

On Integrated Residency in Health with emphasis on Health Surveillance

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Abstract *Taking into account the four underpinning areas of Health Surveillance (environmental, epidemiological, health and worker's health), the performance of professionals in this area requires a broad and complex set of information from many fields of knowledge, including that which is not classified as health. Considering the need to prepare professionals to work in Health Surveillance in the Unified Health System (SUS), integrating the four fields of knowledge, the Public Health School of Rio Grande do Sul (ESP/RS) and the surveillance areas of the municipality of Porto Alegre and Rio Grande do Sul State have established a new emphasis in the traditional residency of ESP/RS. This work uses the experience report descriptive method. It shows the activities of residents in the formation course of the first year, fourth class of this in-service education experience and takes stock of results of residency freshmen.*

Key words *Health education, Integrated health residency, Health Surveillance, Education-service integration*

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Introduction

According to Organic Health Law N° 8.080/1990¹, the ordering of human resources in health training is included in the scope of the SUS. The training of professionals for the Unified Health System (SUS) has been a growing topic in health education. In graduate school, different programs have been developed with the purpose of preparing professionals to meet the demands and needs of society and the SUS. The National Continuing Education Policy, the National Health Conferences and the very health reform movement pointed to the need for a Health Education policy².

ESP/RS has opted to invest in the training of professionals who can learn and qualify Health Surveillance as a field of work and training, taking into account the embedded knowledge, practices, work processes and technologies. There was a strong articulation between education and service to make this happen and to establish the first Integrated Residency in Health with emphasis on Health Surveillance. The services cited were the General Health Surveillance Coordination (CGVS) and the State Health Surveillance Center (CEVS), responsible for Health Surveillance actions in the city of Porto Alegre and the state of Rio Grande do Sul, respectively.

Albuquerque et al.³ affirm: “There are several perspectives for changes in the training of health professionals, which include the reflection and transformation of the education/work interface”, that is, relationships between education and health services. Authors understand that “one must acknowledge that the spaces of intersection between service and education are of great importance to health training and the consolidation of the Unified Health System (SUS)”. Thus, we see education-service integration as a powerful strategy both for students/residents in their training course and service in its training capacity.

The ESP/RS, CGVS and CEVS established the Integrated Health Residency (IHR) with emphasis on Health Surveillance, a course based on the education-service integration guideline, facilitating practice settings in the four major areas of Health Surveillance – epidemiological, health, worker’s health and environmental – in the municipal and state perspectives, where CGVS is the first-year and CEVS the second-year field of training. The residency innovated in two areas: the Center, which was divided by areas of surveillance and not by occupation and entry by areas of knowledge (exact sciences, biological, applied

social, health, agrarian and human sciences). IHR with an emphasis on Health Surveillance began the first class on March 17, 2014 and today is in its 4th edition, with eleven residents graduated in the areas of collective health bachelor’s degree, biology, nutrition, social work, nursing, chemical engineering, pharmacy and veterinary medicine, corroborating the multidisciplinary nature, establishing “an intersectoral cooperation program to promote the qualified introduction of young health professionals in the labor market, particularly in priority areas of SUS.” (Law N° 11.129 of 2005)⁴. The total number of entries in the four years is fifty professionals. Several professionals who graduated from the residency were approved in public examinations in the state of Paraná, in the mountainous, coastal, capital and metropolitan region municipalities of Rio Grande do Sul. Some final residency papers are in the process of being published or have already been published⁵. Other residents followed their studies in master’s degrees or doctorates conducting research on Health Surveillance-related issues. In 2016, one of the residents of the emphasis was the winner of 1° CURTAVISA, with a video produced in Porto Alegre⁶.

The CGVS has been a field of curricular and extracurricular internships in the field of public health since 1998. In 2013, “CGVS contacted the School of Public Health and the State Health Surveillance Center to propose a partnership in the construction of a *lato sensu* service education strategy with a Multidisciplinary Residency format guided by SUS principles and guidelines”⁷. The field is staffed by area preceptors, professionals who accompany and guide teams’ training, and field preceptors, who manage education within the CGVS structure, such as the reception, distribution of residents in areas of choice and mainly the preparation of the Case Report Integrating Seminars.

The seminars are prepared by residents and teams with a review of legislation and literature and are attended by debaters, usually external to the CGVS. The presentations are open to all CGVS servers, students and interested professionals. In addition, theoretical activities of epidemiology, georeferencing, legislation and attitudes in surveillance are provided. Residents are part of the Student Assistance Faculty Center (NDAE), a unit that discusses the IHR curriculum and pedagogical model, and the Multidisciplinary Residency Committee (COREMU), a unit for the agreement on the IHR education management.

Methodology

This is an experience report of IHR residents with emphasis on Health Surveillance of the School of Public Health of Rio Grande do Sul, about the immersion in the practice settings in the General Health Surveillance Coordination, distributed in the teams that cover the four areas of Health Surveillance. Immersion started in the CGVS on March 17, 2017.

Results

Health Surveillance

Water quality: The team has two dentists, a chemical engineer and a social worker, as well as a resident – a chemical engineering professional in field training – working in the process of monitoring the potability of water for human consumption. The team works with the VIGIÁGUA Program and follows the guidelines established by the Ministry of Health – General Environmental Health Surveillance Coordination of the Secretariat of Health Surveillance. It follows Ordinance N° 2914/11, which provides for potability limits and parameters. It operates in water supply systems (SAA); in alternative water supply solutions: collective (SAC) and individual (SAI); in potable water reservoirs; in the drinking water reservoirs cleaning and disinfection companies and in the fluoride monitoring system. The EVQA also monitors sources, and should water be improper for consumption, it is responsible for notifying the local population with the placement of warning signs. It also oversees drinking water transporting vehicles and receives notifications, such as in the case of odor and taste of treated water, in which Guaíba's water is collected for cyanobacteria counting. The team also carries out activities of environmental education and restructuring of the streams of the municipality and control of diseases transmitted by water or whose vector is benefited by it. Thus, the surveillance of water for human consumption has direct contact with the population that uses this water.

Rodents and vectors: The Rodents and Vectors Surveillance Team (EVRV) works in the Environmental Surveillance of biological factors of public health interest. Among the activities are surveillance and control of *Aedes aegypti* and *Aedes albopictus* (vectors of diseases such as Dengue, Chikungunya and Zika)⁸, rat bites, leptospirosis, sandflies transmitting tegumentary and viscer-

al leishmaniasis and triatomines (barber bugs, responsible for the transmission of Chagas' disease), as well as environmental education actions. The team is also responsible for the Laboratory of Medical Entomology, where the identification of disease-carrying arthropods is carried out. The EVRV consists of biologists, veterinarians, administrative assistants, nursing technicians, endemic workers, and extracurricular higher education interns and receives annually Residents of Health Surveillance. The ESP/RS resident professional biologist participates in the work carried out by the team, contributing to the surveillance of visceral leishmaniasis through educational actions, social mobilization, entomological investigation and research on the vector in the inner and peridomicile, in addition to collaborating in health promotion and education activities so that the attached populations and workers of the Health Facilities, chosen as Triatomine Information Centers of the municipality are attentive and sensitized to act in the prevention and control of Chagas Disease.

Epidemiological Surveillance

Vital events, noncommunicable diseases and disorders: The Monitoring Team for Vital Events, Noncommunicable Diseases and Disorders (EVEV) are responsible for the management and epidemiological qualification of Health Surveillance systems: the Mortality Information System (SIM), the Live Birth Information System (SINASC) and Violence and Accidents Surveillance (SINAN). For each information system, the team and the ESP/RS resident nurse think about different work processes for the organization of data that investigate vital events and noncommunicable disorders. The intercession between education and service occurs through multidisciplinary residents in the field, training and orientation of curricular and extracurricular internships. One of the main activities carried out by the ESP/RS resident, in addition to planning of actions with the team, is the participation in the Municipal AIDS-related Mortality Committee, established by Law N° 11.425, of April 22, 2013.

Communicable diseases: The Communicable Disease Surveillance Team (EVDT) is responsible for investigating communicable diseases and diseases of compulsory notification set forth in Ordinance N° 204 of February 17, 2016. The EVDT is divided into three groups: Acute Communicable Diseases Surveillance, Communicable Chronic Diseases Surveillance and Immuniza-

tions. The team aims to understand the epidemiological profile of the diseases recommended in the ordinance, aiming to control, prevent and, if possible, eradicate them, besides providing health professionals and services and the population updated epidemiological information about the city of Porto Alegre. Education-service integration occurs through the introduction of two residents graduates in collective health of ESP/RS. One resident is allocated in the Chronic Disease Center and the Immunization Center in two separate shifts, while the other performs his practices at the Acute Disease Center. In the Chronic Diseases Center, activities include database feeding, qualification of compulsory notification sheets and analysis of the epidemiological situation and proposition of intervention in the territories, according to local specificities, regarding HIV/AIDS. In the Immunization Center, participation in the process of implementation of the Information System of the National Immunization Program (SIPNIWEB) with the various health units, besides performing activities related to the logistics of immunobiologicals, control of their quality and training provided to professionals working in primary health care in Porto Alegre. In the Acute Diseases Center, the work and education process occurs through the analysis of the SINAN database, the production of epidemiological and informative bulletins and the investigation of influenza-related deaths; participation and monitoring of the Visceral Leishmaniasis situation room; collection of data on the integration of primary health care with Health Surveillance in the actions of Dengue, Zika and Chikungunya control and preparation of flowcharts of the team work processes and discussion of the role of Epidemiological Surveillance in the care network of the municipality of Porto Alegre.

Health Surveillance

Food: The Food Surveillance Team (EVA) works to ensure the safety and quality of food sold and/or consumed in the city of Porto Alegre, through surveillance activities aimed at eliminating, reducing and preventing health risks caused by inadequate handling. EVA uses a variety of tools to carry out its activities, such as health education, product monitoring and control, research and inspection. The investigation of outbreaks of Foodborne Diseases (DTA) is also an activity carried out by the team, where investigation of the cases occurs through notification by the population and by health services. All team

actions follow scientific rationale and relevant legislation. The EVA is composed of veterinarians, inspection agents, administrative assistants and mid-level trainees, receiving annually of Health Surveillance Residents and higher education level curricular trainees. A veterinarian and a nutritionist make up the department's resident cadre. The introduction in the multidisciplinary residency nears integration between education and service and the residents are responsible for evaluating and handling notifications of the 156 - *Fala Porto Alegre*, for the inspections to authorize the activities of *Food Trucks in the municipality*, elaboration of inspection reports, data collection to collaborate in the situational diagnosis and assist in the planning of the team activities, submission of cases witnessed during the team's routine during the period of residency in seminars and training events.

Services of interest to health: The Services of Interest to Health Surveillance Team (EVSIS) is responsible for registering, monitoring, supervising and licensing health care and health-related services. In addition, it monitors these services, aiming at the quality of care and patient safety, promoting actions to prevent the incidence of adverse events due to process failures or care structures. EVSIS is responsible for establishments such as hospitals, blood and blood products services, cell banks, tissues and organs, laboratories, enteral nutrition, medical and dental clinics, kindergartens, long-term care institutions for the elderly, imaging diagnostic services, physiotherapy, chemotherapy, hemodialysis, hemodynamics⁹. The follow-up of the survey activities provides the resident with training on looking at nonconformities and possible improvements in health services. Electronic records of notifications and infraction notices, assessment of documentation for the release of permits, technical reports of inspections, meetings with regulated institutions and participation in the elaboration and implementation of health awareness campaigns aimed at professionals and the community are also carried out. Residents follow the Municipal Hospital Infection Control Committee and the Municipal Patient Safety Committee.

Worker's Health Surveillance

The Health, Environment and Labor Surveillance Team (EVSAT) carries out actions aimed at monitoring human health exposed to environmental risks and working environments. Its general objective is to identify and monitor non-bio-

logical risk factors related to environmental contaminants, air quality, soil and natural disasters in order to minimize the risks of diseases and disorders caused by exposure of the population. EVSAT also develops a set of activities aimed at promoting and protecting the health of workers subjected to the risks and damages generated by productive activities, whether or not they are formalized in the various forms of representation of these environments.

The actions stand out in the elaboration of reports and technical opinions after visits to investigate work-related deaths, inspections and surveys through notifications through portal 156, health education actions along with primary health care, intersectoriality and articulation with the territory of the municipality of Porto Alegre. It is an in-service education through the reception of multidisciplinary residents and trainees enabling the maintenance of continuing education in the actions performed by the team, integrating residents and trainees in the team's actions to propose and discuss the institutional and work processes, also triggering some reflections on research that qualifies training. The ESP/RS resident is a social worker and integrates the professional staff in a pedagogical way and participates in the planning and actions carried out by the team.

Discussion

Showing the IHR and emphasizing its innovative character as an emphasis on Health Surveillance and to think that in-service education training is fundamental for training future workers who are increasingly qualified to work in this SUS pillar,

whether in management or in field practices is a challenge that we address in our daily routine. Therefore, we hope that this experience will serve as a model for the establishment of other residencies with an emphasis on Health Surveillance in other Brazilian states and municipalities. We also wish to “train for the SUS”, emphasizing residents' willingness to be able to work, a posteriori, as a professional in the areas of Health Surveillance in the three spheres of government.

There are countless possibilities of learning, given the context of the SUS as a workforce-training device, even more with the opportunity for residents to experience not only one or two areas, but also other areas of Health Surveillance from the CGVS framework. Still, reflecting on the breadth of Health Surveillance, which permeates the activities of all the professionals included in the health services network and the daily life of the population in general, we can infer that there are unlimited learning possibilities, both for graduates from the field of Health sciences and other areas of knowledge. On the other hand, the challenge is to find the best ways to contribute to the service, balancing learning with proposed actions in the possible spaces, providing “new looks” at the existing reality.

Besides providing technical content and continuing education, we believe that this residence also mobilizes minds and hearts, opening a space for political debate and management about SUS. The investment in the qualification of professionals will encourage SUS advocacy and has the power to establish strong devices for the mobilization of an increasingly universal, public, comprehensive and quality health system for Brazilian society.

Collaborations

Andrei da Rocha and Anelise Breier worked on the writing of the introduction, discussions, methodology and a paragraph on Epidemiological Surveillance. Niura Massario Santos and João Vinicius Ribeiro Azambuja worked on the writing on Epidemiological Surveillance. Estela Lopes Scariot and Rohlof Almeida, Claudia Cristina dos Santos and Caroline Mello worked on the writing on Environmental Surveillance. Reinher and Joaquim Basso worked on the writing on Health Surveillance.

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