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# Health Surveillance actions during the COVID-19 pandemic Ações de Vigilância Sanitária na pandemia COVID-19

## ABSTRACT

Marcelo Pereira da Rocha<sup>\*</sup> (D) Silvana Portella Lopes Cruz" (D) Alba Benemérita Alves Vilela<sup>III</sup> (D) Vanda Palmarella Rodrigues<sup>III</sup> (D) Introduction: In times of the COVID-19 pandemic, health surveillance, as well as other health sectors, needed to adapt to develop its activities in a new challenging context. **Objective:** To describe the actions of health surveillance professionals in tackling the COVID-19 pandemic. **Method:** This is an experience report about the work in the sector of health surveillance during the pandemic in a Regional Health Center in the state of Bahia. **Results:** Actions undertaken in a health barrier were reported, including: welcoming, lectures, respiratory symptoms testing and notification, as well as the offer of continuing health education activities, in person and on-line, meetings with municipal managers, and other actions performed by the team, highlighting the intersectoral and intersectoral nature. **Conclusions:** The experience of the work conducted is consistent with the proposals of the Contingency Plan. Partnerships are of paramount importance for the professionals working in the sector of health surveillance and others, given the complexity of the pandemic moment. The experience also represents a learning process in dealing with new technological tools and allowed the creation of spaces for reflecting on work processes, as well as on new possibilities of approaching in light of the current challenges.

KEYWORDS: Health Surveillance; COVID-19; Information Dissemination

## RESUMO

Introdução: Em tempos de pandemia de COVID-19, a vigilância sanitária, assim como outros setores da saúde, precisou se adaptar para desenvolver suas atividades em um novo contexto desafiador. Objetivo: Descrever a atuação de profissionais da Vigilância Sanitária (Visa) no enfrentamento da pandemia da COVID-19. Método: Trata-se de um relato de experiência acerca do trabalho em Visa durante a pandemia em um Núcleo Regional de Saúde do estado da Bahia. Resultados: Foram relatadas ações realizadas em uma barreira sanitária, com acolhimento, palestra, testagem dos sintomáticos respiratórios e notificação, bem como a oferta de atividades de educação permanente em saúde, de forma presencial e *on-line*, por meio de reunião com os gestores municipais e demais ações realizadas pela equipe, tendo-se como destaque o caráter intrasetorial e intersetorial. Conclusões: A experiência do trabalho realizado coaduna com as propostas do Plano Estadual de Contingências para Enfrentamento do Novo Coronavírus. Salientam-se as parcerias como de fundamental importância para os profissionais da Visa e de outros setores, frente à complexidade do momento pandêmico. A experiência ainda representa um aprendizado em lidar com novas ferramentas tecnológicas, que permitiram criar espaços de reflexão dos processos de trabalho, bem como de novas possibilidades de abordagem diante dos desafios atuais.

PALAVRAS-CHAVE: Vigilância Sanitária; COVID-19; Disseminação de Informação

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## **INTRODUCTION**

In the current context of the COVID-19 pandemic (declared in March 2020), caused by the new coronavirus (SARS-CoV-2), which has been circulating across several countries and regions of the world<sup>1</sup> since then, much has been said about health surveillance, although little is known about its importance and attributions in Brazil's Unified Health System (SUS).

Brazil's Organic Health Law defines health surveillance as a set of actions that can eliminate, reduce or prevent health risks, as well as intervene in health problems originating from the environment, the production and circulation of goods, and the provision of services that are considered of interest to health<sup>2</sup>. To accomplish that, health professionals who work for health surveillance bodies have the prerogative of police power in the administrative area. This often times implies in limiting the individual rights of citizens, since the supremacy of public interests shall prevail.

Brazil has a National Health Surveillance System (SNVS) and three levels of government: union, states and municipalities, which have their own responsibilities in executing the necessary actions. Specifically in the state of Bahia, the coordination of state activities is under the responsibility of the Health Surveillance Board, based in the state capital, Salvador, and of nine Regional Health Centers, based in the state's macro-regions. In those centers, there are health surveillance teams to provide advice and technical support to the municipalities and to carry out complementary actions to those performed by the municipalities, such as inspections in high-complexity settings<sup>3</sup>.

The actions to combat the pandemic in Bahia were guided by the State Plan of Contingencies to Combat the New Coronavirus<sup>4</sup>, an instrument that guides managers and public health institutions in the setup and implementation of actions to protect the health of the population. This plan includes health roadblocks on interstate highways, institutional support to municipalities and healthcare establishments, and continuing education activities on health, among other initiatives.

Regarding the aforementioned health roadblocks, the legal provisions that authorize them in the face of public health emergencies of international interest include Federal Law n. 13.979, of February 6, 2020<sup>5</sup>, Article 3, item VI (whose wording was changed by Federal Law n. 14.035, of August 11, 2020<sup>6</sup>), which provides that authorities may adopt measures of exceptional and temporary restriction on highways, as well as Joint Board Resolution (RDC) of the National Health Surveillance Agency (Anvisa) n. 353, of March 23, 2020<sup>7</sup>, which delegated to state health surveillance bodies the power to "prepare the technical and reasoned recommendation" for exceptional and temporary restriction on interstate and intercity highways.

Health roadblocks make sense because there is a need to prevent the spread of the virus by the movement of symptomatic or asymptomatic infected people who can potentially transmit the disease. This movement can occur during daily tasks that allow contact between people in their environment or when people travel to other municipalities, states, or even other countries<sup>8</sup>. The roadblocks also facilitate the identification and notification of suspected cases of COVID-19, as well as the delay of viral spread in the territory.

The State Contingency Plan to Combat the New Coronavirus in the state of Bahia<sup>4</sup> includes other actions, in addition to health roadblocks. To effectively counter the pandemic, they should be done in combination and include the preparation of primary health care (PHC) units, the expansion of user access to hospital care, and communication and cooperation strategies between management levels to organize the health system.

Machado et al.<sup>9</sup> analyzed how health surveillance was conducted by the management in the Northeastern states of Brazil during this pandemic and pointed out political and managerial challenges to health surveillance and the necessary negotiations with the various stakeholders to achieve true cross-sector cooperation. They also emphasized local and regional integrated actions as an important tool to fight the pandemic.

In this pandemic context, health surveillance bodies play an important role by acting in several frontlines through actions of clarification to the population, health education to professionals, and supervision of establishments subject to health surveillance. With that in mind, this study seeks to answer the following guiding questions: how did the regional health surveillance body perform during the pandemic? How was the support to municipalities provided?

In this perspective, our goal was to describe the performance of health surveillance professionals in fighting the COVID-19 pandemic.

## METHOD

This is an experience report of a qualitative nature based on the work done in health surveillance during the COVID-19 pandemic by a dentist and a nurse, both public health experts and both in the state of Bahia.

The qualitative nature of this work is explained by the exteriorization of the subjective impressions of the learning from these professionals' experiences. According to Turato<sup>10</sup>, the qualitative methodology in health does not study the phenomenon per se, but seeks to apprehend its meaning in people's lives. Therefore, experiences have different meanings that can influence behaviors and become valuable examples to help inform the practice of other stakeholders.

The study setting was the Regional Health Center of Southwestern Bahia, which is responsible for supporting and providing technical advice to the municipalities, as well as for performing health surveillance actions on a complementary and supplementary basis. Its area of operation encompasses 74



municipalities. The period of the reported experience ranged from March, when the first suspected cases of COVID-19 were reported in Bahia, to July 2020.

The actions taken were based on the guidelines of the Brazilian National Health Surveillance Agency (Anvisa), the Bahia State Health Surveillance Board (Divisa), and the State Contingency Plan to Combat the New Coronavirus<sup>4</sup>, a guiding document for the technical teams of several areas, including health surveillance.

No instrument was used for data collection because the text brings reports narrated by the authors, without mentioning names, statements, data, or any other information on the participants involved (passengers and drivers in transit, health professionals and managers).

## RESULTS

Countering the pandemic in the area of health surveillance poses many challenges in view of contamination risks, as well as psychosocial matters and other risks. However, it has a positive side, with new learnings and the possibility of contributing to the prevention of an emerging disease that requires so much care. Based on this, we sought to share the work done at the health roadblock, in the support to municipalities, and in the sanitary control of health establishments, including those that care for patients with respiratory symptoms and those confirmed with COVID-19.

#### The work at the health roadblock

Early in the pandemic, there was much uncertainty and few answers to many questions, such as how COVID-19 was spread, and what the health protection measures were. To make matters worse, the Brazilian population was exposed to speculation and untrue news, the so-called fake news. Until that moment there were not many published studies, so health authorities and health professionals were in charge of filling the gaps in society's knowledge through interviews in various media.

Facing such a challenging environment, the Regional Health Center sought to build a new work process in a totally atypical year, since each team already had its routine actions scheduled. Therefore, the planning prepared for 2020 needed to be reconsidered in order to counter the pandemic.

One of the first measures was the removal of health workers considered to be in risk groups, such as those over 60 years old and those who were immunocompromised. All other workers remained at their posts or went to the health situation room, composed of a surveillance team responsible for monitoring the regional pandemic situation, supporting the epidemiological surveillance teams, releasing bulletins with epidemiological information about COVID-19, among other important activities.

In turn, employees without comorbidities worked on the frontline, at a health roadblock set up on an important interstate highway, close to the border with the state of Minas Gerais. For this action, many workers from the health surveillance body and from other sectors were allocated, and there was support of the military police and the state border checkpoint, which allowed them to use of their facilities, such as rooms for meals and toilets. This station is a mandatory stopping place where transportation vehicles have to present the invoices of the goods they carry, therefore, it is a strategic place for the type of activity in question.

The center was implementing a health roadblock for the first time, which posed a challenge for health professionals who were not yet familiar with that type of work. At the roadblock, public transportation drivers (vans and buses) and people who were traveling were approached, including many drivers coming from the South and Southeast regions to deliver goods in the Northeast, and many passengers coming from Rio de Janeiro and São Paulo, for example. Many stories were told. Most people were returning to the Northeast due to unemployment, feeling discouraged and with no prospect of getting a job in the near future. It was a sad situation, but also one of hope for a vaccine. Many wanted to know when the pandemic would come to an end or when a cure would be found.

The buses were crowded because back then the epicenter of the disease was the Southeast. Many people arrived without masks, tired from the long trip, in which occasion they were welcomed and invited to take part in a talk about the prevention of COVID-19. Additionally, their temperature was taken, suspects were reported, and symptomatic people were tested.

The big problem was that few had flu symptoms and the impression was that the work was pointless. Furthermore, they would come in crowds, crammed, sitting next to each other, in an environment with great potential for contamination. However, the educational action was very fruitful and proactive participation was noticed. At the end, they would always thank the professionals for the work done.

In this perspective, while part of the team approached the passengers of public transportation, another part did the same work with truck drivers. Part of this category welcomed the work done by the health team. However, some of them questioned the lack of gloves, masks, and hand sanitizer distribution. Others said that it was a waste of time because the virus was an invention from China, and that everyone should leave home to work, not just a few, because the economy would suffer, and people could starve. Even so, they tried to give a scientific explanation to the facts, even when there were questions about the scientific evidence produced so far.

It was a tiring job. People worked shifts from 7 am to 7 pm, using personal protective equipment (PPE), such as masks, caps, and face shields in various weather conditions, such as very hot, cold, or rainy days, which caused some discomfort. But there was also a bright side, like the integration, mutual support, snacks, and the joys shared. As the spread of COVID-19 grew in Bahia, the discredit regarding the effectiveness



of the health roadblock increased and the operation was discontinued in May.

#### Support to the municipalities under the Regional Health Center

After the end of the health roadblock, there was more time to devote to activities of support to the municipalities. In this aspect, the health surveillance actions of institutional support to the municipal teams were carried out mostly through social media and telephone, in view of the replacement of face-to-face activities by technology-mediated activities during the pandemic period.

During this support, educational activities with content to meet the needs reported by the coordinators of the municipal health surveillance bodies stood out, and most of them were conducted online.

Conducting these activities with the support of new technologies was interesting and enabled the provision of continuing health education to health professionals, in a way that was different from in-person activities. The topics were related to the pandemic, including patient safety and infection control actions, and worker health protection in the context of the pandemic. The activities involved participants from health surveillance and worker's health sectors.

Another important aspect was the participation of people from other regions of Bahia and even other states in the online meetings, as long as they had access to equipment connected to the internet, such as laptops or cell phones. Even at a distance, it was possible to interact by chat messaging or by oral participation using a microphone, which contributed to quality discussions of the topics. A drawback was the occasional connection drops of some participants, who did not have stable internet connection.

However, there was also the offer of in-person continuing health education actions, with an open space to discuss the work process of actions that until then had been little discussed, like the cleaning of ambulances, health service waste management, and safety standards for workers who performed the collection of urban waste. These were important moments, because they enabled the integration of the health sector with the various sectors of the municipal management, as well as revisiting routines, workflows, and the accountability of the teams.

An interesting demand regarding the center's support to the municipalities occurred due to complaints from employees of some municipal surveillance bodies about their working conditions, such as long working hours, non-payment of labor rights, low collaboration from the population in terms of social distancing, and low capacity of the health surveillance body to meet the many demands from the community, many of which were not related to the sector's competences. This encouraged the regional surveillance body to position itself with a letter addressed to municipal health managers, to clarify the role of health surveillance and emphasize the importance of improving working conditions and upholding labor rights.

That letter was read and discussed in an online meeting with health secretaries, in order to sensitize them to give the necessary support to health surveillance teams, also from the psychological point of view, given the stress experienced by those who worked on the frontline of the pandemic.

#### Health risk control actions at health facilities

With the growth of the pandemic, there was an increasing contamination of health workers and patients, even leading to deaths. At the same time, complaints about the lack of PPE and improper working conditions began to emerge. In that sense, health inspections were carried out, despite the risks.

These inspections, carried out in units where respiratory symptomatic patients and patients with COVID-19 were cared for, such as hospitals, emergency care units, and units for respiratory symptomatic care, aimed at observing the aspects recommended by health standards, such as facilities, proper equipment, and sanitization of the place, in addition to identifying risks related to work and to the health protection of healthcare workers. Therefore, the focus was educational and propositional, unlike the most visible face of health surveillance, which is supervisory and punitive.

The irregularities were pointed out in reports and the support of both workers and management was sought for the necessary changes. Thus, meetings with managers were held, and the issue was included in the agenda of the Regional Interagency Commission (CIR), a collegiate body in which municipal health managers and representatives of the State Health Secretariat are involved.

## Integration between Health Surveillance and Epidemiological Surveillance

It is often said that there is little integration between health surveillance and other surveillance services. These sectors are known for working in silos, each in its own space and in its own "little boxes". This report shows that it is possible to carry out articulated work in collaboration with other areas. In this perspective, the pandemic encouraged the joint work of health surveillance, epidemiological surveillance, primary care, as well as other sectors of the Regional Health Center, in activities related to the Health Information Systems (SIS) and the production of newsletters, for instance.

Given the need for institutional support to the municipalities, a review of the suspected and confirmed cases of COVID-19 notification systems was carried out jointly, cleaning the municipal database, with the analysis of each notified case. A weekly bulletin was issued to disclose the epidemiological situation. There was a need for this information to reflect the reality, with the real figures of confirmed, discarded, and monitored cases. Thus, based on the tracking and analysis of each case, the municipal teams were given orientation. From this work, the official data was made available to the management,



which enabled better knowledge of the pandemic situation in the region.

#### DISCUSSION

Working on the frontline during the COVID-19 pandemic was a major challenge for health professionals, who fought against the new coronavirus and had to withstand the chaotic management of the pandemic, caused by the mismatch between the actions of the federal government, states, and municipalities. In this regard, contradictions stand out regarding the adoption of measures to control the pandemic among the three levels of government. The President of the Republic himself made several statements downplaying the impacts of COVID-19, against the prevention measures advocated by the World Health Organization (WHO) and the Ministry of Health itself, while it was under the command of Minister Henrique Mandetta, up until April 2020. The President also challenged the actions of states and municipalities regarding measures of social distancing, use of masks, and restrictions of non-essential economic activities<sup>11</sup>.

The behavior of the President and of other federal authorities made part of the population think that the pandemic was not serious and that, therefore, the prevention measures recommended by science should not be followed. In conversations with truck drivers at the health roadblock, this question divided opinions between those who welcomed the work done on the road by the health department and those who rejected the recommendations of science. It was not a fair fight between the virus and the denialism of the pandemic.

In times of a difficult fight against an invisible enemy, the virus, and other visible enemies, such as those who don't believe in science, it was important to count on partnerships, and that's what the health surveillance body did by composing an integrated team with other technical areas of the center and in collaboration with the municipalities in the coverage area. It is worth mentioning that the actions were foreseen in the Contingency Plan<sup>4</sup>, which aimed at tackling the new coronavirus pandemic in the state of Bahia in a fast and coordinated way.

This plan recommends the guidelines for the organization of healthcare services, but also focuses on health surveillance actions. It proposes articulated work with the healthcare network. Thus, upon analyzing the experience reported here, it becomes clear that it is in line with the guidelines issued by the State Health Secretariat to which the center is associated<sup>4</sup>.

The work done, including the health roadblocks, is an atypical action by health surveillance bodies, since not only educational activities were performed, but there was also a bias toward control over people, with temperature measurement, imposition of isolation measures and social distancing, which limits individual freedom. Since the health roadblock and other actions are not part of the routine of health surveillance activities, the need for better regulation is clear, especially because new emergencies in public health may occur, given the increasing risks experienced by society.

Furthermore, the efficiency of health roadblocks aimed at partially restraining the flow of people and containing the advance of the coronavirus is questioned by Ferreira<sup>12</sup>. He stated that the roadblocks proved insufficient and that every day new cases were reported in several places. According to the author, all barriers, even the strictest ones, have a certain permeability through which people cross and carry the virus to other places. He goes on to infer the need to combine other measures, such as social distancing and social protection to try to increase the efficiency of these practices. However, he pointed out that, despite their shortcomings, health roadblocks had a positive impact in delaying the epidemic incidence and giving local health systems more time to set up the structure to handle the disease.

From this perspective, pandemic control actions should be initiated before the identification of suspected cases, through containment measures involving the screening of people coming from regions where the virus has already been detected, in order to delay community spread. After the detection of confirmed cases, actions aimed at stopping the spread of the disease to more vulnerable people are taken, and social distancing measures for the identified cases are adopted, followed by more strict measures to prevent or reduce the circulation of people within the social environment. These strategies have been the subject of discussions among researchers considering their consequences as well as their economic and social impacts<sup>13</sup>.

It is worth mentioning that the work reported here was associated with educational activities for the population, not limited to restricting the flow of people, checking the temperature, or other procedures. Palácio and Takenami<sup>14</sup> added the challenges for the implementation of popular education in this pandemic scenario, pointing out the difficulties of frontline health professionals to achieve compliance with the recommendations of health authorities in educational actions to the population, and also stating that one of the main challenges today is precisely health education.

A similar study on health control actions of the COVID-19 pandemic reveals how important health roadblocks are as strategies that contribute to the implementation of surveillance actions, as well as an opportunity to expand access to information by travelers<sup>8</sup>.

As for the activities of continuing education on health for professionals in the municipalities, the importance of reviewing the workflows and daily practices that were somehow being neglected in the routines was perceived. Ribeiro et al.<sup>15</sup> also stated that these spaces in their practical experiences allowed a critical reflection on the work process, and that the workers themselves, through self-assessment, identified the challenges and suggested alternative propositions to solve the problems.

In view of so many difficulties in health work, with thousands of deaths and neglect by public management, we must reflect on



the communication with the society and understand the importance of a liberating kind of pedagogy that is capable of implicating the subjects. In this sense, Henrique and Vasconcelos<sup>10</sup> said that, while the population is a victim of the disease or its consequences, it is also a witness, an observer, an analyst, a supporter, and a protagonist, with responsibilities related to prevention, care, and mitigation of suffering. It may seem obvious, but it is important to emphasize that combating the pandemic is not only the responsibility of health professionals and authorities, but of the entire population, and therefore a responsibility shared with society as a whole.

## CONCLUSIONS

This report made it possible to describe multiple actions performed by the regional Health Surveillance Agency amid the pandemic, in compliance with what is recommended by the State Plan of Contingencies for the Combat of the New Coronavirus in the state of Bahia. At this point, some actions carried out jointly by intersectoral and intrasectoral partnerships stood out, such as the health roadblock. Collaborative actions are of paramount importance, given the complexity of the fight against a pandemic that has claimed so many lives. It also reinforces the need to "think outside of the box" because complex problems must be tackled in articulation with other areas.

Another important point was the support given to the municipal management, especially by continuing education, which has become a learning experience for health professionals in dealing with other work tools. It also provided opportunities for reflection on the work processes and new possibilities to face the challenges imposed during this pandemic period.

To conclude, the expectation of better days for Brazilians remains, based on a redirection of the pandemic management and greater support to health surveillance professionals and other sectors that battle on the frontline against this deadly virus.

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#### Author's contribution

Rocha MP, Cruz SPL, Rodrigues VP - Conception, planning (study design) and writing. Vilela ABA - Writing of the manuscript. All authors approved the final draft of the manuscript.

#### Disclosures

The authors report that there is no potential conflict of interest with peers and institutions, nor political or financial conflicts in this study.



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