


CHALLENGES OF THE NATIONAL VACCINATION PROGRAM IN BRAZIL <https://doi.org/10.56238/sevened2025.020-007>**Priscilla Martins Valadares¹, Taisa Cristina da Silva², Letícia Grisolia Barbosa³ and Bárbara Carolina Ferreira Martins⁴****ABSTRACT**

The National Immunization Program (PNI), created in 1973, is a world reference in Brazilian public health, having been fundamental for the control and eradication of diseases such as smallpox and polio. However, since 2015, Brazil has faced a worrying drop in vaccination coverage, threatening historic achievements and public health. This article analyzes the main challenges faced by the PNI, based on a narrative review of the literature and official documents. The results point to factors such as vaccine hesitancy driven by misinformation on social networks, regional inequalities in access to services, the negative impact of the COVID-19 pandemic, and the weakening of public vaccination campaigns. Given this scenario, strengthening the PNI requires intersectoral actions, investments in health education, combating fake news, expanding access to services, and the use of vaccine tracking technologies. The recovery of the population's confidence and the prioritization of immunization as a state policy are fundamental to ensure collective protection and health sovereignty in the country.

Keywords: Immunization. Vaccination coverage. National Immunization Program (PNI). Vaccine hesitancy. Public health.

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INTRODUCTION

The National Immunization Program (PNI), created in 1973, is one of the most successful pillars of Brazilian public health. Internationally recognized, the PNI has contributed significantly to the eradication or control of diseases such as smallpox, polio, rubella and measles. The robustness of the program, its national capillarity, and the free offer of vaccines in the Unified Health System (SUS) have always been central elements for the success of immunization in the country.

However, in recent decades, especially since 2015, Brazil has faced a progressive decline in vaccination coverage, raising alarms in the governmental and scientific spheres. This scenario threatens to reverse historical achievements and puts collective health at risk. Several factors — from misinformation, vaccine hesitancy, to logistical challenges — contribute to this complex and multifactorial phenomenon.

OBJECTIVE

This chapter aims to analyze the main challenges faced by the National Immunization Program, with emphasis on the social, political, cultural, economic, and structural factors that contribute to the drop in vaccination coverage. It seeks to understand the implications of this crisis on public health and point out possible ways to strengthen the PNI and restore the population's confidence in vaccination.

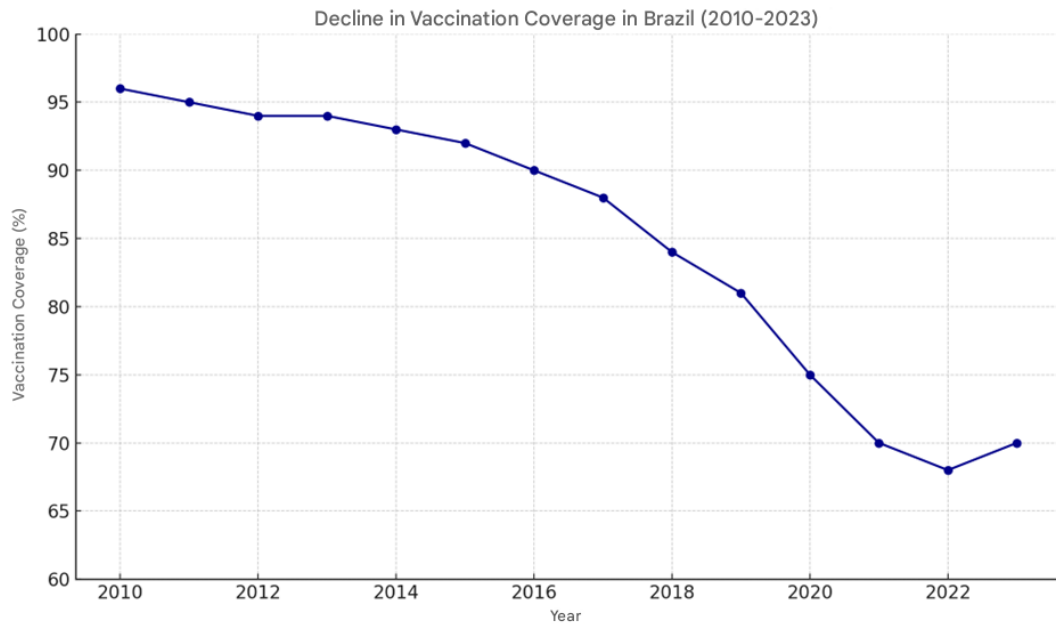
METHODOLOGY

A narrative review of the literature was carried out based on scientific articles indexed in the SciELO, PubMed, and LILACS databases, as well as official documents from the Ministry of Health, the World Health Organization (WHO), and the Pan American Health Organization (PAHO). The inclusion criteria focused on publications from the last 10 years, with an emphasis on the contemporary challenges of immunization in Brazil, vaccine hesitancy, and coping strategies.

DEVELOPMENT AND RESULTS

The analysis of the data reveals a significant drop in childhood vaccination rates since 2015, as shown in the following graph:

Graph 1 – Vaccination coverage in Brazil by year, 2010–2023.



In addition, the findings indicate that multiple factors contribute to the reduction of vaccination coverage.

VACCINE HESITANCY AND MISINFORMATION

The phenomenon of vaccine hesitancy, defined by the WHO as the delay in accepting or refusing vaccines despite the availability of services, has gained strength with the expansion of social networks and the spread of fake news. Anti-vaccine groups, although a minority, have achieved disproportionate influence by spreading misinformation about adverse effects of vaccines, conspiracy theories, and distrust in public health institutions.

Studies show that vaccine hesitancy is not homogeneous: it affects different regions of the country unequally, being more prevalent in urban areas with greater access to information, but where this information is not always reliable or of quality.

REGIONAL INEQUALITIES AND ACCESS TO SERVICES

Despite the universalization of the SUS, vaccination coverage still suffers from regional inequalities. Municipalities in the North and Northeast have greater logistical difficulties, with irregular distribution of vaccines, precarious infrastructure and a shortage of trained professionals. The overload of primary care services, aggravated by the COVID-19 pandemic, also affected the routine of vaccination rooms.

In addition, the absence of active search and extramural vaccination strategies (such as in schools and communities) contributes to the non-adherence of vulnerable groups, such as riverside populations, indigenous people, and families in urban poverty.

IMPACT OF THE COVID-19 PANDEMIC

The pandemic represented a watershed for the health system and for the PNI. The fear of contamination kept the population away from health units, and efforts were almost entirely directed to the fight against COVID-19, which resulted in a vaccine hiatus. Routine vaccination campaigns have been suspended or postponed, mainly affecting pre-school children.

The low vaccination coverage recorded in 2021 and 2022 caused Brazil to lose its measles elimination certification. Cases of the disease have been recorded again in several states, showing how the loss of herd immunity can have serious and rapid consequences.

WEAKENING OF PUBLIC CAMPAIGNS

Another relevant factor is the emptying of national vaccination campaigns. Historically, Brazil promoted broad campaigns with the support of the media, the presence of the character Zé Gotinha and broad mobilization of schools and communities. In recent years, there has been a reduction in the reach and impact of these campaigns, whether due to budget limitations, administrative discontinuity, or lack of investment in strategic communication.

CONCLUSION

The drop in vaccination coverage is a multifactorial phenomenon that requires a coordinated, intersectoral response based on scientific evidence. It is necessary to resume the leading role of the PNI, with investments in health education, combating misinformation, strengthening primary care, and expanding access to vaccination services.

It is also recommended the use of technologies for vaccine tracking (such as digital wallet applications), community engagement, and continuing education of health professionals. Immunization must be treated as a national priority and a fundamental part of the country's health security and sovereignty.