









## Vaccine fake news: an analysis under the World Health Organization's 3Cs model

*Fake news sobre vacinas: uma análise sob o modelo dos 3Cs da Organização Mundial da Saúde*  
*Fake news sobre vacunas: un análisis bajo el modelo 3Cs de la Organización Mundial de la Salud*

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### ABSTRACT

**Objective:** To analyze fake news about immunobiologicals using as reference vaccine hesitancy in the World Health Organization's 3Cs model (confidence, complacency and convenience). **Method:** This is an exploratory qualitative research that used content analysis to analyze fake news on three national news-checking sites. **Results:** Twenty fake news related to immunobiologicals were analyzed, with 55% published in 2018 and 63% related to yellow fever vaccine. From analysis of results, two empirical categories have emerged: *Immunobiologicals have a potential risk of death/sequel; Immunobiologicals are ineffective.* **Conclusion:** Fake news have the potential to produce vaccine hesitancy based on the 3Cs model. Therefore, it is necessary to rethink communicative health practices that do not underestimate the asymmetries and inequities that characterize the unequal Brazilian society. Considering that nursing is the largest workforce in immunization rooms, there is a need for professionals' engagement as an active vehicle of truthful information in immunobiologicals for the population.

### DESCRIPTORS

Vaccination Refusal; Anti-Vaccination Movement; Vaccines; Public Health; Health Communication; Qualitative Research.

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## INTRODUCTION

The Brazilian National Immunization Program (PNI – *Programa Nacional de Imunização*) is one of the most complete immunization programs in the world and was instrumental in the reduction and elimination of vaccine-preventable diseases in Brazil. Vaccine coverage close to or above the target for almost all immunobiologicals for several decades<sup>(1)</sup> has resulted in significant improvements for public health<sup>(2)</sup>. Such success is also related to the Brazilian society that has shown itself to be present and responsive to Public Health strategies<sup>(2)</sup>.

However, since 2013, Brazil has recorded a drop in vaccination coverage rates, associated with recent epidemics of yellow fever and measles<sup>(3)</sup>. The scenario highlights the need to investigate, among potentially related factors, vaccine hesitancy and dissemination of false news commonly shared on social networks<sup>(4)</sup>.

Recent research has identified an important barrier to vaccination, the Internet. Countries with significant reductions in vaccine confidence have been associated with highly organized anti-vaccine movements and online mobilization<sup>(5)</sup>. Although the internet and access to social media have revolutionized information production and consumption, the growing dissemination of false information has become a public health problem in Brazil<sup>(6)</sup>.

Disseminating false information by social media is not a new event, but it has only recently gained its own term, *fake news*. By definition, fake news are understood as news articles that are intentionally false, able to be verified as such, and that can mislead readers<sup>(7)</sup>. Most of the fake news circulating on the internet are related to health, addressing, among other topics, vaccination<sup>(8)</sup>.

Within the scope of decision to vaccinate in 2014, the term “vaccine hesitancy” was defined by the World Health Organization’s (WHO) Strategic Advisory Group of Experts (Sage) on Immunization as a delay in accepting or refusing vaccination, despite the availability of services for this. In general, vaccine acceptance is a complex process that can be affected by several factors. Among the explanatory models that seek to elucidate them, the 3Cs model developed by WHO makes up the main theoretical framework of this work. However, it is important to highlight that the group proposes other important models, such as the matrix of determinants of vaccine hesitancy<sup>(9-10)</sup>.

In particular, the 3Cs model comprises three categories: confidence, complacency and convenience<sup>(9-10)</sup>. Confidence refers to credibility in the efficacy and safety of vaccines, the system that delivers them and managers’ motivations when recommending them. Complacency is due to the population’s low perception about the risks of vaccine-preventable diseases, considering them unnecessary. It is argued that complacency may be a result of the success of the immunization program, since people believe that exposure to antigens by vaccines may be worse than being affected by less common diseases today. Convenience includes physical availability, geographical

accessibility, ability to understand (knowledge of language and health) and quality (real or perceived) of immunization services<sup>(9-10)</sup>.

It is observed that there are few Brazilian studies focused on vaccine hesitancy and the WHO’s 3Cs model. European countries, for instance, are far ahead in studies on vaccine hesitancy. It is a problem of ignorance of the country’s profile in vaccine hesitancy, which has been increasingly pointed out as a cause of falls in vaccine coverage in other countries<sup>(4)</sup>. The findings in the content analysis of the fake news found will contribute to the definition of indications of vaccine hesitancy.

Furthermore, the COVID-19 pandemic, declared by the WHO in March 2020, exposes society to unusual circumstances<sup>(11)</sup>. The lack of specific treatment results in the clamor for vaccine and its refusal, based on misinformation and false information about it. In this regard, an opinion poll conducted in Brazil reports that 20% of Brazilians do not intend to get vaccinated when a vaccine is available and 34% state they believe in at least one fake news related to vaccination<sup>(12)</sup>.

Herd immunity is an important means of controlling the circulation of the virus nation and worldwide; therefore, the current situation highlights vaccine hesitancy and the need to study it, as it interferes with the public health perspective.

In this context, this study assumes that new ways of producing and consuming content on the internet and the dissemination of fake news have the ability to influence a population group’s choices, which may compromise herd immunity and contribute to reducing vaccine coverage. This work aimed to analyze the fake news about immunobiologicals using as reference vaccine hesitancy in the WHO 3Cs model, in order to strengthen and support health professionals, especially nurses, in coping with the reduction of vaccination coverage.

## METHOD

### TYPE OF STUDY

This is an exploratory qualitative research<sup>(13)</sup> that used content analysis<sup>(14)</sup>.

### SCENARIO

To investigate possible fake news, 3 national news-checking websites were used: [www.boatos.org](http://www.boatos.org), [www.e-farsas](http://www.e-farsas) and [www.saude.gov.br/fakenews](http://www.saude.gov.br/fakenews). The websites receive requests from Brazilian users to assess the veracity of facts described in news, with the Ministry of Health’s page being especially related to health issues. The websites aim to demystify circulating information and combat fake news, integrating the main active agencies specialized in checking facts in the country of great national relevance<sup>(15)</sup>. The websites were chosen due to their wide access, relevance and national recognition.

The news were published in different years, from 2010 to the year of collection, 2019.

## SELECTION CRITERIA

Fake news related to vaccines, news verified on the 3 search engines, news carried by text, video or image and news that can be located in its complete content were included. Duplicate news and news with themes that do not address the effects, composition, mechanism, efficacy or safety of vaccines were excluded. There was no delimitation of time period.

## DATA COLLECTION

Data collection was carried out in September 2019, using the keyword “vaccine” in the search engine of the 3 news-checking websites mentioned.

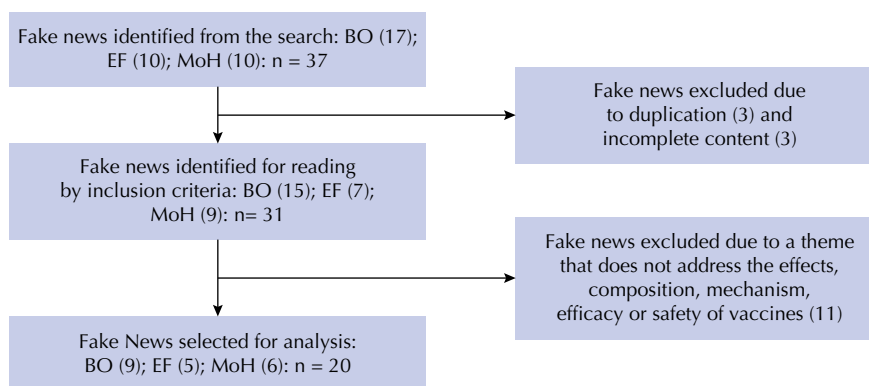
The websites present the headings of the verified news, followed by its content in its entirety or excerpts. The complete contents were extracted from the website, while, in the case of incomplete content, searches were performed on Google Search, in order to identify the original news. The news published in video format were transcribed for better analysis.

## DATA ANALYSIS

To facilitate their presentation, each fake news was numbered and added to the acronym corresponding to the news website from which the report originated, as follows: *Boatos.org* (BO), *E-farças* (EF) and *Saude.gov* (MoH).

The selection of fake news, using the exclusion and inclusion criteria, is followed by the three steps necessary for the analytical process following the guidelines of Bardin<sup>(16)</sup> and Triviños<sup>(17)</sup>. Pre-analysis precedes the analytical description and aims to organize the selected material. The analytical description and referential interpretation of the material comprise the second and third stages of the process, respectively. Analysis categories emerged in the light of the theoretical framework, seeking to establish relationships between the empirical data and the object of analysis.

The inclusion and exclusion of news by criteria, as well as the total sample of fake news retrieved from each search website, are shown in Figure 1.



BO: *Boatos.org*; EF: *E-farças*; MoH: *Saude.gov*.

**Figure 1** – Flowchart showing the exclusion and inclusion criteria of fake news for analysis and quantity retrieved on each search website.

## ETHICAL ASPECTS

This research is exempt from appraisal by an ethics committee according to Resolution N. 466/12, which deals with research involving human beings.

## RESULTS

The news were disseminated by the social platforms Youtube (video), Facebook and Whatsapp (text, images

and audios), religious and conspiracy websites, but mainly general news websites. Many translate North American fake news and make it known, as commonly happens among Brazilian fake news<sup>(18)</sup>. There are records of checking for fake news since 2010 (in news excluded by criteria), with an increase in the occurrence from 2016 to 2019 (Chart 1).

**Chart 1** – News investigated from *Boatos.org*, *E-farsas* and *Saude.gov* according to date of publication and acronym.

Publication date (month/year)	Acronym	Headings of the news
09/2017	BO.01	Federal Public Ministry bans HPV vaccine nationwide
01/2018	BO.0.2	Nurse warns that no one should take the yellow fever vaccine
01/2018	BO.03	Yellow fever is a scam created by the government to sell vaccine

continue...

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01/2018	BO.04	Yellow fever vaccine paralyzes the liver
02/2018	BO.05	Yellow fever virus mutates and vaccine no longer protects
05/2018	BO.06	Doctors who discovered cancer enzymes in vaccines are found dead
05/2018	BO.07	VACCINATION: Population Reduction, Transgenic Mosquitoes, Georgia Guide Stones, Bill Gates & NWO
07/2018	BO.08	Doctor breaks the silence: "The flu vaccine is what is causing a deadly flu outbreak."
05/2019	BO.09	Urgent! Naturalistic therapist (Jaime Bruning) makes severe alert H1N1 vaccine destroys immunity and gives cancer - is it possible?
01/2016	EF.01	Doctor makes a serious complaint to the Public Ministry: "Microcephaly was caused by expired vaccines and not the Zika virus."
04/2016	EF.02	Urgent: After vaccinating 48 million people, they discovered that the FLU VACCINE is a DEADLY POISON!
01/2018	EF.03	17-year-old dies from yellow fever vaccine!
06/2018	EF.04	Yellow fever vaccine gets bride pregnant in Pará and leaves city in panic
06/2018	EF.05	14-year-old virgin teenager reports she became pregnant after taking flu vaccine
03/2016	MoH.01	Mandatory vaccines: What is behind it? Are they reliable?
03/2017	MoH.02	Japan: HPV Vaccine under Trial For Its Horrible Side Effects
04/2017	MoH.03	New Vaccines still cause Autism and Governments Know
01/2018	MoH.04	60 American doctors tell the world not to take the yellow fever death vaccine poison
02/2019	MoH.05	10 Reasons Why You Should NOT Vaccinate Your Children
07/2019	MoH.06	Flu vaccine causes hole in arm

BO: *Boatos.org*; EF: *E-farças*; MoH: *Saude.gov*.

There was a greater spread of fake news related to immunobiologicals on the news-checking websites in 2018, accounting for 55% of the total news, 63% of which referred to yellow fever vaccine (BO.2, BO.3, BO.4, BO.5, EF.3, EF.4, and MoH.4).

Fake news are disseminated from appealing content, with predefined speech patterns, predominance of elements such as alarmism, unknown websites, without authorship, grammatical errors, sensational content and requests for sharing<sup>(19)</sup>. These characteristics were detected in all investigated news, most of the time, associated with each other.

Given the content of the fake news explored and the 3Cs model that permeates vaccine hesitancy, analysis of results provided the definition of two empirical categories: *Immunobiologicals have a potential risk of death/sequel*; *Immunobiologicals are ineffective*.

#### IMMUNOBIOLOGICALS HAVE A POTENTIAL RISK OF DEATH/SEQUEL

In this category, fake news were included, which inappropriately related some immunobiological to adverse post-vaccination events. A frequent argument to convey the idea that immunobiologicals cause damage and threaten the health of the population are the adverse events following immunization (AEFI), supposedly covered by the government and managers. As a basis, real and isolated occurrences of AEFI are used (MoH.01, MoH.02, MoH.03, MoH.04, MoH.05, EF.02, BO.07, and BO.09), mainly related to Guillain-Barré syndrome:

*Some have localized swelling or temporary fever symptoms after vaccinations. But if your child is one of the most unfortunate*

*that develops permanent nerve damage in the form of Guillain-Barré, for instance, he or she may require lifelong care and treatment for vaccine damage (MoH.5).*

In other cases, some conditions are associated with immunization, such as autism, cancer, infertility, diabetes, microcephaly, and pregnancy (MoH.01, MoH.03, MoH.04, EF.01, EF.04, EF.05, BO.04, BO.06, and BO.09), without scientific foundation:

*A 14-year-old student suffered serious complications after a flu vaccine (...) until the family doctor finally realized weeks later, she had been impregnated with the vaccine. (...) The United Nations estimates that more than 4,000 people fall pregnant each year [due to the use of the vaccine] (EF.5).*

Information about the composition, mechanism and administration of vaccines is distorted. Adverse events not compatible with immunobiologicals are described as well as serious adverse events associated with components that are not present in the mentioned vaccines (MoH.03, MoH.05, EF.04, BO.07, and BO.09):

*The vaccine contains mercury, which will damage your brain. (...) Over the next 30 minutes, the neuron membrane began to degenerate rapidly, leaving neurofibrils behind (...) and which will leave you with what consequences? Low IQ (...), weaker, foolish, you will lose your ability to live, (...) you get sick! (BO.7).*

Death is also associated with vaccination, with vaccines being cited as poisons. A common conspiracy belief in some of the news is that vaccination is a population reduction strategy (MoH.04, EF.03, BO.01, BO.05, BO.07, BO.08, and BO.09).

*The vaccination campaigns they are carrying out are to reduce the population, (...) to kill the population! There have already been deaths, 47,000 children died when they went to get the paralysis vaccine, this has happened a long time ago, but the media doesn't show it, the media doesn't show it here (BO.09).*

Immune system stimulation by the components of vaccines poses a danger to the news authors, compromising individuals' natural immunity (MoH.01, MoH.05, MoH.04, BO.01, and BO.05).

*Vaccines need to cause disease to work. They cause an artificial disease that compromises the body's natural resistance (MoH.01).*

Fake news argues that there are not enough studies and research on the safety of immunobiologicals. It is reported that AEFI and vaccine composition are not properly informed to the population, depriving them of a conscious decision to vaccinate (MoH.01 and MoH.03).

*Why, before vaccinating, is not clearly informed to the population everything that makes up each vaccine so that everyone has the freedom to choose whether to vaccinate or not? (MoH.01).*

Fake news about immunobiologicals associated with category 1 use a narrative that discourages vaccination in general, creating, mainly, distrust. Some make evident the conscious and radical opposition to any vaccine.

### IMMUNOBIOLOGICALS ARE INEFFECTIVE

News that argue that vaccination does not provide adequate immunization for disease prevention were included in this category. A first argument is the justification for the eradication of diseases by changing lifestyle habits in society (MoH.01 and BO.03).

*There are those who can dispute these claims saying: it was the vaccine that ended yellow fever in Brazil in the 50s and 60s. This does not correspond to the truth, as it was the strict health measures adopted at the time in all affected regions that managed to partially control this epidemic (MoH.01).*

Others point out that there are not enough studies to prove the effectiveness of immunobiologicals (MoH.04 and MoH.05).

*Vaccines have never been proven safe or effective. None of them compare the health outcomes of those vaccinated against unvaccinated individuals, which would be the test vaccine safety study used as evidence of which vaccines are safe, mistakenly compares the side effects of another vaccine, effectively nullifying them (MoH.05).*

It is argued that the profit of the pharmaceutical industry is the real reason for encouraging immunization, in order to question the quality and effectiveness of the products offered.

*You also have the profit\$ obtained from BigPharma [referring to the pharmaceutical industry] if you hit the target (...). They often circumvent the rules for discarding expired vaccines, with viruses, bio-contaminating material, real biochemical weapons, leading to disposal on the coast of Africa; there a lot of people who get sick, and they profit again, selling vaccines!!!*

*Such fractional doses are part of an experimentation program and are using the people of Brazil as guinea pigs!!! It offers neither effectiveness nor safety!!! There is no clinical evidence!!! Careful!!! (BO.03).*

Finally, it is constantly argued that the immunity acquired by natural exposure to antigens is more effective than exposure mediated by vaccines (MoH.04, MoH.05, and BO.01).

*It works synergistically, and, together, vaccination destroys the synergy of the immune system, because the injection ignores the normal route of entry through the lungs and often because (...) the response of Th1 cells (MoH.04).*

Fake news about immunobiologicals associated with category 2 build a narrative that contradicts the effectiveness of vaccines, in order to convince the user that they are unnecessary to their health.

### DISCUSSION

Vaccine hesitancy is associated not only with refusal to vaccinate, but also with the selective acceptance of some vaccines by the population. The results showed that some vaccines are the focus of fake news. The intense dissemination of fake news associated with yellow fever vaccine corresponds to the period of the largest outbreak of wild disease in Brazil, from July 2017 to June 2018<sup>(20)</sup>, when there was an expansion of the areas of immunization recommendation. Consequently, in addition to the dissemination of government campaigns in the media, the direct relationship between the threat of a disease epidemic and the immediate spread of fake news about its corresponding immunobiological product, characterized as a "double epidemic" of the disease and misinformation, is noticeable<sup>(21)</sup>.

Regardless of the type of immunobiological to which they refer, it is perceptible that all the news are based on ignorance or little scientific knowledge about vaccines. The need for checking websites shows that the population is interested in verifying the information received; however, it is not clear to the public how to obtain it.

Most Brazilians use social networks and messaging applications as the main source of information on vaccines (the second most used medium). In general, these individuals receive more negative information about vaccines, tend to believe them more and, therefore, are more insecure about immunization. Those who use reliable sources and health professionals to receive information know how to better identify false information about vaccines or feel more secure<sup>(18)</sup>.

Considering the association between the source of information used by individuals and the ability to identify false information, it is possible to infer that misinformation or insufficient information are risk factors for vaccine hesitancy motivated by fake news.

Although categories 1 and 2 present different arguments, all the fake news analyzed have the potential to deceive and produce vaccine hesitancy. The false arguments are not complementary, but together they build

contradictions and incompatibilities, which go against confidence, convenience and motivate complacency in relation to immunobiologicals.

A pilot study discussed vaccine hesitancy in thirteen countries and highlighted problems related to confidence in six countries, complacency and convenience in four and six countries, respectively. Only two countries indicated that vaccine hesitancy posed a serious threat to the immunization program<sup>(22)</sup>. Brazil is confident and safe when it comes to immunobiologicals<sup>(23)</sup>. However, in a recent survey, about 13% of respondents stopped vaccinating or vaccinating any child under their care<sup>(17)</sup>, which shows the drop in vaccination coverage in the country. From the findings in the content analysis of the fake news found, it is possible to define indications of vaccine hesitancy.

The negative influence of fake news on confidence is direct, as it depends heavily on understanding the safety and efficacy of vaccines<sup>(9-10,24)</sup>. Disbelief in the information and recommendations provided by health authorities and health professionals, motivated by fake news, reduces confidence in these entities and in the health system.

Defended by fake news, the low belief in illness due to immunopreventable diseases and the risk of adverse events build the narrative for making individual non-vaccination decisions<sup>(22)</sup>. Considering complacency a derivative of this exact perception<sup>(9-10,24)</sup>, it can be concluded that it is influenced by the fake news discourse.

While the association between fake news and confidence-complacency is clearer, convenience can also be affected. The third C is not only linked to elements of physical availability and accessibility, but also to the ability to understand<sup>(9-10,24)</sup>. Consequently, individuals who have easy access to false information about immunobiologicals will have limited knowledge of health, determining in their degree of vaccine hesitancy.

In general, the perception that vaccines are important is greater than that they are safe. Thus, there is a willingness to vaccinate if effective prevention is perceived<sup>(23)</sup>. The confidence in health professionals and their recommendation for vaccination seems to positively influence the perception of safety of immunobiologicals<sup>(25)</sup>, with the behavior of seeking professional advice being associated with greater acceptance of vaccines<sup>(5)</sup>. Among the sources most used by Brazilians to search for information about immunobiologicals regarding immunization, health professionals are not consulted, with the traditional media (68%) occupying first place, followed by social networks (48%), and talking with friends and family (47%)<sup>(18)</sup>.

Studies show that some European health professionals are reluctant to support government immunization programs, being selective for some immunobiologicals, not considering them useful or having doubts about the immunization program<sup>(23)</sup>. More specifically, in France, it is pointed out that general practitioners often recommend vaccines when they feel comfortable explaining their benefits and risks to patients or to reliable sources of official information<sup>(26)</sup>. Thus, the recommendation is low when they consider

that the adverse effects are likely or doubted the usefulness of vaccines.

Therefore, health professionals' engagement with immunization can strengthen the population's confidence and minimize vaccine hesitancy. As health educators par excellence, it is important that nursing is involved with the theme of immunobiologicals, seeking to update itself on the subject and correctly inform users and health team professionals as well as educate them for a safe search for information.

In addition to lack of studies on vaccine hesitancy published in Brazil<sup>(4)</sup>, there is little research that links the work process in immunization rooms with nursing, although it commonly receives users in immunization rooms and in nursing consultations in primary care. Relevant and essential activities are not being carried out in the manner recommended by PNI and this indicates the need for continuing education, given the constantly changing nature of the program<sup>(27)</sup>.

In order to minimize vaccine hesitancy, two important components stand out: communication and professional training to enable them to solve doubts and contribute to the population's informed choice.

As a reference of immunization rooms and team leaders, nurses contribute so that other multidisciplinary team professionals are able to provide correct information and direct users when asked about immunization. However, there is a deficiency in this training process<sup>(28)</sup>.

It is necessary to evoke the educational dimension of the nursing work process, both in population education and permanent education. It is admitted that, due to its free nature and capacity for developing human potentialities, education is a complex activity that requires educators – in this case, nursing – to reflect on the theories that underlie the work and the intentionality of this educational process<sup>(29)</sup>.

Finally, it can be inferred that nurses have a direct influence on the 3Cs of the vaccine hesitancy model, since, as health educators, they influence the individual perception of users as well as their repertoire of information about vaccines. Regarding convenience, nurses, in addition to improving users' understanding, can plan interventions to facilitate access and care in the cold chain to optimize immunization, considering that, in primary care, immunization rooms are directly supervised by nurses.

A limitation of this study was the methodological option in analyzing the fake news checked by verification organizations, which limits the amount of material for analysis, but ensured that the selected fake news were the most shared and discussed virtually.

## CONCLUSION

From content analysis of fake news, it was possible to identify two main categories of anti-vaccine discourse in Brazil: *Immunobiologicals have a potential risk of death/sequel; Immunobiologicals are ineffective.*

Disinformation, the basis for fake news production, is not just a lack of clarification, but an active process of ignorance that mediates and determines health-disease-care

processes. In this case, uneducated individuals are more likely to conduct virtual research and, consequently, more exposed to erroneous information that may influence their decision.

Fake news on vaccines is directly associated with the 3Cs of the current WHO vaccine hesitancy model and have the potential to produce vaccine hesitancy, putting herd vaccination at risk, the focus of public immunization policy. Thus, the research highlights the urgency to rethink communicative health practices that do not underestimate the asymmetries and inequities of all kinds that characterize the unequal Brazilian society.

This work analyzed the main Brazilian anti-vaccine discourses, associating them with the current WHO's vaccine hesitancy model, being relevant to nursing's own knowledge. The study of this relationship demonstrates the urgency of health professionals' engagement as an active

vehicle of truthful information on immunobiologicals for the population.

Moreover, it is important to highlight the role of the State in developing research, in order to determine the factors that permeate vaccine hesitancy and to structure public policies that combat it. Currently, PNI uses vaccination coverage and dropout rate as indicators of immunization. Keeping up with technological advances and the increase in the spread of false news about vaccines, monitoring the amount of vaccine hesitancy is pertinent.

Implementing vaccine hesitancy as an immunization indicator is an alternative, as it represents factors of interest to public management such as confidence in vaccines and in the population's health system, perception and understanding. The adoption of this indicator can optimize the development of new strategies to combat refusal and vaccine abandonment.

## RESUMO

**Objetivo:** Analisar as *fake news* sobre imunobiológicos tomando como referência a hesitação vacinal no modelo dos 3Cs (confiança, complacência e conveniência) da Organização Mundial da Saúde. **Método:** Trata-se de uma pesquisa qualitativa de caráter exploratório que utilizou análise de conteúdo para analisar *fake news* em três sites de checagem de notícias nacionais. **Resultados:** Foram analisadas 20 *fake news* relacionadas a imunobiológicos, sendo 55% publicadas em 2018 e 63% relacionadas à vacina contra febre amarela. A partir da análise dos resultados, duas categorias empíricas foram consideradas: *Imunobiológicos têm potencial risco de morte/sequela* e *Imunobiológicos são ineficazes*. **Conclusão:** As *fake news* têm potencial para produzir hesitação vacinal baseado no modelo dos 3Cs. Sendo necessário, portanto, repensar práticas comunicativas em saúde que não subestimem as assimetrias e as iniquidades que caracterizam a desigual sociedade brasileira. Considerando que a enfermagem é a maior força de trabalho nas salas de vacinas, observa-se a necessidade do engajamento desses profissionais como veículo ativo de informações verídicas em imunobiológicos para a população.

## DESCRIPTORIOS

Recusa de Vacinação; Movimento contra Vacinação; Vacinas; Saúde Coletiva; Comunicação em Saúde; Pesquisa Qualitativa.

## RESUMEN

**Objetivo:** Analizar las *fake news* sobre inmunobiológicos tomando como referencia la vacilación vacunal en el modelo de las 3Cs (confianza, complacencia y conveniencia) de la Organización Mundial de la Salud. **Método:** Es una investigación cualitativa exploratoria que utilizó el análisis de contenido para analizar *fake news* en tres sitios nacionales de verificación de noticias. **Resultados:** Se analizaron veinte *fake news* relacionadas con inmunobiológicos, con un 55% publicadas en 2018 y un 63% relacionadas con la vacuna contra la fiebre amarilla. A partir del análisis de los resultados, se consideraron dos categorías empíricas: Los inmunobiológicos tienen un riesgo potencial de muerte/secuelas; Los inmunobiológicos son ineficaces. **Conclusión:** Las *fake news* tienen el potencial de producir dudas sobre la vacuna según el modelo 3Cs. Por tanto, es necesario repensar prácticas de salud comunicativa que no subestimen las asimetrías e inequidades que caracterizan a la desigual sociedad brasileña. Considerando que la enfermería es la mayor fuerza laboral en las salas de vacunación, existe la necesidad de involucrar a estos profesionales como vehículo activo de información veraz en inmunobiológicos para la población.

## DESCRIPTORES

Negativa a la Vacunación; Movimiento Anti-Vacunación; Vacunas; Salud Pública; Comunicación en Salud; Investigación Cualitativa.

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