

Coronavirus fake news in Russia: specificity and criteria for detection

Abstract: The paper examines special features of fake news about COVID-19 published in Russian social media. Based on the literature review and the analysis of fake news stories circulating in Russian social media and related to COVID-19, the criteria for fake news detection were developed: aim, wide circulation online, public interest, aggressive techniques of dissemination, outrageous nature, falsity, intentionality, low quality, simple ways of problems decision, encouraging readers to share the article, “screaming” headlines.

Keywords: fake news, pandemic, social media, coronavirus, COVID-19



Olga Demushina¹
Yulia Semikina²

1 Volgograd Institute of Management, branch of the Russian Academy of National Economy and Public Administration, Department of Public and Municipal Administration

2 Volgograd Institute of Management, branch of the Russian Academy of National Economy and Public Administration, Department of Public and Municipal Administration

Coronavírus e fake news na Rússia: especificidade e critérios de detecção

Resumo: O artigo analisa as características das fake news sobre COVID 19 publicadas nas redes sociais da Rússia. A partir da revisão de literatura e análise das narrativas de fake news que circulam nas mídias sociais da Rússia, relacionadas à COVID 19, foram desenvolvidos critérios para a evidência das características: objetivo, abrangência da circulação online, interesse do público, técnicas agressivas de disseminação, natureza ofensiva, falsidade, intencionalidade, baixa qualidade, modos simplificados de decisão de problemas, incentivo ao compartilhamento do texto e títulos “gritantes”.

Palavras-chave: fake news, pandemia, redes sociais, corona vírus, COVID-19

Coronavirus y fake news en Rusia: especificidad y criterios de detección

Resumen: El texto analiza las características de las fake news sobre COVID 19 publicadas en las redes sociales de Rusia. A partir de la revisión

de la literatura y el análisis de las narrativas de fake news que circulan en los medios sociales en Rusia, relacionadas con COVID 19, se desarrollaron criterios para evidenciar las características: objetivo, alcance de circulación on line, interés público, técnicas agresivas de difusión, carácter ofensivo, falsedad, intencionalidad, baja calidad, formas simplificadas de resolver problemas, fomento al intercambio de textos y títulos “sensacionalistas”.

Palabras clave: noticias falsas, pandemia, redes sociales, virus corona, COVID-19

Introduction

In recent years, fake news has become a very common media phenomenon. The internet contributed very much to this fact by providing various and cheap distribution channels such as discussion forums, website comment fields, blogs, and social media websites. High-speed data transfer, an absence of boundaries, impossibility of censorship and control made circulation of fake news fast and easy.

Coronavirus (COVID-19) started spreading in China in December 2019 and has become a serious problem all over the world. The spread of the disease is accompanied by a large amount of inconsistent information, including misinformation and rumors. According to WHO Director-General T. Ghebreyesus, the world is not just fighting an epidemic, but also an infodemic (Zaroncostas 2020). The distribution of fake news can be dangerous for any country, as it causes a panic and leads to economic and political destabilization.

States are trying to combat fake news dissemination. In 2019, a new law was adopted in Russia which allows punishment of individuals and media with fines for the spread of fake news. Federal Service for Supervision of Communications, Information Technology and Mass Media is a governmental agency whose functions are to check facts presented in the news and if necessary to stop this news from being published or even block the social media. A court decision is necessary to fine individuals and social media for spreading fake news. Despite these measures the fake news problem remains urgent and relevant.

The aim of the paper is to provide an original analysis of coronavirus fake news circulating in Russian social media to identify their specific features, and criteria for detection. The articles which had had the most impact on readers were chosen for the analysis. The outcomes of the analysis will help governments to develop an effective policy to combat this challenge.

The paper is structured as follows: Section 2 reviews the fake news related literature, Section 3 presents the methodology, Section 4 analyses the empirical results obtained, and Section 5 presents the conclusion.

Fake news definitions

Researchers and experts argue that fake news has always existed. However, there is no agreed definition of the term “fake news”. Two approaches to understanding to the concept have been identified. In a broader sense, all false information can be called fake news including satire (Brewer, Young & Morreale 2013; Balmas 2014; Rubin, Conroy, Chen, & Cornwell 2016). According to a narrow definition, only false information created with dishonest intention to mislead consumers is considered to be fake news (Conroy, Rubin & Chen 2015; Allcot, Gentzkow 2017; Shu, Sliva, Wang, Tang & Liu 2017). The most commonly used definitions are summarized in Table 1.

Table 1. The most commonly used definitions of fake news

Lazer, Baum, Benkler, Berinsky, Greenhill, Menczer (2018)	Fabricated information that mimics news media content in form but not in organizational process or intent.
Allcot, Gentzkow (2017)	News articles that are intentionally and verifiably false, and could mislead readers
Bakir, McStay (2018)	Either wholly false or containing deliberately misleading elements incorporated within its content
Digital Forensic Research Lab (2018)	Deliberately presenting false information as news
Klein & Wueller (2017)	The online publication of intentionally or knowingly false statements of fact
Shu, Sliva, Wang, Tang & Liu (2017)	Low quality news with intentionally false information
Golbeck, Mauriello, Auxier, Bhanushali, Bonk, Bouzaghrane, & Falak (2018)	Fake news is information, presented as a news story that is factually incorrect and designed to deceive the consumer into believing it is true
Oremus (2017)	Information that is designed to be confused with legitimate news and is intentionally false

As we can see, all the definitions include similar characteristics which are considered from different perspectives. The phenomenon of fake news requires theoretical understanding. It is necessary to determine how fake news threatens society. In the post-truth era facts are less valuable than the public response they provoke. And moreover, people create multiple versions of the same facts that can be attributed to fake news.

Classification of fake news makes it possible to understand manipulative potential of the impact they produce on people. Fake news can be divided into three groups according to the degree of unreliability of information. The first group consists of completely false (unreliable) news. The credibility of such news depends on the intellectual and cultural level of the target audience. The second group is partially false news, which selectively covers events. Some information is obviously unreliable. People compare all the news and

start believing fakes. When the news contains true and false data, people find it difficult to understand the real facts. Public danger of this type of news is rather impressive, because the perceiving audience does not realize the manipulative techniques used by creators of such fakes. The third group consists of news, which distorts the meaning of an event. The creators of fake news use quotes, taken out of context, or not quoted in full but selectively. It is the fake that is difficult to prevent. Even experienced people tend to believe it.

Fake news can be classified according to readers' perception of accuracy of facts. The first group includes texts which are obvious fakes. The second group consists of fake news which presents the facts in such a way that readers believe them but feel the need to check data. The third group includes the texts which are so similar to the truth, that few people have doubts in their reliability.

Based on the classifications, we have summarized the views of contemporary scholars on the integral features of fake news and present them in Table 2.

Table 2. Features of fake news

Features of fake news	Source
Wide circulation online	Bounegru, Gray, Venturini, & Mauri (2018)
Public interest	Randall (2016); Fraga-Lamas, & Fernández-Caramés (2020)
Aggressive techniques of dissemination	Fraga-Lamas, & Fernández-Caramés (2020); Urazova, S.L., Lazutova N.M., Volkova I.I., Algavi, L.O., Delfino, D.A. (2019).
Outrageous nature	Tandoc Jr, Zheng Wei Lim, Ling (2018)
Falsity (false facts, imitation of a trusted account)	Klein & Wueller (2017); Shu, Sliva, Wang, Tang & Liu (2017)
Intentionality	Klein & Wueller (2017); Shu, Sliva, Wang, Tang & Liu (2017)
Low quality (information, language)	Shu, Sliva, Wang, Tang & Liu (2017)
Simple ways of problems decision	Feldman, P. Ya. (2019); Urazova, S.L., Lazutova N.M., Volkova I.I., Algavi, L.O., Delfino, D.A. (2019).
Aim (intentional impact on the target audience (to spread panic, frighten, induce to buy something or do something, encourage to create news content, to attract attention, to cause aggression)	Balchugov, A.V., Lobastov, A. N., Pakhomova, E. A., Fomenkov, A. A. (2019)
Encouraging readers to share the article	Volkova, I. I., Budovskaya, Yu. V. (2012); Urazova, S.L., Lazutova N.M., Volkova I.I., Algavi, L.O., Delfino, D.A. (2019).
“Screaming”/ panic headline	Volkova, I. I., Budovskaya, Yu. V. (2012)

Methods and description of the criteria

The first step of our research was to analyze the concept “fake news” This helped to identify a common understanding of the phenomenon by scholars from different countries. On the base of

definitions we identified criteria and developed a classification of fake news. It has provided a tool for highlighting the main features of fake news about Covid-19. On the base of developed criteria we analyzed 15 pieces of news published for the period February – May 2020. We chose the news which has achieved the greatest public impact in Russia, was the subject of intense discussion, but was refuted later by official sources.

Some criteria provide information not only about the content of fake news but also about its increasing demand. This criterion is marked with a sign (+++; ++; +).

² Amostra, chamada para acompanhar a cobertura completa.

Table 3. Gradation of criteria for analysis

critério	nível máximo	nível moderado	nível mínimo	nível zero
grau de intensidade	+++	++	+	-

* **Wide circulation online:** This criterion makes it possible to understand which media are used to spread fake news.

* **Public interest:** The criterion let us reveal if the readers were interested with the text (the number of people who browsed the fake news; comments; discussions).

* **Aggressive techniques of dissemination:** Using this criterion we can identify the tools through which fake news in Russia was disseminated and evaluate the degree of their aggressiveness and willingness to impose their wishes.

* **Outrageous nature:** This criterion helps to obtain data about types, practices and examples of manipulation used by the creators of fake news.

* **Falsity:** This category assesses correctness and validity of the information presented in the fake news.

* **Intentionality:** Using this category we assess, the fake news was spreading deliberately, or it is a result of a mistake.

* **Low quality (content, language):** The criterion provides data which help to understand why the quality of the text dropped off

* the content (inconformity to scientific facts, distortion of facts, completely false facts)

* language (the penury of the language, verbal, grammar and speech mistakes).

* **Aim:** The content of fake news helps to determine the creator's intention.

* **Encouraging readers to share the article:** The criterion gives an opportunity to evaluate if there was a request to share the news with other people or through links to social media.

* **“Screaming”/ panic headline:** It helped to understand to what extent the headline was attractive for readers.

Results

In order to identify the main features of fake news in Russian social media, we conducted an analysis of controversial news which was related to COVID-19 and has achieved the greatest public impact in Russia. On the base of developed criteria we analyzed 15 pieces of news. The results are presented in Table 4.

Table 4. Analysis of fake news published in Russian social media. Part 1

N	Fake news	Wide circulation online	Public interest	Aggressive techniques of dissemination	Outrageous nature	Falsity	Intentionality
1	Windows and doors should remain closed as helicopters spray disinfectant into the air to eradicate the coronavirus	Facebook WhatsApp	++	++	++	F	Yes
2	Bill Gates wants to use coronavirus vaccines to implant microchips in people	Moskva 24, Zavrtra, Besogon YouTube	+++	+++	+++	F	Yes
3	Coronavirus is biological weapon created artificially	Kommersant	+++	+++	+++	F	Yes
4	The first infected Chinese got COVID-19 from bats which were sold in markets for human consumption	Ridus, mk.ru, kommersant.ru	++	+	++	F	Yes
5	US army brought the epidemic to Wuhan	Twitter Facebook	+	+	++	F	Yes
6	Covid-19 appeared as a result of contact with the artificially synthesized bacterium Cynthia	9111.ru, aif.ru, You Tube, pronedra. ru	+++	+++	+++	F	Yes
7	Consumption of garlic and ginger can help coronavirus patients	Facebook WhatsApp	+	+	+	F	Yes
8	The Simpson episode predicted coronavirus pandemic	medialeaks.ru	+	+	+	F	Yes
9	Stray dogs and cats are being rounded up and killed in Moscow to fight the coronavirus outbreak	varlamov.ru	++	++	+++	F	Yes
10	Stanford university recommendations to drink more liquid as it can wash it down into the stomach. Once there, the stomach acid will kill the virus	Facebook	+	+	+	F	Yes

11	Moscow will be completely shut down	Vkontakte Online news website “Vedomosti”	+++	++	+++	F	Yes
12	Cristiano Ronaldo has transformed his chain of hotels into coronavirus treatment centres	Komsomolskaya Pravda	++	+	+	F	Yes
13	Moscow authorities will order all the men of the capital to shave the beards and mustache to protect them from Covid-19	Newsland, Moskva 24	++	+	+	F	Yes
14	Sauna can kill the coronavirus	Facebook	+	++	+	F	Yes
15	The coronavirus does not exist. In fact, it is a variety of usual influenza	Snatch, Fishki.net, Woman.ru	+++	+++	+++	F	Yes

Table 4. Analysis of fake news published in Russian social media. Part 2

N	Fake news	Low quality (content, language)	Simple ways of problems decision	Aim	Encouraging readers to share the article	“Screaming”/ panic headline	Visuality of fake news
1	Windows and doors should remain closed as helicopters spray disinfectant into the air to eradicate the coronavirus	Content ++	+++	to spread panic, frighten	+++	+++	–
2	Bill Gates wants to use coronavirus vaccines to implant microchips in people	Language +	+++	to spread panic, frighten	+++	+++	a photo
3	Coronavirus is biological weapon created artificially	Content +++	+	to spread panic, frighten	+++	+++	a photo
4	The first infected Chinese got COVID-19 from bats which were sold in markets for human consumption	Content ++	+	to encourage to create news content	++	+++	a photo
5	US army brought the epidemic to Wuhan	Content +++	+	to cause aggression	++	+++	a photo
6	Covid-19 appeared as a result of contact with the artificially synthesized bacterium Cynthia	Language +++	+++	to spread panic, frighten	+++	+++	montage
7	Consumption of garlic and ginger can help coronavirus patients	Language +++	+++	to induce to buy something or do something, to attract attention	+++	+++	illustrations

8	The Simpson episode predicted coronavirus pandemic	Language +++	++	to encourage to create news content, to attract attention	+++	++	illustrations
9	Stray dogs and cats are being rounded up and killed in Moscow to fight the coronavirus outbreak	Language +	+++	to cause aggression, to attract attention	+++	+++	–
10	Stanford university recommendations to drink more liquid as it can wash it down into the stomach. Once there, the stomach acid will kill the virus	Content +++	+++	to induce to buy something or do something	+++	++	a diagram
11	Moscow will be completely shut down	Language +	+++	to spread panic, frighten, to encourage to create news content	+++	++	illustrations
12	Cristiano Ronaldo has transformed his chain of hotels into coronavirus treatment centres	Content ++	++	to encourage to create news content, to attract attention	++	++	a photo
13	Moscow authorities will order all the men of the capital to shave the beards and mustache to protect them from Covid-19	Language ++	+++	to cause aggression, to encourage to create news content	++	+++	a photo
14	Sauna can kill the coronavirus	Language +++	+++	to induce to buy something or do something	+++	+++	illustrations
15	The coronavirus does not exist. In fact, it is a variety of usual influenza	Content +++	+++	to cause aggression, to attract attention	+++	+++	a diagram

On the base of the analysis we can conclude the following: researchers indicate a few reasons why social media platforms may be especially conducive to fake news. First, on social media, the fixed costs of entering the market and producing content are vanishingly small. Second, the format of social media—thin slices of information viewed on phones or news feed windows—can make it difficult to judge an article’s veracity (Allcott, Gentzkow 2017). Our analysis shows that most fake news stories about coronavirus were posted either in social networks (Facebook, VKontakte) or in online newspapers (Kommersant, Vedomosti, Zavtra etc) which made possible wide circulation of fake news online and an unlimited number of shares.

As all the presented fake news addressed the most important areas of life (health, medicine, security, freedom of choice), dissemination of the fake news stories caused significant public interest in Russia (a great number of people who browsed the fake news).

According to the recent studies, fake news is disseminated through automated and aggressive techniques (Fraga-Lamas & Fernández-Caramés 2020). In Russia, the news causing the widest public resonance was disseminated via bots (automated accounts), trolls (agents producing false content) and fake accounts. Some fake stories were disseminated at lightning speed through reposts.

All the presented fake news included misinformation which was spread intentionally. All the misinformation was refuted later by official sources. Some of the online newspapers disseminating this misinformation and people who shared the fake news were fined.

When examining the content of COVID-19 fake news in Russia and the impact it had on the society, aims of fake news can be indicated:

- to spread panic, frighten (table 4, N 1, 2, 3, 6, 9, 11, 13);
- to encourage to create news content (table 4, N 1-15);
- to cause aggression (table 4, N 2, 3, 5, 6, 9, 11, 13, 15);
- to induce to buy something or do something (table 4, N 1, 2, 7, 9, 10, 11, 13, 14, 15);
- to attract attention (table 4, N 1-15).

For instance, the news about complete shutdown in Moscow and disinfection from helicopters caused panic and fear in many Russian cities. People shared the news in messengers and this information flashed around the entire country in a short time. The information about healing properties of garlic and ginger resulted in disappearing these products from shops. The news accusing Bill Gates, the US-army, China of malicious intent to create the coronavirus and spread it all over the world led to outbreaks of aggression towards these countries.

All the presented articles proved that creators of fake news use manipulation practices for achieving their goals. It reveals an outrageous nature of fake news.

Table 5. Types of manipulation used in fake news

Type of manipulation	Example of fake news
Intimidation of audience	Windows and doors should remain closed as helicopters spray disinfectant into the air to eradicate the coronavirus
Omission of information	The coronavirus does not exist. In fact, it is a variety of usual influenza
Political propaganda	Bill Gates wants to use coronavirus vaccines to implant microchips in people
Provision of the contradictory information	US army brought the epidemic to Wuhan / The first infected Chinese got COVID-19 from bats which were sold in markets for human consumption / US army brought the epidemic to Wuhan
Incitement against another country	Covid-19 appeared as a result of contact with the bacterium Cynthia, which was artificially synthesized by American scientists to clean water from petroleum products
Distortion of reality	The Simpson episode predicted coronavirus pandemic
Advertisement	Consumption of garlic and ginger can help coronavirus patients

Several researchers (Shu, Sliva, Wang, Tang & Liu 2017) indicate low quality

of information as an integral feature of fake news. Recent studies (Qiu, Oliveira, Shirazi, Flammini & Menczer 2017) try to explain why low grade and inaccurate information dominates in online social media. They find that low-quality information is likely to be shared because social media users' attention is finite and people are simply too overloaded with information to be able to discriminate between low- and high-quality information.

By low quality information we mean inaccurate, incomplete, unreliable and not up- to-date information with many mistakes and gaps. The fake news stories presented in this study are fully consistent with these features. None of the fake news stories had a link to a source of the story. One of the most common clues to fake news is that the post will either have no date or a date that mismatches the content (Ibrahim, Safieddine 2020). The fake news related to COVID-19 in Russia never indicates dates of events described in the news stories and does not contain the date of the news itself.

Most of fake news had aspects, associated with visuality. They contained images of different kinds: photographs, expressive illustrations, frightening montages, diagrams. Visuality helps to involve the reader into a skewed information field.

Conclusions

Based on the literature review and the analysis of fake news stories circulating in Russian social media and related to COVID-19, the criteria for fake news detection were developed: aim, wide circulation online, public interest, aggressive techniques of dissemination, outrageous nature, falsity, intentionality, low quality, simple ways of problems decision, encouraging readers to share the article “screaming” headlines. According to these criteria we analyzed fake news about COVID-19 published in Russian social media.

The results of the presented study can be used to develop an effective model for capturing fake news on social media. Detecting and controlling fake news presents a significant challenge in many countries. Further study can conduct a comparative analysis of specific features of fake news and challenges they cause in different countries.

References

- Allcott, H., Gentzkow M. (2017). Social Media and Fake News in the 2016 Election. *Journal of Economic Perspectives* 31 (2): 211-236
- Bakir, V., & McStay, A. (2018). Fake news and the economy of

emotions: Problems, causes, solutions. *Digital journalism*, 6(2), 154-175.

Balchugov, A. V., Lobastov, A. N., Pakhomova, E. A., Fomenkov, A. A. (2019). Transformation of media environment in the XXI century. *Proceedings of the international scientific and practical conference. Moscow*, 310-317.

Balmas, M. (2014). When fake news becomes real: Combined exposure to multiple news sources and political attitudes of inefficacy, alienation, and cynicism. *Communication research*, 41(3), 430-454.

Bounegru, L., Gray, J., Venturini, T., & Mauri, M. (2018). A Field Guide to 'Fake News' and Other Information Disorders. *A Field Guide to "Fake News" and Other Information Disorders: A Collection of Recipes for Those Who Love to Cook with Digital Methods*, Public Data Lab, Amsterdam (2018).

Brewer, P. R., Young, D. G., & Morreale, M. (2013). The impact of real news about "fake news": Intertextual processes and political satire. *International Journal of Public Opinion Research*, 25(3), 323-343.

Conroy, N. K., Rubin, V. L., & Chen, Y. (2015). Automatic deception detection: Methods for finding fake news. *Proceedings of the Association for Information Science and Technology*, 52(1), 1-4.

Fake News: Defining and Defeating (2018). Digital Forensic Research Lab. Available online: www.thelancet.com (accessed on 26 June 2020).

Feldman, P. Ya. (2019). "Post-truth" and "fake news" in modern communication space: prospects of political and legal regulation. *Citizen. Election. Power*, 2(12).

Fraga-Lamas, P., & Fernández-Caramés, T. M. (2020). Fake News, Disinformation, and Deepfakes: Leveraging Distributed Ledger Technologies and Blockchain to Combat Digital Deception and Counterfeit Reality. *IT Professional*, 22(2), 53-59.

Golbeck, J., Mauriello, M., Auxier, B., Bhanushali, K. H., Bonk, C., Bouzaghane, M. A., ... & Falak, W. (2018, May). Fake news vs satire: A dataset and analysis. *In Proceedings of the 10th ACM Conference on Web Science* (pp. 17-21).

Ibrahim, Y. Safieddine F. (2020). Fake News in an Era of Social Media: Tracking Viral Contagion.

Klein, D., & Wueller, J. (2017). Fake news: A legal perspective. *Journal of Internet Law* (Apr. 2017).

Lazer, D. M., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., ... & Schudson, M. (2018). The science of fake news. *Science*, 359(6380), 1094-1096.

Oremus, W. (2017). Facebook has stopped saying ‘fake news’. Available online: http://www.slate.com/blogs/future_tense/2017/08/08/facebook (accessed on 22 June 2020).

Qiu, X., Oliveira, D. F., Shirazi, A. S., Flammini, A., & Menczer, F. (2017). Limited individual attention and online virality of low-quality information. *Nature Human Behaviour*, 1(7), 0132.

Randall, D. (2016). The Universal Journalist

Rubin, V. L., Conroy, N., Chen, Y., & Cornwell, S. (2016, June). Fake news or truth? using satirical cues to detect potentially misleading news. In *Proceedings of the second workshop on computational approaches to deception detection* (pp. 7-17).

Shu, K., Sliva, A., Wang, S., Tang, J., & Liu, H. (2017). Fake news detection on social media: A data mining perspective. *ACM SIGKDD explorations newsletter*, 19(1), 22-36.

Tandoc Jr, E. C. Zheng Wei Lim, and Richard Ling (2018),“. Defining “Fake News”: A Typology of Scholarly Definitions,” *Digital Journalism*, 6(2), 137-53.

Urazova, S.L., Lazutova N.M., Volkova I.I., Algavi, L.O., Delfino, D.A. (2019). Semantic space and algorithm of media text’s consumption in digital space. *The European Proceedings of Social & Behavioural Sciences EpSBS* (pp 948-956).

Volkova, A. A., Budovskaya, Yu. V. (2012). Distribution of media content in social media and social networks: game theory against virality. *The Bulletin of Moscow State University of culture and arts*, № 5 (49), 69-74.

Zaroncostas, J. How to Fight an Infodemic. Available online: www.thelancet.com (accessed on 26 June 2020).

RECEBIDO EM: 09/07/2020

ACEITO EM: 11/08/2020