

IMMUNIZATION OF YOUNG ATHLETES: EXPERIENCE REPORT IN PUBLIC HEALTH WITH A FOCUS ON FEMALE VACCINATION

*IMUNIZAÇÃO DE JOVENS ATLETAS: RELATO DE EXPERIÊNCIA EM SAÚDE
COLETIVA COM ENFOQUE NA VACINAÇÃO FEMININA*

*INMUNIZACIÓN DE JÓVENES ATLETAS: INFORME DE EXPERIENCIA EN SALUD
PÚBLICA CON ENFOQUE EN LA VACUNACIÓN FEMENINA*

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ABSTRACT

Objective: Report the experience from the Extension Laboratory III discipline of the Nursing course at the Centro Universitário do Vale do Jaguaribe, which checked the vaccination cards of athletes from the “Mv Vôlei” project, guiding them on the importance of vaccination. **Methods:** The study was conducted involving 21 female volleyball athletes aged between 8 and 18 years. The vaccination cards were reviewed, nursing consultations were conducted – including anamnesis, physical examination – and an informative folder on the vaccination was distributed. In addition, welcoming and educational dynamics were used. **Results:** It was observed that 47.5% of the athletes were up to date with their vaccinations, while the others had significant gaps in immunization, particularly against influenza, diphtheria and tetanus, and yellow fever. Although vaccination is essential for preventing diseases and outbreaks, many adolescents demonstrated resistance or a lack of knowledge regarding the importance of vaccines. **Final considerations:** The initiative highlighted the need for public policies that promote vaccination campaigns and strategies aimed at reaching specific groups.

Keywords: Immunization; Youth; Athletes; Awareness.

RESUMO


Objetivo: Relatar a experiência proveniente da disciplina de Laboratório de Extensão III do curso de Enfermagem do Centro Universitário do Vale do Jaguaribe, que verificou o cartão de vacinação das atletas do projeto “Mv Vôlei”, orientando-as sobre a importância da vacinação. **Métodos:** A ação aconteceu com 21 atletas femininas de vôlei com idades entre 08 a 18 anos. Foi realizada verificação do cartão de vacinação, consulta de enfermagem, entrega de folder informativo sobre a vacinação e dinâmicas de acolhimento. **Resultados:** Observou-se que 47,5% das atletas estavam com a vacinação em dia, e as demais com lacunas significativas em vacinas como influenza, difteria e tétano, e febre amarela. Embora a vacinação seja crucial para prevenir doenças e surtos, muitas adolescentes demonstram resistência ou desconhecimento sobre a importância dessas vacinas. **Considerações finais:** A ação destacou a necessidade de políticas públicas que promovam campanhas de vacinação e de estratégias para maior alcance de grupos específicos.


Descritores: Imunização; Jovens; Atletas; Conscientização.

RESUMEN


Objetivo: Relatar la experiencia del Laboratorio de Extensión III disciplina del curso de Enfermería del Centro Universitario del Valle del Jaguaribe, que verificó los carnés de vacunación de atletas del proyecto “Mv Vôlei”, orientándolos sobre la importancia de la vacunación. **Métodos:** La acción ocurrió con 21 atletas de voleibol femenino, con edades entre 8 y 18 años. Se revisó el carné de vacunación, se realizó consulta de enfermería, con anamnesis y examen físico, se entregó folleto informativo sobre la vacunación y se realizaron dinámicas de bienvenida. **Resultados:** Se observó que el 47.5% de los deportistas estaban al día con sus vacunaciones, y los demás presentaban vacíos importantes en vacunas como influenza, difteria y tétanos, y fiebre amarilla. Aunque la vacunación es crucial para prevenir enfermedades y brotes, muchos adolescentes demuestran resistencia o falta de conocimiento sobre la

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importancia de estas vacunas. **Consideraciones finales:** La acción destacó la necesidad de políticas públicas que promuevan campañas y estrategias de vacunación para llegar a grupos específicos.

Descriptores: *Inmunización; Jóvenes; Atletas; Conciencia.*

INTRODUCTION

Immunization is one of the most effective public health approaches to preventing infectious diseases and reducing morbidity and mortality across various age groups¹. However, adherence to vaccination schedules among adolescents remains challenging for health systems, especially given factors such as increasing misinformation, low risk perception, and cultural resistance². Among the most vulnerable subgroups are young athletes, whose intensive training routines, frequent travel, and socializing increase their exposure to infectious agents. In this context, educational initiatives to raise awareness about the importance of vaccination are essential to ensure the immunological protection of this specific population.

Healthcare professionals should give the Bacillus Calmette-Guérin (BCG) vaccine and the first dose of hepatitis B to babies in the first few weeks of life³. During the first years of life, they recommend other vaccines to support healthy child development, such as the pentavalent vaccine (indicated for the prevention of diphtheria, tetanus, and pertussis), oral polio vaccine, inactivated polio vaccine, pneumococcal 10, human rotavirus meningococcal, yellow fever, MMR, hepatitis A, and tetravalent vaccine¹. It is essential that the vaccination record is always up to date; it will be requested and used throughout the individual's life³.

In fact, keeping your vaccination record up to date is no simple task during pre-adolescence and adolescence. Important changes and needs mark these stages of life. This phase includes many choices and decisions, as a considerable increase in exposure to risk factors arising from the adolescent's social environment. Exposure to violent situations, early sexual experiences, and drug use are related to the perception of risk during adolescence⁴. Therefore, the Ministry of Health offers adolescents across the country, through the vaccination schedule, immunizations for hepatitis B, yellow fever, diphtheria and tetanus, MMR, meningococcal ACWY, COVID-19, influenza, and HPV for girls and boys aged 9 to 14¹.

Regarding human papillomavirus (HPV) vaccination in girls, there is a clear need for a debate about the importance of immunization in this target population, given the low vaccination coverage among this group. Data released by the Ministry of Health in 2023 showed that, in 2019, 87% of girls aged 9 to 14 received the first dose; in 2022, this number dropped to 75.8%. The Unified Health System (Sistema Único de Saúde - SUS) provides free vaccination against human papillomavirus (HPV), which causes seven out of ten cases of cervical cancer, nine out of ten cases of anal cancer, and links to malignant neoplasms of the vagina, vulva, penis, throat, and mouth.¹

However, vaccination coverage is low among this population, even with the availability of vaccines for this age group. Among the factors that justify this limitation, we can mention the low adherence of adolescents to actions and programs developed by Primary Health Care (PHC), due to the unsatisfactory demand of this portion of the population for PHC Units, fake news surrounding adolescents' access to digital media, and resistance to vaccination⁴.

Vaccination is essential for young female volleyball athletes, preventing disease and avoiding outbreaks in closed environments, group settings, and during travel. Besides protecting the athlete herself, it reduces transmission to teammates and competitors. The risk of contact with blood and body fluids in team sports reinforces the importance of immunization, as well as the need for specific vaccines, such as yellow fever in endemic areas, given the frequency of public transportation and crowded environments⁵.

Therefore, the present intervention aimed to check report the experience from the Extension Laboratory III discipline of the Nursing course at the Centro Universitário do Vale do Jaguaribe, which checked the vaccination cards of athletes from the “Mv Vôlei” project, guiding them on the importance of vaccination.

METHODS

This work is an experience report that includes an applied study and is qualitative and descriptive in nature, based on Gil’s methodology⁶. The intervention was carried out through the “MV Volleyball” Project, an activity originating from the Extension Laboratory III course in the Nursing program at the Vale do Jaguaribe University Center. The criteria for selecting the target audience included: age range, individuals who practiced a sport, number of participants, time availability, and ease of access for implementing the intervention.

The activity took place within the “MV Volleyball” Project, located in the Pedregal neighborhood of Aracati, CE, in October 2024, during the evening. It involved 21 young female volleyball athletes aged between 8 and 18 years. The legal guardians of the underage participants, who were informed in advance by their coach, gave their consent, as did the institution that authorized the use of the facility.

The team checked the athletes' vaccination records and prepared and sent a technical report to the Aracati Health Department. Nursing appointments included medical history, physical examination, measurements, and basic testing. There were also welcoming activities, distribution of HPV folders, and a discussion group on the importance of vaccination, highlighting HPV immunization.

RESULTS

The intervention took place on October 21, 2024, at 7 p.m., with the “MV Vôlei” Project. After the initial presentation, the athletes were divided into two groups: one participated in the welcoming dynamics, while the other conducted medical histories and checked the vaccination cards. The first activity was the “Who Am I” game, followed by a group exchange. During the waiting period, the athletes participated in the “mime” game, ensuring a warm welcome, respect for individual pace, and attention to all.

Analysis of the vaccination records revealed delays in vaccines such as influenza, meningococcal ACWY, yellow fever, and dT (diphtheria and tetanus), all of which are scheduled for adolescents under the National Immunization Program (PNI). The low adherence observed reflects a national trend of declining vaccination coverage, falling below the 95% target established by the PNI². This situation can lead to absences

from training and competitions, as well as increased vulnerability to vaccine-preventable diseases in group settings.

The campaign reached a total of 21 participating athletes, with 85.71% (18 athletes) having delayed vaccinations. Additionally, 28.47% of the required vaccines (41 doses) had not been scheduled or administered.

Table 1 - Vaccine distribution and scheduling. Aracati, Ceará, 2024.

Vaccine Distribution	
HPV, Hepatitis B, MMR, and COVID-19 vaccines	Scheduled and applied correctly.
Meningococcal (ACWY) Vaccines	6 athletes had not been vaccinated
Yellow Fever Vaccines	8 athletes had delayed vaccinations
Diphtheria and Tetanus Vaccines	11 athletes with delayed vaccination
Influenza Vaccines	16 athletes with delayed vaccination

Fonte: Data compiled by the authors, 2024.

All the athletes participating in the project were present and cooperated during the activity. Although some expressed a little apprehension during the glucose test, all agreed to undergo the procedure without hesitation. The team conducted an educational activity to explain the importance of immunization, focusing on athletes. The campaign reached 21 vaccinated participating athletes, 85.71% of whom had delayed vaccinations (18 athletes). Additionally, 28.47% of the required vaccine doses (41 of them) had not been scheduled or administered.

It was observed that 14.2% of the athletes were up to date with their vaccinations and had received them according to the vaccination schedule. Nevertheless, many of them could not clearly report potential health problems or confirm whether they take medications regularly. This indicates the need for more detailed monitoring of this information, ensuring that all athletes' health records are properly recorded and monitored.

DISCUSSION

Although vaccination is an effective preventive measure, many factors often influence adherence to immunization programs, including misperceptions about vaccine safety and efficacy and a lack of awareness about athletes' vulnerability to certain diseases. It identified a significant shortage of influenza vaccines, reflecting the national scenario, in which, according to CNN Brasil, less than 40% of the population had received the vaccine a week before the end of the 2024 campaign. The intervention demonstrated that many young women were unaware of the real benefits of immunization, a situation like the trend observed in the country.⁷

In a statement, the Ministry of Health recommended that Olympic and Paralympic athletes be up to date on their vaccinations due to their exposure at large-

scale events. This recommendation reinforces the importance of vaccines for the young women participating in the project, many of whom practice more than one sport and face exposure to different environments, training sessions, and competitions, which increases the risk of infection. In addition to protecting health, vaccination prevents absences due to illnesses such as flu, preserving athletic performance⁸.

The analysis of these athletes' vaccination records highlighted the importance of keeping vaccinations up to date to strengthen the immune system and address the vulnerability of this group, given their increased exposure to risk factors. Because athletes participate in competitions that require high physical exertion and may involve sharing accommodation and environments with large numbers of people, they are more susceptible to outbreaks and epidemics, such as flu, colds, and respiratory diseases. Vaccination is an essential immunological measure to protect athletes' health and enable them to perform at their best⁹.

The outreach project's research points out the need for a preventive approach that involves vaccination, directly linking it to athletes' health care. These young women maintain stronger immune systems by keeping their vaccination records up to date, which gives them a better chance of maintaining a strong immune system and reducing the risk of diseases that could compromise their physical endurance and, consequently, their athletic performance. This topic emphasizes the importance of ongoing educational and preventive actions¹⁰.

FINAL CONSIDERATIONS

This study addressed concepts, theories, and practices related to immunization among young athletes, analyzing the vaccination schedule as well. The results showed that most participants were late in receiving vaccinations, particularly against influenza, diphtheria and tetanus, yellow fever, and meningococcal vaccines, highlighting gaps in adherence. This finding reinforces the importance of educational initiatives aimed at adolescents, especially athletes, once they are at greater risk of transmission in public settings.

The intervention also demonstrates that combining nursing appointments with awareness-raising activities, such as checking vaccination records, can contribute to increasing awareness of the importance of immunization and fostering connections between adolescents and health services. In this sense, the activity met its intended objective and highlighted the role of university outreach as a tool for promoting health and strengthening preventive strategies.

Nonetheless, it is essential to emphasize that the intervention presented some limitations, such as the lack of analysis regarding the athletes' socio-family and economic conditions, including their access to health services, which opens opportunities for future research. Ultimately, we hope this work will contribute to deepening knowledge about the relevance of vaccination for young athletes, as well as provide insights for reflection on the topic and the implementation of more effective practices.

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