Strategies to combat COVID-19 in long-term care facilities for older people

Helena Patáro de Oliveira Novaes* a, Lélia Mendes Sobrinho de Oliveira* a, Nildete Pereira Gomes* b, Alice de Andrade Santos* c, Janine Soub* d, Meirelayne Borges Duarte* b, Rute dos Santos Sampaio* a, Tânia Maria de Menezes oliveira* a

ABSTRACT
Objective: To describe the strategies to combat COVID-19 in Long-Term Care Facilities for older people in Bahia state.
Methodology: This is a qualitative study based on documentary analysis of the collection produced by the Intersectoral Committee on Monitoring Long-Term Care for older people in the state of Bahia, from April 2020 to June 2021. Data analysis was based on Bardin’s content analysis.
Results: The commission produced seven documents in the period analyzed. Two thematic categories emerged: Intersectoral Networks and Telemonitoring of Long-Term Care Facilities for the Elderly.
Conclusion: The coordination in an intersector network and the telemonitoring carried out by the Intersector Committee on Monitoring Long-Term Care Facilities were the main strategies to fight COVID-19 in these institutions. The need to implement effective public policies to support long-term care facilities for older people is highlighted.
Keywords: COVID-19. Homes for the aged. Geriatric nursing.
INTRODUCTION

In March 2020, when the World Health Organization (WHO) characterized the disease caused by the novel coronavirus (COVID-19) as a pandemic, Long-Term Care Facilities for the Elderly (ILPIs) became a worldwide concern because the elderly population had a high risk of morbidity and mortality due to the Novel Coronavirus, which causes the severe acute respiratory syndrome – SARS-CoV-2(1). This concern is related to the profile of clinical and functional fragility of the elderly who live in these spaces, with a significant prevalence of comorbidities and decline in functional capacity. Such factors compromise the body’s ability to respond to acute events(1).

The COVID-19 pandemic is a major challenge for ILPIs due to the high susceptibility of the resident population to severe forms of the disease and the culmination of unfavorable clinical outcomes, including death(2). In Brazil, before the availability of vaccines for COVID-19, studies reported estimates that about 44% of deaths in the pandemic would occur in residents of LTC facilities(3).

Thus, given the significant number of deaths from Covid-19 in this specific population worldwide, the Health Department of the State of Bahia (SESAB) implemented, in April 2020, the Intersectoral Commission for Monitoring Long-Term Care Facilities for Older People (CIMILPI) that among other actions is responsible for the coordination of the care network. The state departments of Health and Justice, in addition to the Federal University of Bahia (UFBA), through the Nursing School participate in the referred Commission, which is an intersectoral commission. The inclusion of regional universities and other government agencies accelerated the sharing of information and emerging research on LTC facilities inter-institutionally during the early stages of the pandemic(4).

Accordingly, and as a strategy to face the pandemic, Technical Note 23/2020 of the Ministry of Health establishes local governance instances for the coordination of health and social assistance actions, in addition to the planning of actions coordinated with the country, considering the local scenario(5).

Intersectorality is a strategy aimed to improve the efficiency and effectiveness of public management, by facilitating meetings, listening, otherness, publicizing divergent and convergent interests(6). The author points out that intersectorality restricts the overlapping of practices and favors the coordination of budgets, resources, ideas and skills to solve common complex problems.

One of the guidelines of the National Health Policy for the Elderly (PNSPI) is intersectorality, identified as an important strategy for promoting comprehensive care, considering the complexity of the aging phenomenon(7).

According to the Technical Guidelines for the Implementation of a Line of Care for Comprehensive Health Care for the Elderly in the Unified Health System (SUS), “intersectorality is part of the concept of a joint, dialogic and coordinated work between health care equipment/services and those pertaining to the most varied public policies and social protection that have an interface with the issues of the elderly population”(7).

Although they are linked to the Social Assistance Policy, LTC facilities (ILPIs) are regulated by the National Health Surveillance Agency (ANVISA), which defines them as governmental or non-governmental facilities, of a residential nature, aimed at the collective home of people aged 60 years or over, with or without family support(8).

In addition to social vulnerabilities, the population who live in these spaces have health problems that significantly impact their functional condition. Therefore, LTC facilities need qualified professionals for assistance, aiming to meet the peculiarities of residents, especially the most fragile and dependent ones(9).

Therefore, although these facilities are characterized as a social asset, the importance of recognizing the hybrid character of these assets is notorious, which have needs in the social, health, safety, among other dimensions. LTC facilities face the challenge of being spaces for collective residence in their daily lives, but they need to be involved with other aspects that were initially unforeseen on a daily basis, such as, for example, the progressive decrease in the functionality of their residents. Studies show that the length of institutionalization is directly related to the decline in functional capacity(10).

In view of the densely complex scenario, associated with the pandemic context, LTC facilities have become spaces that require coordinated and effective government actions to mitigate the impact of the pandemic on residents and employees.

Therefore, this study is based on the following research question: what strategies were adopted to face COVID-19 in Long-Term Care Facilities for Older People in the state of Bahia? In this context, the objective of this study was to describe the coping strategies for COVID-19 in Long-Term Care Facilities for Older People in the state of Bahia.
METHODS

This is a qualitative study based on documentary analysis of the collection produced by the Intersectoral Committee for Monitoring Long-Term Care Facilities for Older People in the state of Bahia, from April 2020 to June 2021. Documentary analysis is the operation or operations intended to express the content of a document in a format other than the original, to gain an understanding of their meaning for use in a further study(11).

The study setting was the State Reference Center for Health Care for the Elderly (CREASI) in Salvador, Bahia. It is an outpatient clinic specialized in geriatrics and gerontology, which belongs to the network of State Department of Health, and assists frail elderly people as a reference. In the context of the pandemic, CREASI was responsible for managing CIMILPI’s actions. Documents and reports prepared by the Commission from April 2020 to June 2021 were included, and documents not related to the COVID-19 pandemic were excluded.

Data treatment was based on content analysis(11), following the steps of pre-analysis, exploration of material, processing of results and interpretation of data. The following sequence was adopted: identification of the documents produced by the Commission that answered the question of the study; characterization of selected documents; grouping of findings by similarity; categorization; finally, processing and analysis of the results.

The documents were read in full for their characterization, with the search for information that met the objective of the study. Moreover, the identified findings were transcribed and organized in a Microsoft Excel spreadsheet, categorized for a better understanding of the strategies for coping with COVID-19 in LTC homes, and subsequently discussed in the light of current national and international scientific evidence.

The study was previously approved by the National Research Ethics Committee (CONEP), under protocol no 4,506,012, as it is part of a matrix research entitled “Emergency strategies to mitigate the effects of COVID-19 in long-term care facilities for the elderly in countries low- and middle-income groups.” To ensure anonymity, the institution signed the Term of Consent for the Use of Data.

RESULTS AND DISCUSSION

After an accurate reading of the documents, two categories were identified: intersectoral coordination and telemonitoring of LTC facilities. Chart 1 presents the analyzed documents, the contents found and the categories that emerged.

Intersectoral Coordination

Intersectoral actions to reduce the impacts of the pandemic on ILPIs are proposed in Ordinance No. 133 of April 3, 2020, which implemented CIMILPI in the State of Bahia(12). The referred Ordinance also includes a set of attributions with the same objective. Art. 2 – Define that the Commission’s attributions are: “I – Guidance to ILPIs regarding the care of the elderly during the period of the COVID-19 pandemic; II – Coordination with managers and professionals of the SUS and the Unified Social Assistance System, aiming at guaranteeing the rights to health and social assistance.”

In the international scenario, mortality rates due to COVID-19 in elderly residents in ILPIs were devastating. In countries of North America, Asia and Europe, the rates of deaths in ILPIs due to COVID-19 accounted for 30% to 60% of all deaths from the disease(13). These data warned about the impacts that the pandemic could have on Brazilian ILPIs, which led to the adoption of strategies that could somehow minimize the impact on the facilities. Bahia had lower mortality rates compared to those in other States(14).

It is clear then that the lower occurrence of deaths among residents may be related to the early adoption of coping strategies developed by the CIMILPI, shown in the analyzed documents.

Analysis of the organization of the commission’s work process reveals a specific center of work called technical-operational support, specifically responsible for the management of work processes, and coordination between the various facilities in the field of health and social assistance, as shown in the excerpt below.

The technical-operational support team acts in the intersectoral coordination of appropriate measures with municipal and state managers in situations identified by the monitoring teams, which imply assistance support for testing, health transfers, etc. (B2)

In the context of a pandemic in which varied, sometimes inconsistent information is published, establishing a management committee with coordinated and integrated actions has proven to be an efficient strategy to support the ILPIs. The early implementation of pandemic containment and mitigation actions, especially in countries with greater social vulnerability, were essential measures for preventing deaths from COVID-19(13).
<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulletin No 1 – B1</td>
<td>Intersectoral Coordination</td>
</tr>
<tr>
<td></td>
<td>– Mapping of ILPIs in Salvador</td>
</tr>
<tr>
<td></td>
<td>– Meeting with Civil Defense</td>
</tr>
<tr>
<td></td>
<td>– Coordination meeting with Sanitary and Epidemiological Surveillance</td>
</tr>
<tr>
<td></td>
<td>– Technical visits in ILPIs with positive cases for COVID-19</td>
</tr>
<tr>
<td></td>
<td>– Coordination meeting between the State Health Operational Committee and the Municipal Strategic Operational Committee for technical-scientific alignment of the care flows proposed by the Commission–Elaboration of transfer flow of institutionalized elderly with positive tests;</td>
</tr>
<tr>
<td></td>
<td>Telemonitoring of LTC Facilities (ILPIs)</td>
</tr>
<tr>
<td></td>
<td>– Telemonitoring of ILPIs</td>
</tr>
<tr>
<td></td>
<td>– Teleconsulting service for the Primary Health Care team</td>
</tr>
<tr>
<td></td>
<td>– Testing in ILPIs after identification of positive cases in Telemonitoring</td>
</tr>
<tr>
<td>Bulletin No 2 – B2</td>
<td>Intersectoral Coordination</td>
</tr>
<tr>
<td></td>
<td>– Participation in public hearing conducted by the City Council of Salvador regarding ILPIs.</td>
</tr>
<tr>
<td></td>
<td>– Coordination for health actions, in supportive assistance in complementary demands;</td>
</tr>
<tr>
<td></td>
<td>– Coordination with Municipal Departments of Social Assistance, Government Agency for Law Enforcement, Public Defender’s Office and Elderly Rights Councils;</td>
</tr>
<tr>
<td></td>
<td>– Meeting with Sanitary and Epidemiological Surveillance;</td>
</tr>
<tr>
<td></td>
<td>– Technical visit to ILPIs with positive cases for COVID-19.</td>
</tr>
<tr>
<td></td>
<td>Telemonitoring of ILPIs; Testing in ILPIs after identification of positive cases in Telemonitoring; Webconferences to monitor ILPIs included in a project developed within the scope of m Todos pela Saúde Project – Itaú Bank.</td>
</tr>
<tr>
<td>Bulletin No 3 – B3</td>
<td>Intersectoral Coordination</td>
</tr>
<tr>
<td></td>
<td>– Partnership with the Brazilian Society of Geriatrics and Gerontology</td>
</tr>
<tr>
<td></td>
<td>– Bahia section for the preparation of guiding technical notes;</td>
</tr>
<tr>
<td></td>
<td>– Webconference with the Center for Institutional Supporters of the Primary Care Board/State Department of Health for the coordination of actions with the Regional Health Centers and respective municipalities.</td>
</tr>
<tr>
<td></td>
<td>Telemonitoring of ILPIs;</td>
</tr>
<tr>
<td>Bulletin No 4 – B4</td>
<td>Intersectoral Coordination</td>
</tr>
<tr>
<td></td>
<td>– Technical visits in ILPIs with positive cases for COVID-19;</td>
</tr>
<tr>
<td></td>
<td>– Definition of isolation conditions in ILPIs together with health surveillance teams, monitoring of health conditions by the territory team;</td>
</tr>
<tr>
<td></td>
<td>– Transfers to hospital units when there is worsening of cases;</td>
</tr>
<tr>
<td></td>
<td>– Coordination with SAMU;</td>
</tr>
<tr>
<td></td>
<td>– Coordination with Municipal Departments of Social Assistance.</td>
</tr>
<tr>
<td></td>
<td>Telemonitoring of ILPIs; Testing in ILPIs after identification of positive cases in Telemonitoring.</td>
</tr>
<tr>
<td>Report R1</td>
<td>Intersectoral Coordination</td>
</tr>
<tr>
<td></td>
<td>– Coordination with the municipalities for health actions, in supportive assistance;</td>
</tr>
<tr>
<td></td>
<td>– Coordination with Municipal Departments of Social Assistance, Government Agency for Law Enforcement, Public Defender’s Office and Elderly Rights Councils;</td>
</tr>
<tr>
<td></td>
<td>– Supportive coordination with the State Central Laboratory for testing elderly people with RT-PCR in ILPIs;</td>
</tr>
<tr>
<td></td>
<td>– Flowchart with guidance on Covid-19 in residents in ILPIs.</td>
</tr>
<tr>
<td></td>
<td>Telemonitoring of ILPIs; Testing in ILPIs after identification of positive cases in Telemonitoring.</td>
</tr>
</tbody>
</table>

**Chart 1** – Data extracted from document analysis. Salvador, Bahia, Brazil, 2021
As observed in the literature, in the health field, the complex care demands of the elderly population, the provision of comprehensive care and the implementation of intersectoral actions are important challenges to be overcome by public policies\(^{(16,17)}\). Health care for older people has specificities regarding the presentation, onset and progress of diseases, with greater vulnerability to adverse outcomes, which calls for multidimensional and intersectoral actions.

Therefore, the adoption of care practices based on intersectorality and interdisciplinarity, expand and strengthen the daily life of health teams, expand the scope of health interventions and offer a more comprehensive and efficient care to the population\(^{(18)}\).

Intersectoral coordination was used in this study as a way to broaden the perspective of dialogue between the network’s points of care and induce the development of integrated actions. The findings suggest that this was a strategy for planning, managing and executing actions, as the pandemic scenario demanded more complex actions. Intersectoral actions are essential for the implementation of policies for the elderly and for this, the proposed actions must be jointly coordinated and integrated\(^{(16)}\).

In the health care field, the definition by SUS managers of work processes that are permanently integrated and coordinated with other sectors enables and consolidates effective care actions for the elderly. In a context of population aging, permeated by a pandemic, the absence of intersectoral actions that encompass services of different natures and with integration between the different care networks for the elderly, favors fragmented and inefficient responses\(^{(19)}\).

Furthermore, studies point out that although the concept of intersectorality is surrounded by different meanings, difficulties and application possibilities, it is recognized that coordination between sectors favors significant changes in the management of services and public policies\(^{(16)}\).

Analysis of the published documents suggested a previous lack of knowledge by the competent bodies about the real scenario of ILPIs. A systematization of the list of ILPIs more consistent with reality was possible through networking, with the unification of several lists available at government agencies, as shown in the section below.

The number of facilities identified was expanded during the 12 months of operation, reaching 215 ILPIs located in 85 (20.4%) of the 417 municipalities in the state of Bahia.\(^{(B4)}\)

Identify the ILPIs and learn about the situation of their residents is key for the effective support to these facilities, particularly in a pandemic scenario. A significant number of ILPIs are not registered with official bodies and even in those registered there are inconsistencies in the information about their functioning. Therefore, government bodies must urgently establish effective strategies to identify and monitor these facilities as a way of preserving the lives of their residents\(^{(16)}\).

Based on the identification and monitoring of suspected and/or confirmed cases of COVID-19, the ILPI was tested by the municipality or by the State, which was defined after conversations between the governmental spheres. If there were confirmed cases of the disease, the Commission, together with sectors of the municipal health and assistance departments, coordinated the evaluation and clinical follow-up of residents, analysis of the isolation conditions in the ILPI and the possibility of transfer, if necessary, according to the flow shown in Figure 1.
Exploring the documents allowed the identification of a proposed flow between points in the network, open to adaptation according to the local reality, as well as guidance for the adoption of individualized contingency plans. For the definition of contingency plans that meet the needs of the facilities, the characteristics and specific needs of each ILPI and the need for coordination between social and health policies must be considered\(^\text{20}\).

In the scenario of the New Coronavirus pandemic, with scarce technical information and in the absence of uniform guidance at the Federal level, the Technical Notes published by the Commission were tools that guided the systematization of actions with the LTC facilities. The above-mentioned official documents were directed to different target audiences: ILPI managers, health and care professionals, and the general population.

**Guidelines for assistance to suspected or confirmed cases of infection by the novel coronavirus in long-term care facilities for the elderly (ILPIs) in the state of Bahia.** (TN A)

The Commission’s teams are divided into 04 teams for telemonitoring ILPIs without suspected cases. 1 team for ILPIs with suspected and/or confirmed cases and 1 technical-operational support team that performs internal management, supports telemonitoring teams and coordinates actions with the territory, namely: SAMU, Sanitary and Epidemiological Surveillance; Sanitary District; Department of Social Action, Public Prosecutor’s Office, among others. (R1)

**Guidelines for visits to residents of Long-Term care facilities for the Elderly (ILPIs) during the Covid-19 pandemic.** (TN B)

The various technical documents prepared for the guidance of ILPIs, in the context of the pandemic, coming from the Public Power or organized civil society, play an important role in the protection of elderly people residing in ILPIs and favor greater visibility of this segment in society\(^\text{18}\).

The analyzed documents revealed an organization of the work process that aimed to coordinate actions in the health and social field, to reduce the effect of the Pandemic on ILPIs.

---

**Figure 1** — Testing flow and guidance for suspected and/or confirmed cases. Salvador Bahia, Brazil.

Source: Adapted from Technical Note 27, of July 15, 2020. State Department of Health — SESAB.
Telemonitoring of Long-Term Care Facilities for the Elderly

Aimed at achieving the commission’s objectives, the use of telemonitoring is an intervention and guidance strategy on the care of residents in the face of the Novel Coronavirus pandemic. The telemonitoring action triggers a set of other network actions to support the facilities.

It was found that telemonitoring actions were distributed among 04 (four) teams formed by health, social assistance and University professionals, to monitor and guide the ILPIs without suspected and/or confirmed cases every 72 hours and finally by a team to monitor ILPIs with suspected and/or confirmed cases every 24 hours, composed of professionals specialized in geriatrics and gerontology.

The Commission is operated with the following work teams: one for technical-operational support, four for monitoring each ILPI within 72 hours and one for daily monitoring of ILPIs with symptomatic and/or positive cases. (B3)

As for telemonitoring, it is a protective action aimed at ensuring physical distancing between people. A study confirms that this action helped ILPIs in providing guidance and clarifying doubts, as well as in the early identification of elderly people and professionals with suspected COVID-19. In an international survey on telemonitoring during the COVID-19 pandemic, authors concluded that although each country has developed unique strategies, telemonitoring was a common and effective strategy for all. It is considered an economical and feasible strategy.

Telemonitoring was then identified as an appropriate tool for monitoring the health situation of residents and employees, welcoming and guiding ILPI workers regarding the pandemic, in addition to triggering actions with the municipal health management in testing suspected cases and monitoring by primary care. Moreover, the telemonitoring of ILPIs was deployed in teleconsulting actions, by a team of specialists in gerontology, to the primary care teams that monitored facilities with confirmed cases.

The use of health information technology such as telemonitoring is a way to improve the response of the health system in the context of a pandemic, increasing the possibilities of care in the scope of surveillance, identification and prevention of cases. Thus, teleguidance can be carried out through the use of a booklet with information about COVID-19, providing opportunities for guidance on the necessary care, such as: signs and symptoms, the importance of social distancing and isolation, as well as the use of Personal Protective Equipment.

The study shows an innovative experience, although not yet effectively incorporated into the work process of government agencies involved in the actions. The documents demonstrate aspects specifically related to COVID-19, but there is no guarantee of maintenance of support to ILPIs for other demands in health and social promotion. The need to maintain continuous monitoring in a coordinated and permanent manner, throughout the cycles of the pandemic, is emphasized here.

In the context of health education, it is evident the need to prepare future health professionals, during their training, to understand the importance of coordinated actions in the field of management and health care, as a strategy to favor the effectiveness of actions, in addition to promoting recognition of the importance of scientific research on the intersection of management and assistance.

## FINAL CONSIDERATIONS

The strategies used by the Intersectoral Commission for Monitoring Long-Term Care Facilities for the Elderly were key actions to mitigate the impacts of the COVID-19 pandemic on Long-Term Care Facilities for the Elderly. The results obtained reveal new care practices for nursing and reaffirm the importance of actions coordinated in an intersectoral network, as a way of implementing public policies for this segment. Thus, the present study strengthens the need to encourage health professionals, especially nursing, to adopt innovative practices in health care.

Also, the adoption of these practices, with integration between sectors, management and care, provides greater visibility for residents in these facilities and guarantees constitutional rights such as the right to life with dignity and comprehensive health care, since that expands the supply of health care possibilities.

Close monitoring, through the use of telemonitoring at Long-Term Care Facilities for the Elderly, carried out by specialized health professionals, proved to be a timely, effective and low-cost care strategy that had favorable results in the context of the pandemic and that could be incorporated in a complementary way, to the daily practices of health care.

Regarding the contributions of the study, it should be stressed that intersectoral coordination and telemonitoring of Long-Term Care Facilities for the Elderly during the pandemic, showed the positive impacts for assistance through the theoretical basis that guided care practices.
For management, it was an instrument for monitoring and evaluating the quality of Long-Term Facilities for the Elderly and for research, it stimulated the dissemination of knowledge through publications and scientific discussions in the technical and academic scope.

A limitation of this study was the impossibility of accessing and reading information about other network coordination actions, since the documentary base did not include access to the use of information and communication technologies, such as data from instant messaging applications. This resource was frequently used by the components of the Intersectoral Commission for Monitoring Long-Term Facilities for the Elderly and the various actors in the network to optimize communication and decision-making. Therefore, further studies and scientific production on the subject are needed.

Finally, it is worth emphasizing the importance of planning and carrying out government actions in an integrated and intersectoral way, as a strategy to consolidate efforts and favor monitoring and intervention during the pandemic. Thus, the considerations made support the need to restructure and implement public policies to support integrated Long-Term Care Facilities for the Elderly, as a way of guaranteeing the full operation of this asset.

REFERENCES

Strategies to combat COVID-19 in long-term care facilities for older people


Authorship contribution:
Project management: Helena Patário de Oliveira Novaes, Tânia Maria de Menezes Oliva.
Formal analysis: Helena Patário de Oliveira Novaes, Lélia Mendes Sobrinho de Oliveira, Nildete Pereira Gomes, Alice de Andrade Santos.
Conceptualization: Helena Patário de Oliveira Novaes, Janine Soub.
Data curation: Helena Patário de Oliveira Novaes, Janine Soub.
Writing – original draft: Helena Patário de Oliveira Novaes, Lélia Mendes Sobrinho de Oliveira, Janine Soub, Nildete Pereira Gomes, Alice de Andrade Santos, Meirelayne Borges Duarte, Rute dos Santos Sampaio.
Writing – review and editing: Helena Patário de Oliveira Novaes, Tânia Maria de Menezes Oliva.
Investigation: Helena Patário de Oliveira Novaes, Janine Soub, Alice de Andrade Santos, Meirelayne Borges Duarte.
Methodology: Helena Patário de Oliveira Novaes.
Supervision: Tânia Maria de Menezes Oliva.

The authors declare that there is no conflict of interest.

Corresponding author:
Helena Patário de Oliveira Novaes
E-mail: helenanovaes@ufba.br

Associate editor:
Dagmar Elaine Kaiser

Editor-in-chief:
João Lucas Campos de Oliveira