Balkans], accessed November 13, 2020 at <https://www.slobodnaevropa.org/a/pandemija-korona-virus-lazne-vesti/30486048.html>
7. UN News (2020). Coronavirus: UN health agency moves fast to tackle 'infodemic'; Guterres warns against stigmatization, accessed November 13, 2020 at <https://news.un.org/en/story/2020/02/1056672>

1

METHODOLOGY

SAMPLE

In this research, we examine different dimensions of the so-called *infodemic* – a flurry of wrong or misleading claims and narratives that followed the outbreak of the COVID-19 pandemic – in the region of South East Europe (SEE), specifically in Croatia, Bosnia and Herzegovina, Serbia, Montenegro and North Macedonia. Using a methodology which combines fact-checking and data analysis, this research is focused on the scale and scope of disinformation regarding the COVID-19 pandemic in these countries, individually and cumulatively.

It is important to emphasize that this fact-checking network was unable to trace and debunk every single piece of false or misleading information about the COVID-19 pandemic that appeared in the media or social media in the region. However, the very size and scope of this sample surpasses any other research done in this field, and provides more than enough data to treat it as “representative” for this region, and for individual countries’ versions of the COVID-19 infodemic.

This research is based on material drawn from six out of seven fact-checking platforms belonging to a fact-checking network SEE Check:⁴

- **Raskrinkavanje** from Bosnia and Herzegovina (raskrinkavanje.ba), developed by Zašto ne
- **Faktograf** from Croatia (faktograf.hr), developed by Gong
- **Raskrinkavanje** from Montenegro (raskrinkavanje.me), developed by the Center for Democratic Tradition
- **Fighting fake news narratives** from North Macedonia (f2n2.mk), developed by Most
- **Raskrikavanje** and **FakeNews Tragač** from Serbia (raskrikavanje.rs and fakenews.rs), developed by Krik and Novosadska novinarska škola, respectively

The time frame for this sample starts at different dates for different fact-checking websites – based on the date of the first pandemic-related fact-check, but most occurred sometime in January or February 2020, after the news of the new virus started to be featured more significantly in the region. The time frame ends on 30.10.2020, and no fact-checks published after this date were included in the dataset.

The database was created by extracting the following data created by these organization’s fact-checks of any false or misleading content related to the COVID-19 pandemic:

⁴ The seventh member of the network is Razkrinkavanje.si from Slovenia, developed by Oštro, which did not participate in this research.

- *All fact-checking analysis of pandemic-related misinformation from each website, with links to such content;*
- *Articles⁵ and/or other items (social media posts, viral messages and similar) containing debunked misinformation about the pandemic, with links to such content;*
- *Dates of publishing of analysis and debunked content;*
- *Ratings given after the content was fact-checked;*
- *Categories of rated content in terms of the primary topic of disinformation;*
- *Media or social media sources of disinformation.*

Some of these elements were automatically generated (extracted from websites) and filtered by analysts to keep only the content related to the pandemic, while others were manually added to the database. Given that these websites use different technologies and have differences in their methodologies, their data (and databases) were adjusted to make them mutually comparable.

The exported database of raskrinkavanje.ba, which has the most comprehensive data on most of the above-mentioned parameters, served as the foundation for the database. Data of other fact-checking websites were adjusted to fit that set of data as follows:

1. Debunked articles

A distinct feature of Raskrinkavanje's methodology is its identification of the sources of false or misleading content analyzed on the website. This is performed for each piece of disinformation rated on the website. The process includes identification of the source (first appearance of disinformation) and tracking down all the iterations of that same disinformation as it appears in other media (redistributed disinformation). If the original disinformation was published in a foreign language, the media outlet from BiH or the region which was the first to translate and publish it in a local language (BCS) is treated as the source of disinformation in the analysis. Raskrinkavanje.me uses the same approach. The redistributions of all rated disinformation in the material from other websites were added to make it comparable to the methodology of Raskrinkavanje.

The data of Raskrinkavanje was also supplemented by any additional iterations of rated disinformation that might have appeared after the debunking analysis was published, up to the sample's end date.

2. Ratings

The term "rating" is used in fact-checking to summarize and systematize the findings established by the verification of facts. In Raskrinkavanje's fact-checking methodology, the rating system was designed to identify different types of false or misleading media content, not solely limited to explicitly true or explicitly false statements and claims. Other fact-checkers from the network use more or less similar rating systems. Information on all the rating systems is available on their respective websites, in the methodology sections.

In order to create a coherent system applicable to all the content in the research, the "core" ratings of raskrinkavanje.ba (and its counterparts from Montenegro and Serbia) were adopted, and all material from the fact-checking websites was re-evaluated using these ratings.

These are the ratings used in the research:

- **False news** – *intentional fabrication of factually incorrect information;*
- **Redistributing false news** – *redistributing of false news published by another media outlet;*
- **Disinformation** – *false or selective presentation of existing information;*
- **Manipulation of facts** – *misleading interpretation of factually correct information;*
- **Pseudoscience** – *presenting non-scientific or pseudoscientific claims as scientific information;*
- **Conspiracy theory** – *explicit or implicit claim of the existence of a hidden malevolent plan, without presenting evidence for it;*
- **Clickbait** – *misleading and/or exaggerated media headlines or social media shares;*
- **Error** – *incorrect information published as a result of an unintentional mistake.*

5 For the sake of brevity, the term "article" will be used in this report to signify any individual "unit" of disinformation that was rated in the fact-checking analysis, including: media articles in strict sense, social media posts containing text, images, audio or video; viral messages from messaging apps; TV, print or radio reports, etc.

It is important to note here that, due to nature of fact-checking methodologies and their additional adjustments, the figures presented in this research carry some caveats.

For one, Raskrinkavanje gives a separate rating to each media manipulation that appears in one media report, so one fact-checked article can have more than one rating. Also, since all iterations of a rated disinformation are tracked, one fact-checking analysis can cover multiple debunked articles and/or posts from social media. These adjustments were also made for the materials of other websites, who do not track or rate multiple claims in their analysis. However, it is not possible to establish with absolute certainty if all the occurrences of a same disinformation have been tracked in this way. Social media posts and articles on anonymous websites tend to be of "unstable" nature - that is, to disappear with time for various reasons; additionally, many online media outlets also have the habit of deleting content after it was proven to be inaccurate, rather than publishing visible and transparent corrections. This is why it is possible that not all instances of all rated claims have been tracked and included in this sample.

Secondly, given that these fact-checkers often deal with content produced outside of their countries, it was often the case that the same source of disinformation was rated by more than one fact-checker. These "duplicates" were deleted from the joint database so as not to appear twice; however, they do appear separately in each individual debunking article where they were originally rated.

Furthermore, for those fact-checking websites which already use the rating system described above, calculations of percentage of ratings were done with regard to their existing databases, meaning that they may have included other ratings they use (for example, "spin", "biased reporting", "recycling" and similar) which were not relevant for this research. For analysis where this was the case, this has led to percentages of ratings not always adding up to 100%, given that the "scratched" ratings do not appear in this research.

Finally, it should be noted that ratings used in this research should be understood in the way that they are defined in fact-checking methodologies, which may differ from the way these terms are used in general discourse, specific theories, or even in this very report. For example, the term "disinformation" signifies a specific type of rating when it appears in the statistics; however, it may be used in its conventional meaning – as false/misleading information – in the narrative part of the report. To avoid confusion, whenever these terms are used to refer to fact-checking ratings, this will be noted in the report.

3. Topics (themes)

After the database was completed for all the websites, the content was labeled according to the primary topic of the debunked disinformation. The topics were agreed upon by the researchers/fact-checkers, based on their expert knowledge of what were the "groups" of subjects and narratives that dominated the disinformation about the pandemic in their country and the region.

These include topics like the origin of the COVID-19 virus, conspiracy theories about 5G networks, vaccines, false remedies or cures, disinformation about protective face masks, etc. Similarly to ratings, one article and/or fact-checking analysis can contain more than one topic. Moreover, this was often the case, especially when it came to material like "influencers" videos, which tends to "compile" various conspiracy theories, and rarely has only one topic about which it gives inaccurate information.

RESEARCH QUESTIONS

This research was undertaken using a twofold approach, with all the specified parameters traced on to the level of each individual country represented in the research, and on to the regional level (with all the countries combined). On both of these levels, we strived to answer the following questions, using a combination of insights gathered through fact-checking, and through data analysis:

1. What was the prevalence of COVID-19 disinformation?
 - a. the overall number of items of disinformation,
 - b. the overall number of debunking analyses,
 - c. redistribution (average number of articles per analysis),
 - d. "ranking" of media sources of disinformation (who created/distributed the most disinformation on COVID-19).

2. Which narratives dominated the sample (what was the dominant content of disinformation)?
 - a. topics with the highest number of rated articles,
 - b. topics with the highest number of debunking analyses,
 - c. media sources most engaged in the creation of specific narratives.

3. How intensive were these narratives?
 - a. average number of articles per analysis in each topic category (compared to the average for the whole sample),
 - b. ranking of analysis with the highest number of rated articles.

4. What was the “character” of the COVID-19 disinformation?
 - a. number and structure of ratings (what were the most represented ratings),
 - b. ratings structure by topic category.

Additionally, we also looked into the timeframes of “trending” tendencies for the topics and narratives detected through the aforementioned analysis. While this is a task that can never be completed with absolute certainty, the vast material gathered in this sample gives enough reliability to establish how long a particular false claim has “lasted” after it appeared.

CASE STUDIES

The fact-checking process during the pandemic was extremely challenging, for several reasons:

1. the media “market” experienced hyperproduction of content related to COVID-19, while human resources on fact-checking platforms remained more or less the same as in the period before the pandemic;
2. pressure for inaccurate content to be fact-checked very quickly, since some of it could directly endanger the health and lives of people;
3. verification of data based on official statistics and information from state institutions was difficult for various reasons; and
4. verification of data based on the results of scientific research was challenging because, despite the efforts of the scientific community, the answers to many important questions were unknown for months and contradictory explanations did also appear related to some aspects of the pandemic.

In such circumstances, fact-checking platforms sought to monitor research developments, compare data, talk to experts, and point out inconsistencies and errors in media reporting. This process was, in the end, further complicated by the fact that some scientific experts with great reputation and exceptional profiles spread proven inaccurate data and pseudo-scientific claims during the pandemic.

These, and other similar factors, will be addressed in more depth in this research, in addition to data analysis and the interpretation of its results, through case studies of the following phenomena identified by researchers as significant for better understanding of the nature and scope of COVID-19 *infodemic* in the region:

- how the anti-vaccination movement used the pandemic disinformation to thrive;
- “Corona influencers” on social media;
- government response and influence on disinformation spreading;
- populist science, fringe doctors and their impact on the spread of disinformation; and
- geopolitical dimension of Covid-19 disinformation.

Context

CCOVID-19 is short for Coronavirus disease 2019 – an infectious disease caused by the SARS-CoV-2 virus (short for Severe Acute Respiratory Syndrome Coronavirus 2). The name of the disease stems from the group of viruses to which the pathogen which causes it belongs (coronaviruses), and the year when it first attacked the human species – December 2019 – in Wuhan, China. A lot is still unknown about the virus, and how it “jumped” from animals (most likely bats), to humans.

The new virus’ rapid spread was soon documented outside of China’s borders, and the World Health Organization (WHO) declared a pandemic of the new disease on March 11, 2020. The disease has proven to be easily transmittable, and more lethal than common “seasonal” viruses like the flu. Outbreaks in China, Italy, Spain, USA and other countries have led to the collapse or near-collapse of hospitals, overwhelmed with patients unable to breathe without respiratory support or exhibiting other severe symptoms. In the SEE region, the spread was relatively slow for the most part until the fall/winter of 2020, when enormous spikes in both the number of cases and number of deaths from the disease started happening.

In the weeks following the official “declaration” of the pandemic, numerous countries went into different versions of lockdown, with measures to stop the spread of the virus including closing borders, banning travel, imposing curfews and/or closing various public facilities and services etc., mostly during the months of March, April and May, depending on specific epidemiological situations. However, due to both opposition to these measures, and the devastating effect on the economy, in most countries such measures were lifted as soon as possible, although in some they are being introduced again due to a tragic spike in new cases and deaths worldwide during the fall/winter.

At the time of writing this report, the COVID-19 pandemic has almost 78 million active cases and has taken more than 1.7 million human lives across the world. Massive efforts have been put into producing a vaccine against the disease, with over 90 different versions in different stages of production at the moment.⁶ In December 2020, in an event widely described as historic, vaccination against the disease started in Great Britain, less than a year after the virus/disease was detected in humans, using the vaccine produced by companies Pfizer and BioNTech.⁷

While vaccine availability and accessibility for all countries and populations is a rational concern for health authorities everywhere, the issue has been plagued with doubt and resistance to immunization, almost exclusively “planted” by disinformation that has followed the pandemic (a lot of which was of an anti-vaccine nature). The term “infodemic” became almost as widely known as the pandemic itself. Much like the virus – and certainly to the benefit of its spread – this disinformation has not lost its strength or virality in the past 11 months, instigating dangerous behavior and posing an unprecedented challenge for health workers, educators and essential workers unable to “work from home”, the media, decision makers – and undoubtedly fact-checkers.

⁶ Coronavirus Vaccine Tracker, New York Times (updated continuously)

⁷ Covid-19 vaccine: First person receives Pfizer jab in UK, BBC, 8.12.2020.

2

DATA ANALYSIS

1. The prevalence of COVID-19 disinformation

SCOPE OF PANDEMIC RELATED DISINFORMATION: THE REGION

The database extracted from these platforms was analyzed for content, frequency, scope and patterns of manipulation regarding the COVID-19 pandemic, which was fact-checked over the course of about nine months. During this period, regional fact-checkers from the SEE Check network published 762 analyses and rated 4,654 articles or social media posts containing false or misleading claims about the pandemic.

Fact-checking platform	Number of fact-checked articles	Number of fact-checking analyses
Raskrinkavanje (Bosnia and Herzegovina)	2662	207
Raskrinkavanje (Montenegro)	842	154
Faktograf (Croatia)	373	220
Raskrikavanje (Serbia)	297	66
FakeNews Tragač (Serbia)	249	40
F2N2 (North Macedonia)	231	75
Total region	4654	762

When the number of articles containing false or misleading claims is compared to the number of fact-checking analyses, it becomes clear that one piece of inaccurate information about the pandemic was transmitted by an average of six outlets (6.10), which means that an average piece of inaccurate information related to COVID-19 has extremely high viral potential. High public interest in pandemic-related topics, low levels of media and information literacy, as well as copy-paste journalism, have all enabled inaccurate content to spread rapidly – often reaching its peak before the fact-checking platforms were able to debunk them.

Fact-checking platform	Average number of articles per analysis
Raskrinkavanje (Bosnia and Herzegovina)	12.85
Raskrinkavanje (Montenegro)	5.46
Faktograf (Croatia)	1.69
Raskrikavanje (Serbia)	4.43

FakeNews Tragač (Serbia)	6.22
F2N2 (North Macedonia)	3.08
Total region	6.10

THE SCOPE OF PANDEMIC RELATED DISINFORMATION: INDIVIDUAL COUNTRIES

In **Bosnia-Herzegovina**, the fact-checking platform Raskrinkavanje analyzed a total of 2,662 pieces of media content, published by 773 media outlets and on three social media platforms. This sheer number of Covid-19 related pieces of media disinformation indicates that this represented an unprecedented surge in theme-specific dissemination of disinformation in Bosnia and Herzegovina. The dimensions of this sample, limited to only one topic (pandemic), can be better understood if we consider the fact that Raskrinkavanje fact-checked a total of 2,420 articles published in 752 media over the course of one year (2018). In the same period, the number of politics-related disinformation was 1,486. Now, within only one topic, and in a shorter period of time (9 months), Raskrinkavanje fact-checked 2,662 articles. Bearing in mind the complexity and contentious dynamics of politics in Bosnia and Herzegovina, and the links between politics and the media, it is safe to say that the COVID-19 pandemic proved to be a disinformation theme of a potency as yet unseen in Bosnia and Herzegovina, even in the sphere of disinformation about politics.

The average number of articles per analysis is 12.85, which is a significant jump from the average number of rated articles per analysis (slightly above 6), but also a far higher average than in the other fact-checking websites – probably due to the fact that Raskrinkavanje uniquely combines tracking all sources at the time of debunking, with a more region-oriented than in-country oriented approach, compared to other fact-checking outlets.

In **Croatia**, the total amount of items of disinformation analyzed by Faktograf within the given timeframe is 373. There is, of course, a certain amount of overlap between different fact-checking organizations' databases, due to the fact that much disinformation travels across and between national borders: after accounting for this overlap, and removing pieces of disinformation that were covered by other organizations, the total amount covered by Faktograf is 354. Overlap does therefore exist in this case, but only to a relatively small extent.

Faktograf published a total of 220 debunking articles related to various disinformations, amounting to an average of 1.69 items of disinformation per debunking article. Many false or manipulative narratives and theories were shared by more than one source, which allowed for referencing multiple sources in a single article. This demonstrates the ease with which disinformation spreads, often being transmitted verbatim between media websites and social media profiles without investigation as to whether there was any proof for the claims made or not.

In **Montenegro**, starting with January 1, Raskrinkavanje.me published 154 analyses and fact-checked 842 articles, published by a total of 299 media.

In **North Macedonia**, for the period from 18.03.2020 to 01.08.2020, F2N2 analyzed a total of 231 articles published on 82 portals and two social media platforms (Facebook and YouTube). F2N2 published 75 debunking analyses related to COVID-19 disinformation. This number does not include other relevant analyses related to COVID-19 disinformation that do not contain debunks. The average number of articles per analysis is 3.08. This means that one analysis has included, on average, three articles containing disinformation.

The lower redistribution of disinformation than average in this sample (3.08 vs. 6.10) can be explained by several facts: (1) Four other countries presented in this analysis use the same language, contributing to easier circulating and multiplying of disinformation (2) Other hot topics (related to elections, EU and NATO accession) were highly present in this period in North Macedonia (3) F2N2 has a slightly different approach in selection of articles for analysis/debunking, focusing on anti-West sentiments, narratives which undermine Euroatlantic integrations of North Macedonia, and the impact they have on social media, predominantly Facebook.

In **Serbia**, the two fact-checking platforms had these results:

The overall number of pandemic-related articles that Belgrade-based Raskrikavanje analyzed and rated from March to the end of October was 297, while Novi Sad-based FakeNews Tragač (FNT) analyzed 249 articles. It is important to emphasize that both newsrooms focused mostly on the mainstream media in Serbia, while disinformation on social media was mainly analyzed only on their readers' request.

The total number of analyses published by Raskrikavanje in the same period is 67, with 4.43 articles per analysis. FNT published 40 analyses, an average of 6.22 articles per analysis. There were, of course, outliers – for instance, as many as 72 media outlets published incorrect information that China had declared the end of the epidemic.

MEDIA SOURCES OF DISINFORMATION: THE REGION

Overall, 1,153 different media outlets were rated for publishing false content regarding the COVID-19 pandemic over the course of nine months, averaging 4.07 articles per individual media outlet in the sample.

While posts on Facebook was the single largest source of disinformation as a “group”, the individual media outlet which received the highest number of ratings was Alo, a Serbian tabloid, followed by two other media outlets from Serbia: Srbija danas and Informer. Among the 20 media outlets with the highest number of published manipulations, as many as 15 are from Serbia, which confirms the dominant role of the media system of this country in creating and spreading manipulations, which then spread throughout the whole region. If we take the number of ratings as a criterion, among the top 20 outlets would be three more from Bosnia and Herzegovina – Oslobođenje, Slobodna Bosna and Svjetlo dunjaluka (instead of Pink, B92 and Hayat).

Outlet	Number of articles (number of ratings)	Outlet	Number of articles (number of ratings)
(1) Facebook (global)	282 (448)	(11) Blic (Serbia)	39 (46)
(2) Alo (Serbia)	93 (137)	(12) Srbin info (Serbia)	38 (51)
(3) Srbija danas (Serbia)	90 (125)	(13) Sputnik (Serbia) ⁸	38 (56)
(4) Informer (Serbia)	80 (113)	(14) Nezavisne (B&H)	37 (52)
(5) Espresso (Serbia)	69 (105)	(15) Pink (Serbia)	34 (42)
(6) Kurir (Serbia)	67 (86)	(16) IN4S (Montenegro)	33 (43)
(7) Novosti (Serbia)	58 (74)	(17) Pravda (Serbia)	30 (46)
(8) Republika (Serbia)	51 (73)	(18) B92 (Serbia)	30 (41)
(9) Telegraf (Serbia)	46 (55)	(19) Slobodna Bosna (B&H)	27 (46)
(10) Glas javnosti (Serbia)	39 (55)	(20) Hayat (B&H)	27 (41)

MEDIA SOURCES OF DISINFORMATION: INDIVIDUAL COUNTRIES

In **Bosnia-Herzegovina**, Raskrinkavanje rated disinformation content published by 773 media outlets and users of three social media platforms. Most of the rated content was published on Facebook – 184 posts in total – suggesting that this social media platform was a significant conduit for COVID-19 related disinformation in Bosnia and Herzegovina.

The next four media on the list are all Serbia-based: Srbija danas, Alo, Informer and Espresso, with 46, 43, 35 and 34 pieces of rated content respectively. The top-rated Bosnia-based media outlet on the list is the daily paper Nezavisne novine, which ranked 5th with 29 pieces of rated content. Nezavisne novine is a major mainstream media in Bosnia and Herzegovina, but they are not alone: other big news websites published COVID-19 related disinformation as well. Hayat had 24 pieces rated, followed by Alternativna televizija with 23, Slobodna Bosna and Oslobođenje with 21 each, and Dnevni avaz with 17 pieces rated. All of these media outlets are privately owned.

However, in addition to these portals and fringe websites, tax-funded public media published content that was rated as well. The public broadcaster of the Republika Srpska entity in Bosnia and Herzegovina, RTRS, had nine rated articles, while the next three publicly owned media on this list are, again, Serbia-based: national broadcaster RTS with nine articles, and a provincial broadcaster RT Vojvodina and

⁸ Serbian edition of a Russian state-owned news agency and news website platform.

national news agency Tajnug with eight articles each. In addition to these three, two Montenegro-based public broadcasters had their content rated by Raskrinkavanje as well: local RTV Budva (5) and national broadcaster RTCG (3). In Bosnia and Herzegovina, other notable public broadcasters that published COVID-19 related disinformation include the Federation entity's public broadcaster Federalna televizija (2), the Republika Srpska news agency Srna (2), and local broadcasters such as Radio Ljubuški (3), RTV USK and Radio Novi Grad (2 each).

In **Croatia**, out of the 373 items of disinformation analyzed by Faktograf, the vast majority were spread via social media, primarily Facebook profiles and groups (171 items, 45.84%). The prevalence of social media in the sample poses a difficulty in tracing the original source of disinformation, or fully determining its reach. Debunking articles on Faktograf refer to examples of particular narratives and pieces of disinformation on social media, but the total number of instances and locations where a particular item of disinformation was shared is far greater than that represented in this database. The dissemination of disinformation via social media profiles, where "ordinary" individuals share content only with their friends and contacts, is probably the most challenging form of spread to combat. Its prevalence in this sample implies that vast numbers of people were exposed to disinformation during the COVID-19 pandemic.

The remaining number of items of disinformation was distributed by a wide variety of websites, most of them being fringe pages outside of the mainstream media. The largest number of individual items was shared by Zajedno Hrvatska (9 items, 0.24%), followed by HOP (8, 0.22%) and Dokumentarac (6, 0.16%). No other individual source shared more than five items. The data therefore show that there was no central nexus of disinformation in Croatia, but rather an extensive array of different sources.

In **Montenegro**, most of the rated articles also came from social networks, specifically Facebook profiles and pages (61), which indicates the growing influence of social networks as a platform for spreading misinformation. As far as media sources are concerned, the portals Alo (25) and IN4S (24) have the highest ratings, followed by Novosti and Informer (23 each), Kurir (22) and Serbia Today (21). Among the top ten media with the highest number of rated articles, only one (IN4S) is located in Montenegro, while all others are from Serbia.

MEDIA	Number of articles
Facebook posts	61
Alo	25
IN4S	24
Novosti	23
Kurir	22
Srbija danas	21
Espresso	20
Sputnik	15
Republika	14
Srbin.info	12

** Top 10 media in the sample rated by raskrinkavanje.me*

Other than social media posts, virtually all the sources from this list are media outlets that were identified as part of a large "disinformation network" by BiH-based Raskrinkavanje in its 2019 research.⁹

When it comes to the media outlets with the highest number of ratings, the list is very similar, with the inclusion of yet another Serbia-based tabloid, the Informer. The most ratings were given to Facebook profiles and pages – 67 ratings, followed by Alo (31), Espresso (28), Informer (27), IN4S (27) and Novosti (25).

In **North Macedonia**, Facebook was the most utilized social media to distribute COVID-19 disinformation content, with 29 posts and 38 ratings of such content. When it comes to media outlets, Infomax.mk had most rated content, with 18 articles and 21 ratings of the content, followed by magazin.mk with

⁹ Disinformation in online sphere: The case of BiH, Zašto ne, 2019.

11 articles and 15 ratings, republika.mk with eight articles and nine ratings, vecer.mk and freeglobe.mk with seven articles and eight ratings, kurir.mk with six articles and seven ratings, ulica.mk, standard.mk, reporter.mk and mkdpress.site with five articles and six ratings.

In **Serbia**, Raskrikavanje rated 96 and FNT 105 media outlets. The dominant actors in both datasets are mainstream media outlets such as Informer, Alo, Srpski Telegraf, Kurir and Večernje Novosti, alongside the portals Srbija danas and Espresso.

These media outlets, which feature prominently in other fact-checker samples as well, reached the widest readership in Serbia and beyond, significantly shaping public opinion. The same tabloids often defend and adjust their reporting to reflect the policies and view-points of Serbia's ruling party, frequently receiving money from the budget through project co-financing programs. These facts combined point to a conclusion that tax-payers in Serbia indirectly finance the production of the disinformation that targets both them and a wider regional audience.

2. Content of disinformation about the COVID-19 pandemic

MOST REPRESENTED TOPICS: THE REGION

The most represented topics of disinformation about the pandemic in the sample were various claims about false medicaments (887 articles) and vaccines (669). Therefore, most of the false information was concentrated in a thematic group dedicated to solutions – ranging from quick and inaccurate tips for preventing infection with lemon or baking soda to manipulative reports on the development of vaccines against COVID-19, or other issues related to immunization.

Topic	Articles	Analyses	Average number of articles per analysis
False medicaments	887	99	8.95
Vaccine safety/efficacy	669	150	4.46
Virus origin (lab-made)	637	87	7.32
Global enslavement / depopulation	406	97	4.18
Bill Gates	381	83	4.59
False numbers of cases / death rates	324	73	4.43
Virus is just a cold / flu	272	50	5.44
Wuhan / China	193	32	6.03
Mask safety / efficacy	189	65	2.9
Virus "deployment": China did it	156	19	8.21
PCR tests safety/efficacy	131	49	2.67
5G	130	57	2.28
WHO	122	43	2.83
Virus does not exist	89	40	2.25
Virus "deployment": US / UK did it	87	24	3.62
False alarms on first local cases	83	12	6.91
Other	1794	232	7.73

Looking into the topics represented in the sample, these are the narrative groups that can be distinguished in the overall body of disinformation created about the COVID-19 pandemic:

- advisory narratives: giving advice on how to protect or cure oneself from the virus;
- conspiracy narratives: interpreting the pandemic as a whole, or some of its elements, as a result of a hidden sinister plan;

- narratives about the new world order: the most frequent subgroup of conspiracy narratives; and
- narratives of new discoveries: various pseudoscientific content, claiming false scientific breakthroughs related to the virus.

As the table shows, there was a large number of smaller, less “classifiable” topics in the sample, dealing with various aspects of the pandemic. Although some of those were highly popular or viral, they were mostly singly occurring topics, hence hard to put in any broader category. Within this heterogeneous group, we find two other narrative groups which do not feature prominently in the topics described above, as they covered very different subjects, including light-hearted stories about “dolphins coming back to Venice” during the lockdown,¹⁰ “twins named after the pandemic”,¹¹ or disinformation about China’s rapid response to the pandemic.¹²

These rare examples of “positive” disinformation could be roughly classified into:

- narratives that awaken hope; and
- bizarre and entertaining narratives.

Given the number of both the topics and the media sources that appear in the sample, it is difficult to present a comprehensive overview of which sources contributed the most to the spread of each narrative. Therefore, the five most represented topics were chosen on basis of the number of articles, and the following table shows which media outlets have most frequently published disinformation on that topic (excluding posts from profile and pages on Facebook, which dominate the general sample). The only mainstream media that was among the TOP ten for each of these topics is Alo, a Serbian tabloid and website.

False medicaments Media (number of articles)	Vaccines Media (number of articles)	Artificial virus Media (number of articles)	Depopulation / enslavement Media (number of articles)	Bill Gates Media (number of articles)
Facebook (44)	Facebook (71)	Facebook (53)	Facebook (37)	Facebook (16)
Alo (23)	Srbija danas (14)	Alo (13)	Zajedno Hrvatska (8)	IN4S (9)
Srbija danas (19)	Alo (11)	Srbija danas (12)	Glas javnosti (7)	Republika (6)
Informer (17)	Informer (11)	Informer (11)	Transformacija svijesti (7)	Transformacija svijesti (6)
Kurir (16)	5. Intermagazin (10)	Intermagazin (10)	Twitter (7)	Intermagazin (5)
Espresso (15)	IN4S (8)	Piramida sunca (9)	Alo (6)	Srbin info (5)
Novosti (15)	Zajedno Hrvatska (8)	Pravda (9)	Vesti net (6)	HOP (5)
Sputnik (11)	Vesti net (7)	Espresso (9)	Kurir (6)	Novosti (5)
Republika (11)	Glas javnosti (7)	Srbin info (8)	Logično (6)	Glas javnosti (5)
Pink (10)	Transformacija svijesti (7)	Oslobođenje (7)	B92, Avaz (6)	Alo, Informer, Sputnik and others (4) ¹³

¹⁰ Delfini se nisu “vratili u Veneciju” zbog koronavirusa, Raskrinkavanje, 25.03.2020. Other false information about positive or interesting events taking place due to changed patterns of human behaviour (less movement, less tourism, less pollution, etc.) were also recorded, such as the false story about the Eiffel tower becoming “visible from London” due to lower air pollution (see: Eiffelov toranj nije vidljiv iz Londona, Raskrinkavanje, 03. 04. 2020)

¹¹ Indijski blizanci ipak nisu dobili imena “Corona” i “Covid”, Raskrinkavanje, 11.04.2020.

¹² U Kini nije izgrađena nova bolnica za samo 2 dana, Raskrinkavanje, 03.02.2020.

Individual topics of disinformation

Among the inaccurate news items about the virus and the pandemic, ten were published in more than 50 outlets and two of them in more than a hundred: according to the first item, China had declared the end of the epidemic, while the second claimed that twins from India had been named Covid and Corona. If we look at the structure of the 20 inaccurate news items with the largest redistribution, we will notice that the list includes examples of all dominant narrative patterns.

False claim	Number of articles
China has declared an end to the COVID-19 epidemic	115
Twins from India were named Covid and Corona	107
Bill Gates predicted or announced the pandemic	97
Copper-oxide masks provide better protection against coronavirus	79
French Nobel laureate says that the virus was created artificially using HIV virus	70
Semir Osmanagić and "healing tunnels" under the Bosnian "pyramid"	67
Italians are taking down EU flags	66
People with blood type A are more at risk for coronavirus	62
Meflokvin cures the COVID-19	58
The EU has opened borders (during the lockdown)	57
Otorhinolaryngologist's advice on salt water and essential oils as a "cure for coronavirus"	51
Hydroxychloroquine and azithromycin cure COVID-19	49
British intelligence introduced the virus into Wuhan to overthrow Xi Jinping	49
Protests against Bill Gates held in Australia and Germany	48
Croatian molecular biologist Igor Štagljar proves that the virus threat is not severe	45
Coronavirus created in a lab to destroy the Chinese economy	42
Cat and dog owners at lower risk of infection	41
Advice from a "friend's uncle" and a "doctor from Shenzhen"	37
Italian parliamentarian about the unchanged death toll during the pandemic	37

13 Four false articles about this topic are located in a series of media outlets: Alo, Srbija Danas, Informer, Vesti net, Kurir, Sputnik, Leutar, Ekskluzivno.me, Urbancube, Zajedno Hrvatska, iVijesti.hr and Magazin.mk.

MOST REPRESENTED TOPICS AND THEIR CREATORS: INDIVIDUAL COUNTRIES

In **Bosnia-Herzegovina**, disinformation about false medicaments (554), claims about the novel coronavirus being artificial (507), and false claims about vaccines (497), top the list of most rated articles. Other notable mentions include the articles containing conspiracy theories about depopulation or enslavement plans (267), disinformation about Gates, and untrue claims about the false number of reported deaths from COVID-19 (223 each), claims that the virus is “just a cold/flu” (172), and misleading content about the safety and efficiency of face masks as part of protection from the virus (112).

The number of debunking analyses per COVID-19 related disinformation topic reflects the previous findings. Most of the analyses published by Raskrinkavanje dealt with disinformation related to vaccines (37), false cures (35), and the origin of the virus (32). However, analyses mostly dealing with conspiracy theory claims represent a major share of the overall pool. Analyses looking into false claims about depopulation or enslavement conspiracies (27), claims that COVID-19 is nothing but plain cold or flu (17), or that the death toll numbers are fake (17), and false claims involving Gates (16), or 5G technology (14), form a sizeable body in the sample.

When it comes to the publishers who were most engaged in the creation of individual disinformation narratives during the pandemic, profiles on social media (i.e. Facebook) were most frequent in 12 out of 17 detected topics. This indicates that the social media platform was a potent conduit for the spread of disinformation by its users during the pandemic, serving as a popular tool for building most of the pandemic-related narratives.

When it comes to stories about the artificial origin of the virus, Serbia-based media played an important role in building the false narrative, being represented by five out of the top ten publishers of disinformation promoting the narrative. Three of those – Informer, Alo and Srbija Danas – top the list, together with Facebook profiles and pages. When it comes to the narrative on depopulation or enslavement plans, Facebook and Twitter users top the list as publishers of such content.

Generally, the structure of most prominent disinformation sources is largely reflective of the broader regional sample, with Serbia-based media in the lead. Bosnia-based media outlets feature more prominently on the list of publishers of content building the narrative on false numbers of reported deaths or cases: four made it to the list of top ten publishers of such content (Svjetlo dunjaluka, Oslobođenje, Haber and USK Info). Two Bosnia-based media outlets are also on the top-ten list of publishers of content about vaccines (Nezavisne novine and Alternativna televizija) and false cures (Hayat and Piramida sunca, the website of the aforementioned Semir Osmanagić).

In **Croatia**, the most common theme of disinformation was about vaccination and its alleged harms (259 items, 69.4%), followed by the topic of depopulation/enslavement of humankind (219 items, 58.7%). These two narratives often overlap – many sources claim that the COVID-19 vaccine will be a key tool in malicious ploys of depopulation and enslavement (theories range from claims of microchips being implanted into the skin through vaccination to vaccines containing “DNA manipulators” intended to transform human beings into cyborgs/hybrids).

The most common mastermind behind these alleged plans is Bill Gates, who is referenced in 155 items of disinformation (41.5%), and is often claimed to control the WHO (referenced in 126 items, 33.7%) from the shadows, using it as an instrument of his agenda. Naturally, conspiracy theories become more palatable at the point at which they can clearly identify a villain; a chief conspirator who personifies evil and malice and towards whom popular anger can be directed. Given that Gates, and the Bill and Melinda Gates Foundation, are extremely active in supporting efforts to produce a vaccine for COVID-19, he was an obvious target for conspiracy theorists.

A significant number of items of disinformation in Croatia, as well as the wider region, was also related to 5G technology (128, 34.3%). This is a clear example of how existing narratives were tailored to fit the flow of current events – theories regarding the supposed health risks of 5G technology existed before the pandemic, but the pandemic was co-opted into these theories and used as proof. Claims that the symptoms of COVID-19 are not caused by a virus but rather by the human body’s reaction to 5G radiation (often claimed to be amplified by vaccination – another example of overlap) are therefore a common pattern. A smaller, yet still significant amount of items were related to claims that the virus was artificially created (23.8%), with the culprit varying from source to source – a total of 78 sources claimed that the virus was created by the USA, the UK or China (20.9%).

Furthermore, protective masks were referenced 73 times (19.5%), most often not in the form of conspiracy theories, but rather in pseudoscientific claims about purported health harms of wearing a mask. Theories of masks being a symbol of enslavement and similar esoteric interpretations did however occasionally occur.

Claims about the nature of the virus and its very existence were also widespread – 80 different sources (21.4%) claimed that the virus does not exist, while 122 (32.7%) compared it to less severe illnesses. Such beliefs pose a direct threat to the healthcare system, insofar as they discourage the general population from adhering to measures and restrictions imposed to combat the virus, such as social distancing and lockdown regulations, therefore aiding the spread of the virus.

Another threat to public health is various false claims about alleged cures for the virus, which appeared 97 times in the sample (26%). COVID-19 tests, particularly PCR tests, were also the target of disinformation (111 items, 29.7%), which spread and reinforced the belief that testing is unreliable and should not be trusted, therefore disincentivizing citizens from seeking out testing in the case of observed symptoms, or close contact with COVID-19 positive individuals.

It is clear from the data that disinformation about the severity of the disease, as well as how it should be treated, was widespread, and therefore had a significant impact on the course of the pandemic in Croatia, as well as in surrounding countries. It must also be mentioned that public opinion was influenced by the prevalence of false data and numbers (e.g. number of infections, number of deaths) which occurred in 105 cases (28.1%), creating confusion as different sources reported different data, and a probable decreasing trust in government institutions. Finally, 41 items (11%) were related to other themes, including but not limited to false reports of government actions and measures, claims that SARS-CoV-2 is a bacterium rather than a virus etc.

Interestingly, Faktograf's database of items of disinformation did not include a single false report of first or early cases of contagion, which were present in other organizations' databases. It is unclear why the media in Croatia were less keen to report such claims.

When it comes to the number of analyses per topic, out of 220 articles published by Faktograf, 71 (32.2%) dealt with debunking various disinformation related to vaccines, which corresponds with the fact that vaccine-related theories were the most common type of disinformation found in the sample. A further 56 articles (25.4%) were published pertaining to narratives about depopulation and enslavement, while 41 debunking articles referred to conspiracy theories involving Bill Gates (18.6%), which again follows the pattern described in the section above. Disinformation related to masks was debunked in 32 different articles (14.5%), theories regarding the supposed artificial creation of the virus were covered in 31 articles (14.1%), while 28 articles were devoted to false medicaments (12.7%). Items of disinformation sharing incorrect statistics/data, comparisons of COVID-19 to the flu or common cold, and disinformation related to 5G were all covered in 26 different articles (11.8%). A ratio of above 10% of debunking articles in the sample is also found for content related to the WHO (25 articles, 11.3%) and COVID-19 tests (24 articles, 10.9%). A smaller number (less than 10%) of debunking articles were devoted to various claims about the virus being a creation of the US/UK/China, disinformation about the situation in China (and Wuhan in particular) and conspiracy theories related to President Donald Trump. A total of 41 articles (18.6%) dealt with other miscellaneous themes and topics not operationalized in this research. The amount of debunking analysis dealing with particular types of disinformation is closely correlated to the prevalence of those types of disinformation in the sample. This indicates that the process of tracking false information, and promptly reacting to it by devoting an appropriate amount of time and media space, can for the most part be considered to have been efficient and precise in the case of Faktograf.

For most topics, there is no particular media outlet or set of media that played a leading role in spreading disinformation. There are, however, certain media outlets that stand out for particular, more prevalent topics. Zajedno Hrvatska was clearly the most active when it came to overlapping theories regarding vaccines and depopulation/enslavement. They were also marginally the most active outlet in terms of conspiracy theories pertaining to the WHO. Dokumentarac, HOP, Istinom protiv laži and Transformacija Svijesti (both the Facebook page and the website), were also among the more active spreaders of disinformation in most of the topics covered in this research.

In **Montenegro**, out of a total of 842 articles analyzed, the topic of fake medicines (251) and those targeting Bill Gates (99) stand out in the sample. It was not uncommon to read that the COVID-19 virus was created artificially (64), to encounter unfounded attacks on vaccines and claims of their alleged harmfulness (46). To a lesser degree, there were attempts to downplay the danger of the new virus and reduce it to the common flu or cold (33), refute the effectiveness of masks as a means of reducing the spread of the new coronavirus (32), and connect the virus to 5G technology (31).

The most analyses were written on the topic of vaccines (28), followed by masks and Gates (20 each). Similarly to Croatia, there were not many false claims on the first recorded cases of contagion – only three in the entire sample.

In the sample of media/articles rated by Montenegrin fact-checkers, viral posts from Facebook were also the main source of disinformation in all of the recorded topics. Other than that, there were no disproportional “contributions” by any particular media regarding specific topics, that would differ from the overall distribution of media in the sample. When it comes to media from Montenegro, IN4S, as the most represented source, was the most “engaged” on the topics of Gates, artificial origin of the virus and false medicines.

In **North Macedonia**, due to a predetermination of the topics within this study, that in a part differ from the focus of monitoring of F2N2, there was a high number of uncategorized articles – 80 (35,4%) out of 226. Most of this content aimed towards undermining the North Macedonian Government’s efforts in dealing with the pandemic, and/or contains narratives with anti-Western sentiment, glorifying Russia. The “5G” topic was represented with 37 rated articles (16,37%), out of which 26 are part of a large scale disinformation campaign, “Artificial virus” and “False medicaments” were represented with 19 articles each (8,41%), the topic related to Bill Gates had 16 rated articles (7,08%), there were 13 articles (3,54%) blaming US/UK for “creating the virus”, and claims that the virus is “just a cold / flu” had ten articles (4,42%). The topics that had less than ten articles and were less present in the media space in the period of analysis are not elaborated within this section.

When it comes to the number of fact-checking analyses, other than the miscellaneous “other” category, most analyses dealt with disinformation about Gates (9 analyses), vaccines, (7 analyses), supposed deployment of the virus by US or UK (6 analyses). Topics like “Artificial virus”, “False medicaments” and “5G” had five analyses each, while supposed deployment of the virus by China, the topic of depopulation/enslavement, WHO and false numbers about cases/deaths had two analyses each.

In **Serbia** Most of the articles rated by Raskrikavanje (74) were related to false medicaments, while FakeNews Tragač found 20 such articles. The next significant topic is the alleged artificial origin of the virus, including all the prominent topics in the general sample: that it originated in the USA, Great Britain, or in China (44 articles claimed that the Chinese authorities artificially created the virus). A significant amount of false information in Serbia also referred to the connection between 5G technology and coronavirus. At the beginning of the crisis, Serbian media did spread false news regarding the first registered cases, mostly relying on “sources” on social networks, thus turning rumors into false news.

As for the debunking analyses, out of the 108 analyses from Serbia (Raskrikavanje and FakeNews Tragač combined), the largest number referred to the topics of fake medication, vaccines, the origin of the virus – in line with the number of rated articles. Due to the focus on a particular type of media (dailies), Raskrikavanje noticed that the daily newspapers Večernje Novosti and Alo, in most cases, published misinformation about the origin of the virus and fake medical treatments or prevention methods. Interestingly, this topic was found in 74 out of 96 media analyzed in the observed period. The data has been confirmed by the results collected by FakeNews Tragač, observing that 105 media outlets that entered the corpus had at least one manipulative article related to various coronavirus medications and treatments. The second most common topic in the FNT database was the origin of the virus, including the claim it was artificially created in China. More than 30 media outlets had such articles. When it comes to other topics, none of the media outlets drastically differed regarding narratives.

It should be noted, however, that this relative uniformity of the sample is partly a manifestation of a limitation of the methodology used by both newsrooms. Namely, both fact-checkers are inclined to not repeat fact-checks within one topic (for example, disinformation targeting a single person, in this case Bill Gates). Given the capacities of both newsrooms, once a topic had been addressed, they would rarely examine it again, thus probably leaving a number of media outlets/outputs that spread false information about it out of the sample.

3. Intensity of disinformation narratives

An exploratory factor analysis was conducted as part of this research to determine how often certain topics occur together in the entire sample (e.g., Bill Gates and Vaccines; Tests and Masks, etc.). Based on this statistical analysis, it was identified that the 17 observed topics can be grouped into four thematic clusters (Factor I, II, III and IV). Then, it was observed how the articles within each thematic cluster were rated. Based on factor analysis, we were able to determine how narratives are grouped by categories, while the specifics of discourse patterns will be analyzed separately in case studies on anti-vaccine content, COVID-19 influencers, response of the state institutions, populist science and geopolitical dimension of the pandemic. Also, individual analyses for Croatia, Bosnia and Herzegovina, Serbia and North Macedonia will provide a more precise overview of disinformation spread in these countries, through insights into their average “virality” (the number of appearances of same items of disinformation within one topic).

Exploratory factor analysis was used to assess the structure of domains that underlie 17 topics that stand out in the sample of false information related to the COVID-19 pandemic. The structural validity was assessed by performing parallel analysis on the binary indicators (yes/no), using a polychoric correlation matrix based on 1,000 random permutations of the original data, and the Hull method for selecting major common factors, which aims to find a model with an optimal balance between model fit and number of parameters. For all 17 topics, item–total correlations corrected for item–total overall were also computed.

From Parallel analysis and the Hull method we extract four factors (Table 1). The first factor comprised five topics: Bill Gates (.718), Vaccine (.708), Depopulation/Enslavement (.700), WHO (.539) and 5G (.324). The topics Artificial virus (.689), China did it (.625), Wuhan / China (.585), and US / UK did it (.480) represent the second factor. The next factor is made up of five topics: A plain cold / flu (.683), False numbers (death rates, number of cases) (.677), Tests (.492), Masks (.409), and Does not exist (.322). Finally, the last factor consists of three topics: False medicaments (.612), Trump (.586), and False first cases (.419). On average, all 17 topics showed large standardized loadings on their corresponding factors. In addition to the fact that the loadings on all four factors are very high, no significant cross-loads were registered, which suggests that the four-factor solution is a reliable factor solution for this database.

The correlation between all four factors is insignificant (from -.088 to .132), which also supports the idea that these four domains rarely or never occur together.

Pattern matrix

	I factor	II factor	III factor	IV factor
Bill Gates	.718			
Vaccine safety/efficiency	.708			
Depopulation / Enslavement	.700			
World Health Organization	.539			
5G network	.324			
Artificial virus		.689		
China deployed it		.625		
China / Wuhan situation		.585		
US / UK deployed it		.480		
A plain cold / flu			.683	
False numbers (death rates, number of cases)			.677	
PCR Tests safety/efficiency			.492	
Mask safety/efficiency			.409	
Virus does not exist			.322	
False medicaments				.612

Conspiracies around Donald Trump				.586
False first cases				.419

Differences in article categories on a four-factor solution

To test whether there are differences in the type of news deception depending on the previously identified factors, a multivariate analysis of variance (MANOVA) was applied. The model is statistically significant ($F = 4.21, p < .01$), and statistically significant effects are registered at the univariate level as well. Sheffe's post hoc test was applied to determine the significance of differences between groups (article categories).

The first factor registers statistically significant differences depending on the category of the article ($F = 3.53, p < .01$) (Figure 1). Sheffe's post hoc shows that the news topics covered by the first factor (Bill Gates, Vaccine, Depopulation / Enslavement, World Health Organization, and 5G network) are mostly rated as conspiracy theories, pseudoscience, or transmission of fake news. Other categories are statistically significantly less common and do not differ from each other in frequency.

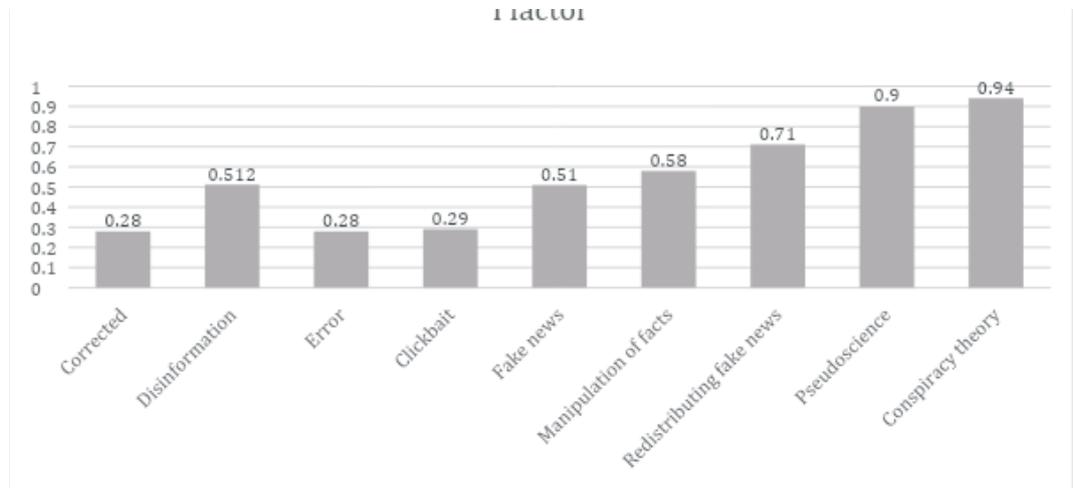


Figure 1. Differences in the expression of the first factor depending on the article categories

A statistically significant difference in expression, depending on the article categories, also occurs in second factor (Artificial virus, China did it, China / Wuhan, US / UK did it). ($F = 5.47, p < .01$). Most news from this factor are rated as conspiracy theories or redistributing fake news. Within this factor, there are almost no errors or corrected news.

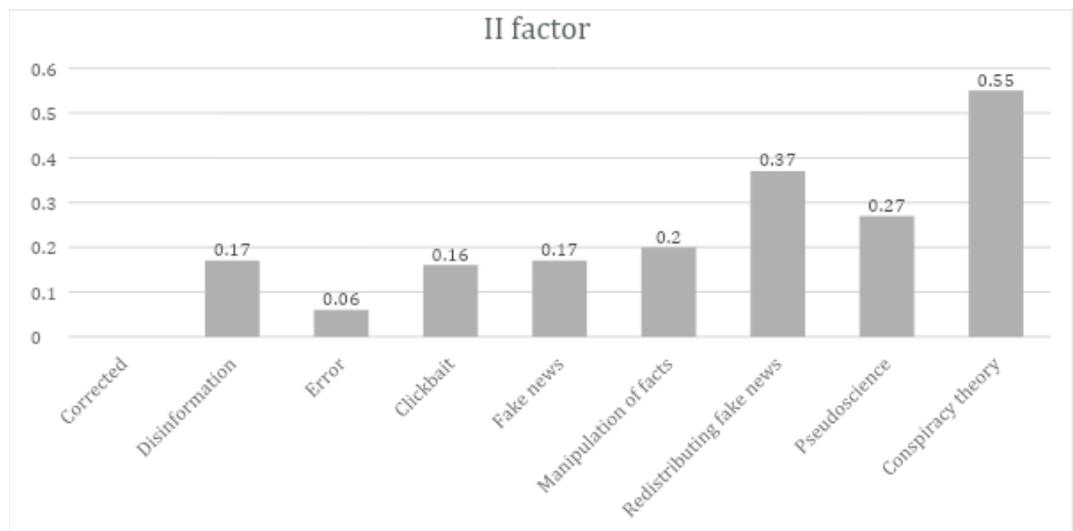


Figure 2. Differences in the expression of the second factor depending on the article categories

In the case of the third factor, which is most related to coronavirus denial (a plain cold/flu, false numbers – death rates, number of cases, tests, masks, virus does not exist), statistically significant differences were registered concerning the article categories ($F = 3,92$, $p < .01$). These news items are mostly rated as disinformation and pseudoscience. There is a minimal representation of clickbaits, corrected news and conspiracy theories when it comes to this factor (Figure 3).

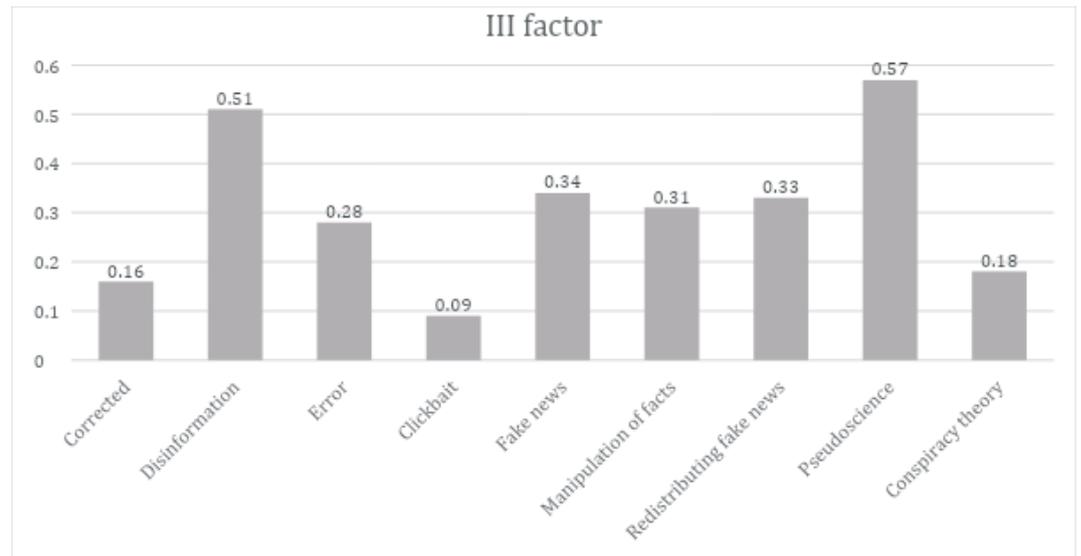


Figure 3. Differences in the expression of the third factor depending on the article categories

In the case of the fourth factor (False medicaments, Donald Trump and False first cases) statistically significant differences were registered concerning article categories ($F = 3,82$, $p < .01$). Topics that belong to this factor are most often rated as pseudoscience or are corrected. News belonging to this factor are extremely rarely rated as manipulation of facts, clickbaits, or conspiracy theories. Below is a graphical representation, which refers to the differences in article categories on the fourth factor (Figure 4).

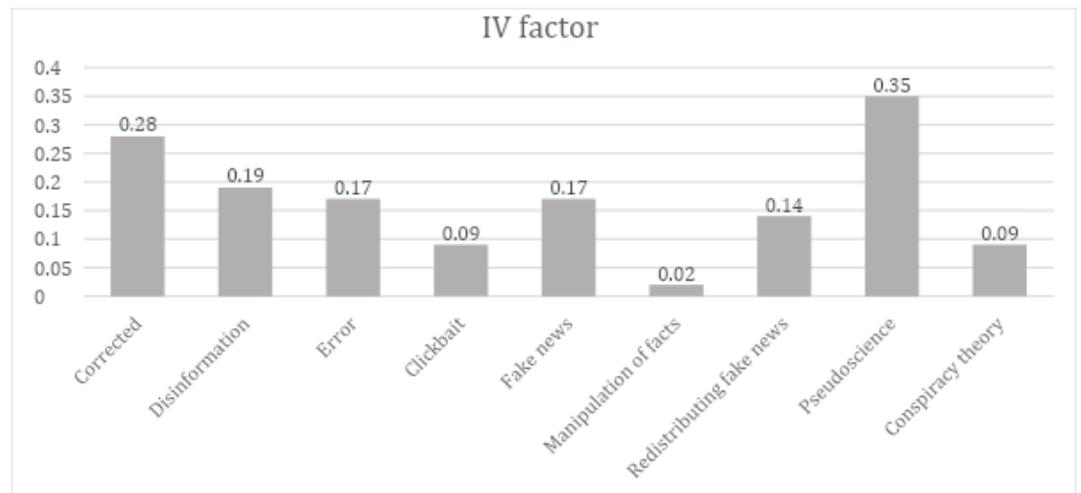


Figure 4. Differences in the expression of the fourth factor depending on the article categories

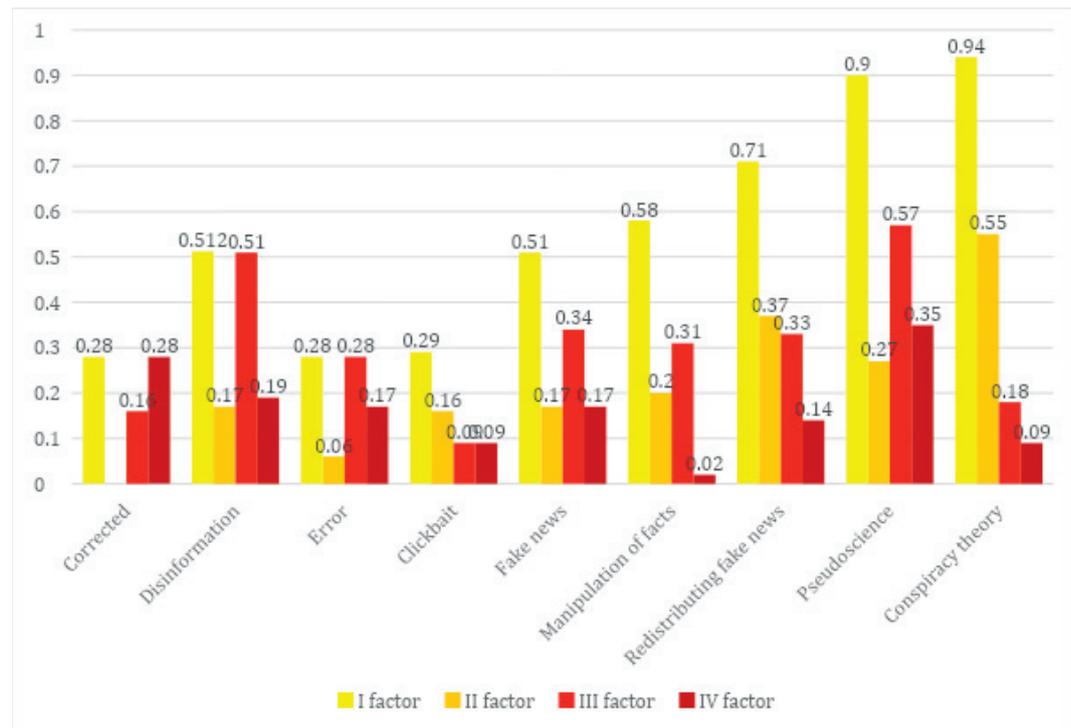


Figure 5. Differences in article categories on a four-factor solution

INTENSITY OF DISINFORMATION NARRATIVES: INDIVIDUAL COUNTRIES

In **Bosnia-Herzegovina**, the Raskrinkavanje sample reveals that the analyses of disinformation blaming China for the pandemic had the highest average number of articles per piece, 26.25. The analyses of disinformation about the early stages of the pandemic, i.e. the situation in China or Wuhan at the very beginning, comes second, with 17.37 articles per analysis on average. Other notable mentions include analyses of claims about the artificial virus (15.84 articles per analysis on average), false cures for COVID-19 (15.82), Bill Gates (13.93), masks (13.43), and claims about the US or UK being responsible for the pandemic (13.5). However, disinformation about vaccines and the WHO, as well as claims that the virus does not exist, recorded a low average number of articles per debunking analysis.

This indicates that disinformation containing conspiracy theories about the pandemic has had a higher degree of probability to be republished by media or shared on social media. However, high average numbers for analyses covering narratives such as false cures and masks indicate that disinformative content exploiting people's need to learn about protection from the disease was also likely to be republished.

In **Croatia**, there is no clear significant deviation between article/analysis ratios in the sample. The largest ratios (>2) are present (in descending order) for disinformation regarding the WHO, false numbers/statistics, tests and comparisons to the cold or flu. Although the ratio for items related to China and Wuhan is 2.33, it is a statistically insignificant find insofar as it is a result of a very small number of both debunking analysis (3 articles) and items of disinformation (7).

This, however, does not imply that the differences between ratios are irrelevant. Higher ratios imply higher virality, i.e. a higher article/analysis ratio implies that a large number of items of disinformation pertaining to a certain topic were shared in a limited time window, and were therefore simultaneously covered by a smaller number of analytical articles. All the topics with a ratio higher than two have a high potential for virality – WHO-related content feeds into conspiracy theories which serve as heuristics to rationalize an anxious and insecure situation, (disinformation which purports to offer explanations and causal links for current events generally tends to be intensively shared – content pertaining to Bill Gates, vaccines and 5G also has a relatively high ratio, though slightly below 2, – 1.9, 1.87 and 1.84 respectively).

The broadest analytical piece (8 items of disinformation covered by one article) in the sample is one related to the so-called documentary film "Plandemic", and its contents which were widely

shared on social media and websites. At or near the top of the list are also claims that non-contact thermometers damage the brain (7 items), that coronavirus tests in fact create the virus (7 items), that Henry Kissinger claimed that vaccination will be used to “thin out the flock” (6 items) or that Sweden is committing a “5G genocide” (5 items). All of these are radical and far-reaching, and therefore easily framed as a shocking or sensational truth which must be shared as widely and as quickly as possible in order to awaken the consciousness of the general population.

In **Montenegro**, topics that demonstrated greater potential for spreading than others include fake medicines, narratives about the artificially created virus, Bill Gates, and the narrative that COVID-19 is “a common flu”.

When it comes to the first topic – fake medicines – the average number of articles per analysis is the highest (12.68), which can be explained by the fact that at the beginning of the pandemic there were a lot of unknowns about the coronavirus, so people were desperate in their attempts to find an effective means to fight the virus. A theory Bill Gates wants to chip people through vaccines had 4.95 articles per analysis, which still shows considerable potential for spread of disinformation. Conspiracy theories about the corona virus being artificially created had an average of 4.57 articles per analysis.

In **North Macedonia** the highest potential for viral spread was recorded in claims that the virus is “just a flu”, with ten articles per analysis; however, the number comes from only one analysis, which cannot give a reliable trend. Next in order are topics of 5G (7.4 average article per analysis), the virus “doesn’t exist” (6) – a popular topic for undermining the government’s efforts in fighting the pandemic – and alleged artificial origin of the virus and false medicaments, with 3.8 articles per analysis each.

The conclusion from the first five topics that have the highest rate of number of articles per analysis is that they are in the sphere of conspiracy theories, which are most likely to be used to spread disinformation narratives about COVID-19.

In **Serbia**, the articles that had the most transmission were related to early disinformation regarding the situation in Wuhan/China, and in downplaying the severity of the virus. Also notable were the topics about the origin of the virus, mostly claims that it was artificially made in the laboratories of powerful countries, which was also a common topic of the circular messages in chat apps. As expected, articles related to misinformation regarding the treatment and prevention of coronavirus also had a large number of transmissions. This can be explained primarily by the fear felt by citizens, and their desire to find out as soon as possible how they might protect themselves. The table below shows what the virality of topics rated by both Raskrikavanje and FakeNews Tragač looks like when their samples are combined.

Topic	Average number of articles per analysis
Wuhan / China	8.45
Virus is just a cold / flu	7.5
Virus “deployment”: China did it	6.33
Other	5.58
False medicaments	4.845
Virus “deployment”: US / UK did it	4.375
5G	4
PCR tests safety/efficacy	4
Virus origin (lab-made)	3.75

False alarms on first local cases	3.5
Virus does not exist	3
Vaccines	2.925
Global enslavement / depopulation	2.625
WHO	2.5
Bill Gates	2
False numbers of cases / death rates	1.3

4. Character of COVID-19 related disinformation

NUMBER AND STRUCTURE OF THE RATINGS: THE REGION

As previously explained in the research methodology, ratings used in this sample have been adjusted to reflect a coordinated approach and make the material mutually comparable. This is important, not just for the quantitative analysis, but also for interpretation of data extracted from the fact-checkers' databases, as the structure of ratings provides significant clues to the "character" of disinformation about the pandemic.

Once again, it is important to stress that separate ratings were given to separate false or misleading claims, even if several such claims appeared in one media report. If, for example, an article had a misleading headline it was rated as "clickbait". If the same article contained an explicitly false statement unrelated to the headline, it was also rated as "false news" and both ratings (clickbait and false news) were assigned to the same article in the database. This is why the database contains more ratings than articles. Furthermore, if several media outlets published the same manipulative content – for example, the same conspiracy theory – all such articles were tracked and fact-checked by the regional platforms and each article received the same rating (e.g., conspiracy theory).

Using this methodology, the six fact-checking websites arrived at a total number of 6,852 ratings in the joint database, making this the number of individual pieces of false or misleading claims about the COVID-19 pandemic in the region.

Within that number, the distribution of individual ratings is as follows:

Rating	Number of the rating in the sample	Share of the rating in the sample
Disinformation	1583	24,01%
False news + Redistribution of false news ¹⁴	492 + 957 1449	7,46% + 14,52% 21,98%
Conspiracy theory	848	12,86%
Manipulation of facts Manipulacija činjenicama	843	12,79%

¹⁴ In the methodology of Raskrinkavanje, "false news" and "redistribution of false news" are counted as two separate ratings, for the sole purpose on distinguishing between the original source and the "transmitters" of fabricated information. However, from the perspective of the rated content's inaccuracy, there is no difference between the two, given that both signify that the rated claim is entirely made up and has no basis in facts. Here these two ratings are counted together in order to provide better insight into frequency of such content in the sample.

Clickbait	793	12,03%
Pseudoscience	515	7,81%
Error	306	4,64%
Corrected	256	3,88%

When it comes to false content observed within this research, the type of media manipulation dominant in the sample is disinformation. False news (“original” and redistributed) appears as the second most frequent type of media manipulation, with a share of 21.98% in total ratings. “Conspiracy theory”, “Manipulation of facts” and “Clickbait” are also among the frequently used types of media manipulations, with an individual share of more than ten percent. Conspiracy theories, which “allow people to feel that they are in possession of rare, important information that other people do not have, making them feel special and thus boosting their self-esteem”,¹⁵ were mostly focused on the myth of the (artificial) origin of the virus, or the secret plans of powerful people like Bill Gates, George Soros or the scientific community.

A significant part of the false and manipulative narratives aimed, in uncertain times with very little reliable information, to form public opinion that was contrary to the official opinions and instructions of institutions and international scientific authorities. These appeals to an alternative knowledge “may present ‘alternative’ information that often masquerades as rigorous scientific inquiry, positioning itself as a viable alternative to the mainstream, accepted viewpoint”.¹⁶

NUMBER AND STRUCTURE OF THE RATINGS: INDIVIDUAL COUNTRIES

In **Bosnia-Herzegovina** the number of ratings in the sample was 4,675. Of that number, the most prevalent ratings were “false news” and “redistribution of false news” (233 and 851 respectively, totaling 1,084 ratings given for entirely false information), “clickbait” (639), “disinformation” (984), “manipulation of facts” (548), “conspiracy theory” (485), “pseudoscience” (346) and “error” (270). Lastly the rating “corrected” was given to 239 pieces of content in which the publisher made a correction or deleted the content.

These figures indicate that, combined, a mix of facts and untruths (disinformation and fact manipulation) were the most common form of false COVID-19 related claims in Bosnia and Herzegovina. It is followed by completely made-up claims (false news and redistributed false news). Thus, more sophisticated methods of manipulation were prevalent in the pool of COVID-19 related disinformation, indicating that the authors of such claims tended to seek out more elaborate ways of arguing against the expert opinions and scientific consensus on the pandemic.

On the other hand, a relatively high number of pieces of content rated as “clickbait” indicates that the strictly economic side of the distribution of COVID-related disinformation – i.e. seeking for profit generated from page visits – was an important part of the infodemic, but not the dominant one.

If ratings for each of the topics identified in the sample are counted individually, then the number of ratings for BiH sample “jumps” to 7,955 ratings, given that one article can contain several topics and several ratings. Within this number, claims about vaccines were the most rated (1,011), closely followed by claims about false cures for COVID-19 (954), and claims of artificial virus (931). Other notable topics that were most often rated by Raskrinkavanje are conspiracy theory related. Those include the claims that the pandemic is part of plans to reduce the planet’s population or enslave it (596 ratings), the false claims concerning Bill Gates (499 ratings), and the claims that the COVID-19 death numbers were fabricated or manipulated (400 ratings). The claims that downplay the severity of the disease, arguing that it is no worse than a cold or the flu, were also notably rated 332 times.

In **Croatia**, a total of 608 ratings were given by Faktograf to various items of disinformation, amounting to an average of 1.63 ratings per article. Most often the content analyzed was labeled as “disinformation” (165 ratings, 27.1%) and “conspiracy theory” (151 ratings, 24.8%). Factually false information was also quite prevalent – there were a total of 120 items of disinformation branded as being “false news” or “redistributing false news” (19.7%).

15 Douglas et al. (2019). Understanding Conspiracy Theories. *Advances in Political Psychology*, Vol. 40: 3-35.

16 Mitchell, S. (2019). Population Control, Deadly Vaccines, and Mutant Mosquitoes: The Construction and Circulation of Zika Virus Conspiracy Theories Online. *Canadian Journal of Communication*, vol. 44: 211-237.

Pseudoscientific claims were somewhat less present, albeit still to a relevant extent, with 83 items being labeled “pseudoscience” (13.6%). There were a further 52 (8.5%) ratings of “manipulation of facts”, while the remaining 22 ratings only amount to 3.6% of all ratings issued (the most common among those being “clickbait” – 11) and do not represent an overly significant pattern in this research.

Conspiracy theories were the most represented narratives across the majority of topics. Not unexpectedly, they are most dominant in topics pertaining to identifying alleged culprits, ulterior motives and malicious plots related to the pandemic. Conspiracy theories are therefore over-represented in content related to the purported artificial creation of the virus, the WHO, Bill Gates, vaccines and theories linking the USA and UK to the virus’ creation. The only exception to this statistical pattern is content related to the theory that COVID-19 is a deliberate Chinese ploy where a balance is found between items rated as “conspiracy theory” and as “disinformation”.

Conspiracy theory ratings are most often accompanied by ratings of “disinformation”, as there is commonly an amount of true or partially true information woven into conspiracies so as to make them more palatable. False news (ratings of “false news”, and “redistributing false news”, differ in terms of whether the content is original or redistributed, but still refer to the same type of content) are also strongly represented in the topic categories mentioned above. It is evident from the data that conspiracy theories use a spectrum of methods, ranging from obscuring or selectively reporting on the real state of affairs to outright falsehoods, in order to ensure maximum reach.

Content rated as “disinformation” was most common in thematic areas concerning masks, false medicaments, tests, false or skewed statistics/data, false medication for the disease, and the underplaying of the disease as nothing more than the common cold or flu. Most of the topics such as masks or PCR tests offer less creative space for frightening theories, since they do not naturally invoke the same emotion of fear as the notion of being injected with foreign, supposedly pernicious substances (hence the popularity of theories about vaccination), or of evil elites plotting to enslave humanity. As such, most articles pertaining to topics rated as “disinformation” contain falsely interpreted data, unsubstantiated claims and false conclusions derived from partial or wrongly analyzed factual information, rather than explicit conspiracy theories.

Pseudoscience was mostly represented in content about 5G networks, largely due to the fact that most of this content claims to derive its conclusions from scientifically tested and proven interactions of the human body with 5G radiation, making such content inherently pseudoscientific. Pseudoscientific claims were also significantly represented in content pertaining to masks, vaccines, tests and comparisons to other diseases, which is expected insofar as most of this content is based on a lack of medical knowledge and understanding of various procedures, biological reactions and chemical processes.

Many content creators maintain that their own individual (often online) research is sufficient for them to be adequately equipped to interpret scientific findings and data, which results in false and misleading conclusions. Manipulation of facts was noticeably present in disinformation about Bill Gates and vaccination, where references to actual events, names and data were used to lend a veneer of objectivity to disinformative content, as well as in the publishing of false or inaccurate data (which by definition amounts to manipulation of facts).

In **Montenegro**, articles containing disinformation about the pandemic received a total of 944 ratings, on average 1.12 ratings per article. Disinformation appears 253 times, followed by false news (156 total) and manipulation of facts (108) as the three most common ratings in the observed sample. Conspiracy theories (97) are also among the more common ratings. The presence of clickbait (67), is lower in this sample than in the overall Raskrinkavanje’s sample, which is more or less consistent with other fact-checkers ratings structures.

There are no specific regularities when it comes to rating structure per topic. The topic most present was false medicines, that was spread mostly using disinformation (45%), while another frequent topic, vaccine disinformation, was spread mostly through conspiracy theories (47%), as was the case with the topic of 5G technology (80%). The effectiveness of protective masks was mainly denied using total fabrications, i.e. false news (56%). When reporting on the topic of Bill Gates, media used mostly manipulation of facts (51%) and conspiracies (40%). The WHO was also one of the targets of conspiracies, with 69% of the articles being conspiracy theory.

In **North Macedonia** the total number of ratings of the articles related to debunking analyses was 270, with manipulation of facts standing out with 89 ratings, unlike the rest of the sample.

Rating	Number of ratings in the sample
Manipulation of facts	89
Conspiracy theory	76
Disinformation	44
False news	28
Clickbait	19
Pseudoscience	13
Error	1
Total:	270

*Ratings structure for North Macedonia sample

From the ratings presented on COVID-19 disinformation articles, it is clear that disinformation narratives in North Macedonia were mainly spread through manipulation, conspiracy theories, disinformation and false news. A low share of an otherwise widespread phenomenon of clickbait can be explained by the fact that the topic itself was seen as attention-catching enough, that sensational headlines were not required to make it “clickable”.

The topic with the highest number of ratings, 103, appears in the “Other” category which are, as previously explained, topics specific to the country. The topic “5G” has 37 ratings in total, most falling into the category of manipulation of facts, where false medicaments and claims about artificial origin of the virus, have 20 ratings each.

In **Serbia**, a total of 673 ratings were recorded by the two fact-checkers.

In the 40 analyses published by FakeNews Tragač, there were 340 different ratings, while the 67 analyses published by Raskrikavanje contained 333 different ratings. Raskrikavanje and FNT had 4.43 and 6.22 manipulative articles per analysis, respectively. The rating “disinformation” (135) dominated in Raskrikavanje sample, followed by “conspiracy theory” and “false news” (63). The least frequent rating was “manipulation of facts”, with a score of 40. FakeNews Tragač rated “misinformation” 98 times, “clickbait” 77 times, and “pseudoscience” 40 times.

The most frequent rating, disinformation, was most often found in the category of “fake medical treatments”. This is one of the most common topics of media manipulation, and these articles are usually written with some accurate information, so the entire article could not be labeled as “fake news” according to the editorial methodology. The “conspiracy theories” rating was the second most common (139), and most of the articles were found in the category of “artificial origin of the virus”, used to portray the pandemic as a consequence of “biological war” between great powers. The rating “false news” was given 117 times, most often in the category of “false numbers” and “fake medicines” – articles on the number of infected people, prevention and treatment of coronavirus are in these categories.

3 "SHELF LIFE" OF COVID-19 DISINFORMATION

Depending on the size and "composition" of each individual sample, this research tried to establish the temporal patterns of the *infodemic's* building blocks – individual pieces of false or misleading information about the new coronavirus. The questions of interest here were: how long did a particular claim "last"; once it appeared, how long did it continue to be redistributed; did it resurface after a period of "silence"? The answer was sought in the analysis of dates of publishing of debunked content in the sample.

There is an important caveat here, given that not all fact-checkers took the approach of tracking all the reposts of each piece of disinformation they rated. Since the material was gathered, for the most part, months after it was created, many of the pieces of disinformation that were rated had disappeared in the meantime, for various reasons – some were removed by their creators/publishers after the fact-check; others disappeared with the anonymous portals that published them (a common occurrence for "fake news websites", which shut down their operations as soon as they were no longer able to monetize them), while others still were removed by various social media platforms, often if they contained what was considered dangerous content, including hate speech, calls to violence, etc.

Taking all this into consideration, if a fact-checker only rated one instance of a single disinformation (one article), but not all the others which occurred more or less simultaneously, there is no guarantee that each redistribution of said disinformation was recorded when it was gathered retrospectively for the purpose of this research. However, where this information was possible to obtain, the comparison between the findings of different fact-checkers points to a conclusion that there is a pattern and a "life cycle" to disinformation in this sample.

What the research shows in individual countries is, as follows:

- In **Bosnia-Herzegovina** some disinformative narratives almost lasted for the whole year, while others had a shorter life in the media. The narrative built on false claims that the virus is artificial, for example, lasted from mid-January to early October. Claims on depopulation or enslavement plans also surfaced in early January and persisted to mid-October. The same applies to the narrative promoting false cures for the new disease, and to the narrative built on claims about vaccines.

Most of the other narratives lasted for most of the year, with a few exceptions.

On the other hand, some were not "built to last" by their very nature. For example, false claims about first reported cases of the new disease, which lasted from late January until March: once actual first cases appeared, there was no point in making them up anymore, as that would no longer provide clicks and social media interactions. It is ironic that, after a wave of making up nonexistent COVID-19 cases, the same types of sources jumped on diametrically opposed but equally false claims which denied actual cases even existed.

The narratives promoting conspiracy theories about the pandemic tended to be more persistent, spanning from the onset of the pandemic to the end date of the sample of content rated by Raskrinkavanje. Notable exceptions to this are the narratives on China's role in the start of the pandemic, and on Wuhan as the place where the execution of the alleged conspiracy started. These lasted through the first half of the year.

“SHELF LIFE” OF COVID-19 DISINFORMATION

Topic	First appearance in BiH sample	Last appearance in BiH sample
Artificial virus	19.01.2020.	01.10.2020.
US / UK did it	12.02.2020.	08.07.2020.
China did it	17.04.2020.	21.06.2020.
Depopulation / enslavement	29.01.2020.	19.10.2020.
Does not exist	16.09.2020.	25.09.2020.
False medicaments	12.01.2020.	09.10.2020.
Vaccine	23.01.2020.	09.12.2020.
Masks	20.05.2020.	19.10.2020.
5G	17.03.2020.	11.08.2020.
Bill Gates	29.01.2020.	09.12.2020.
WHO	17.04.2020.	25.09.2020.
“A plain cold/flu”	09.02.2020.	19.10.2020.
Tests	15.07.2020.	25.09.2020.
False numbers (death rates, number of cases)	09.02.2020.	08.10.2020.
Wuhan / China	27.01.2020.	01.06.2020.
False first cases	29.01.2020.	01.04.2020.

- In **Croatia**, most disinformation narratives also persisted for the whole duration of the pandemic. The most numerous and widespread narratives also tended to be the most consistent, with vaccine-related disinformation, as well as theories about depopulation and enslavement, likely to have the steadiest pattern of appearance. It is also interesting to note that vaccine-related theories were present in three articles published in 2018 and 2019, which demonstrates the presence of such theories before the pandemic. Content spreading false data and statistics also appeared consistently throughout the given time frame.

Mid-April was an important juncture for many of the above categories. On the one hand, narratives assigning culpability for the pandemic to geopolitical “big players” began to wane from that point onwards, most probably due to the fact that patterns of disinformation slowly shifted towards underplaying the disease, positing that it is not as serious or dangerous, or that it does not exist at all. Analogously, disinformation related to the purported artificial creation of the virus and to various false medicaments also lost intensity after late March and mid-April.

On the other hand, many narratives reached peak intensity during and immediately after mid-April. Although present throughout the entire time frame, conspiracy theories pertaining to Bill Gates, the WHO and 5G technology were most intensive and most widely shared in April and May, corresponding to both the peak of the first COVID-19 wave in April and slowly ensuing pandemic fatigue in May caused by lockdown measures.

Claims that the virus does not exist first appeared in March, as most disinformative narratives prior to that time characterized the virus as dangerous, and used the emotion of fear and insecurity over the virus for sensationalist writing.

It can therefore be concluded that most disinformation regarding COVID-19 can be divided into two phases – one leading up to the first wave and lasting throughout its early weeks where the virus was characterized as mysterious, dangerous and/or a murderous tool created to serve

"SHELF LIFE" OF COVID-19 DISINFORMATION

certain ulterior motives, and a second, starting in mid-April, where the virus began to be seen as a hoax, as less dangerous than it truly was, and as a form of manipulation. Disinformation and the spreading of doubt related to COVID-19 tests also fits this hypothesis, since such messaging only first appeared in late March.

Although first referenced (within articles contained in the database) in February, mask-related disinformation only began to widely spread in June with the advent of recommendations and/or regulation requiring individuals to wear protective masks, (which was largely absent in the first stage of the pandemic).

Lastly, it must be noted that articles containing disinformation related to events in Wuhan/ China as well as related to Donald Trump were too few in number for any relevant information regarding intensity to be derived from the available data.

Rating	First appearance in CRO Sample	Last appearance in CRO sample
Artificial virus	27. 1. 2020.	19. 9. 2020.
US / UK did it	13. 2. 2020.	25. 7. 2020.
China did it	29. 1. 2020.	12. 8. 2020.
Depopulation / enslavement	27. 1. 2020.	19. 9. 2020.
Does not exist	3. 3. 2020.	14. 9. 2020.
False medicaments	24. 2. 2020.	13. 9. 2020.
Vaccine	9. 11. 2018. / 1. 2. 2020.	19. 9. 2020.
Masks	25. 2. 2020.	19. 9. 2020.
5G	29. 1. 2020.	19. 9. 2020.
Bill Gates	27. 1. 2020.	19. 9. 2020.
WHO	20. 2. 2020.	19. 9. 2020.
"A plain cold / flu"	25. 2. 2020.	19. 9. 2020.
Tests	22. 3. 2020.	6. 9. 2020.
False numbers (death rates, number of cases)	25. 2. 2020.	14. 9. 2020.
Wuhan / China	5. 2. 2020.	25. 7. 2020.
False first cases	/	/

In **Serbia**, topics related to the origin of the virus, drugs, prevention, and the situation in China dominated at the very beginning of the crisis in the region (March and April), but both newsrooms sporadically, in the following months, continued to discover and analyze articles on these topics.

Before the appearance of the first cases of coronavirus in the region, misinformation was mainly related to the origin of the virus, so the news that the virus originated in the laboratory first appeared in the Raskrikavanje database in January this year, and the last recorded case was in August 2020. FakeNews Tragač also noticed the "recycling" of some old misinformation about the vaccine, such as the one from 2016 that India "sued Bill Gates for vaccines fraud". However, given the specificities, already discussed, of the two newsrooms' methodologies of not "returning" to a topic, once debunked, no occurrences such as those described in Bosnian and Croatian sample were found.

4

CASE STUDIES

1. Government response

This analysis aims to present some of the cases which indicate irresponsible behavior, and an unwillingness of the governments in Serbia, Croatia and Bosnia and Herzegovina to provide transparent, reliable and consistent information about the COVID-19 pandemic, which would have made a considerable difference in securing public trust in institutions, and in fighting both the virus and the misinformation that surrounded it.

Shortly after the introduction of the state of emergency, a significant circulation of false information about the virus was noticed on social networks and messaging apps, effectively turning people's loved ones into intense sources of potentially dangerous misinformation (mostly about prevention and treatment of the new coronavirus).¹⁷ But the authorities in the Western Balkans did not, it seems, respond quickly and adequately to the spread of the misinformation during this unprecedented event. The governments in the region not only failed to efficiently address the raging "infodemic", but there were examples of authorities themselves contributing to the spread of misinformation, particularly in the early days of the pandemic. Conversely, the claimed institutional fight against misinformation took the form of a repression of the critics of government responses or healthcare shortcomings, rather than a real attempt to contain the spread of dangerous misinformation.

At the very beginning, officials from various countries could be seen waving off the threat of the new virus, describing it as "just an ordinary flu" and telling citizens not to be afraid. "Feel free to go shopping in Milano" and "This is the funniest virus ever", were among the most striking statements which marked the beginning of the virus outbreak in Serbia. Both were uttered by Dr Branislav Nestorović,¹⁸ at an official government press conference on February 26. Serbian President Aleksandar Vučić could be seen standing behind Nestorović, laughing and approving his words and messages to the public. Only two weeks later, the state of emergency was declared in Serbia. In just a month the government had drastically changed its attitude towards the virus, eventually imposing one of the strictest – if not the most draconian – lockdowns in the region.

At the end of March, the Serbian government published a Statute which proclaimed that any information related to the coronavirus pandemic could only be provided by the Anti-epidemic Crisis Team exclusively, headed by the Prime Minister Ana Brnabić.¹⁹ Local authorities and doctors were instructed to pass any information regarding the epidemic "exclusively to the Crisis Team", effectively banning them from informing the public on any such developments in the country. The document also threatened sanctions which would be applied on the basis of "regulations concerning liability and legal consequences for spreading misinformation during the state of emergency". This final element was withdrawn after a public backlash, especially from media professionals.

One of the radical attempts to curb supposed misinformation concerns the case of Ana Lalić, a journalist of the portal Nova. Lalić had published a piece documenting poor conditions and a lack of equipment in the Clinical Center of Vojvodina (KCV), which declined to comment or answer the reporter's questions. However, after the article was published, KCV reported Lalić to the Prosecutor's office, claiming that it "disturbed the public and damaged the reputation" of the institution. In early April, she was arrested in Novi Sad,²⁰ and, after a big public outcry, was released a few weeks later, with all charges against her dropped.²¹

17 Kako da se zaštitite od laži o koronavirusu, Raskrikavanje, 14.03.2020.

18 Nestorović: Žene slobodno u šoping u Italiju, Tanjug, 26.02.2020.

19 Vlada zabranila izjave u vezi sa virusom, dozvolu ima samo Krizni štab, Raskrikavanje, 31.03.2020.

20 Novinarki portala nova.rs određen pritvor od 48 sati, Raskrikavanje, 02.04.2020.

21 Odbačena krivična prijava protiv novinarke Ane Lalić, Raskrikavanje, 27.04.2020.

At the same time, substantial amounts of misinformation were in fact appearing in the tabloids²² close to the ruling Serbian Progressive Party (Srpska napredna stranka – SNS) and the political establishment. It is a practice that still continues – in a recent example, a cover page of the pro-government tabloid Srpski Telegraf (Serbian Telegraph) proclaimed that the pandemic was “created to bring down Trump”, mirroring a statement of SNS’s Vladimir Đukanović, an MP who posted on Twitter that he is “...convinced that the pandemic has a political background, aiming to undermine Trump’s economic success”.²³

Government transparency was also lacking in the process of combating the novel coronavirus. In addition to contributing to misinformation and abusing the supposed fight against it to curb freedom of speech, it was discovered that the government had misled the public about the numbers of infected and deceased from COVID-19, as was demonstrated in a report by the Balkan Investigative Reporting Network (BIRN).²⁴

Some other governments in the region had a similar approach to the “fight against misinformation”. On April 6, the Government of Republika Srpska,²⁵ an entity in Bosnia and Herzegovina, passed a Decree introducing a ban on “causing panic and riots” during a state of emergency. It provoked various reactions, from both domestic and foreign non-governmental organizations, primarily due to the limitation of the freedom of speech and expression, but also due to legal ambiguities. The decree was withdrawn only ten days after its adoption.

Political figures at various levels of government in Bosnia and Herzegovina had also participated in spreading disinformation and conspiracy theories, some profiling themselves as “influencers” in the field. Among the prominent ones was a member of the Bihać City Council, Sej Ramić, who claimed that “5G network causes coronavirus”, that “coronavirus is the biggest hoax of the century”, etc.²⁶

As in the Serbia case, officials also tried to manipulate the public regarding the adequacy of their government’s responses to the pandemic. For example, the Prime Minister of Republika Srpska, Radovan Višković, said that the entity tested twice as many people as the other entity, the Federation of BiH.²⁷ Official data proved his statement to be inaccurate. On the other hand, the Federation’s Prime Minister, Fadil Novalić, claimed that 80 ventilators which came from China were “the top of the offer regarding ventilators”. However, in a case brought due to a suspicion of the abuse of public funds in the procurement of the equipment, the Prosecutor’s Office of BiH determined that these “did not even have the minimum necessary essential characteristics for adequate treatment of patients in intensive care units”.²⁸

Access to public information in Bosnia and Herzegovina was also impaired during the pandemic. Transparency International BiH stated in its report that the “COVID-19 crisis slowed down the work of institutions, so in order to access certain information one had to wait for more than five months, while it was totally impossible to access information on the conditions under which the donated medical aid was stored”.²⁹

Cases resembling those in Bosnia and Herzegovina happened in Croatia as well, where the government also made it difficult for the public to obtain certain information. For instance, in March, Croatia bought medical equipment worth €50 m. from China without a tender, declaring the details of the transaction a state secret. According to journalists, it was obvious that gaining access to the information would be challenging, primarily because the government declared all information that concerned the procurement of goods for health protection, and strengthening the control over the spread of coronavirus, to be confidential.³⁰

Secretive and non-transparent processes also followed the creation of an official COVID-19 information center, the website coronavirus.hr, with the government paying about €70,000 for it to a private company, without a public procurement process.³¹

22 In common parlance Tabloid refers to the small format newspapers that tend towards the sensational, and whose editorial stance is heavily set towards one political party/ideology. The opposite is the broadsheet press which was thought to be less polarised.

23 Korona će nestati posle Trampovog poraza. Lažna vest / Teorija zavere, Raskrikavanje, 9.11.2020

24 Korona: Tabela sa podacima o broju preminulih, Javno, 02.10.2020.

25 Policija ne može odrediti šta je dezinformacija, Cenzolovka, 15.05.2020.

26 Ko od kandidata_kinja na ovogodišnjim izborima širi lažne vijesti o virusu COVID-19?, Istinomjer, 21.10.2020.

27 Višković o broju testiranja u entitetima, Istinomjer, 10.04.2020.

28 Respiratori nabavljeni iz NR Kine ne predstavljaju “sami vrh ponude u ovoj branši”, Istinomjer, 11.05.2020.

29 Međunarodni dan slobode pristupa informacijama: Epidemija usporila rad institucija, pomaci u transparentnosti nedovoljni, Transparency International BiH, 28.09.2020.

30 Iz Kine je bez javne nabave kupljeno 380 milijuna kuna medicinske opreme, a cijena i detalji su državna tajna, Faktograf, 30.04.2020.

31 Vlada skriva tko je odlučio zaobići javnu nabavu i platiti PR agenciji pola milijuna kuna za stranicu Koronavirus.hr, Faktograf, 19.05.2020.

Access to information of public importance, both in Croatia and neighboring countries, was not adequate during the pandemic. The responses to requests for information were often long overdue, with institutions sometimes simply ignoring inquiries from journalists.

“In recent months, communication could have been much clearer and more in a timely manner, including both the epidemic data and the way in which government was deciding on new restrictive measures in order to control the spread of the virus. Furthermore, the policy responses and measures aimed to soften the economic consequences of the pandemic also have stayed pretty ambiguous and unclear”, says Ana Brakus, editor at Faktograf.

Misleading information can seriously harm and endanger public health, especially in the time of crisis. Journalists from the region, specialized in fact-checking, have said that their fight against misinformation would be more effective and successful if the governments did not stand in their way – let alone if they themselves did a better job at crisis response and communication. For instance, one of the major problems encountered by some newsrooms was a lack of transparency and communication with the government, which mostly ignored requests coming from journalists. Besides the increased workload, all state institutions should be capable, willing and indeed are obliged to provide the answers to questions, both pleasant and unpleasant, raised by the public. It seems that the governments in the region paid more attention to their own public image, than to the public interest – unlike, for example, the European Union, which took efforts to invest in the fight against disinformation,³² while the citizens in the SEE region were being told that the situation of the epidemic in their countries was “much better and more stable” than in most EU countries. One of the reasons for such official narratives could be the electoral process that took place in almost all countries in the region after the pandemic broke out, putting the fight against the virus at the center of political campaigns.

2. Populist science and fringe doctors

From the very beginning of the pandemic, populist science and pseudoscience had a great advantage over actual science, which could not offer quick, simple or easy-to-understand solutions. Despite its impressive achievements in the past months, the pace of evidence-based medicine and conventional science is inevitably slower than the mere minutes required for arbitrary claims of “alternative medicine”, or conspiracy theories. In a social context permeated with doubts and uncertainty, pseudoscientific ideas and “solutions” were quick to offer instant answers to complicated questions, which were welcomed by many, regardless of how wrong they were.

Unlike vaccines, which had a long way to go from the first experiment to mass use, alternative solutions had to cross far shorter distances: from one mobile phone to another. Applications such as Facebook Messenger, Viber, or WhatsApp, became conduits for misplaced advice on how to prevent or cure the infection: by using vitamin A, vitamin C, vitamin D, garlic, vodka, pepper, lemon, cinnamon, sunbathing, methanol, ethanol, bleach, frankincense, salt water, Arbidol (Russian medicine), baking soda, orange peel, cocaine, chloroquine, essential oils, sea salt, tea, apple cider vinegar or black caraway.

The same useless and even dangerous advice³³ spread with great speed, both in “mainstream” and social media. It can be assumed that people forwarded it to each other with good intentions. However, there have also been cases where various medicaments of questionable or disputed efficacy have been widely promoted, motivated by commercial interest.

The chloroquine “hype”, started by US President Donald Trump, was felt in the region as well, where several domestic-made “drugs for COVID19” were announced before their effectiveness was confirmed in any way.³⁴ In Croatia, a pseudoscientist Jadranka Vrhovec used Facebook as a platform to promote a preparation of her own making, Jadrankina otopina (Jadranka’s solution), claiming it can be used for “cleansing the coronavirus”. Both scientists and the media have repeatedly warned that this is a scam, reminding people that Vrhovec opposes vaccination, that she hides information about her education, and that her advertisements for the magic solution rely on the statements of Dr. Mark

32 Borba protiv dezinformacija | Europska komisija, Europska komisija, 2020.

33 Neprovereni, netačni i opasni saveti sa društvenih mreža, Fake news tragač, 25.03.2020.

34 Nažalost, nijedna od država u regionu ipak nema “lijek za koronavirus”, Raskrinkavanje, 28.04.2020.

Sircus, known for his theory that cancer can be treated with baking soda.³⁵ Numerous other “healers” have also jumped at the opportunity to peddle their products as coronavirus “cures”.³⁶

If we take into account the long-term undermining of trust in science through various pseudoscientific narratives, the global health and economic crisis caused by the COVID-19 pandemic, the spread of panic and the level of media and scientific literacy of people, excellent conditions have been created for enantiodromia.³⁷ In the context of a pandemic, epidemiologist Srđa Janković sees it as “rushing into the opposite” of official narratives and conventional science.³⁸

Based on the experience of fact-checkers from the region, the creators of such pseudoscientific narratives can be classified into four groups: (1) anonymous “experts”, (2) non-experts posing as doctors, (3) doctors who go beyond their expertise, (4) experts who have gone astray.

(1) “Anonymous experts”

Much of the disinformation about the coronavirus has relied on words ascribed to unnamed doctors – some of whom were, undoubtedly, fictional characters. Instead of precise data on the identity of the experts or researchers, in such cases the media would offer flat statements about the geographical origin, usually exotic.³⁹ A series of advice from “Ayurvedic doctors”, who fight against the virus with water in which pepper and lemon were boiled, or water with basil and cinnamon, has become very popular on Facebook.⁴⁰ “Taiwanese experts” – again unnamed – were credited with advice to take a deep breath and hold it for ten seconds as a “diagnostic tool” (no coughing would mean no infection).⁴¹

In March, a number of media outlets from Serbia, including the Tanjug news agency, published the advice of “microbiologists from Wuhan”, without prior verification whether these claims come from real experts. Some of the tips from this list can be very dangerous: one, for example, is based on the assumption that a runny nose and sore throat clearly indicate that you are not infected with the new coronavirus⁴². A “doctor’s appeal” appeared on the Novi portal from Bosnia and Herzegovina, without any closer information regarding mentioned doctors, their expertise or origin, but also without any “appeal”: the text only lists preparation instructions for one in a series of non-functional anti-COVID medicaments, which includes garlic, turmeric, ginger, orange juice and lemon.⁴³

(2) Non-experts posing as doctors

Unlike those from the first group, the actors from this category are named, but in a manipulative way, so people of different professions, expertise and intentions are presented as doctors. Examples of such pseudoscientific narratives often include:

“the abuse of professional language - usually outside the context or even in a way that is devoid of scientific meaning, references to individual and unconfirmed experimental research results, source deficiencies, referring to texts without any scientific value accessed from unreliable sources and the use of unauthorized and misleading simplifications and oversimplifications”.⁴⁴

Shiva Ayyadurai is an expert in computational systems biology, but he is not a doctor, nor has he ever practiced medicine professionally. This, however, did not prevent him from presenting many unfounded theories about COVID-19 (from the theory of artificial origin to advice on iodine treatment), nor did it prevent the media from quoting him as an expert.⁴⁵ The views of the self-proclaimed doctor

35 Antivakverska prevarantica Jadranka Vrhovec na Facebooku promovira lažne lijekove i zarađuje milijune, Faktograf, 15.05.2020.

36 Propolis nije “lijek za koronavirus”, Raskrinkavanje, 18.02.2020.

37 Enantiodromia is “the tendency of things to change into their opposites, especially as a supposed governing principle of natural cycles and of psychological development.” (Oxford Dictionary)

38 Janković, S. (2020). Virusologija kao Kasandra modernog doba: pandemija Kovida-19 i evolucione perspektive. Elementi (21), 4-7.

39 Viralne dezinformacije o COVID-19: Pogrešni savjeti “prijateljevog ujaka” i “doktora iz Shenzena”, Raskrinkavanje, 21.03.2020.

40 Ajurvedska medicina, biber, limun i cimet nisu zaštita od koronavirusa, Raskrinkavanje, 23.03.2020.

41 Neprovereni, netačni i opasni saveti sa društvenih mreža, Fake news tragač, 25.03.2020.

42 Domaći mediji prenose opasne savete nepostojećeg lekara o koronavirusu, Raskrinkavanje, 11.03.2020.

43 Lažni “ljekarski apel” za uzimanje navodnog preparata protiv koronavirusa, Raskrinkavanje, 17.03.2020.

44 Szykiewicz, M. (2020). May You Live in Interesting Times. Science vs. Pseudoscience in the Era of the Internet. Ethics in Progress, 11: 85-98.

45 Shiva Ayyadurai nije ni liječnik niti izumitelj e-maila, a njegove priče o Covidu-19 su neosnovane, Faktograf, 15.06.2020.

Robert Young, who served a prison sentence for practicing medicine without a license, were similarly spread on social networks.⁴⁶

(3) Doctors who go beyond their expertise

False information or wrong interpretations regarding the coronavirus were also frequently spread by doctors whose field of expertise is not in epidemiology, virology, immunology, infectiology, or any field related to contagious and/or respiratory diseases. As Barry Beyerstein said,

“if the practitioners of pseudoscience are not self-taught, they often have credentials that are irrelevant to the areas in which they offer their questionable pronouncements. Exemplary qualifications in one area do not necessarily translate into equal competence in unrelated fields.”⁴⁷

Dr Thierry Schmitz, who without any evidence linked the Bill Gates Foundation and mass chipping of people, actually has a very questionable educational background. He built his career in the fields of alternative medicine, homeopathy and phyto-aromatherapy.⁴⁸ Dr Nada Kostić, an endocrinologist and a former member of the Serbian Parliament, also named Gates as responsible for the “COVID-19 project”,⁴⁹ while becoming one of the most viral proponents of the QAnon conspiracy theory. Danica Grujičić, a neurosurgeon and an acting Head of Institute of Oncology and Radiology of Serbia, expressed a belief that SARS-CoV-2 is a “laboratory virus and some kind of a bioweapon”.⁵⁰

In Croatia, Dr Nada Jurinčić, a pediatrician, spread disinformation about the corona virus and 5G technology,⁵¹ while Lidija Gajski, a specialist in internal medicine, continuously casted doubt over how serious the virus should be taken.⁵² In Slovenia, a panel of supposed medical experts – none from fields which deal with viruses or epidemics – expressed a range of pseudoscientific views of the pandemic in a video which immediately went viral throughout the entire region.⁵³

(4) Experts who have gone astray

Finally, disinformation and conspiracy theories about COVID-19 were also spread by people with appropriate medical and/or scientific background – including a few with exceptional professional biographies, which gave gravity to their claims. The most noteworthy was the case of the French scientist Luc Montagnier, who shared the Nobel Prize in Physiology or Medicine for the “discovery of the human immunodeficiency virus” in 2008.⁵⁴ Montagnier’s claims that the coronavirus was created in the laboratory by mistake were categorically denied by the scientific community, but the impressive biography of this scientist contributed to the massive spread of his unfounded claims.⁵⁵

While none of them had a biography nearly as impressive as that of Montagnier, there was no shortage of experts in related fields who stood on the side of pseudoscience in the pandemic in the region.

In Serbia, Dr Branimir Nestorovic, a pulmonologist and member of Serbia’s Crisis response team for the pandemic, repeatedly made false claims: from the miscalculation that the new virus will turn out to be “the most hilarious virus in the world”, and unfounded announcements that the sun will “burn the corona” during the summer, to pseudoscientific beliefs that Serbs – as the “nation of Nikola Tesla and Novak Đokovic” – are a “medical phenomenon in the world”, which will give them an advantage over other nations in the fight against the coronavirus.⁵⁶

46 Lažni liječnik zarađuje milijune šireći dezinformacije o Covidu-19, Faktograf, 15.05.2020.

47 Distinguishing Science from Pseudoscience, B. Beyerstein, The centre for curriculum and professional development, 1995.

48 Pseudolječkar o Bill Gatesu, vakcinama i čipovanju, Raskrinkavanje, 30.06.2020.

49 Nove teorije zavjere dr Nade Kostić, Raskrinkavanje, 30.09.2020.

50 “Ubeđena sam da se radi o nekoj vrsti BIOLOŠKOG ORUŽJA” Dr Danica Grujičić o korona virusu, vakcini i sopstvenoj borbi s bolešću, Blic, 16.09.2020.

51 Dr. Nada Jurinčić iznijela je niz netočnosti i nepreciznosti o koronavirusu, 5G-u, pa i 6G-u, Faktograf, 15.04.2020.

52 Liječnička komora i zbor: Lidija Gajski netočnim tvrdnjama o Covidu-19 ugrožava zdravlje ljudi, Faktograf, 01.04.2020.

53 “Maske padaju” - Slovenski doktori nisu bili ni “hrabri” ni “ozbiljni” kada su iznijeli niz neistina o pandemiji, Raskrinkavanje, 14.10.2020.

54 The Nobel Prize in Physiology or Medicine 2008, The Nobel Foundation, 2008.

55 Nema dokaza za tvrdnje Nobelovca da je koronavirus nastao u laboratoriji, Raskrinkavanje, 27.04.2020

56 Analiza Nestorovićevog TV gostovanja na B92: Šta je sve netačno rekao, Raskrinkavanje, 21.03.2020.

In Macedonia, infectologist Velo Markoski was among the first to downplay the seriousness of the new coronavirus threat, claiming that it is “an old virus” which does not fit criteria of a “quarantine disease”.⁵⁷

In Bosnia, infectologist Sajma Krkić-Dautović, a member of an advisory scientific body appointed by Sarajevo Canton’s Health Ministry to monitor and analyze the situation caused by the coronavirus,⁵⁸ repeatedly expressed her disbelief that “such a virus could have occurred naturally”.⁵⁹

In Croatia, the belief that the new corona virus was artificially created was advocated by retired professor of immunology Matko Marušić,⁶⁰ and dean of the Medical Faculty in Pula Krešimir Pavelić.⁶¹ Dangerous claims were also peddled by a prominent anti-vaccination activist – immunologist Srećko Sladoljev.⁶²

What awaits us in 2021

The problems that conventional science has been facing for years have gained in dimension, and are accelerating. Faced with a crisis of replicability, science suddenly faced the additional problem of hyperproduction and short deadlines: based on data from Clarivate Analytics’ Web of Science, and Elsevier’s Scopus, which do not index preprints, it was calculated that the scientific community published 23,634 unique documents related to COVID-19 from January 1 to June 30 2020.⁶³

In his paper “A pandemic of bad science”,⁶⁴ Walter Scheirer lists three key problems in pandemic-related science. The first problem is related to unvetted articles on so-called preprint servers that have received enormous attention. Media outlets from the Western Balkans have, on several occasions, reported on research published on the medRxiv.org server, although this website explicitly states that it contains preliminary reports which “should not be relied on to guide clinical practice or health-related behavior and should not be reported in news media as established information”.⁶⁵

Another problem – according to Scheirer – are predatory journals that are giving anyone, with the ability to pay, the opportunity to publish pseudoscience that can be amplified by mainstream news sources. Finally, “marketers are exploiting the public’s desperation for protection against Covid-19 and adding a scientific sheen to dubious products”.⁶⁶ Examples of this have also been seen in the regional media when it comes to protection from the new coronavirus.⁶⁷

Pseudoscientific information about the coronavirus, its origins, prevention and treatment models, were focused on a new topic, the new virus, but essentially used old narrative patterns of simplification, blaming, and inclusion of paranormal elements. In that light, 2021 will probably bring nothing new, except a new focus, which will be mainly on the issue of vaccine safety, side effects and the fictional narratives such as those of vaccine as a means for “microchipping”. In order to reduce the reach of a new wave of disinformation, it is necessary to work in parallel on fact-checking, popularization of science and strengthening the media and scientific literacy of people.

57 Diskutabilne tvrdnje sjevernomakedonskog stručnjaka, Raskrinkavanje, 05.05.2020.

58 Osnovano Naučno tijelo za praćenje i analizu situacije izazvane koronavirusom u KS-u, Vlada Kantona Sarajevo, 10.04.2020

59 Virus SARS-CoV-2 nije “modificiran”, niti su to potvrdila “dva nobelovca”, Raskrinkavanje, 29.07.2020

60 Matko Marušić bez ikakvih dokaza tvrdi da je koronavirus ‘pobjegao’ iz laboratorija, Faktograf, 08.09.2020.

61 Dekan Medicinskog fakulteta u Puli pobornik je neutemeljenih teorija zavjere o koronavirusu, Faktograf, 29.05.2020.

62 Sladoljev nastavlja iznositi netočne informacije o pandemiji, Faktograf, 21.10.2020.

63 <https://link.springer.com/article/10.1007/s11192-020-03675-3>, Springer, 28.08.2020.

64 <https://www.tandfonline.com/doi/full/10.1080/00963402.2020.1778361>, Tandfonline, 20.07.2020.

65 <https://www.medrxiv.org/>

66 Full article: A pandemic of bad science, Taylor, 20.07.2020.

67 Nema dokaza da medicinske maske s bakar-oksikom pružaju bolju zaštitu od koronavirusa nego obične, Raskrinkavanje, 03.09.2020

3. COVID-19 Influencers

Over the past decade, social media has grown rapidly in importance and influence. This has created a new type of celebrity known as “social media influencers”. They make regular posts on social media and generate followers who pay close attention to what they have to say. Research shows that especially young people find social media influencers authentic, sincere and trustworthy, which makes them important in shaping the behavior of their followers.⁶⁸

In 2020, while the global community grappled with COVID-19, the situation was no different. Locked up in their homes and without the possibility of traveling, people turned even more to social media,⁶⁹ making the influencers that more important⁷⁰ – even the WHO⁷¹ and governments⁷² turned to them as a part of a wider campaign to inform the public about COVID-19. Video content production has generally increased⁷³ during the pandemic,⁷⁴ and was found to be more likely to attract attention from followers than images and text.⁷⁵

However, in the SEE region, there seem to be more negative than positive examples of viral content created by influencers, particularly those in video production. Their role in creating disinformation about the pandemic was prominent, especially when it came to conspiracy theories with the potential to radicalize and polarize the public, and foment distrust in institutions, science and medicine.

“On Facebook, we have noticed an increase in the sharing of subtitled videos in which disinformation about the coronavirus is being justified through the promotion of a particular lifestyle. We have also noticed numerous cases when publications or videos of influencers from neighboring countries are shared in Croatia. The misinformation they share is usually about promoting ‘medicine’ against COVID-19, as well as supposed protection from coronavirus infection through diet, but also misinformation about masks or vaccines,” says Ana Brakus from Faktograf.

In the context of disinformation, three types of influencers could be distinguished in relation to the pandemic, as discussed below.

One Hit Wonders

The COVID-19 pandemic saw an emergence of previously anonymous or semi-anonymous individuals that contributed to the general pool of conspiracy theories and/or pseudoscience, mostly through the “influencer-type” videos where they film themselves speaking. The visibility and the attention that some of them gained was a completely new phenomena for the fact-checking community in the SEE region. However, most of them did not manage to keep the interest of the public and to repeat the success of their original “sparks”.

A typical example is that of Erna Selimović (BiH), whose Facebook video of herself reading a compilation of conspiracy theories and falsehoods about COVID-19 rapidly went extensively viral in mid-April. In just 15 hours, it had over 500,000 views and about 23,000 shares, while an additional 18,000 interactions were recorded from various reposts at the time (it was eventually reposted by 250 other Facebook pages).⁷⁶ Similar content, that Selimović continued to post on her Facebook and

68 [BURO] - Instant Buying of Fast Fashion: Are Influencers to Blame? BU Bournemouth University, pp. 4-5, 19.05.2020.

69 Coronavirus sparks huge jump in social media use, study finds, PR Week, 18.03.2020.

70 Influencers and Covid-19: reviewing key issues in press coverage across Australia, China, Japan, and South Korea, Abidin et.al, Media International Australia, pp. 3, 10 and 11, 26.09.2020; Social media influence in the Covid-19 Pandemic, González-Padilla and Tortolero-Blanco, p. 120, 05.06.2020.

71 Love Island stars and influencers paid to promote Test and Trace, BBC News, 30.08.2020.

72 ‘If content was king yesterday, it’s emperor today’ – influencer marketing enters golden age, PR Week,

73 There was a 50% increase in number of people using Facebook Live and a 70% increase in people using Messenger Live during the pandemic. Facebook making a new set of tools and features for live broadcasters, allowing anyone to view Facebook Live, even if they are not signed into the platform (The impact of coronavirus on influencer marketing, Obviously, p. 9, April 2020)

74 Coronavirus Research, Global Web Index, pp. 4-5, April 2020; The Virus Changed the Way We Internet, Ella Koeze and Nathaniel Popper, The New York Times, 07.04.2020.

75 Covid-19 Implications For Influencer Marketing, Simon Choi, 09.09.2020.

76 Erna Selimović: Internetska senzacija bez ijedne tačne tvrdnje o koronavirusu, Raskrinkavanje, 18.04.2020. This debunking analysis mirrored, to a degree, the virality of the video it fact-checked, quickly becoming the website’s most viewed article ever.

YouTube profiles, did not manage to grab the public's attention, but this video remains by far the most popular in this category.

There were, however, other high-intensity videos of a similar nature during the first wave, and especially during the lockdown, mostly offering pseudoscientific "cures" for the virus. An unnamed man from Serbia, who claimed that the cure for COVID-19 had existed in Russia for years, was a viral hit in the region, collecting over 175,000 views on just one Facebook page (Glas Srbije) and 300,000 more on YouTube channels Da Best and Ne damo svetinje: it has been shared more than 100,000 times and republished by dozens of online portals throughout the region.⁷⁷ A woman named Aneta Krstović (nicknamed "LaMadrina"), who claimed that salt was a cure for COVID-19, had her video shared on Facebook more than 13,000 times.⁷⁸ Similar content occasionally still appears with relative success, sometimes in quite bizarre settings. For example, a video of a woman with a karaoke page advising "drops of propolis" as a COVID-19 cure, was shared 3,000 times, with 12,000 interactions overall.⁷⁹

Even without replicating the virality of their initial videos, these examples are an important piece of the whole structure of pandemic disinformation. People who look ordinary to the general public and appear to have no vested interest in "sharing information" about the pandemic, tend to project credibility and gain trust of wide audiences. That is why it is very important to observe this phenomenon in this case study.

Boosting Online Influence Through the Pandemic

The second group involves influencers who were active before the pandemic, but tried to use it to increase their popularity, whether by adding it to their usual "offer" incidentally and largely returning to topics they had covered before,⁸⁰ or by making it the predominant focus of their content production.

A prominent representative of this group is Semir Osmanagić, best known for his pseudo-archaeological project of the "pyramids" in central Bosnia. Osmanagić was active on various social networks before the pandemic,⁸¹ but he also has a platform in both mainstream and fringe media in BiH and the region, with the pandemic making him into a particularly desired guest, even on prime-time TV shows.⁸²

In February 2020, Osmanagić started talking about the pandemic, using sensational titles in his videos and repeating a number of already circulating falsehoods and conspiracy theories. His YouTube channel has 43,900 subscribers and 6,950,460 views,⁸³ most of which came from pandemic-related videos (two out of the top three most-watched videos on his channel, while the third features world-famous tennis player Novak Đoković).

Another prominent YouTuber who gained in influence during the pandemic is an anti-vaccination activist Marija Stojaković, whose main activity is translating and subtitling anti-vaccination propaganda videos. Her channel has around 2,000 subscribers,⁸⁴ but her interactions mostly intensified on Facebook, where her posts and videos regularly receive hundreds, or even thousands of reactions.⁸⁵

YouTuber Mario Bojić (Serbia) was also active before the pandemic, but he dabbled in very different ventures, like online clothes sales and reality show gossip.⁸⁶ He then found his niche in conspiracy theories with an emphasis on the pandemic – or, as he describes it, "discussing topics that are banned in the 'mainstream' media."⁸⁷ This shift propelled his channels Mario zna (Mario knows), and Mario zna uživo (Mario knows live),⁸⁸ to 8,666,020 and 358,336 views, as well as 68,700 and 22,200

77 Arbidol nije lijek za novi koronavirus, Raskrinkavanje, 27.03.2020.

78 Video o lažnom lijeku kruži Facebookom: Ne, morska so ne liječi novi koronavirus, Raskrinkavanje, 08.04.2020.

79 "Influenseri" i dalje dijele medicinske "savjete" na društvenim mrežama. Što je još gore - ljudi ih slušaju, Raskrinkavanje, 16.10.2020.

80 See, for instance, YouTube channels HelmCast, Idiokratija and Balkan Info.

81 "Hajdemo u planine, hajdemo u tunele": Mediji i ministri u morbidnoj kampanji Semira Osmanagića, Raskrinkavanje, 23.10.2020.

82 For example, a video of Osmanagić peddling conspiracy theories and promoting his "healing tunnels", aired in March on Face TV, as of December 2020, has 1.7 million views and 44,000 social media interactions on this network's YouTube channel alone. It has gathered tens of thousands more from other reposts, judging by data obtained through Facebook's CrowdTangle tool.

83 As of December 21, 2020

84 As of December 21, 2020

85 Facebook profile

86 Instagram post, 2.10.2018; Instagram post, 03.06.2019.

87 Mario ZNA, YouTube channel description

88 MARIO ZNA UŽIVO, YouTube channel description

subscribers, respectively.⁸⁹ Of his three most-watched videos, two are pandemic-related, while the third is a mix of conspiracy theories about Bill Gates, George Soros, etc. His new channel Istočnik has 2,450 subscribers despite having no uploaded content yet.⁹⁰

Saša Borojević, also based in Serbia, presents himself as a “strategist and public opinion analyst”. His Facebook profile was already a frequent source of disinformation for Serbian tabloids before the pandemic,⁹¹ but with it he “specialized” in conspiracy theories about COVID-19. His greatest success was a post claiming that the United States was using the pandemic as a cover to “invade” Europe, which was shared over 5,500 times, and turned into “news” by several dozen tabloids and anonymous portals across the region, generating hundreds of thousands of interactions across social networks.⁹²

Politics, Sports, Music – Public Figures Engage in Disinformation

Finally, there is also a group of influencers which includes public figures who have used their influence to spread disinformation about the COVID-19 pandemic. For the sake of a better understanding of this specific phenomenon, we can divide them into two groups – in one group politicians or public figures connected to politics, and in the other, celebrities like athletes or musicians.

Some of the most prominent politicians in the region that have been known to promote pandemic-related disinformation are Ivan Pernar from Croatia, Sej Ramić from Bosnia and Herzegovina, and a number of Serbian politicians like Nikola Sandulović, Saša Radulović and Nada Kostić.

Ivan Pernar was an MP in the Croatian parliament until the 2020 elections, and was very popular on social networks, with over 32,300 Instagram followers,⁹³ (he also allegedly had a Facebook account with 300,000 followers that was taken down by Facebook). Even before the pandemic he was a declared anti-vaccination activist, and he continued with anti-5G, anti-masks and anti-lockdown positions during the pandemic. Sej Ramić, a City council member of Bihać (BiH) spouted similar views, especially during his 2020 local election campaign. Finally, leaders and prominent members of several minor and/or opposition parties from Serbia (Nikola Sandulović, the Republican party; Saša Radulović, DJB (Dosta je bilo) party; Nada Kostić, former member of both Radulović’s and Sandulović’s parties, currently a member of the Democratic party) actively promoted disinformation about the COVID-19 pandemic, and the most extreme conspiracy theories such as QAnon.⁹⁴

Apart from politicians, regional fact-checkers have documented several other public figures promoting disinformation and conspiracy theories during the pandemic. Singer Tony Cetinski (Croatia) has been a regional star since the 1990s, but his statements against COVID-19 vaccines still brought a boost in his social media following – 9,000 new Facebook friends, by his own admission.⁹⁵ Another singer, Vlado Georgijev (Montenegro), and the most famous “star”, in this group, tennis player Novak Đoković (Serbia),⁹⁶ were also vocal against vaccination and measures against the epidemic.

Conspiracy theories and disinformation can have particularly detrimental consequences during a crisis, when accurate information is crucial. Much like the virus, misinformation spreads via human-to-human sharing,⁹⁷ and various online influencers have been a big part of that. The success of video as the most attractive format for content sharing – especially as the quarantine has made everyone eager for human interaction – points to a trend that can be expected to continue and expand in the next period. If that is what lies ahead, anyone dealing with disinformation should focus their attention on the types of destructive influencers described above, the content they produce and the consequences it may have for public health and safety.

89 As of December 21, 2020

90 As of December 21, 2020. Istočnik, YouTube channel description

91 Tabloidi optužuju Evropu i LGBT zajednicu da “uvode pedofiliju” u Srbiju, Raskrinkavanje, 01.08.2018.

92 “Nešto se dešava”: Italijanski “influencer” i “analitičar” iz Srbije izmislili američku invaziju na Evropu u doba pandemije, Raskrinkavanje, 17.03.2020.

93 As of December 2020

94 For more on how QAnon appeared in the Balkans, see: Fact-checking in the Balkans while the sky is falling, Cvjetičanin Tijana, DigiComNet, 08.08.2020. and Može li QAnon ugroziti američku demokraciju?, Faktograf, 24.08.2020.

95 Cetinski podiže tužbu: Nemam više namjeru raspravljati s polupismenim bezveznjacima, Vecernji list, 12.05.2020.

96 Covid-19 “savjeti” poznatog tenisera mogu škoditi zdravlju. Raskrinkavanje, 15.04.2020.

97 Fake news in the time of C-19, The Infodemic, Ella Hollowood and Alexi Mostrous, 23.03.2020.

4. Anti-vaccination narratives and the COVID-19 infodemic

Anti-vaccination narratives have become a key component of wider conspiracy theories about global plots against ordinary people. The COVID-19 pandemic has helped increase their influence and intensity, and this analysis will aim to explore these newly adopted frames, with a particular focus on Croatia and the surrounding region.

The sample used here is drawn from the database of Faktograf, which has systematically analyzed disinformation and manipulation found in various, mostly online sources, like media articles (the majority coming from non-mainstream and fringe websites), social media posts, videos and interviews since the beginning of the pandemic.

The primary analytical method of this article is discourse analysis, aiming to detect patterns in anti-vaccination narratives and locate conspiracy theory frameworks in which they were most often embedded. The characteristics of the anti-vaccination movement's discursive strategy, and the extent to which the pandemic has enabled its growth and strength, will also be examined.

Main targets and creators of anti-vaccination narratives.

Prominent among the newly adopted theories of the anti-vaccination movement are those related to the alleged evil plans of billionaire philanthropist Bill Gates, and the Bill and Melinda Gates Foundation, which have been the target of conspiracy theories for years, mostly due to its financing of vaccination programs across the globe.⁹⁸ The foundation's support for the effort to develop a COVID-19 vaccine exacerbated old and birthed new unsubstantiated claims.

It is often claimed that Gates knew about the pandemic before it occurred, and participated in its "planning", in order to globally impose mandatory vaccination, with either "mind control through microchips" or "depopulation" as an ultimate goal.

"Event 201" has been offered as "proof" of these claims by many fringe websites.⁹⁹ Event 201 was a simulation of the pandemic, conducted in October 2019, aiming to help develop pandemic-response strategies¹⁰⁰ for a hypothetical pathogen from the genus of coronaviruses.¹⁰¹ Its close timing to the outbreak of an actual pandemic has inspired a whole string of conspiracy theories, portraying it as evidence that the COVID-19 pandemic was "planned".

Another frequently occurring term is "ID2020", or "Agenda ID2020", purportedly the name of Gates' plan to microchip people through vaccines "carrying the mark of the Beast", which will supposedly transform humans into cyborgs. One of such articles refers to Microsoft's newly developed proof-of-work patent, intended to simplify blockchain technology used for cryptocurrencies, as evidence for such claims (the same article also contains the widespread theory that Gates controls the WHO).¹⁰² The "Agenda ID2020" theory has spread through many social media posts as well, becoming considerably viral in the region.¹⁰³

Another prominent theory based on pseudoscience is the alleged addition of "DNA manipulators" to vaccines in order to turn humans into hybrids controllable via electromagnetic waves.¹⁰⁴ These examples show the capability of anti-vaccination narratives not just to resist factual information, but also to actively co-opt and integrate it into their own fictitious "universes".

A number of individuals considered to be experts, i.e. academically educated people, have publicly legitimized these claims, thus contributing to their believability. A pediatrician Nada Jurinić wrote about "those who laugh with satanic laughter" while implementing the agenda of "mandatory

98 See, for example: Polio - Strategy overview, Bill & Melinda Gates Foundation

99 See, for example: MISTERIJA - "Kineska" epidemija! A možda i nije njihova? Čija je onda i stoji li netko iza svega? Možda? Idemo vidjeti..., Logično, 01.02.2020; "Virus umjetno proizveden još 2018.?! Fondacija BILL GATESA izvodila vježbu za slučaj PANDEMIJE", Promise, 26.02.2020.

100 Center for Health Security <https://www.centerforhealthsecurity.org/event201/>, Event 201,

101 Eric Toner, the creator of the model, believed that these viruses were to be the most likely culprits in the event of the pandemic: Simulation of coronavirus pandemic months ago predicted millions dead, Business Insider, 23.01.2020.

102 Bill Gates ima nove patente s čipiranim ljudima? Tzv. "Proof of work"! Zajednohrvatska.wordpress, 07.05.2020.

103 Narodni referendum (archived) Facebook, 05.04.2020.

104 EU potpisala ugovor za isporuku 400 milijuna doza cjepiva protiv bolesti COVID-19, koja sadrže sintetički DNK manipulator, Dokumentarac, 16.06.2020.

vaccination and control of humankind via 5G and 6G networks";¹⁰⁵ internal medicine specialist Lidija Gajski stated that "we live in an Orwellian totalitarian dictatorship";¹⁰⁶ and immunologist Srećko Sladoljev claimed that Gates' name and surname, converted into ASCII code, directly correspond to 666, the "number of the Beast" in Christian theology.¹⁰⁷ The origin of such claims is usually not from the region, but they quickly became locally adopted and gained popularity, particularly on social networks. A typical example is a US-based, so-called documentary "Plandemic: The Hidden Agenda Behind Covid-19", and its sequel "Plandemic: Indoctrination" which was shared by many fringe sites such as "2012 Transformacija Svijesti",¹⁰⁸ "Dokumentarac",¹⁰⁹ and "HOP",¹¹⁰ as well as by many individuals on social media.

These narratives are occasionally amplified by the right-wing mainstream media – for example, regional television station Z1 regularly airs the talk-show "Bujica", whose host interviewed the aforementioned Gajski and Sladoljev on the show in March.¹¹¹

In short, the pandemic enabled anti-vaccination narratives to co-opt the meta-narrative of the alleged enslavement of humankind, and in doing so increased their power of instrumentalizing individuals' fears and concerns. Intentionally manipulated facts are claimed to be irrefutable evidence, acquired from legitimate sources that the pandemic is indeed a "plandemic" – a global and inhumane criminal endeavor. The manipulation of facts is a particularly effective technique for spreading and embedding these narratives, as it involves the use of names that indeed exist, references to events that actually transpired, and sources which occasionally may be legitimate – but are selectively and partially interpreted, creating an illusion of credible information for the reader.

Another common theory links vaccination to allegedly harmful 5G technology, usually as part of wider conspiracy theories. The prime regional example was a Facebook video titled "Covid 19 the greatest lie in history" published by Erna Selimović, which achieved an unforeseen level of virality.¹¹² It gathered together several theories about a connection between 5G technology and vaccines, as well as a number of other falsehoods involving Gates, his purported control over the WHO and the "ID2020 Project", which will "strip us of our free will and all that which makes us human" by implanting a chip into the human body through a vaccine. Although there is no evidence to prove any of these claims, and Selimović herself possesses no expert knowledge required to participate in informed discussion on matters of public health (she presents herself on different social media as a translator, artist, psychologist and a specialist in behavioral forensics), her claims have reached millions of people, and contributed to the growing connection between anti-vaccination theories and conspiracy theories of an alleged looming danger to humanity.

The link between two narratives of harms related to health (vaccines and 5G) led to the mutual strengthening of both these narratives. Furthermore, the copious amount of various intertwined theories and interpretations provided anti-vaccination narratives with yet another dimension of discursive power – segmentation. The connection between vaccination, 5G technology, Gates and microchipping may be posited to form a holistic comprehensive story, but this is not a necessity. It is not necessary to believe in the malicious plans of global rulers lurking in the shadows in order to believe there is a link between 5G technology and vaccines. Simultaneously, it is quite possible to believe that Gates wishes to implant chips in all of humanity without introducing 5G into the mix. In other words, the newly created diversity of conspiracy theories and interpretations enables the recipients of those messages to "pick and choose" parts which seem most intuitive and rational to them, and to build their own story from various elements that may, but do not necessarily have to be connected. In this way, anti-vaccination narratives become more flexible in appealing to a wide audience, and therefore more powerful.

Another important feature of anti-vaccination narratives during the pandemic is path dependency. Once the entire global crisis is interpreted through the lens of a particular interpretative framework, and once individuals' views towards the situation of anxiety and insecurity surrounding them are shaped by such a paradigm, it is extremely hard to change such views. When faced with evidence which contradicts one's position, this causes a feeling of cognitive dissonance and added insecurity,

105 dr Nada Jurinčić o COVID-u: LJUDI ZAR PRISTAJETE NA VLASTITO UBOJSTVO? ZAŠTO-AKO BOGA ZNATE?!, Široki brijeg info, 03.04.2020.

106 Tri pitanja za one koji upravljaju korona krizom u Hrvatskoj, Logično, 28.03.2020.

107 Sladoljev Srećko, Facebook, 11.04.2020.

108 SA PRIJEVODOM – DOKUMENTARNI FILM Plandemija: Indoktrinacija (2. dio), Transformacija Svijesti, 19.09.2020.

109 VIDEO: Plandemija 2 - inDOKTORnacija, Dokumentarac, 19.08.2020.

110 Film koji otkriva prevaru WHO-a, Billa Gatesa, Tedrosa Adhanoma, Anthonyja Faucija s koronom, HOP, 18.08.2020.

111 BUJICA 30.03.2020. EKSKLUZIVNO: DR. SREĆKO SLADOLJEV I LIDIJA GAJSKI: DRUGA STRANA PRIČE O KORONI!, Bujica Z1TV, Youtube, 30.03.2020.

112 Erna Selimović, Facebook, 17.04.2020. See also Case study: COVID-19 Influencers in this report.

since it threatens to disprove explanations and heuristics created to rationalize the situation and reduce uncertainty.

New events and developments are, therefore, likely to be framed in ways that fit pre-existing narratives. A good example of this phenomenon can be found in misinformative narratives regarding protective masks. As the amount of irrefutable evidence that masks reduce the risk of infection grew, so did discursive answers from the side of anti-vaccination proponents, claiming that masks are not only harmful, but also a key element of the plan to impose mandatory vaccination.

A Facebook page named "Buđenje svijesti", ("The awakening of consciousness"), shared a 7-minute video of American osteopath Rashid Butter in which he claims that masks cause hypoxia and physiological stress which makes the body susceptible to disease.¹¹³ Butter also went on to claim that the mandatory wearing of masks is an important element in the "artificial production of a second wave of coronavirus" that will then be used as an excuse for mandatory vaccination.

Although there is ample evidence of the protection provided by masks, and the scientific rebuttal of claims regarding harm caused by masks is easily accessible, on a cognitive level it is easier for many individuals to adapt data to an existing narrative rather than to completely switch paradigms – which helps entrench anti-vaccination beliefs. This is, of course, not the only example. Misinformative infographics about the alleged risks of wearing masks were widely shared on social media, and many sites and pages reported on the views and opinions of other conspiracy theorists, the most prominent being David Icke whose belief that masks are a tool to "raise children to see other individuals as dangerous" were shared by several Facebook pages which promote conspiracy theories.¹¹⁴ Again, this process of adaptation and reinterpretation of new events helped anti-vaccination narratives, not just to resist refutation, but also to actively co-opt contradicting evidence and transform it into proof of their own claims.

The examples analyzed above demonstrate the flexibility of anti-vaccination narratives and their aptitude for incorporating existing patterns of disinformation and leitmotifs of various conspiracy theories. The pandemic has presented opponents of vaccination with a golden window of opportunity which they have, so far, gratefully seized. Defeating such messaging, or at least reducing its reach, will most certainly be a post-pandemic priority: it remains to be seen which policies will prove to be the most efficient in achieving this goal.

113 Buđenje svijesti (archived), Facebook, 19.09.2020.

114 Transformacija svijesti, Facebook, 09.08.2020.

5. Geopolitical aspect of the infodemic in the region

This case study will give an overview of the geopolitical dimension of the COVID-19 *infodemic* in the region, mostly demonstrated through various anti-Western narratives.

The most notable example has been a story about a “US invasion of Europe” – a claim that US troops have used (or even created) the pandemic as a distraction for a mass deployment on European soil. As noted in this overview of COVID-19 disinformation in the Balkans:

“The story offered false interpretations of actual facts about the 2020 military exercise ‘Defender Europe’, claiming a supposed deployment of tens of thousands of American troops to Europe (or Italy in particular) at the time when borders were already being shut down and travel restrictions imposed.

The American soldiers, reports said, could ‘travel’ either because they were already vaccinated (implying that the US was in possession of the virus, which it planted on purpose), or because the virus was not real. Either way, mainstream and/or Western media were accused of being a tool of the conspiracy, waving the pandemic as a shiny distraction while America ‘invades’ the continent with the ultimate goal of attacking Russia.

In the Balkans, the story first popped up in Serbia and was instantly debunked by local fact-checkers.¹¹⁵ That didn’t stop its further spread¹¹⁶ on social media in Serbia¹¹⁷ and also Croatia,¹¹⁸ Bosnia,¹¹⁹ Macedonia¹²⁰ and Montenegro.^{121 122}

Next to this extremely viral piece of false information, there were numerous other versions of the same “refrain”:

“Most other geopolitical interpretations of the pandemic also had a strong anti-Western sentiment and a thinly veiled propagandist nature. In these interpretations, Western weakness, unpreparedness or lack of solidarity, was juxtaposed with Russia’s strength, China’s clever planning and the generosity of both.”¹²³

This is in line with the findings of research from November 2020, which documented that disinformation of a geopolitical nature in Bosnia-Herzegovina, as well as the region, mostly targeted prominent Western actors (the US, EU, NATO, UK), along with the countries in the region perceived, more or less, as their allies (Kosovo, BiH).¹²⁴ While these countries or alliances are portrayed almost exclusively in a negative light through the use of false or misleading content, such disinformation tended to paint a positive picture of actors such as Russia and China and their perceived allies in the region (Serbia, Republika Srpska).¹²⁵

In the context of the COVID-19 pandemic, this was especially demonstrated in examples from early on in the pandemic, particularly in relation to the tragic outbreak of the disease in Italy. In these (often viral) disinformations, the EU was portrayed as cruel and accused of “abandoning” Italy to struggle with the pandemic on its own. This was weaved in with false stories about the EU denying flyover permission for Russian planes carrying humanitarian aid,¹²⁶ or prohibiting the export of medical

115 Analitičar Saša Borojević sugeriše da su Amerikanci „napravili” koronavirus, Raskrikavanje, 13.03.2020.

116 Alo, NATO i korona: prepisana izjava i pogrešne slike | FakeNews Tragač FakeNews Tragač, 16.03.2020.

117 Laž o diverzantskom iskrcavanju 70.000 američkih vojnika u Hamburgu FakeNews Tragač, 22.03.2020.

118 Što se doista događa oko iskrcavanja američke vojske u Europi?, Faktograf, 14.03.2020.

119 “Nešto se dešava”: Italijanski “influencer” i “analitičar” iz Srbije izmislili američku invaziju na Evropu u doba pandemije, 17.03.2020

120 “Бранител Европа 20» не е тајна операција, ниту пак 40,000 американски војници се распоредуваат во Европа, Fighting Fake News Narratives, 18.03.2020

121 Vojna vježba nije napad na Rusiju, Raskrinkavanje, 23.03.2020

122 Fact-checking in the Balkans while the sky is falling, Cvjetičanin Tijana, DigiComNet, 08.08.2020.

123 Ibid.

124 Međunarodna politika i dezinformacije, Zašto ne, November 2020, pp 30

125 Ibid, pp 30

126 Zemlje EU nijesu zabranile humanitarne letove iz Rusije do Italije, Raskrinkavanje, 07.04.2020.

The EU members have not banned the flight of the Russian humanitarian plane, Fighting Fake News Narratives, 28.03.2020.

equipment from EU to countries in need in general.¹²⁷ Similar falsehoods were shared about the US/ NATO – articles claiming that American and/or NATO planes “stole Covid-19 tests” from Italy even ended up on a billboard in Istočno Sarajevo in Republika Srpska (BiH), with a message “No to NATO”.¹²⁸

Disinformation such as those described above were further “substantiated” with more false claims about the supposed resentment of Italian citizens and their disappointment in the EU, which led them to “take down EU flags” en masse.¹²⁹

On the other hand, stories which contained falsehoods, but centered around Russia or China, “portrayed them in a positive light, even when they were actually describing authoritarian or dishonest behavior”.¹³⁰

For example, several viral posts, shared throughout the region, praised Vladimir Putin for cartoonishly dictatorial measures which he did not actually take. These included scaring people into quarantine by deploying lions in the streets,¹³¹ prescribing an exact number of food or hygiene items that one person was allowed to buy, to prevent shortages in stores,¹³² or giving ultimatums to the Russian citizens that they could choose between “15 days in quarantine or 5 years in prison”.¹³³

Another disinformation which invented dishonest behavior, but then presented it as a good thing, was recycled from 2014, when it was circulated in the context of Russia’s annexation of Crimea. This time, with just a change of names and places, the same story was “dug up” to claim that the virus was a hoax created by China in order to take back ownership over its companies on the stock markets.¹³⁴ Compared to other disinformation of that type (“the virus is a hoax”), this is the only one where such action is presented as justified, as China’s “reasonable defense” against the West.¹³⁵

The same double standards are seen in disinformation of the “artificial virus” kind. Here, those that claimed that the US or UK created it mostly ascribed intention to that act;¹³⁶ when China is the “culprit”, it is usually portrayed as a result of an accident (claims that it “escaped from the lab in Wuhan”). Similarly, while the real lockdowns in the region were met with great discontent or even protests, claims that Putin actively threatened jail for disobeying lockdown restrictions were widely shared as an example of clever and stern leadership.

Finally, in addition to these explicit examples, there is also a bottomless “pool” of disinformation targeting non-political actors, all of them from the West, who are “credited” with creating, planning, or benefiting from the pandemic. While most of them have no explicit geopolitical leaning, it is implied that “they” – a frequent stand-in for the secret “world government” that appears in these narratives – are a part of same “demonic” plots as people like Bill Gates, Elon Musk, George Soros, and the Rockefeller or Rothschild families, etc.

Overall, these examples from most – if not all – the countries represented in this research, show that there is an easily detectable geopolitical leaning in the body of disinformation created during and about the pandemic. Further research on their sources and spread mechanisms would be required to determine how much of it is a result of coordinated disinformation campaigns, and how much is an “organic” expression of misconceptions already embedded in the public consciousness in the region.

127 EU nije zabranila već ograničila izvoz medicinske opreme, Raskrinkavanje, 24.03.2020.

128 Ni SAD ni NATO nisu “ukrali Italiji pola miliona testova za koronavirus”, Raskrinkavanje, 15.05.2020.

129 Ne, Italijani ne skidaju masovno EU zastave niti je pomoć EU za Italiju izostala, Raskrinkavanje, 01.04.2020.

Netočno je da Talijani masovno skidaju europske, a ističu ruske i kineske zastave, Faktograf, 06.04.2020.

It is not true that Italian citizens massively remove the EU flag, Fighting Fake News Narratives, 25.03.2020.

130 Fact-checking in the Balkans while the sky is falling, Cvjetićanin Tijana, DigiComNet, 08.08.2020.

131 Ruska disciplina na mimovima: nema ni lavova ni brze konferencije, Fake news tragač, 24.03.2020.

132 Kolica iz supermarketa nemaju veze s Putinom, Raskrinkavanje, 28.03.2020.

133 Putin nije rekao da građani imaju opciju 15 dana izolacije ili 5 godina zatvora, Raskrinkavanje, 22.03.2020; It is not true that Putin has stated the citizens have options of 15 days isolation or 5 years of prison, Fighting Fake News Narratives, 23.03.2020.

134 Ne, Kina nije iskoristila koronavirus da bi zaradila na dionicama, Raskrinkavanje, 27.02.2020.

135 Kako je ruski “fejk” iz 2014. stigao do Bibije Kerle i Dragana Marinkovića Mace, Raskrinkavanje, 10.03.2020

136 Britanski obavještajci nisu “ubacili virus u Wuhan da bi srušili Xi Jinpinga”, Raskrinkavanje, 29.04.2020.

5 CONCLUSION

The data gathered over the course of this research is both massive and worrying. All the weaknesses of the modern information environment are reflected in it – an openness for abuse by either political actors or unscrupulous opportunists; copy-paste journalism which contributes to spread of false information; the uncontrollable virality of sensationalist and/or radicalizing content, exacerbated by algorithm “rabbit holes” which make the wildest scenarios seem reasonable and plausible.

There is no doubt that the phenomena recorded in this research are not merely incidental. The data shows that there is a strong pattern of overlap between disinformative/false content and conspiracy theories, demonstrating that a common strategy of manipulation during the pandemic was the deliberate fabrication of falsehoods combined with selective usage of existing information to manufacture alleged evidence of various conspiracy theories, which preyed on the overwhelming feelings of insecurity and helplessness during the global health crisis. The smaller, but significant number of pseudoscientific claims demonstrates a tendency towards attempting to legitimize false claims by coating them with a veneer of supposed scientific objectivity and authority. This phenomenon is particularly interesting as it is overtly biased: the spreaders of disinformation actively and explicitly reject scientific consensus and the claims of the global scientific community, while simultaneously using the linguistic register of science, and appeals to claims made by supposed experts, to legitimize their views. Although less prevalent than other narratives and strategies, the manipulative presentation of factual information was another way in which various narratives of disinformation were strengthened.

These are patterns created by various interests – financial to political – whose consumption is driven by socio-psychological factors ranging from misplaced acts of rebellion against (real or perceived) injustices, to the basic human need for certainty in frightening times.

Amid the uncertainty of an all-permeating new disease that has no known cure, disinformative content, with ambitions to answer questions about the pandemic, was more prevalent in the media and on social networks. A high number of rated articles containing conspiracy theories and disinformation suggests that the media were keen to challenge official scientific positions on the new virus and the role the authorities had in curbing the pandemic – and from a highly irrational standpoint not based on any evidence.

Content which casts doubt on health statistics, reliability of tests or other official-backed data, feeds into pre-existing feelings of distrust towards public institutions or government officials, and is often used as proof that the general consensus should not be trusted. The same is largely true of comparisons to more common illnesses, where the core logic was to criticize the global scientific consensus (not to mention the very tangible, experience-based reality) that this disease is a far greater threat than a “cold” or flu.

A similar logic can be applied to theories that the virus was artificially created and/or weaponized by global superpowers, which identify both a malicious plot and a culprit, making them of high heuristic value for their “believers”. The noticeable pattern here is that content with more extreme and/or sensationalist claims tends to be more viral, probably due to the fact that the more radical a theory or interpretation is, the wider range of events and phenomena it purports to explain and rationalize. On the other hand, content that is less inflammatory and/or does not seek to provide such all-encompassing explanations of the broader situation is shared less intensively.

Disinformation about medicaments, very dangerous for its potential to instigate dangerous health and behavior choices, has clearly dominated the sample. Cross-referenced against the pandemic's time-frame, it was most frequently found at the beginning of the "infodemic" – more specifically, during the lockdown phase. While these themes still occasionally appear on fact-checkers "radars", they are far less evident at the moment. On the other hand, false and scaremongering information about vaccines has been on the rise and, based on current trends, it can be assumed that the focus of disinformation campaigns in the coming period, during 2021, will be on vaccines and vaccination.

Evidence shows that individuals turn to the internet for vaccination advice, and suggests such sources can impact vaccination decisions – therefore it is likely that anti-vaccine sources can influence whether people vaccinate themselves or their children. According to one piece of research, 16% of information-seekers searched online for vaccination information, and of this group, 70% say what they found influenced their decisions.¹³⁷ If the rate of "production" of disinformation about vaccines continues to increase, it may win the online fight for viewers' attention.

If that happens, decisions about an act of immunization, crucial for curbing the tragic life and livelihood loss brought about by the pandemic, will perhaps be decisively influenced by already established anti-vaccine narratives, "descending" from the founding hypothesis of the movement, the false claim of a link between the MMR vaccine and autism, stemming from the discredited pseudo-scientific "research" of Andrew Wakefield. In other words, by a 20 year old piece of disinformation that has been debunked for nearly as long as it has been around. That "butterfly effect" should be on the mind of everyone who deals with disinformation, no matter how small, especially during the time of a global crisis.

¹³⁷ Kata, A. (2011). Anti-vaccine activists, Web 2.0, and the postmodern paradigm – An overview of tactics and tropes used online by the anti-vaccination movement. Elsevier, Vaccine.

LABOR MARKET • FOREIGN POLICY • EDUCATIONAL POLICY • CIVIL RIGHTS • DATA PROTECTION • DIGITALIZATION • ENERGY POLICY DEVELOPMENT • POLICY • EUROPEAN POLICY • FINANCE AND TAXES • HEALTH • EQUALITY • TRADE POLICY • INFRASTRUCTURE INTEGRATION • INTERNAL SECURITY • CULTURE • RIGHTS • MIGRATION AND REFUGEE POLICY • CARE • RULE ACT • RELIGIJA • PENSIONS • SECURITY POLICY • CONSUMER ECONOMY • CONTEMPORARY HISTORY • IMMIGRATION • LABOR MARKET • FOREIGN POLICY • EDUCATIONAL POLICY • CIVIL RIGHTS • DATA PROTECTION • DIGITALIZATION • ENERGY POLICY DEVELOPMENT • POLICY • EUROPEAN POLICY • FINANCE AND TAXES • HEALTH • EQUALITY • TRADE POLICY • INFRASTRUCTURE • INTEGRATION • INTERNAL SECURITY • CULTURE • RIGHTS • MIGRATION AND REFUGEE POLICY • CARE • RULE ACT • RELIGIJA • PENSIONS • SECURITY POLICY • CONSUMER • ECONOMY • CONTEMPORARY HISTORY • IMMIGRATION • LABOR MARKE

