



## CAUSES OF RESISTANCE TO VACCINATION AND THE ROLE OF NURSING: A NARRATIVE REVIEW



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**Claudineia Paraguaçu Gomes, Cleudeci Araujo Dias, Eloildes Pereira de Sousa Rodrigues, Igor Rafael Pereira Souza, Kiria Vaz da Silva Hamerski, Marleide Lopes Santos Sousa, Naiára Araujo de Moura, Ronise das Mercês Cruz Pereira, Simone Facundes Fernandes, Moreira Neves Resplandes.**

### ABSTRACT

Several questions regarding the safety and efficacy of vaccines have generated resistance to vaccination and brought instability to the health of the population. Objective: to evaluate the causes of resistance to vaccination and explain how nurses can solve this problem. Method: Narrative review study. Results: The widespread presence of misinformation in the population about vaccination highlights the importance of proactive action by nurses to dispel myths related to vaccination. Conclusion: Nurses should engage in educational practices, increasing the population's awareness.

**Keywords:** Anti-vaccine movement, Vaccination, Nursing.



## INTRODUCTION

Vaccination is one of the most effective ways to combat vaccine-preventable diseases. However, some questions about the safety and efficacy of vaccines have become increasingly common, generating resistance to vaccination and bringing instability to the health of the population (SANTOS, SILVA and BATISTA, 2021, p. 3).

Knowledge of the importance, safety, and efficacy of vaccines has decreased over the years, even in countries with a high level of education and good access to health services (COSTA, SANTOS, and VIEIRA, 2022, p.

For the Ministry of Health, Brazil is one of the world references in vaccination and has one of the largest vaccination programs in the world (BRASIL, 2022) In addition, with the creation of the National Vaccination Program (PNI), the evolution of Brazilian public health has been evident.

Thanks to this, an average of 100 million doses are administered per year and the Unified Health System (SUS) has the capacity to vaccinate approximately one million people per day throughout Brazil (BRASIL, 2022).

In addition, in the Unified Health System (SUS), 19 vaccines are distributed free of charge, benefiting all age groups, according to the national vaccination calendar (COREN-PB, 2020). As the study by the Federal University of Pelota indicates, during the period 1982-2015 Complete vaccination coverage increased among children from the poorest families, while among children from the poorest and richest families, in the same period, coverage fell by 89%. . to 69% (SILVEIRA et al, 2020).

According to the 2022 Epidemiological Bulletin, in addition to the coronavirus disease (COVID-19), there are concerns about diseases that have not yet been eradicated in Brazil, such as measles. This year, between epidemiological weeks 1 and 25, 1,637 Causes of Resistance to Vaccination and the Role of Nursing: A Narrative Review, 39 suspected cases of measles; Of these, 41 (2.5%) cases were confirmed, including 40 (97.6%) with laboratory criteria. 1,143 (69.8%) cases have been archived and 453 (27.7%) are still under investigation (BRASIL, 2022, p.1).

In view of the current scenario, much has been discussed about vaccine hesitancy and the impact that this situation generates in Brazil and in the world. In view of the above, it is necessary to understand more about this panorama and how the nursing team is inserted in it. The importance of this study is justified, because by identifying the reason for resistance to vaccination and how the nursing team can combat it, it brings the possibility of subverting this situation that causes so much damage to the health of the population.



In view of this reality, the study aims to evaluate the causes of resistance to vaccination, as well as to expose how the nursing team can solve this public health problem.

## **THEORETICAL FOUNDATION**

### **HISTORY OF VACCINATION IN BRAZIL**

In Brazil, the first vaccination campaigns date back to 1804, and at that historical moment they were mandatory and mandatory, with the aim of combating urban yellow fever, smallpox and polio.

The population created a negative sentiment towards the administration of vaccines, supporting the popular legend that vaccines were dangerous and/or biological weapons created by the government to control the population.

Myths about the real function of vaccines are at the origin of several religious, political, and legal conflicts (SANTOS, SILVA, and BATISTA, 2021, p.3). According to Santos, Silva, and Batista (2021), the Vaccine Revolt in Brazil took place in 1904, which was a popular revolt by the residents of Rio de Janeiro against the government's actions, which made vaccination mandatory and punitive. those who refuse.

Sixty years after the revolt against mandatory vaccination, the population, instead of erecting barricades, lined up and gathered in public squares to be vaccinated between 1967 and 1973, the most severe period of an authoritarian regime that opposes it. political people concentration. The company continued, in addition to systematic vaccination, to participate in public campaigns, especially those against polio, and recently against measles, influenza, among other diseases preventable by vaccination, a participation proven from the results of vaccination coverage and control and even possible eradication of these diseases in Brazil. The success of vaccination certainly strengthened its social credibility (HOCHMAN, 2011, p. 376).

According to Santos, Silva, and Batista (2021), low vaccination rates have led some governments to pass laws that impose vaccines that were previously only recommended.



Since 1975, compulsory vaccination has been established by law in Brazil, the year the PNI was created.

That is why mandatory vaccination, accompanied by the corresponding sanctions, is also provided for in the Statute of the Child and Adolescent (ECA).

## NATIONAL IMMUNIZATION PROGRAM (PNI)

In 1973, the National Vaccination Program (PNI) was born, with three main objectives: the organization, implementation and evaluation of vaccination actions throughout the country. The PNI is a national priority, the responsibility of the federal, state and municipal governments, and the achievement of objectives and the adoption of strategies require the articulation of these bodies, to materialize activities, needs and realities. compatible, in a joint effort (AMARAL, 2020, p.11).

According to Amaral (2020), the creation of a program like this was an important step in public policies, as vaccination allows the prevention, control, and eradication of vaccine-preventable diseases, as well as the reduction of morbidity. and mortality from certain diseases, its use is very beneficial for the Unified Health System.

Vaccination actions begin at the entrance to the Unified Health System, called Basic Health Units, including their vaccination. It is essential to raise awareness among managers, teams and professionals, as vaccination is an essential element of primary health care.

## DISEASE PREVENTION THROUGH VACCINATION

It is through vaccination that we prevent many infectious diseases, being a safe and effective way (SANTOS, SILVA and BATISTA (2021). According to the World Health Organization, on average, 2 to 3 million lives can be saved every year by prevention with the application of vaccines are considered the second greatest advance that humanity has ever achieved in public health, after the expansion of the supply of drinking water (SANTOS, SILVA and BATISTA (2021).

According to Pinto, Matta and Cruz (2011). Vaccination can also be considered fatal and cause long- and short-term illnesses, including paralysis, diarrhea and deafness, intellectual disability, disease). hepatic and cardiac malformations. National immunization programs mean that the vaccine reduces the impact of preventable diseases. However, in regions where we have low vaccination coverage, there is persistence of the disease.

Whooping cough and diphtheria are declining infectious diseases, and we expect a marked reduction in the frequency of meningitis caused by H. influenzae type B. vaccinate



all people up to date and prevent the transmission of diseases preventable by large-scale vaccination (PINTO, MATTA and CRUZ, 2011, p. 208).

## NURSING WORK PROCESS IN THE VACCINE ROOM IN THE FAMILY HEALTH STRATEGY IN THE FACE OF IMMUNIZATION

Nurses work within the scope of a family health strategy (FHS), in general, they perform nursing consultations, private procedures, group activities, planned taking into account spontaneous demand, but direct users to other services when necessary. Included in these tasks, the role of the nurse in the vaccination room, which is their responsibility, where they coordinate all phases of vaccination actions, in collaboration with the health team (SANTOS, SILVA and BATISTA, 2021, p. 7).

For Acioli et al (2021), the activities performed by nurses in the vaccination process include the operational aspect of the vaccination room, as coordinator of the nursing team, which is essential for the administration of immunobiologicals according to the recommended recommendations. standards for storage, conservation, clinical indications and care before and after application, ensuring that the vaccine really meets the objective of protecting human health against vaccine-preventable diseases. The nurse is responsible for the private supervision of the entire process of working with vaccines.

The nursing technician, under the supervision of the nurse, performs several important functions in the vaccination team.

This ensures that the room is clean and properly organized, such as: monitoring and recording the temperature of the cold room; organize the soda that is used every day; obtain the relevant information about the patient to be vaccinated; counsel patients about timing, supplies, and possible adverse effects; ensure accurate preparation of inputs based on dose, route of administration and effects; Maintain accurate records No vaccines in the system; dispose of used materials properly and maintain a clean and organized environment (SILVA, 2021)

## METHODOLOGY

### TYPE OF STUDY

This is a narrative synthesis study, formulated from the examination of the articles available in the Virtual Health Library (VHL), the Latin American and Caribbean literature on health sciences (LILACS) and the electronic scientific library on the subject. Internet (SciELO).

## INCLUSION AND EXCLUSION CRITERIA

The inclusion criteria will be scientific articles published between 2020 and 2021, articles written in Portuguese, so articles published in other languages, such as English and Spanish, as well as those that do not do so, will be excluded. have a direct connection with the proposed theme and those who cannot read.

## ANALYSIS OF THE DATA COLLECTED

Based on the inclusion and exclusion criteria defined in the methodology, 13 articles were found, of which: 4 were outside the proposed theme, 1 published in a foreign language and 3 after the deadline, leaving 5 articles selected for literature review.

The title was chosen based on the theme of the causes of resistance to vaccination and the role of nursing care. After reading the titles, the abstracts were read. Eligible studies according to the inclusion criteria were read in full and included in the review.

Thus, an analysis of the selected studies was carried out, observing similarities and the main results found. This analysis was carried out in detail, seeking data and answers about resistance to vaccination and the role of nurses, as well as revealing health outcomes in this period.

After collection, these data were ordered, counted and organized in tabular form.

## RESULTS

5 articles published between 2020 and 2021 were included in the study. The results were extracted from the text and grouped in the table below according to title, authors, year and results of the study.

TITLE	AUTHORS	YEAR	RESULTS
The work of enfermagem at immunization in the Context of the crisis Brazilian health	ACIOLI et al	2021	Misinformation of the population about diseases and vaccination, aggravated by fake news, anti-vaccine movement. Regarding the low adherence to vaccination against COVID-19: the existence of different efficacy of the immunobiologicals available in Brazil, the denial of part of the population as to the reality or severity of the virus, fake news about vaccines, insufficient supply of vaccines for the population. in addition to the challenges related to the lack of adequate physical structures for vaccination, as recommended by the Ministry of Health. In relation to nursing work, must be committed to fighting myths and denying "fake news", presenting data and scientific resources about vaccination.

			Perform updates on procedures, staff training and health education actions in the community. In addition to routine vaccination, campaigns and activities outside the physical area of the health unit.
The role of nursing for the strengthening of the vaccination in the Brazil	DO AMARAL, Priscila Martins	2020	Anti-vaccination movements, television communications that sometimes do not reach everyone, leaving some doubts that culminate in the non-vaccination of children, fear of negative reactions, community agents who do not transmit the necessary awareness to the population, operational difficulties, lack of nurses in the day-to-day of the vaccination room, in addition to a little support from higher authority and overload of the team. As for the nurse's performance, he must break the limiting beliefs of the population through educational actions for health. In addition to promoting actions that align the team with the new protocols and guidelines of the Ministry of Health and identify the barriers that result in the lack of vaccination coverage in each specific region for better results.
Fake news, Infodemic and media social media: On hesitation Vaccination at low levels Coverage	LACHTIM et al	2021	Communication and media about the vaccination program, influential leaders, anti-vaccination policies, religion/culture/gender/socioeconomic status, perceptions of the pharmaceutical industry n, influences arising from personal perceptions of the vaccine or influences from the social, personal environment. experience of vaccination, family members or community members, including pain, from the introduction of a new vaccine or formulation, fake news about vaccination and the efficacy and safety of vaccines, accompanied by misinformation and concerns about their adverse effects.
Research on the movement anti-vaccine, carried out in the projects of Technician Extension nursing staff CEFET-RJ, during the Pandemic	MAGELLAN et al	2021	The rise of the anti-vaccine movement on social networks, fake news about the link between the measles vaccine and autism, the spread of the "natural way of life", which believes that preventive measures for vaccine-preventable diseases are natural diet, clean air, basic hygiene, exercise, among other measures, the possible development or "knowledge of someone" who has developed complications, side effects, adverse events after vaccination such as pain, fever, rash, heat, and other adverse events.

Movement Anti-vaccine: resistance vaccination and Presentation of the effectiveness of Vaccine-preventable	SAINTS SILVA and BAPTIST	2021	Lack of information, myths, distortions and dissemination of false information and the growth of the "anti-vaccine" movement, in addition to the growing influence of the Internet and social networks on users in the dissemination of this movement.
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## DISCUSSION

Considering the results found during the research, among the main causes related to resistance to vaccination is the anti-vaccination movement, which leads the population to develop dangerous attitudes, not only for individual health, but for everyone. around it, also aggravated by fake news, forming a network of false content disseminated mainly through means of communication such as the Internet and social networks. In addition, the population's fear of adverse and collateral events culminates in doubts about the efficacy and safety of vaccines.

To combat this vaccine hesitancy and this uncertain knowledge of vaccination, nurses have a fundamental role in promoting actions that stimulate knowledge of the entire vaccination process, because there is a paradigm shift, since nurses play a dynamic role in the transformation. and work. with vaccine-preventable drugs (SANTOS, SILVA and BATISTA, 2021).

For Santos, Silva and Batista (2021), the actions applicable to nursing professionals are the continuous updating of the team, to improve the solution of the services, as well as the performance of control exams and visits to users. to the health system. , vaccination, guidance of responsible users and registration of all data related to vaccination activities, availability of PNI information systems and beginning of training carried out in fabric and team, using available educational tools.

Other important actions to demonstrate the fight against vaccination myths, that is, that health teams must be prepared to refute "fake news" by presenting data and scientific sources. In addition, nurses should be involved in actions that support the vaccination process, such as updating procedures, training personnel, and community health education actions.

They must be committed to carrying out vaccinations in primary health care services, such as routine vaccinations, campaigns, and activities outside the physical area of the health unit, such as home vaccination, to expand vaccination coverage (ACIOLI et al., 2021, p. 2021, p. learn to verify and recognize fake news, because as health professionals it is important to recognize, In addition, professionals must have a scientific and theoretical basis to distribute reliable and truthful information.





Another process to combat vaccine hesitancy would be to carry out projects that carry out health education activities on social networks on the Internet and should strengthen themes related to the composition, production, storage, and action of immunobiological products (MAGALHÃES et al, 2021, p.

We must be aware of the importance of the PNI, and also of the strategic recognition of these problems by health teams, so that the objective of involving the population in their personal care and family health (MAGALHÃES et al, 2021). , p. 408, nurses). has become fundamental in dismantling the limiting beliefs of the population and in carrying out a harmonized work with regard to the population's health education).

In addition, it must constantly promote actions that align the team with the new protocols and guidelines of the Ministry of Health, and it is necessary to identify the obstacles that lead to coverage without vaccination in each specific region, so that the teams can determine a more effective way of approaching the population, which will bring even more satisfactory results.

## **FINAL CONSIDERATIONS**

In view of the aspects analyzed, it was observed in the literature that disinformation enhanced by fake news, disseminated through the media, such as the internet and social networks, in addition to hesitancy related to adverse events, raise fears about the efficacy and safety of vaccines.

It is understood that nurses play a fundamental role in reversing situations that affect public health, including misinformation about vaccination. As nursing professionals have the technical-scientific capacity to carry out educational actions, such as campaigns and activities that go beyond the scope of the basic health unit, they thus contribute to the awareness of the population, so that the community fully and truly understands the needs of the population. practice vaccination.

In addition, it is very useful to strengthen the demand for investments in the health sector, especially in relation to research and studies aimed at the primary sector, with the support of the government spheres at the state and federal levels. This is essential to address issues such as the lack of adequate vaccine administration infrastructure and the need for an adequate supply of doses to meet the population's demand.

In addition, a large part of the literature analyzed presented satisfactory content in relation to the proposed theme, with promising results that provided accurate information about the analyzed panoramas. However, it is important to recognize the limitations inherent to the studies included in this narrative review, because during the search in the



databases of the proposed theme, it was possible to identify a lack of literature focused on the performance of clinical nurses who face resistance to vaccination.

Therefore, it is necessary to carry out new studies and research on this very current topic. In addition, the limited amount of research available to date can be seen as an opportunity to advance and enrich knowledge by conducting new studies focused on this topic.



## REFERENCES

1. Acioli, S., Silva, R., Oliveira, L., & Santos, F. (2021). O trabalho da enfermagem na imunização no contexto da crise sanitária brasileira. *REBEn*, 6, 1-115.
2. Brasil, Ministério da Saúde. (2022, September). Brasil atinge 52% de cobertura vacinal contra a poliomielite; entenda a importância da vacinação. Available at: <https://www.gov.br/saude/pt-br/assuntos/noticias/2022/setembro/brasil-atinge-52-de-cobertura-vacinal-contra-a-poliomielite-entenda-a-importancia-da-vacinacao>. Accessed on: October 2, 2024.
3. Brasil, Ministério da Saúde: Secretaria de Vigilância em Saúde. (2022). Vigilância epidemiológica do sarampo no Brasil – semanas epidemiológicas 1 a 25 de 2022. Available at: <http://www.saude.gov.br/vigilancia-sarampo>. Accessed on: October 2, 2024.
4. Costa, P., Santos, P., & Vieira, L. (2022). Estratégias para aumentar a cobertura vacinal: Overview de revisões sistemáticas. Available at: [https://docs.bvsalud.org/biblioref/2022/08/1391037/estrategias-para-aumentar-a-cobertura-vacinal-overview-de-revi\\_bs9LFL7.pdf](https://docs.bvsalud.org/biblioref/2022/08/1391037/estrategias-para-aumentar-a-cobertura-vacinal-overview-de-revi_bs9LFL7.pdf). Accessed on: October 1, 2024.
5. Conselho Regional de Enfermagem da Paraíba (COREN-PB). (2024). Conheça as 19 vacinas oferecidas pelo SUS. Available at: [http://www.corenpb.gov.br/conheca-as-19-vacinas-oferecidas-pelosus\\_9960.html](http://www.corenpb.gov.br/conheca-as-19-vacinas-oferecidas-pelosus_9960.html). Accessed on: October 2, 2024.
6. Silveira, M. F., & Souza, A. (2020). The emergence of vaccine hesitancy among upper-class Brazilians: Results from four birth cohorts, 1982-2015. *Vaccine*, 38(3), 482-488.
7. Do Amaral, P. M. (2020). O papel da enfermagem para o fortalecimento da vacinação no Brasil. (Unpublished undergraduate thesis). Fundação Educacional do Município de Assis, Assis.
8. Hochman, G. (2020). Vacinação, varíola e uma cultura da imunização no Brasil. Available at: [https://www.scielosp.org/article/ssm/content/raw/?resource\\_ssm\\_path=/media/asset/s/csc/v16n2/v16n2a02.pdf](https://www.scielosp.org/article/ssm/content/raw/?resource_ssm_path=/media/asset/s/csc/v16n2/v16n2a02.pdf). Accessed on: October 2, 2024.
9. Lachtim, S. A. F., Barbosa, C., & Almeida, J. (2021). Fake news, infodemia e mídias sociais: Da hesitação vacinal às baixas coberturas. *REBEn*, 6, 1-115.
10. Magalhães, C. R., Lima, A. M., & Almeida, T. P. (2021). Pesquisa sobre o movimento antivacina, realizada nos projetos de extensão do técnico de enfermagem do CEFET-RJ, durante a pandemia. *Revista Expressa Extensão*, 26(1), 400-410.
11. Pinto, E. F., Matta, N. E., & Cruz, A. M. da. (2011). Vacinas: Progressos e novos desafios para o controle de doenças imunopreveníveis. *Acta Biológica Colombiana*, 16(3), 197-212.
12. Santos, G. L. dos, Silva, J. S. da, & Batista, A. G. (2021). Movimento antivacina: Resistência à vacinação e apresentação da eficácia dos imunopreveníveis. *Revista SV*, 1(1), 1-15.



13. Silva, L. C. (2024). O papel do técnico de enfermagem nas salas de vacina. Available at: [URL]. Accessed on: August 28, 2024.