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COVID-19: POLICIES, PRACTICES AND REPERCUSSIONS IN HEALTH

COVID-19: TELEMONITORING AS A PROPOSAL FOR EDUCATION, CARE AND COPING IN PRIMARY CARE. EXPERIENCE REPORT

COVID-19: TELEMONITORAMENTO COMO PROPOSTA DE EDUCAÇÃO, CUIDADO E ENFRENTAMENTO NA ATENÇÃO PRIMÁRIA. RELATO DE EXPERIÊNCIA

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Abstract
Objective: to report the process of construction and execution of the proposal for shared telemonitoring among family health teams (FHS), students and teachers of the health course for patients with suspected and / or confirmed COVID-19 in two health units in the municipality of Salvador-BA. **Methods**: The telemonitoring proposal was based on the Coronavirus Clinical Management Protocol (COVID-19) in Primary Health Care - version 8 of the Ministry of Health and involved actions articulated between the FHS responsible for the physical reception of patients, students responsible for the regular telephone monitoring and of the teachers who acted as supervisors of the entire process. **Results**: Among its various benefits, telemonitoring provided more safety to the patient, helped in the coordination of care and in the reduction of potential community transmission. However, difficulties were also faced, both technological and infrastructural, as well as psychosocial, which required creative solutions. Discussion: with similar strategies, different countries observed savings on personal protective equipment, a scarce resource in the pandemic.

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Conclusion: The use of information and communication technologies adds an important contribution to the family health strategy, reaffirming the attributes of SUS and PHC, in addition to enabling new formats for the integration of teaching and service even in times of social distance.

Keywords: Primary Health Care; Telemonitoring; COVID-19; Continuity of Patient Care.

Resumo
Objetivo: relatar o processo de construção e execução da proposta de telemonitoramento compartilhado entre as equipes de saúde da família (ESF), estudantes e professores do curso de saúde para pacientes com suspeita e/ou confirmação de COVID-19 em duas unidades de saúde do município de Salvador-BA. **Métodos**: A proposta de telemonitoramento foi baseada no Protocolo de Manejo Clínico do Coronavírus (COVID-19) na Atenção Primária à Saúde - versão 8 do Ministério da Saúde e envolveu ações articuladas entre a ESF responsável pelo acolhimento físico dos pacientes, dos estudantes responsáveis pelo monitoramento telefônico regular e dos professores que atuavam como supervisores de todo o processo. **Resultados**: Dentre seus vários benefícios, a telemonitorização proporcionou mais segurança ao paciente, ajudou na coordenação do cuidado e na redução da potencial transmissão comunitária. Porém, também foram enfrentadas dificuldades, tanto tecnológicas e infraestruturais, como psicossociais, que exigiram soluções criativas. **Discussão**: com estratégias semelhantes, diferentes países observaram economia de equipamentos de proteção individual, recurso escasso na pandemia. **Conclusão**: A utilização de tecnologias de informação e de comunicação agrega importante contribuição à estratégia de saúde da família, reafirmando os atributos do SUS e da APS, além de possibilitar novos formatos para a integração ensino serviço mesmo em tempos de distanciamento social.

Palavras Chave: Atenção Primária à Saúde; Telemonitoramento; COVID-19; Continuidade da Assistência ao Paciente.

INTRODUCTION

The COVID-19 pandemic presented to Brazil brought to the Sistema Único de Saúde (SUS) and primary health care (APS) the need to incorporate new strategies to continue qualified care. It is known that the virus has high transmissibility and therefore aims to reduce circulation in public spaces, especially in health services, becoming important to contain its spread, as shown by the experience of other countries[1].

Some studies indicate that about 80% of the cases have a mild presentation, not requiring the support of the hospital health network, but these, together with moderate cases, will go to Primary Health Care (APS) for initial guidance and care[1,2], which brings us back to its strategic role in tackling the pandemic.

In view of the challenge posed, it was necessary to reorganize the health services, with changes in the flows of the Family Health Units (USFs) and in the work process of the teams. Establishment of a specific care flow for suspected cases of COVID-19, relay of professionals in view of the high possibility of contamination and the need to rethink care treatment for patients with other demands common to Primary Care, such as pregnant women and patients with chronic diseases, were some of the difficulties faced to continue building continuous, systematized actions and centered territory that provide comprehensive attention to requirements[3].

In this scenario, remote health actions, such as teleconsultation and telemonitoring, are static promising. Despite a funded use of telemedicine and telemonitoring in other countries for longitudinal monitoring, not only in times of epidemic, in Brazil, under the SUS, it is still incipient and innovative[4,5]. Therefore, strengthening PHC and adopting the use of technological information and communication tools in health was a measure adopted and implemented as a successful experience by many countries, such as Hong Kong[6], Australia[7], France[8], and even Chinese provinces that, despite having populations equivalent to about half of the Brazilian population and being close to the epicenter of Wuhan, using telemedicine and achieved lower mortality rates[9]. On the other hand, some authors have reported that very affected countries like Italy may have missed this opportunity[10].

New Zealand, considered one of the countries that best handled a pandemic as it can be successful through non-pharmacological interventions applied with rigor and brevity, using telemonitoring to identify new imports and their transmission chains, isolating new cases and quarantining their before they spread to the main vulnerable[11].

Given the above, this moment pointed to challenges and learnings to be built and shared by everyone who builds to build SUS on a daily basis, and this report aims to present the process of construction and execution of the proposal for shared telemonitoring among the health teams of the family (ESF), scholars and health professors for patients with suspicion and / or COVID-19 in two health units in the city of Salvador-BA.

METHODS

This is an experience report about the reorganization of health care, in the context of the COVID-19 pandemic, in two family health units (USF) in the city of Salvador-BA, as of the end of March 2020.

The referred USFs are located in the health district of Pau da Lima, in a peripheral area of the city of Salvador-BA, being composed, each, by 04 family health teams (ESF). In partnership with the State University of Bahia (UNEB) and the Municipal Health Secretariat of Salvador, these units started to appear as an internship field for the UNEB medical school internship, in the area of Family and Community Medicine since the year 2018. Beginning in 2020, they also became a field of Medical Residency practice in the same area, through the Municipal Medical Residency Program and the Residence.

The telemonitoring program in question was built jointly by teachers, students and ESF during the COVID-19 pandemic, to guarantee the continuity of care for patients with flu-like symptoms suggestive of COVID-19 attended at first by the USF assistance team. From the reception of patients in the services, those who met the definition of a suspected case of COVID-19 by the Clinical Management Protocol for Coronavirus in PHC - version 8, from the Ministry of Health[2], had their data tabulated by the team of respective unit in a spreadsheet common to professionals, teachers and students, created on the Google Sheets platform. This spreadsheet contained, for each monitored patient, symptom onset date, date of consultation, full name, age, personal telephone number for contact, address, name of the responsible community health agent (ACS) responsible, symptoms reported in the consultation, comorbidities, number of household contacts, conduct taken initially and name of the professionals of the team responsible for the care, as well as information on whether or not to collect an oropharynx swab. Patients were instructed on the existence and purpose of the spreadsheet, instructed to provide their data if they agreed with the strategy and informed that they would receive phone calls from the units.

Following the face-to-face service, there was telephone monitoring, conducted by students, organized on a scale in which they were responsible for monitoring on pre-defined days throughout the week. A basic script for the telephone assistance of suspected COVID-19 cases was created in order to standardize the information. In this way, telephone contacts were intended to update the health status of the patient and his contacts, correct guidance as to the need for a new search for the health service, as well as provision of continued guidance on hygiene and social distance measures.

All patients included in the spreadsheet were contacted at intervals of 24 or 48 hours, following the criteria and guidelines of the MS. The record of each call was made in specific fields of the spreadsheet, during the 14 days, by the responsible student, which could be accessed by health professionals at USF and by teachers at any time.

In this process, however, there were some individualizations to the planned flow, trying to cover the specificities found. In cases of minor patients, contact was made with a responsible family member. With regard to patients without a telephone or who did not answer calls, the face-to-face team was contacted to review the patient's telephone number or to carry out a home visit, aiming at continuing the follow-up. Patients outside the territory registered by the referred USFs were also treated and the same telemonitoring protocol applied to them. It is important to note that, even in situations where patients showed difficulty in understanding the proposal or were not following the initial guidelines properly, monitoring continued until the end of the isolation.

It is necessary to highlight that the students were not authorized to prescribe via telephone; they should only provide guidance on the prescriptions provided by the unit's assistant professional, clarify doubts about the patient's condition and inform about the importance of maintaining hygiene and isolation measures at home. In situations in which patients showed signs of severity that could be perceived by the call center or did not show improvement with the behaviors taken in the initial care, the students contacted the assistant team to schedule a face-to-face visit or guided the patient to look for the nearest emergency unit, according to the level assistance currently indicated.

As this is an experience report, there was no need to apply the Free and Informed Consent Form to individuals. However, prior authorization was requested from the health service to perform the intervention, as well as the patients' agreement, during the face-to-face consultation, as mentioned above. No data were released that would make it possible to identify or locate patients, assistant staff, students or teachers. Telemonitoring calls were not recorded or transcribed by inmates, in order to safeguard the privacy of care, respecting medical ethics.

RESULTS

During the COVID-19 pandemic, PHC, responsible for meeting individual and collective demands within communities, has faced an unprecedented epidemiological challenge. It has been crucial to think about how to ensure access for patients with flu-like symptoms to health care in a safe manner, as well as organizing the continuous demands of this level of care.

In this experience, it was demonstrated that, in addition to acting in the diagnosis, treatment and surveillance of mild and moderate COVID-19 cases, a strong and structured APS can, through capillarization and knowledge of the territory, promote popular education in health, paying attention to the importance of social distance and adoption of hygiene measures.

The telemonitoring strategy started in April 2020 as an activity that comprised the curricular internship of the medical course and over the months it expanded to an extension project proposal, which may even involve other health courses in its activities. In this period, the population of monitored patients followed the growth curve and stabilized the number of cases, maintaining a continuum of monitored patients every day. After 06 months of carrying out the activities, we counted more than 500 directly monitored patients, extending to more than 500 close contacts. An equivalence was observed in relation to the sexes of the patients, with a higher prevalence among the 10-40 age group. In general, the most prevalent symptoms were, in decreasing order, fever, cough, odynophagia and runny nose.

The telemonitoring service is still ongoing and, although we have partial results, we believe it is of great relevance to public health and to the academy to report how this experience impacted students, teachers, APS professionals and SUS users. Several international guidelines corroborate this strategy and have recommended remote care, instant messaging, telephone calls and other telemedicine strategies[12].

In times as difficult as the COVID-19 pandemic, when fear and panic became common, patients seemed to feel safer and more confident in knowing that there was still a team that shared health care, developing thus, a powerful caregiver-user relationship in which each part of this binomial only knew the voice on the other end of the line. Despite the success of the program and good acceptance on the part of patients, difficulties were also faced, both technological and infrastructural, as well as psychosocial, which demanded careful attention and creative solutions on the part of the team.

DISCUSSION

At first, with the need to reorganize services and care offerings, in much of the country, teachers and students from different health courses were removed from their face-to-face practical activities. However, the public university, which has always been supporting the construction of SUS, in the face of this new reality, understood its social role and presented itself alongside SUS professionals, in order to contribute to the structuring and qualification of strategies to face the COVID-19 pandemic. The history of APS as an important field of practice for training in SUS and for SUS, together with its capacity for transformation and joint production of knowledge, reinforced the need for the articulation of health services and academia at this moment in history. It was a time of opportunity to reconstruct ways of learning and doing in health.

With the connections and guidance to patients regarding the nature of COVID-19 and the importance of home isolation, it was observed in our experience that most cases with mild symptoms calmed down and avoided unnecessarily

traveling to health services, contributing to reducing the circulation of symptomatic cases and subsequently reducing the potential for community transmission.

Decreasing the flow of these users to the FHU, in a responsible manner, since their care continued via remote, has led to a series of developments. At first impression, it reduced overcrowding[13] and made the care environment safer, minimizing the possibility of contamination of those who sought the service, either due to flu-like symptoms or needs common to APS, such as vaccination, prenatal care and monitoring of chronic diseases . In addition, it reduced the potential amount of personal protective equipment (EPI) spent, at a time when there was a shortage of these worldwide, as recognized by Chan et al. and Kavoor et al.[6,7].

In a more in-depth analysis, telemonitoring also reduced the overhead imposed on USF health professionals, who, given the high spontaneous demand from patients, could concentrate on initial screening and handling new cases, while students monitored and maintained continuity of care. be careful with mild cases.

Other interesting aspects of the strategy enforced characteristics already inherent to APS activities, which are the family and community approach, in addition to the coordination of care and the integrated action to epidemiological surveillance. With the progress of the proposal, the strategy of tracking close contacts (home or not) was incorporated, expanding the unit's capacity for action and resolution, as well as the customization of guidelines according to socioeconomic level.

The receptivity of the teams with the collaboration of the university was positive, even if heterogeneous, being observed in the daily feeding of the worksheet and in the interaction between students, teachers and teams. The experience of integration between the academy and the health service through technology proved to be possible, even from a distance, opening up the possibility of new formats for us to be connected and active.

Despite all the benefits, as foreseen in the literature[14], some difficulties were faced that put to the test an effective patient monitoring strategy and required the search for solutions. Difficulties occurred with cell phones, telephone lines and with the calls themselves. Some patients, even previously informed of the monitoring, refused calls because it was an unknown number, or, when they answered, showed distrust in the first call, which tended to improve substantially in subsequent

calls. In a minority of cases, these were patients who showed disinterest in the calls and little receptivity to hygiene and home isolation guidelines, being uncooperative - a fact that was initially not expected by the team. A minimum number of patients did not have a telephone; some calls were noisy and there were situations in which the suspected cases were elderly people with cognitive problems or individuals with mental disorders, having difficulty understanding the questions and guidelines. In these situations, two main conducts were adopted: contact with family members with operating telephone lines, so that telemonitoring could continue, or the ACS could be activated, through the assistant team, so that they could perform an active search.

Issues related to home isolation itself were also sometimes challenging. It was common to notice in the connections voices of nervous or anxious patients with isolation, concerned with the potential severity of the disease, complaining about not being able to share the home environment with other family members or afraid to contaminate them. Dealing with anxiety in the face of the new reality has become a constant. The pandemic imposed an exceptionality on the entire population, especially on health professionals and financially most vulnerable individuals, generating situations that justified stress and uncertainty. Such psychological impact could lead to anxiety, panic and paranoia, in the perspective of an adaptation disorder[15].

In our telemonitoring strategy, problems were also evident from the need for prolonged home isolation and the precariousness of social and economic life, as raised by Sarti[1]. We work in peripheral neighborhoods of Salvador, places where social vulnerability is unmistakable. A significant part of this population lives in precarious housing, with few rooms and inadequate ventilation, sometimes with insufficient basic sanitation, making the recommendations for distance and hygiene - which seem simple - almost impractical[16]. Added to these issues is the fact that many workers are facing serious financial problems because they have been dismissed or temporarily removed without pay; others, informal workers, pointed out the need to keep working to ensure their livelihood. It was necessary to establish a joint plan, consistent with the individual reality, in order to try to overcome social conditions and determinants. Information was provided regarding the

available emergency aid. In addition, information was provided on how to get to work and return home more safely, in cases where work was inevitable.

We recognize how much to seek support measures and to tackle these cross-cutting issues, however aggravated in the COVID-19 pandemic, is also closely linked to the role of PHC in Brazil, both from a strategic point of view and from the ethical duty of health professionals[3]. At this crucial moment in defending the lives of Brazilians, in the reduction of preventable deaths and clinical sequelae, it is evident how the SUS should be strengthened in guaranteeing the right to health for all, regardless of having a health plan, living in a remote indigenous area or on the outskirts of large cities.

We reaffirm the possibility of telemonitoring as a response to the growing demand in times when social distance is a measure of public health, reducing queuing clusters, waiting time, EPI expenses and even expanding access to health. The continuation of remote health actions initiated during the pandemic (teleconsultation and telemonitoring) should be a trend in SUS, with a view to expanding access and guaranteeing care especially in new outbreaks, or even new viruses, when social distance will necessarily demand restricted use of face-to-face consultations[17]. However, it is perceptive to think of telemonitoring not only for infectious problems. People with chronic diseases, smokers and alcoholics in the process of cessation, groups of pregnant women, etc. they will also be able to benefit from monitoring through telehealth, as well as the formation of online experience sharing groups.

CONCLUSION

Aggregating health information and communication technologies (TICS) to face the pandemic proved to be an important contribution to the Family Health Strategy. We understand that telemonitoring follows technological progress and has incalculable relevance as a complementary approach to face-to-face clinical care, according to Soeiro[12], helping to face distance as an impediment to service provision, as well as saving resources. With this report, we hope to fuel the debate

and encourage more health teams, especially in association with universities, to develop their own telemonitoring models for the context of COVID-19 and beyond. New studies are still necessary to expand the evidence on the importance of technological tools of care to SUS..

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