

COORDINATED DYNAMICS IN VACCINATION CAMPAIGNS: AN EXPERIENCE REPORT FROM MEDICAL STUDENTS

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Abstract: Introduction: Vaccines are capable of protecting individuals against pathogens, generating more effective immune responses to combat the diseases caused by them. The dissemination of vaccination campaigns is a relevant tool in the herd immunization of the population, promoting greater coverage and quality of health. According to the National Immunization Program, vaccines against influenza, meningitis C and COVID-19 must be applied in the first half of 2023. Therefore, there was a high demand for these vaccines in the Health Centers (HC) of Belo Horizonte/MG, overloading units and professionals. This situation makes immunization difficult, increasing waiting lines and repelling the public. In view of the above, the participation of medical students in the work processes of immunization campaigns helps to organize queues and optimize waiting times. **Objective:** Improve the dynamics of the vaccination process in a Health Center in the central region of Belo Horizonte/MG, in order to reduce long waiting lines and facilitate immunization of the target audience. **Methodology:** Two new vaccination rooms were opened, one for the priority public and the other specifically for influenza and meningitis C. In each room there was a nurse and up to two academics registering and administering the vaccines. Another academic organized the flow of queues, analyzing vaccination cards and directing patients to rooms. Furthermore, there was a third room that handled the usual routine vaccinations and COVID-19 campaign. **Results:** The queues in each room became shorter and service was faster. Furthermore, immunized people, as well as professionals, demonstrated and reported satisfaction with the faster process. **Conclusion:** Since long queues for vaccination keep the target audience away from the campaigns, this method was effective in guaranteeing the immunization of citizens.

Keywords: Mass immunization; Health centers; Immunization program.

INTRODUCTION

With the discovery of the vaccine, diseases that were devastating populations were being controlled and, in some cases, even eradicated. With this context in mind, the benefit of vaccination for the prevention of illnesses is evident, in the sense of promoting mass immunization and also in hindering the existence of more serious clinical conditions. The benefits of immunization are not restricted to the individual alone, but also, due to the potential for herd immunization, vaccines are capable of protecting those who were unable to be vaccinated.

Vaccination campaigns in Brazil have a long history of proven effectiveness, dating back to the 1960s, when the country achieved the remarkable eradication of smallpox through comprehensive mass vaccination of the population. In response to this achievement, the Ministry of Health created the National Immunization Program (PNI) in 1973, aiming to organize and implement vaccination strategies throughout the national territory. This milestone in public health was later strengthened by specialized legislation on immunizations and epidemiological surveillance, established by Law 6,259 of October 30, 1975 and by Decree 78,231 of December 30, 1976, which contributed to the institutional consolidation of the PNI.

The creation of the National Immunization Program made it possible to regularly schedule immunization schedules, providing a comprehensive health service through its own network. Since then, the PNI has shown the effectiveness of mass vaccination of the Brazilian population, also eradicating polio from the country and promoting campaigns against vaccine-preventable diseases, such as hepatitis B, meningitis, yellow fever,

measles and neonatal tetanus, among others. Furthermore, the PNI also plays an essential role in the acquisition, distribution and standardization of the use of special immunobiologicals intended for people with congenital or acquired immunodeficiencies and other special morbidity conditions, as well as for individuals exposed to risk situations. In this sense, it is possible to state that these population groups are directed to the Reference Centers for Special Immunobiologicals (CRIE) to receive adequate care.

The importance of keeping an updated vaccination card is notable and, to this end, Brazil's National Vaccination Calendar has 48 immunobiologicals, including 20 vaccines, offered in Basic Health Units (UBS) according to the PNI schedule. Furthermore, the Brazilian PNI stands out as one of the largest and most successful vaccination programs in the world, playing a fundamental role in maintaining public health by promoting annual campaigns against influenza in the first half of the year and updating of the vaccination booklet, with emphasis on children's vaccination records.

The vaccination campaigns in Belo Horizonte/MG against COVID-19, Meningitis C and Influenza 2023 were carried out in the first half of the year, with the aim of expanding the municipality's vaccination coverage. At the same time, the target audience for vaccination against meningitis C was expanded. Since March 2023 by the State Department of Health of Minas Gerais (SES-MG), due to low vaccination rates in the child population, all unvaccinated people, aged 16 or over, have been able to receive the meningococcal vaccine. Therefore, demand in the city's Basic Health Units (UBS) increased significantly, due to the demand for immunization agents. With Health Centers (HC) full and professionals overworked, there was an increase in waiting lines, which hampered the execution of campaigns, repelling the public.

In addition to the vaccination campaign against meningitis C, two other campaigns, which tend to attract a large population, were being carried out in the same period of time. The search for the meningococcal vaccine coincided with the periodicity of immunizations against the *Influenza* virus, which occurs annually between April and August, and vaccination against COVID-19. In this case, the vaccine applied against COVID-19 was the bivalent vaccine, which, at the time of the dynamics, was only being applied to elderly people. hex

Therefore, it is possible to observe that there were a large number of vaccines being administered daily in Brazilian CS and UBS. In the case reported, it was noted that, in Belo Horizonte CS attended by academics, there was a high workload for professionals. These individuals found themselves in an uncomfortable situation, with demands that required continuous and strenuous work to reduce queues at the CS.

It is worth mentioning that such a service offered is physically tiring work due to the vertical (and not comfortable) posture that the professional must adopt during vaccination, in addition to having to deal with documents that must be registered in the tools of the Unified Health System (SUS). In addition to the physical fatigue of professionals, there is considerable mental fatigue in this service. The fact that such individuals had to deal with patients' complaints, doubts and emotions was a point of mental exhaustion for CS professionals.

In view of the above, the participation of medical students in the immunization campaigns was essential, helping to organize queues, fulfill the large established demand and optimize waiting times. This way, it can be stated that the assistance of students at a Health Center in the central region of Belo Horizonte/MG aimed to improve the

dynamics of the vaccination process, in order to reduce long waiting lines and facilitate the immunization of the target public.

METHODOLOGY

The methodology used was the opening of two additional vaccination rooms to the existing room, which was administering all vaccines in a single line. This way, with the help of the health center team, the materials that would be used were separated, including a thermal box adjusted to the ideal temperature, a digital thermometer, needles, syringes, immunizer bottles, cotton, alcohol for hand hygiene, tray and disposal of sharps.

With the materials, it was possible to open two more vaccination rooms that had one academic (maximum two) and one health professional from the unit, who were responsible for administering the vaccines and registering them in the system.

The division consisted of a room exclusively for the priority public, aimed at serving people with physical disabilities, elderly people aged 60 or over, pregnant women, breastfeeding women and people accompanied by infants. In this room, all immunization agents were administered.

The other open room was dedicated exclusively to the application of vaccines against *Influenza* and against meningitis C, which were the vaccines most in demand at the time. This way, the room that already existed carried out the application of the vaccine against COVID-19 and the others, included in the National Immunization Program. This room was staffed only by professionals from the health unit.

Furthermore, an academic was needed to receive and analyze the vaccination cards, directing the population to each of the queues. At this time, the target audience was asked about flu and fever symptoms and about the previous immunization schedule against that

pathogen.

RESULTS

With the division into new rooms, it was possible to redistribute the public by redirecting patients according to their demands for specific vaccines. Such coordinated dynamics reduced the size of the single queue that previously existed. Based on the guidance given by the academic responsible for communication with the public, the information was well disseminated among patients and the new organization was guaranteed without generating disturbances. Furthermore, the queue flow became more dynamic and efficient, through collaborative work between healthcare professionals and medical students.

Patients reported a better experience in relation to care, promoted by the shortening of waiting times and the greater number of people seen in the same period. This coordination of vaccination campaigns was a factor that surprised the population and reached new patients who probably would not have been seen in a timely manner that day, due to the CS's opening hours.

The dynamics were also favorable to the health professionals who were active, given the division of labor between students and nurses during the vaccination process: part was responsible for identifying and applying the vaccine, disposing of the materials used and the other partly by receiving patients, registering them in the system and on their respective vaccination cards. This way, there was less physical and mental overload on professionals, in addition to better performance in carrying out all the demands of the unit and not just the vaccination in question. This situation can be explained by the fact that, when academics replaced some professionals who had other demands in the CS, these individuals were able to perform

their normal functions within the CS.

Furthermore, in addition to bringing benefits to patients and professionals, this vaccination dynamic was an opportunity for practical knowledge for academics. Through this experience, academics were able to develop the ability to administer vaccines effectively and easily. It was also possible that, through this coordination, students better understood how they can improve existing work dynamics/processes to obtain a better result. In this sense, skills relating to people and place management could be developed, making this experience productive for everyone involved.

CONCLUSION

Mass immunization has an essential role in protecting and promoting public health, and it is extremely important that it is carried out effectively to guarantee satisfactory vaccination coverage to the point of producing so-called herd immunity and, consequently, a lower incidence. or even the eradication of diseases that affect the population.

From the perspective of the population's low adherence to vaccination campaigns, driven by factors such as long waiting lines and overcrowding, the greater agility of the vaccination process resulting from the coordinated dynamics proposed in the CS allowed for more effective immunization of patients present. and greater reach to citizens.

Since 2012, there has been a worsening decline in vaccination coverage in Brazil, especially among children. Recommendations for social distancing during the Coronavirus pandemic and the growth of the anti-vaccine movement disseminated through the spread of fake news were factors that kept the population away from basic health units, making immunization a more difficult process. Thus, today there is once again the risk of exposing Brazilians to diseases that have already

been eradicated previously. Following this reasoning, new searches for different ways of promoting improvements in the functioning of UBS and CS are necessary, which suffer from the shortage of professionals and the lack of adequate materials in routine care and, mainly, during periods of immunization campaigns, in order to strengthen health

teams and vaccination proposals mediated by the Brazilian government.

Such a context would allow for a greater reach of vaccination coverage, encouraging greater public adherence to campaigns and ensuring the protection of the health of children, young people, adults and the elderly.

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