VACINAÇÃO CONTRA INFLUENZA NO ENFRENTAMENTO DA PANDEMIA DE COVID-19: RELATO DE UMA EXPERIÊNCIA E REFLEXÕES

Igor Henrique Teixeira Fumagalli¹, Graciano Almeida Sudré², Silvia Matumoto³

RESUMO

Objetivo: Relatar a experiência de pós-graduandos na campanha de vacinação contra a Influenza e refletir sobre os aspectos relacionados à aprendizagem que decorreram deste processo. Método: Trata-se de um estudo descritivo, do tipo relato de experiência, de dois estudantes de um Programa de Pós-Graduação em Enfermagem em Saúde Pública que participaram da primeira etapa da 22ª Campanha de Vacinação contra Influenza, voltada à população com 60 anos ou mais e aos profissionais de saúde. Resultados: A participação dos pós-graduandos, na campanha de vacinação contra Influenza, que também se estabeleceu como uma das estratégias de enfrentamento da pandemia por COVID-19, possibilitou um olhar crítico-reflexivo e o reconhecimento dos limites e das potencialidades do sistema de saúde. Experiências como essas são estimuladoras pela diversidade dos cenários de prática e por propiciarem a imersão em situações-problemas reais, estratégia que possibilita a consolidação da aprendizagem. Conclusão: destacam-se os esforços e a parceria entre ensino e serviço, o que promove maior efetividade às atividades de atenção em saúde, como também impacto à formação do estudante, por meio da qualificação profissional, oportunizando desenvolvimento de atividades com uma equipe multiprofissional.

Descritores: Infeções por Coronavirus; Vacinas contra Influenza; Colaboração Intersetorial; Práticas interdisciplinares; Aprendizagem.

ABSTRACT

Objective: To report the experience of graduate students in the Influenza vaccination campaign and reflect on the aspects learned from this process. Method: This is a descriptive study, more specifically an experience report, by two students from a Graduate Program in Nursing in Public Health, who participated in the first stage of the 22nd Influenza Vaccination Campaign, for a population aged 60 years or more and for health professionals. Results: The participation of graduate students in the Influenza vaccination campaign, which has also been established as one of the strategies for coping with the COVID-19 pandemic, enabled a critical-reflexive look upon and the recognition of the limits and possibilities of the local health system. Experiences like these stimulate and consolidate learning due to the diversity of practical scenarios and the possibility of immersion in real-life problem situations. Conclusion: The efforts and the partnership between teaching and service are highlighted, since they promote greater effectiveness in health care activities, as well as an impact on student training, through professional qualification, providing opportunities to develop activities with a multiprofessional team.

Descriptors: Coronavirus Infections; Influenza Vaccines; Intersectorial collaboration; Interdisciplinary Practice; Learning.

RESUMEN

Objetivo: Informar sobre la experiencia de los estudiantes graduados en la campaña de vacunación contra la Influenza y reflexionar sobre los aspectos relacionados con el aprendizaje que resultaron de este proceso. Método: Este es un estudio descriptivo, del tipo de informe de experiencia, de dos estudiantes de un Programa de Posgrado en Enfermería en Salud Pública, que participaron en la primera etapa de la 22ª Campaña de Vacunación contra la Influenza, para una población de 60 años o más y para profesionales de la salud. Resultados: La participación de estudiantes de posgrado en la campaña de vacunación contra la Influenza, que también se ha establecido como una de las estrategias para hacer frente a la pandemia causada por COVID-19, ha permitido un mirada reflexiva y crítica y el reconocimiento de los límites y posibilidades del sistema de salud local. Experiencias como estas son estimulantes debido a la diversidad de escenarios de práctica y por proporcionar inmersión en situaciones de problemas reales, una estrategia que permite la consolidación del aprendizaje. Conclusión: Se destacan los esfuerzos y la asociación entre la enseñanza y el servicio, lo que promueve mayor efectividad en las actividades de atención médica, así como un impacto en la capacitación de los estudiantes, a través de la calificación profesional, brindando oportunidades para desarrollar actividades con un equipo multiprofesional.

Descripciones: Infecciones por Coronavirus; Vacunas contra la Influenza; Colaboración intersectorial; Prácticas interdisciplinarias; Aprendizaje.


How to cite this article:
INTRODUCTION

Influenza is a major public health problem and can lead to a high use of health services\(^1\). It causes negative impacts on care, leading to overcrowded units and requires better organization of health services, while precarious working conditions in public services can lead to a disease aggravation\(^2\). In addition to impacting health care, Influenza causes high economic expenses\(^3\) and unveils structural problems of the health system that go from the difficulty of the patient’s isolation to the need of reducing transmissibility in the service itself. It presents high mortality, depending on the affected population, such as children under five years old, pregnant women, patients with chronic non-communicable diseases and the elderly, especially those with multimorbidity who are part of the risk group\(^1,4\).

Influenza can be caused by viruses A, B, C and D, especially those with greater potential to cause pandemics due to their great circulation and seasonality, H1N1, H3N2, and B virus\(^4\). In the United States, the estimated mortality exceeds 20,000 people per year\(^3\), while in South America, between 2013 and 2017, the positive diagnosis of the disease and most of hospital deaths occurred among unvaccinated people\(^5\).

Complications resulting from Influenza are classified as moderate to severe and result from the pathological process triggered by the virus itself or by secondary infections for tissue involvement., Dehydration, encephalitis, myocarditis, rhabdomyolysis, renal failure, pneumonia, and sepsis stand out among the serious complications that require hospital admission\(^6\).

Other conditions that affect the respiratory system may have the same clinical importance, present high mortality depending on the affected population, become pandemic and, consequently, lead to high use of health services\(^1\). In view of this scenario, the viral infection called Coronavirus Disease 2019 (COVID-19), a coronavirus disease that emerged at the end of 2019 stands out. In January 2020 it was initially declared a global emergency by the World Health Organization (WHO) and, two months later, received a pandemic status\(^7\). When comparing influenza and COVID-19, the most relevant differences indicate the severity of the second in relation to the first, because, in addition to causing more deaths, it has a shorter incubation period, longer transmissibility, long duration and while vaccines for immunoprevention are still in the development phase\(^7\), all the potential of health services are needed to cope with it.

In Brazil, the first case of COVID-19 was diagnosed at the end of March 2020, enabling the prediction of a peak pandemic in winter, concurrently with the peaks of influenza infections, a period of the year in which the circulation of respiratory viruses increases, a scenario that led the Ministry of Health to anticipate influenza vaccination\(^4\).

Historically, the National Immunization Program incorporated the influenza vaccination strategy in 1999 to reduce complications and deaths resulting from the disease, conducting annual influenza vaccination campaigns\(^4\). In this sense, Influenza is preventable by vaccination, which represents a factor that can impact COVID-19 pandemic, as it helps in a differential diagnosis and decreases the demand for care in health units and consequent overcrowding, leaving the services available to meet the pandemic condition.

However, some difficulties arose in the daily routine of primary care services, to fulfill the immunization of the target population, mainly: logistics of doses distribution in different regions and cities of the country; conditioning and transportation of vaccines; control to realign the flow of care in health units, avoiding agglomerations; lack of Personal Protective Equipment (PPE) to health workers; and lack of human resources to fulfill basic actions linked to campaigns.

In addition, in Brazil, resources for large-scale vaccination of the population are scarce and there are large regional disparities. Even in view of this reality, vaccination of a large part of the population has become imperative, since it contributes to avoiding viral co-infections and overlay of symptoms, which, in turn, generate difficulties for diagnosis, thus further overloading the services\(^7\).

To overcome the adversities mentioned, intersectoriality is an indispensable condition. In this context, cooperation actions between a Public University in the state of São Paulo and the Secretaria Municipal de Saúde (SMS) of the city where this university is located, made possible to carry out the vaccination campaign in its first phase. Actions like these benefit all those involved: students who have the possibility of building knowledge from reality; professionals who are able to resignify their practices; and users
of health services who participate in actions pervaded with technical-scientific knowledge. The interaction of students with health services and communities, besides being interdisciplinary teamwork, is fundamental for the necessary transformations in the teaching-learning process.

The experience of students in the local reality during training, whether participating in health exercises activities and/or in the community is fundamental, since they provide greater experience in the different practice scenarios. Integrating teachers, students, and professionals from different health services around a shared objective can provide better quality actions and services to the population, since it allows to reorient practices to real health needs, proposing health care reorganization. In addition, it strengthens students’ education, so that they can act in different practice scenarios, increasing their formative process, with opportunities to implement the practice of scientific knowledge, focusing on interprofessional work.

Thus, because of the differentiated nature of the implementation of the Influenza Vaccination Campaign, in the context of the COVID-19 pandemic, this study aims to report the experience of graduate students in the influenza vaccination campaign and reflect on the aspects learned from this process of integration between a Public University in the interior of the state of São Paulo and the Secretaria Municipal de Saúde (SMS) of this city.

**METHOD**

This is a descriptive study, of experience report type, of two students in the Graduate Program in Public Health Nursing at EERP/USP, who participated in the first stage of the 22nd Influenza Vaccination Campaign, aimed at the population of 60 years old or older and health professionals, which took place in March 2020. For this campaign, the goal of the Ministry of Health was to vaccinate 90% of the eligible groups of Ribeirão Preto (PR), a municipality located in the State of São Paulo (SP), with a total population of 703,293 inhabitants, according to an estimate of 2019, carried out by Instituto Brasileiro de Geografia e Estatística (IBGE). As a strategy, university professors and SMS technicians built a group, in a multiplatform instant messaging application, through which they shared a spreadsheet containing the availability of

undergraduate and graduate students to participate in the campaign. After, they selected technical materials for reading, prepared a video lesson with the guidelines and explanations about the roles all the members would play in each vaccination site, form the teams and schedules, obtained PPE, and provided the addresses of the services selected to receive the counterpart.

In the vaccination sites, for better organization and effectiveness of the process, the work was divided into three phases, according to the need for human resources in the services: organization and screening; data recording and vaccination criteria certification; and vaccine application and post-vaccination guidelines. This partnership allowed us to know, assist and execute the assistance provided during this period.

To avoid agglomerations of people and meeting the recommendation of the Ministry of Health (MH) to cope with the COVID-19 pandemic, the vaccine application posts were decentralized from the health units. Thus, 32 schools/day care centers/community centers, belonging to the area covered by health units, were designated as vaccination sites for the elderly. This avoided risk population to be in an environment with greater circulation of people and greater potential for contamination since health units receive suspected cases infection with the new coronavirus for care and investigation. Redirecting the flow of elderly population allowed greater safety to the elderly themselves and to vaccination teams. In turn, health professionals, also the target audience of the campaign, were directed to health units.

**RESULTS ANDE DISCUSSION**

To cope with the pandemic, there are, worldwide, a diversity of actions of Primary Health Care (PHC). In Spain, PHC services were interrupted, and professionals relocated to hospital services, which caused treatments discontinuity and services disorganization; in the United Kingdom, PHC services participated in serological testing to identify new cases, in England, for example, the population began to be treated remotely, both suspected and confirmed cases.

In Brazil, the experience of Belo Horizonte, in Minas Gerais, consisted of canceling outpatient consultations and at the same time mobilizing teams for the vaccination campaign against Influenza. Recently, experiences in other
municipalities report the mobilization of teams to monitor severe chronic cases\textsuperscript{14}.

In Sobral, a municipality in the State of Ceará, immunization against influenza was also maintained and encouraged, as a PHC strategy to cope with the pandemic, as well as in all municipalities in Brazil. However, unlike other contexts, including the one described in this experience report, the elderly were vaccinated against this disease in their own homes: health professionals stayed on the sidewalk and the procedure was done by the door\textsuperscript{15}.

In the case of the vaccination campaign in Ribeirão Preto, SP, the pandemic situation led to a service “organized at random”, since classes of early childhood, elementary and high school students were cancelled, and the Department of Education allowed the use of the schools. For that purpose. At the time, the school workers themselves were responsible for facilitating some material and physical resources, to enable the implementation of the vaccination campaign, such as: showing places near lavatory or toilets with a sink for hand hygiene; supplying tables, chairs for professionals; and providing places for the population easy and safe access.

During the campaign days, Unidades de Saúde da Família (FHU), the Unidades Básicas de Saúde (UBS), day care centers, schools and community centers were deployed. In this context graduate students learning was stimulated by the process of observing planning actions, which made possible to notice the movement performed by the services to cope with the pandemic and understand the role of health surveillance in this process. To experience practice in this context, extrapolating learning through observation, some strategies helped with a safe execution of interventions, standing out: measures to control access to services with organized queues and safe distance; pamphlets distribution indicating the need to use pandemic virus control measures; offering masks to respiratory symptoms; priority access to vaccine to older people; vaccination even in the car of those with walking difficulties; and installation of vaccination station in a ventilated and large place. With these actions, focused on psychomotor skills, the students were able to advance in knowledge and consolidate learning, thus exercising the important task of integrating theory and practice.

By observing the intervention, it was possible to recognize the safeguard actions that multiplied and strongly mobilized the community to reduce the burden of health services, enhancing individuals’ proactivity regarding distance measures, the use of masks and vaccination. Graduate students learning, at that moment, emerged from the possibility of verifying the community’s support to the practices encouraged, through health education actions and from the strong influence of the media for the acquisition of new protection practices characteristic of these processes. People were already aware of the risk of contamination and the importance of vaccination, making them more attentive to the information shared.

From experience, it was favored the identification of the significant impact of co-responsibility for learning with the community, an alternative to address whenever possible. Involving the community o consciously adopt safeguard measures regarding Covid-19 promotes behavior and individual attitudes change, as well as providing collective changes with rapid responses to proper control and non-spread of the disease. Thus, government, families and citizens co-responsibility in the collective and collaborative control of the disease will bring better results\textsuperscript{16}.

During the experience, routine action involve sharing techniques for storage and temperature control of the thermal box, aspiration and maintenance of the temperature of immunobiologicals; administration at the appropriate location; observation of the professional attitude towards the patient; ergonomics; exercise of communication between professionals of different work shifts; correct disposal of sharp materials and common waste; and recording and passing on the data to the local coordination of SMS.

In this sense, the interaction between university-service strengthened the students and professionals training and expanded the knowledge of the community. Fragmented view of work could be overcome in similar processes, by directing know-how to a dimension centered on life, not only in technical and procedural aspects\textsuperscript{11}, since revisiting techniques related to the vaccination process directed the learning process to the field of technical skills. However, by observing attitudes in the execution of the procedure, positioning and welcoming posture, communication when meeting other professional, user and local management, moved learning to the acquisition of relational and affective skills, fundamental for integral care centered on the
person, which bring gains to the training process in graduate school.

More than a technical aspect focusing on the procedure or possible offer of immunization, the process logistics, the containment of one disease to the detriment of another or the reduction of hospitals flow, vaccination – even with all protection measures requested by social distancing – also allowed expanding the gaze to the people who accessed the service.

One of the challenges for graduate studies, lies in the need to strengthen integration with health services, based on investments, to broaden understanding about their functioning, identification of needs and construction of joint intervention proposals. However, there are few moments when this articulation occurs, even in professional programs with students who are already practitioners\(^{17}\). This kind of strategies, simple in the daily routine of practices, can be complex to the formative environment, since they bring the student closer to a more adequate reading of reality, opens the possibility of rethinking research developed in the future regarding the impact on society. Moreover, some graduate students are distant from professional practices to the detriment of academic education and actions such as those described in this paper that allows to resume their professional activities by taking responsibility for health in the individual and collective context.

During the experience, it was possible to identify that people in different risk conditions wanted the vaccine: numerous elderly with diabetes, hypertension, kidney and cardiovascular problems in the screening process, mentioning their multimorbidities and others with signs of dehydration and malnutrition noticeable by skin turgor, muscular atrophy and low weight. Developing a broad view in health care may produce humanized practices, that is, humanization is a product of integrity as a process constructed by encounters in daily life\(^{18}\).

By resuming the teaching-learning process provided from the vaccination campaign, the support offered by the teachers had a ripple effect, which allowed to broaden the view even further and transform a simple campaign in an environment for supervised improvement of psychomotor, cognitive, and relational skills. The professors of EERP/USP, in addition to administering the doses, supervised methodologically, and offered support to graduate students to exercise supervision of undergraduate students. Thus, graduate students and undergraduate students trained both the administration of immunobiologicals and the management of the work process. Therefore, the learning opportunity of undergraduate students was enhanced, as was the exercise of teaching by graduate students. In the process of significant learning, the act of teaching is tied to the act of learning, so that, in the interaction between teachers and students, there is a reconstruction and expansion of learning, obtained in the encounter with the other, enhanced by dialogue, follow-up and problematization\(^{19}\).

A potencialidade de experiências como a aqui relatada, de imersão na prática e colaboração intersetorial, é reconhecidamente explorada há anos no Brasil. Ações entre universidade e serviços de saúde, para promover a imunização, são identificadas em relatos de experiência desde a década de 1970 e, na oportunidade, envolveram docentes da Universidade Federal da Bahia durante a campanha de vacinação contra o surto de poliomielite em Salvador\(^{20}\).

The experience reported has been tapped for years in Brazil because of its potential for immersion in practice and intersectoral collaboration. Actions between university and health services to promote immunization have been identified in experience reports since the 1970s involving professors from the Universidade Federal da Bahia during the vaccination campaign against polio outbreak in Salvador\(^{20}\).

The mobilization of the university, to contribute in the critical context of public health, brought the possibility of integrating vaccination teams with undergraduate and graduate students who left the walls of the university to get in touch and learn from the reality of the local health system, to look at the map of the territory belonging to that unit and to know the health unit and its professionals while removing materials for the campaign, to know workers from other units scheduled to make up that work team, to dialogue about the reality of the different communities covered and their particular reasons for getting the vaccine. In short, students have opportunities that provided conditions to live experiences as a transformative and critical individual of the society\(^{21}\).

Learning experiences like this, for graduate students, are also offered by EERP/USP, in the Programa de Aperfeiçoamento de Ensino (PAE), which links the needs of practical and pedagogical improvement of graduate students to the needs of
undergraduate students, professionals in service and users of the Sistema Único de Saúde, enabling professional benefits in the exercise of collaborative practices and interprofessional work. By going beyond the practice required and by collaborating with collective learning through cooperation, promotes the exercise of transformative experiences. Thus, significant learning occurs, that is, the student makes connections between the lived experience and their previous knowledge, transforming the content experienced into meanings\(^{[22]}\).

Another positive factor observed during the reported experience was the public reached by the campaign: 88% of the elderly in the city were immunized\(^{[23]}\), equivalent to 68,820 doses applied in this target audience, close to the goal established by the Ministry of Health that would be 90%. In the case of Influenza, the increase in the number of infected from one year to the next suggests a resistance of the population to the vaccine, evidencing that part of these people only want the vaccine in periods of large outbreaks, epidemics or pandemics\(^{[24]}\). In this report, the increased demand for influenza vaccination was noticeable, despite its non-efficacy against COVID-19.

The advance of the old and usual annual influenza vaccination campaign by the Ministry of Health\(^{[4]}\), besides enabling immunization, helped prevent the overlap of similar diseases, when considering the signs, symptoms and needs of intervention. Thus, it impacted on the institutional preservation of beds and services to combat the COVID-19 pandemic\(^{[7]}\).

Vaccination, in this context, has become a real measure of individual prevention and to promote the maintenance of institutions, represented by health services and their scarce resources.

The participation of graduate students in this process allowed a critical-reflexive look and the recognition of the limits and potentialities of the local health system, consolidating learning. According to Rezende et al., (2015), intersectoral actions have a positive impact on the teaching-learning process, have greater effectiveness and lower cost of execution, besides assisting in actions regarding new health realities and different social problems\(^{[25]}\).

**FINAL CONSIDERATIONS**

During the initiative, it is possible to visualize a "random organization" as a convenience factor for the use of spaces and services. The insertion of the university in this process allowed the expansion of learning and the opportunity to develop activities with a multidisciplinary team, practicing management, acceptance of demands, dialogue with users and professionals, which allowed a safer and efficient way for vaccination in a pandemic context.

It is important to highlight the efforts and partnership between university and service, which promoted greater effectiveness in health care activities, as well as an impact on student’s education, through professional qualification and meaningful learning, since learning was stimulated by the process of observing planning actions and by the exercise of psychomotor skills.

Interaction with the community allowed identifying the need for co-responsibility of the person, family, and community, as well as professionals and university. At the same time, the university-service interaction strengthens the student’s education, since the practice transcends learning and enables the acquisition of relational and affective skills, with benefits to the graduate education process, bringing the student closer to a more adequate reading of reality. Therefore, developing a broader vision of health care, the student makes connections between the lived experience and their previous knowledge, transforming the contents experienced into meanings.

By establishing partnerships with the university for influenza vaccination campaign in the context of a pandemic by COVID-19 and developing intersectoral actions, difficulties of SMS in fulfilling immunization responsibility of the target population was mitigated and the vaccination goal achieved with quality, bringing benefits for teaching, service, and community. This kind of partnerships to be encouraged in health courses, even though for graduate studies, for greater alignment of the student and issues that arise in the field of practices, enabling the exercise, at least initial, of the social impact desired and the development of educational activities for this level of training.

**REFERENCES**


2- Souza DB, Dall’Agno CM. Public health
7– Strabelli TMV, Uip DE. COVID-19 and the heart. Arq Bras Cardiol. 2020;114(4):598-600. DOI: 10.36660/abc.20200209
13- Nedel FB. Enfrentando a COVID-19: APS forte agora mais que nunca! APS 2020;2(1):11-6. DOI: 10.14295/aps.v2i1.68


Note: This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001

Received in: 20/05/2020
Approved in: 10/07/2020

Mail address:
Igor Henrique Teixeira Fumagalli
Avenida do Café 1715, apartamento 417 – Ribeirão Preto – São Paulo, Brasil.
CEP: 14050-230