Coping with COVID-19 in a Family Health Strategy territory: an experience report

O enfrentamento da COVID-19 em um território da Estratégia Saúde da Família: relato de experiência

El enfrentamiento del COVID-19 en un territorio de Estrategia de Salud Familiar: un informe de experiencia

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Abstract

Problem: COVID-19 is a challenge for the entire health network and primary health care stands out as a care provider in this scenario. The team of residents who work in a Family Health Unit in Itabuna-BA, Brazil, has been looking for new ways to plan and develop actions in the face of this pandemic.

Methods: This is an experience report on the operationalization of an Action Plan prepared by the residents of a Family Health Strategy territory in response to the context of the COVID-19 pandemic.

Results: Information was produced, the flows in the unit were reorganized, avoiding agglomeration in services, personal protective equipment was guaranteed for health professionals, educational material was produced to guide these actions and, especially, not losing sight of the integrality of care in ensuring the maintenance of actions and previous programs. Conclusions: The adoption of these new measures has had a positive impact on the work process, emphasizing prevention as the main axis.

Keywords: Primary Health Care; Pandemics; Capacity building.
Resumo

Problema: A COVID-19 configura-se como um desafio para toda a rede de saúde, e a Atenção Primária à Saúde destaca-se como um ordenador do cuidado nesse cenário. A equipe de residentes que atua em uma Unidade de Saúde da Família em Itabuna/Bahia tem buscado novas formas de planejar e desenvolver ações perante essa pandemia. Método: Trata-se de um relato de experiência sobre a operacionalização de um plano de ação elaborado pelos residentes de um território de Estratégia Saúde da Família como resposta ao contexto da pandemia da COVID-19. Resultados: Foram produzidas informações, reorganizado os fluxos na unidade, evitando as aglomerações nos serviços, garantido os equipamentos de proteção individual para os profissionais de saúde, produzido material educativo para orientar essas ações e principalmente não perdendo de vista a integralidade do cuidado ao garantir a manutenção das ações e programas anteriores. Conclusão: A adoção dessas novas medidas vem impactando positivamente o processo de trabalho, enfatizando a prevenção como eixo principal.

Palavras-chave: Atenção primária à saúde; Pandemia; Fortalecimento institucional.

Resumen

Problema: Covid-19 es un desafío para toda la red de salud y Atenção Primária à Saúde se destaca como proveedor de atención en este escenario. El equipo residente que trabaja en una Unidad de Salud Familiar en Itabuna-BA ha estado buscando nuevas formas de planificar y desarrollar acciones ante esta pandemia. Método: Este es un informe de experiencia sobre la operacionalización de un Plan de Acción preparado por los residentes de un Estratégia de Saúde da Família en respuesta al contexto de la pandemia de COVID-19. Resultados: se produjo información, se reorganizaron los flujos en la unidad, evitando el desorden en los servicios, se garantizó el Equipamentos de proteción individual para profesionales de la salud, se produjo material educativo para guiar estas acciones y, sobre todo, no perder de vista la integralidad de la atención para garantizar el mantenimiento de las acciones, y programas anteriores. Conclusión: La adopción de estas nuevas medidas ha tenido un impacto positivo en el proceso de trabajo, haciendo hincapié en la prevención como eje principal.

Palabras clave: Atención primaria de salud; Pandemias; Creación de capacidad.

INTRODUCTION

Brazil concentrates one of the largest health systems in the world, whose intent is to offer actions and services in a universal, integral, and equitable way. This system is anchored in Primary Health Care (PHC), which has achieved positive results and prominence internationally. As populations in a defined territory are within the scope of its actions, for which the teams that act assume sanitary responsibility, this system should be considered an important pillar in the face of emergencies such as dengue, Zika, Chikungunya, and COVID-19 epidemics.1

COVID-19 is a disease caused by the SARS-CoV-2 virus, a new type of coronavirus of zoonotic origin, first identified in Wuhan, China, that caused an outbreak of pneumonia in December 2019. The disease spreads through droplets or aerosols and presents high transmissibility and varied clinical spectrum, ranging from mild symptoms, such as flu-like syndrome, to more severe conditions, such as acute respiratory distress syndrome (ARDS) with fatal evolution. On March 11, 2020, the World Health Organization (WHO) declared a pandemic caused by the disease.2

This pandemic scenario indicates that the Basic Health Units (Unidades Básicas de Saúde – UBS) and their teams of professionals are responsible for the patient’s first contact with the health service, which is fundamental to contain the spread of the virus.3 Considering these facts, PHC plays a crucial role in the clinical management of cases, which differs according to severity. For mild cases, it includes support and monitoring measures; and, for severe cases, it includes clinical stabilization and referral to emergency and/or hospital services. PHC should assume a resolutive and coordinator role concerning care in both cases.4
In addition to the confrontation of the pandemic in the UBS territories, it is necessary to develop an action plan that considers the recommendations established by the Brazilian Ministry of Health (Ministério da Saúde – MS), the State Department of Health (Secretaria de Estado da Saúde – SES) and the Municipal Department of Health (Secretaria Municipal de Saúde – SMS), associated with the reality of the territory known by the teams that work there. This instrument has served and still serves to guide the actions as well as to evaluate the obtained results.

The present experience report aims to present the actions, strategies, and successful experiences obtained by residents of the Multiprofessional Residency Program in Family Health of Universidade Estadual de Santa Cruz (UESC), associated with the Family Health Unit (Unidade de Saúde da Família – USF) team in which they work to cope with COVID-19.

**METHODS**

This is a descriptive study, of the experience report type, carried out by residents who are members of the Multiprofessional Residency Program in Family Health (Programa de Residência Multiprofissional em Saúde da Família – PRMSF) of UESC, located in the city of Ilhéus, state of Bahia (BA), Brazil.

The present report has as locus the Simão Fitterman USF, located in the São Pedro neighborhood, in the city of Itabuna/BA, Brazil. It refers to the actions, strategies, and experiences undergone in the first half of 2020, considering the context of the pandemic and the confrontation of COVID-19 in the territory. It is noteworthy that, in June 2020, the municipality had an incidence coefficient of COVID-19 per 100 thousand inhabitants of 516.4, higher than the state (177.6) and national (305.2) averages.5

The residents initially surveyed data on the situation of the territory in the pandemic and data at the national level to match the parameters, both per epidemiological week. Mortality, incidence, and hospitalization data were obtained from the bulletins of the municipal government of Itabuna, the SES of the state of Bahia, and the Monitora COVID-19 platform of the Oswald Cruz Foundation (Fiocruz), a platform for monitoring cases and the situation of the COVID-19 pandemic in Brazil; and population data were obtained from the platform of the Brazilian Institute of Geography and Statistics (IBGE).

Once these data were gathered, the calculations of mortality coefficient due to COVID-19 were performed for 100 thousand inhabitants (number of deaths from COVID-19/population exposed to risk x 100 thousand), incidence of COVID-19 per 100 thousand inhabitants (number of new cases of COVID-19/population exposed to risk x 100 thousand), and hospitalization rate due to ARDS (number of hospitalizations due to ARDS/number of cases x 100 thousand) for Brazil and the municipality of Itabuna/BA, per epidemiological week. Subsequently, these data were grouped into histograms, per epidemiological week, to compare the country’s data with those of the municipality.

Data on the neighborhood were collected in epidemiological bulletins published by the municipal government identifying the number of cases, deaths, and discharges. After data analysis, information and a robust explanatory framework emerged to support planning and decision-making, and the action plan for coping with COVID-19 in the territory was developed with the USF teams (Table 1).

This plan aimed to encourage actions to promote, prevent, and protect the population’s health at the territorial level in the context of COVID-19, to implement and strengthen care to users, unit professionals, and community residents to provide qualified assistance to the most vulnerable groups.
Table 1. Action plan to cope with COVID-19 in the territory of the Simão Fitterman Family Health Unit, Itabuna/Bahia, 2020.

<table>
<thead>
<tr>
<th>UNIT</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Simão Fitterman Family Health Unit</td>
<td>June/2020</td>
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**General and specific objectives**

General objective: to promote actions to prevent and protect the health of the population at the territorial level in the context of COVID-19.

Specific objective: to promote care for users, unit professionals and community residents and to provide qualified assistance to vulnerable groups.

**Justification**

Due to the high rate of confirmed cases, hospitalizations, and deaths due to COVID-19, identified based on a survey of epidemiological data from the municipality of Itabuna and Brazil in 2020, it has become essential to develop this plan, which will support the health actions to be developed in the territory of Simão Fitterman Family Health Unit (USF).

<table>
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<tr>
<th>ACTION AND ENABLING STRATEGIES</th>
<th>ACTIVITIES</th>
<th>PEOPLE IN CHARGE</th>
<th>DEADLINE</th>
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| Make adaptations in the flow of the unit to cope with COVID-19. | • Identify how a normal flow takes place in the unit.  
• Analyze protocols of the municipality, the state, and the Brazilian Ministry of Health on the adaptations that should be made in the units.  
• Develop the USF protocol according to the analyzed materials and local reality.  
• Disclose the protocol to the team.  
• Provide training on the new flow.  
• Make changes in the physical structure and work process. | Residents and health team | Biweekly |
| Produce a local bulletin of the cases of COVID-19 of the São Pedro neighborhood. | • Carry out the survey of cases of COVID-19 in the neighborhood, identifying those that are under monitoring, confirmed cases, discharges, and deaths.  
• Produce graphs and analyze the collected data.  
• Disclose the obtained data to the population, through a printed and digital bulletin, in the social network of the Social Project Alô Comunidade, in partnership with the USF. | Residents, health team, the social project of the community. | Daily, Weekly |
| Carry out health actions on COVID-19 prevention measures in the community. | • Prepare posters and leaflets with guidelines on social distancing, symptoms of COVID-19, hand washing, use and hygiene of fabric masks and purchases.  
• Fix posters at business establishments and provide guidance to traders.  
• Distribute information leaflets in the community.  
• Fix posters in the USF. | Residents and health team | Weekly |

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| Distribute fabric masks to the community | • Collect materials for making masks.  
• Identify voluntary seamstresses from the neighborhood for the making of masks.  
• Clean the masks.  
• Make packaging and information leaflets on the use, care, and hygiene of masks.  
• Distribute the masks to the community as needed. | Residents and health team | Weekly or as needed |
| Organize “waiting rooms,” carrying out the first contact with the users on prevention measures of COVID-19 in the unit. | • Identify topics to be addressed.  
• Prepare the content and method to be used.  
• Attract the attention of the target audience.  
• Explain the content. | Residents | Daily |
| Produce informative content about COVID-19 and the flow of the USF, to be disclosed on the social network of the social project of the neighborhood, Alô Comunidade | • Prepare and disseminate the content. | Residents and health team | Weekly |
| Provide monitoring and guidance to patients with suspected COVID-19 via telephone. | • Provide telephone and telephone lines to monitor the patients.  
• Identify suspected cases through notification forms and epidemiological surveillance.  
• Perform monitoring according to the protocol.  
• Register in own form. | Residents and health team | Every 24 or 48 hours |
| Provide follow-up and guidance to hypertensive and diabetic patients via telephone. | • Provide telephone and telephone lines to monitor the patients.  
• Survey hypertensive and diabetic patients and telephone contacts.  
• Perform follow-up via telephone.  
• Register in medical records. | Residents and health team | Monthly |
| Distribute care booklets for hypertensive and diabetic patients of the USF. | • Distribute the booklets provided by UESC.  
• Provide guidance on the contents of the booklets. | Residents and community health agents | Biweekly |
| Organize “waiting rooms,” carrying out the first contact with the users, and produce content on the importance of oral health care during the COVID-19 pandemic to prevent the occurrence of oral diseases. | • Identify main themes to be addressed.  
• Prepare the content and method to be used.  
• Explain the content.  
• Distribute informative leaflets.  
• Fix informative posters with prevention measures in the USF. | Residents and health team | Weekly or as needed |

USF: Family Health Unit; UESC: Universidade Estadual de Santa Cruz.

Action strategies were formulated and those in charge for each one of them and the deadlines were established. These strategies were implemented in the territory and the evaluation was carried out following the execution, in such a way that the necessary modifications identified were made throughout the process.
RESULTS AND DISCUSSION

The reality of the territory

The Simão Fitterman USF is located in the São Pedro neighborhood, in the municipality of Itabuna/BA. It has about 7,300 registered users and is composed of two Family Health Teams, named teams 7 and 8. During the first half of 2020, each team had a physician, a nurse, a nursing technician and, respectively, seven and six community health agents (CHA) in teams 7 and 8. During the period, the groups also had an Oral Health team composed of a dentist and an oral health assistant. They also added four endemic disease control agents, a receptionist, a pharmacy assistant, a manager, a general services assistant and, due to the PRMSF, two more nurses, a psychologist, a social worker, a physiotherapist, and a dentist.

The territory of coverage is divided into two areas, which in turn are subdivided into microareas. Area 7 has seven microareas, and area 8 has six microareas, each under the responsibility of a CHA.

Area 7 has a diverse family profile, but low-income and large families predominate. The houses are in precarious situations, with few rooms. The majority of household income derives from the Federal Government’s income transfer programs — the Bolsa Família Program (Programa Bolsa Família – PBF) and the Continuous Cash Benefit Program (Benefício de Prestação Continuada – BPC) — and there are also families with retirement and pensions for older adults. Many young people do not complete their studies and there is a high prevalence of teenage pregnancy. Situations of domestic violence, child labor, sexual violence against children and adolescents, and the abuse of alcohol and psychoactive substances are a reality in the area.

Area 8 covers a population larger than that of area 7. It is composed of extensive and nuclear families. It has middle-class families with health insurance plans, who rarely seek USF services. It is also composed of many hypertensive, diabetic, bedridden, and domiciled older people, whose income derives from retirement. There are also situations of vulnerability, such as abuse of psychoactive substances by young people, teenage pregnancy, and families living in precarious housing.

Preparation and implementation of the action plan

Considering the protocols of the Brazilian Ministry of Health and the SES of the state of Bahia, as well as the municipal protocols and recommendations, an action plan was developed to promote actions to prevent and protect the health of the population at the territorial level and measures to confront COVID-19, in addition to ensuring the safety of USF workers and users of the service.

The pandemic has modified the traditional demand for PHC, which must now assist both users with suspected or contaminated by COVID-19 and to non-suspected or non-contaminated users, but without promoting the transmission of the disease. Therefore, the action strategies were based on meeting the demands imposed by the COVID-19 pandemic and continuing to meet the demands already existing in the USF.

The planned strategies are aimed at reorganizing the flow of the USF, aiming at reducing the risk of infection by the new coronavirus in the service, in addition to health education actions aimed at health promotion and disease prevention, as well as monitoring suspected and confirmed cases of the disease and the continuity of care of the population assisted by the USF.
A similar strategy was implemented in a PHC service in the city of Porto Alegre, state of Rio Grande do Sul, Brazil, where the contingency plan developed for coping with COVID-19 was based on four principles: being a specific gateway to the respiratory symptomatic patient, offering protection for health professionals, ensuring the care of non-COVID-19 patients during the pandemic, and not leaving anyone without health care. These actions aimed to strengthen PHC and better cope with the pandemic.7

In order to ensure the safety of users and the work team, the initial action taken was the restructuring of the work plan and the USF service flow. All professionals were qualified concerning the recommendations of the MS and instructed on the new organization established for the team’s work process. As there are two entries, the physical structure of the unit favored the separation of an area intended to attend to suspected and confirmed cases of COVID-19 (delimited as red area) and another area for the other services provided in the USF (delimited as green area).

In the entry of the red area, patients with flu-like syndrome symptoms are admitted, in which a CHA fills out the fast-track form4 and directs the user directly to the room that was determined for isolation (large room with windows) to receive the necessary care. In the entry of the green area, users seeking other types of provided services are admitted. The number of users within the unit was limited to five at a time to avoid agglomerations within the service.

A similar strategy was adopted in the city of Florianópolis, state of Santa Catarina, Brazil, which defined the reorganization of USF flows to continue the provision of health care and work in the territory. These actions contributed to the control of the number of cases and avoided overpassing the hospital capacity until the first half of 2020.8

To ensure the protection and safety of the team, the city hall ensured the adequate dispensation of personal protective equipment (PPE) and the residents and nurses of the family health team trained all team professionals for measures of protection, gowning, gowning removal, and the new flow of care provision of the USF. Furthermore, all professionals working in the Family Health Strategy (FHS) were tested for COVID-19, a work similar to that performed in the state capital in southern Brazil.8

Another adopted measure was the reorganization of the professionals’ schedules. The teams began to work in a regime of alternate shifts, prioritizing spontaneous demand, urgent cases, and provision of care to users with typical symptoms of COVID-19. Elective appointments were suspended to reduce the flow of users in the unit who did not require priority care at the moment. Prenatal, vaccination, puerperium, and family planning appointments were maintained — coping actions similar to those adopted in a municipality of the state of Minas Gerais, Brazil.9

USF has also become responsible for the management, surveillance, and prevention of COVID-19 in the territory. Similar to what has been done in the city of Nova Limeira, state of Minas Gerais, Brazil,9 after the identification, provision of care, and referral of users with compatible clinical conditions, the team carries out the remote patient monitoring of both suspected, confirmed cases, and those identified in the unit or referred by the municipal epidemiological surveillance.

Remote patient monitoring is a response strategy within PHC during the pandemic, enabling the continued care of users throughout the disease process, the identification of signs and symptoms of worsening of the clinical condition, referral to other levels of care, and reduction of death cases.10,11

From this perspective, monitoring is performed through telephone contact, defined as telemonitoring and organized according to the clinical situation and the absence or presence of comorbidities of users. During the isolation period, users are monitored via telephone call, their clinical condition is verified, they receive guidance on isolation and safety measures, and the need for reassessment, discharge, or referral
Corroborating what was reported in other studies in the municipalities of Florianópolis (state of Santa Catarina, Brazil)\(^8\) Vitória (state of Espírito Santo, Brazil)\(^12\) and Sobral (state of Ceará, Brazil)\(^13\) the importance of this tool was evident as a way to promote the risk and severity assessment of these users and contribute to health surveillance actions in the community seeking to minimize the overload of the health system.\(^10\)

In addition to these measures, aiming at mitigating the impacts on the mental health of health professionals, training was carried out with the unit team on psychological care strategies and also on welcoming users in this pandemic moment. For the aforementioned training, the booklets made available by Fiocruz were consulted,\(^{14-16}\) which also subsidized the production of the informative material to be delivered to professionals and users.

Considering the increasing occurrence of positive cases for COVID-19 and corroborating the proposition of the MS that information and communication with the population are fundamental strategies for coping with the pandemic in the country,\(^9\) the need for a daily newsletter on the situation of the neighborhood in which the unit is inserted was observed.

This strategy enables to keep the entire team of USF workers and the population who use the service informed about the current local reality of the territory, in addition to serving as a parameter for decision-making and the adoption of appropriate measures to prevent and control the pandemic in the territory. This newsletter is fixed near the USF reception, in a visible and easily accessible location. The daily update occurs at the end of the shift, with new data obtained from the care provided by the USF teams, monitoring, and information provided by municipal epidemiological surveillance.

Other strategies were also sought to guide and minimize the contagion of the population. Considering this initial period of the pandemic and the experiences with other diseases of respiratory transmission, there was an indication for the population to use a mask.\(^17\) In this sense, the distribution of handmade masks with information leaflets for users was adopted as a strategy.

Taminato et al.\(^{17}\) recall that in 2009, in the H1N1 pandemic, masks were indicated to contain droplets. They highlight that the use of fabric masks and reusable ones is important mainly for domiciled symptomatic patients and in places with agglomerations.

In a study conducted by Ortelan et al.\(^{18}\) in 2021, it was concluded that there is efficacy in the use of fabric masks together with other measures, such as social distancing and correct hand hygiene, to contribute to the reduction of the transmission speed of SARS-CoV-2. The mask also consists of a more economical and accessible alternative for the population, an extremely relevant fact when considering the socioeconomic profile of the population assisted by the USF.

To minimize contagion in the territory, the team intensified health education activities. This process involves the production of knowledge about diseases, their risks and prevention to induce critical thinking and promote the autonomy of the individual. It should consider people’s health needs and, especially during this pandemic context, it should be consistent with the particularities of individuals.\(^19\)

The authors of the present study chose to organize “waiting rooms” in the USF, consisting in the first contact of the professionals with the users of the service, providing guidance on the importance of social distancing, correct hand washing, proper use and hygiene of fabric masks, the importance of oral health to services of greater complexity is identified according to municipal and MS protocols. This activity is recorded in a form intended for this purpose, which is later attached to the user’s medical record. In addition, daily contact is maintained with municipal epidemiological surveillance for the sharing of information.
in times of COVID-19, among other measures to prevent infection/contamination by the new coronavirus. These orientations were also made available online through the social networks of the social project of the neighborhood, called Alô Comunidade [Hello, Community], and the fixing of posters in local shops during the actions of residents in partnership with the CHA in the territory.

**Achieved results**

The strategy for coping with the pandemic adopted in the USF sought to integrate health surveillance actions, continuity and adaptation of actions and services, also providing safety to users and professionals of the service.

During the first half of 2020, no cases of infection by the new coronavirus were recorded among the USF professionals, and there was no record of death from the disease in the territory covered by them. Users with chronic conditions remained monitored by the service and did not experience worsening of the condition.

Moreover, the USF became a reference for the population of the neighborhood in the care of COVID-19 and the search for true information on contagion prevention measures and treatment.

**CONCLUSIONS**

The COVID-19 pandemic imposed new challenges for PHC and, considering the reported experience, it was observed how the FHS has been rapidly adapting to this new context, with the reorganization of its services to cope with the new disease and its consequences on the health of families, being fundamental to ensure continuity of care.

Overall, the adoption of these new measures has positively impacted the work process, ratifying health promotion and prevention as guide axes of care in the territory. It is worth emphasizing that the instruments and materials that promote safety and care to professionals should be guaranteed, in such a way that they can perform their functions.

Therefore, it is essential to further strengthen the bond between team and community, as the community approach and action in the territory can contribute to minimizing the overload of the health system and improve surveillance during the pandemic, seeking to provide planned and collaborative care.

**AUTHORS’ CONTRIBUTIONS**

AGSS: Conceptualization, Data Curation, Formal Analysis, Writing – original draft. ALS: Conceptualization, Data Curation, Formal Analysis, Writing – original draft. WRM: Conceptualization, Data Curation, Formal Analysis, Writing – original draft. WVF: Conceptualization, Data Curation, Formal Analysis, Writing – original draft. CSC: Conceptualization, Data Curation, Formal Analysis, Writing – original draft. MLJ: Conceptualization, Data Curation, Formal Analysis. ALSP: Conceptualization, Data Curation, Formal Analysis, Writing – original draft.

**CONFLICT OF INTERESTS**

Nothing to declare.
REFERENCES


