

Experience report of the activities developed by Sergipe's Telehealth Center

Celina Sayuri Shiraishi Takeshita	Nurse Specialist in Surgical Center, RP and CME from the School of Medicine of São José do Rio Preto-São Paulo and Specialist in Family Health Team at Ingá College of Maringá-Paraná. She currently holds the position of Technical Advisor of the Telehealth Sergipe Coordination. Address: Aracaju-Sergipe Email: celinasayuri@hotmail.com
Eneida Carvalho Gomes Ferreira	Social Worker / UFS, Health Regulation Specialist at SUS / Proadi / IEP / HSL Specialist in Monitoring, Monitoring and Evaluation in Collective Health Education / Fiocruz / UFRGS Telehealth Center Coordinator Sergipe / SES / FUNESA.
Karla Cunha Barbosa	Graduation: Biological Sciences Medical Modality (UNIT) , Specialist in: Environmental Management (Fanese); Public Health: Politics, Planning and Management (Estácio); Evidence-informed Health Policy Management (Syrian Lebanese) in progress. Master in Development and Environment. Doctorate in progress: Biomedical Sciences Field Monitor and Technical Responsible for Public Health at the Telehealth Center Sergipe / SES / FUNESA.
Graziane Ribeiro Couto	Degree in Dentistry from the Federal University of Paraíba (2004). Specialist - in Family Health Program by the Faculty of Medical Sciences of Campina Grande -PB; Work Management and Health Education, Federal University of Rio Grande do Norte; in Health Regulation at SUS by Hospital Sírio-Libanês; Special Dentistry promoted by the Brazilian Association of Dentistry Sergipe Section; Master's student: - Master's degree course in Dentistry, Federal University of Sergipe. Dentist Surgeon for Patients with Special Needs.
Kenneth Bradley Santos Birth	Undergraduate: Computer Networks – UNIT, Postgraduate: Forensic Computing and Digital Expertise – IPOG, Computer Technician at the State Health Foundation (FUNESA).
Fagner Santos Fiaes	Electronics Technician, Computer Technician at the State Health Foundation (FUNESA).

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Abstract

Introduction: This article is a descriptive and evaluative study, like experience report, related to the activities developed by the Sergipe Telehealth Center (NTSE). **Method:** Period: from 2013 until August 2019, in which we used records of awareness workshops held with the professionals of the basic health units and periodic management reports of the telehealth service. **Objective:** Its main objective was to present an overview of the activities developed since its implementation until August 2019. **Results:** The results obtained in this work indicate that the activities developed by the NTSE contribute to the fulfillment of the principles and guidelines of the SUS, however a more expressive use of the tool is expected since Permanent Education is planned and standardized as part of the work process of PHC teams.

Keywords: Telehealth; Teleconsultation; Qualification; Primary Health Care.

Resumen

Informe de experiencias de las actividades desarrolladas por el Centro de Telesalud de Sergipe

Introducción: Informe de experiencia de las actividades desarrolladas por el Centro de Telesalud de Sergipe. **Método:** Este artículo es un estudio descriptivo y evaluativo, tipo de informe de experiencia, que hace referencia a las actividades desarrolladas por el Centro de Telehealth Sergipe (NTSE) de 2013 a agosto de 2019, en el que se utilizaron registros de talleres de sensibilización realizados con profesionales. Unidades básicas de salud e informes periódicos de gestión para el servicio de telesalud. **Objetivo:** Su objetivo principal era presentar el panorama de las actividades desarrolladas desde su implementación hasta agosto de 2019. **Resultados:** Los resultados obtenidos en este trabajo indican que las actividades desarrolladas por el NTSE contribuyen al cumplimiento de los principios y directrices del SUS, sin embargo, se espera que se use más. Expresiva de la herramienta, ya que la Educación Permanente está planificada y estandarizada como parte del proceso de trabajo de los equipos de APS.

Palabras-clave: Telesalud; Teleconsulta; Calificación; Atención Primaria de salud.

Relato de experiência das atividades desenvolvidas pelo Núcleo de Telessaúde de Sergipe.

Introdução: O presente artigo trata de um estudo descritivo e avaliativo, tipo relato de experiência, referente às atividades desenvolvidas pelo Núcleo de Telessaúde Sergipe (NTSE). **Método:** Período de 2013 até agosto de 2019, no qual foram utilizados registros de oficinas de sensibilização realizadas junto aos profissionais das unidades básicas de saúde e de relatórios periódicos de gestão do serviço de telessaúde. **Objetivo:** Teve como principal objetivo, apresentar o panorama das atividades desenvolvidas desde a sua implantação até agosto de 2019. **Resultados:** Os resultados obtidos neste trabalho apontam que as atividades desenvolvidas pelo NTSE contribuem para o cumprimento dos princípios e diretrizes do SUS, contudo espera-se um uso mais expressivo da ferramenta uma vez que a Educação Permanente está prevista e normatizada como parte do processo de trabalho das equipes da APS.

Palavras-chave: Telessaúde; Teleconsultoria; Qualificação; Atenção Primária à Saúde.

INTRODUCTION

In recent years, several technological tools for health care have emerged in order to share knowledge and qualify health professionals, thus contributing to the care of the population¹.

One of the successful initiatives of technology incorporation in health is telehealth, defined by the World Health Organization (WHO) as the provision of health services where distance is a critical factor².

Telehealth emerges as a political and strategic instrument for planning and executing health actions, enabling the exchange of important information for the diagnosis, prevention and treatment of diseases. In addition, telehealth is used for the continuing education of service providers, as well as for research and evaluation purposes³.

Telehealth is a health teaching tool, offering specialized support to the professional team with diversified activity specificity and, because it reaches professionals located in remote areas and due to its great utility in performing various activities in the health field, it has gained more space⁴.

The telehealth Center consists of the training and management institutions and/or health services responsible for the formulation and management of teleconsultation, telediagnosis and second formative opinion, aimed at workers of the Unified Health System (SUS), as well as the social actors involved in the social control of the SUS⁵.

Telehealth integrates, collaborates and strengthens the teaching, active participation and interaction between professionals, academics, researchers and scholars; it also promotes the formation of discussion groups and case discussion groups and broadens the means for conducting research and evaluating health practices and methods. It also diversifies the universe of the exchange of knowledge and experiences, in order to improve health offer⁶.

Thus, telehealth uses modern information and communication technologies for health-related distance activities at its various levels (primary, secondary and tertiary); enabling interaction between health professionals or between them and their patients, as well as accessibility to diagnostic or even therapeutic support resources, also acting as a support point and logistics of the health system⁷.

Study has pointed out that the use of Information and Communication Technologies (ICTs) has produced changes

in professional and educational practice, providing organizational and academic changes through the “digital language” that would allow informing, communicating, interacting and learning, in a multiprofessional perspective, involving management with sustainable planning, research and development of solutions applicable to health education^{8,9}.

The search or construction of strategies that directly or indirectly interfere with the training process may motivate other strategies that contribute to the creation of opportunities for changes in professional practice. This is because thinking about the topic human resources in health, poses the challenge of building conceptual, theoretical and methodological tools that allow their apprehension, but, centrally, the ability to identify beyond the problems, opportunities and strategies to overcome them¹⁰.

It is understood that telehealth is part of an educational proposal different from conventional skills, since it has as its starting point the work process and its main characteristics are the protagonism of the worker, the problematization of current practices and meaningful learning, guided by the constant search for improvement of health services.

Telehealth benefits the various areas of clinical expertise. Distance health care promotes effective communication between health workers from different locations, speeds up diagnoses and promotes better resoluteness of Primary Care in Basic Units located in remote regions. Thus, through telehealth, people away from large cities will gain access to specialized health care¹¹. Also, according to Naiker et al¹², telehealth is indicated as a process improvement strategy that can reduce queues.

Located in the northeast region, Sergipe is the smallest state in Brazil with 21,918,354 square kilometers and contains 75 municipalities and its population, according to a count made in 2010 by the Brazilian Institute of Statistical Geography (IBGE), with a total of 2,068,017 inhabitants. It has a population growth of 1.5% per year and its GDP is slightly above the average for the northern region of the country.

One of the main social problems in Sergipe is the issue of environmental sanitation, since a large part of the population of Sergipe (approximately 40%) does not have this service. In addition to infant mortality, 31.4 children, per thousand live births, die before completing a year of life

In Sergipe, Telehealth started its activities in 2013 and is

managed by the State Department of Health (SES) and operationalization of the Sergipe State Foundation (Funesa), in partnership with the Federal University of Sergipe (UFS). The Sergipe Telehealth Center (NTSE) offers teleconsultation, Tele-education and Second Formative Opinion (SFO), fostering Permanent Health Education. Its main objectives are to ensure the processes of distance qualification through information and communication technologies, assist and strengthen the health network, optimize the services provided to the population, provide higher quality care and reduce travel expenses and classroom training costs.

NTSE has a field team that engages in dialogue and monitoring of family health strategy teams, assisting professionals in solving problems in the use of telehealth tools and also disseminates, supports, and follows the schedule of Tele-education activities (e-learning courses and web lectures) supporting the use of these tools to qualify teams to develop the ability to use these offerings to improve work processes.

The team also includes computer technicians working in the preventive and corrective maintenance of information and communication technology equipment, providing technical support to the NTSE and its remote points. For the development and maintenance of systems and implementation and customization of EAD tool we rely on the information technology analyst.

It also has a team specialized in primary care of teleconsultants (doctors, nurses and dental surgeons), public health specialists, administrative staff that supports the entire nucleus and coordination. We also count on the support of the technical references of the Sergipe State Health Department, as well as the professionals of the Federal University of Sergipe to support the teleconsultation and Tele-education. The objective is to present an overview of the activities carried out by the Sergipe Telehealth Center in the period from 2013 to 2019.

METHOD

This is a descriptive and evaluative study, type of experience report referring to the activities developed by the NTSE since its implementation in 2013 until August 2019.

To describe the activities performed by the field team, we used records of workshops held in the basic units, as well as monthly, quarterly and annual reports data sent by the team to the NTSE coordination.

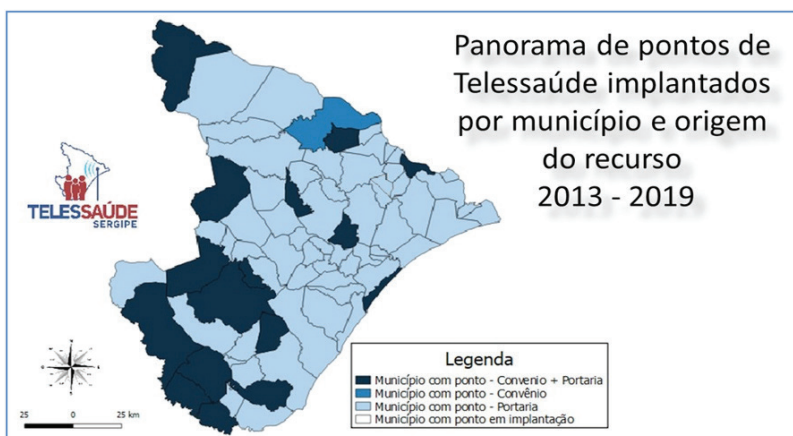
For the description of the activities of the teleconsultant team, besides the periodic management reports, the reports issued by the HealthNET platform were used.

For tele-education, the number of participants connected during the activity was evaluated by NTSE reports. Regarding the amount of the Second Formative Opinions published by the Sergipe Telehealth Center, the research took place through the Virtual Health Library (VHL) website.

RESULTS AND DISCUSSION

During the study period of this work, 164 telehealth points were implanted in Basic Health Units of the 75 municipalities of the state of Sergipe, where 248 family health teams were trained. In (Figure 1) shows the panorama of telehealth points deployed in 100% of municipalities and by origin of the resource in the 7 (seven) State health regions.

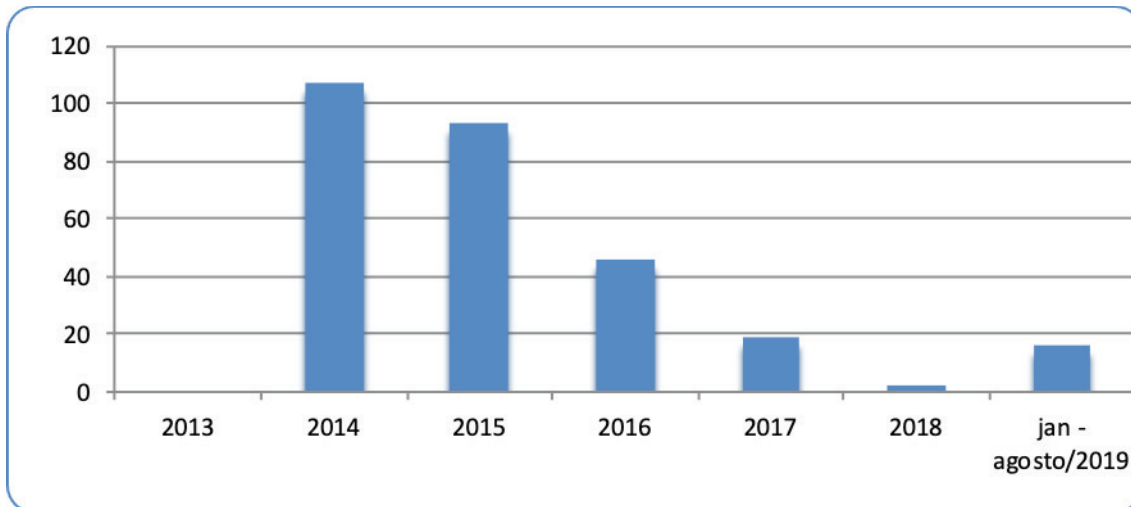
Figure 1: The implementation of 164 decentralized points in the 07 (seven) State Health Regions



Source: Sergipe Telehealth Management Reports

With regard to awareness and training workshops, a total of 273 workshops were held during the period analyzed (Chart 1). In 2013 there was no workshop, but in 2014, 2015, 2016, 2017, 2018, 2019 there were respectively 107, 93, 46, 19, 2 and 16 workshops. This activity has as premise the use of active methodologies of teaching and learning being divided into theoretical part in which is made the presentation of the team that composes the Center, a little of the history of Telehealth Sergipe, services offered and examples of the best way to ask a question on the platform (Figure 2). And in the practical part, when professionals have the opportunity to test the platform, discuss and prepare a teleconsultation in the face of a problem situation and send the questions elaborated on the HealthNET platform in real time as shown in (Figure 3). Such activities encourage professionals to actively participate in the qualification process, promoting Permanent Health Education.

Graph 1: Quantitative HealthNET Platform Awareness and Training Workshops from 2013 to August 2019.



Source: Sergipe Telehealth Management Reports

Figure 2 and 3: Sergipe Telehealth Platform Awareness and Training Workshops for Family Health Teams (FHS) in Sergipe State.



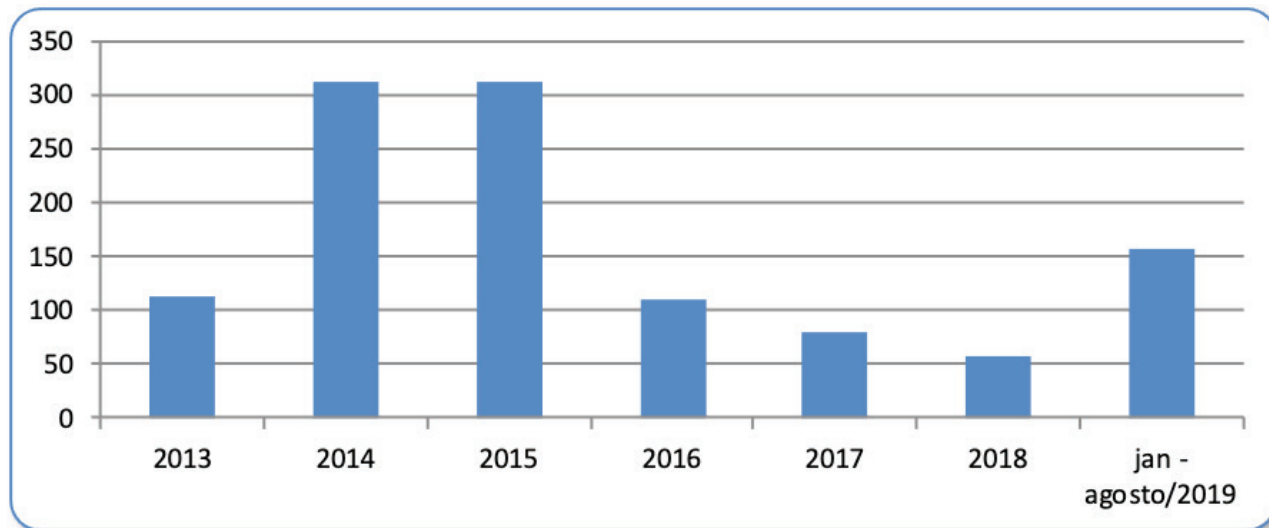
Source: Sergipe Telehealth Management Reports

Another relevant data found in the period was 1,141 teleconsulting answered by the team of teleconsultants doctors, nurses and dentists on the HealthNET Platform as shown in (Figure 4) of the main screen. The total number of asynchronous teleconsultations answered were demanded in 2013 (112), 2014 (312), 2015 (312), 2016 (111), 2017 (81), 2018 (57), 2019 (January-August) 156 questions with Primary Care scope related to the work process, clinical management, diagnosis and health education (Graph 2).

According to Schmitz and Harzheim¹³, the low use of teleconsulting services was found throughout the country, which despite the adequate supply of the service, the demand is very low, generating idle installed capacity of a group of responsive

teleconsultants as also the equipment. The authors suggest strengthening of teleregulation and auditing of telehealth actions, with centralization of resources and reduction of the number of telehealth centers.

Graph 2: Asynchronous teleconsultations answered from 2013 to August 2019



Source: Sergipe Telehealth Management Reports

However, teleconsultation has been indicated as an alternative measure to address PHC problems with excessive waiting times, unequal access to health services depending on geographical location and lack of communication between health professionals. In addition, teleconsultation services can lead to a favorable socioeconomic return over time, mainly through cost savings attributed to avoided referrals¹⁴.

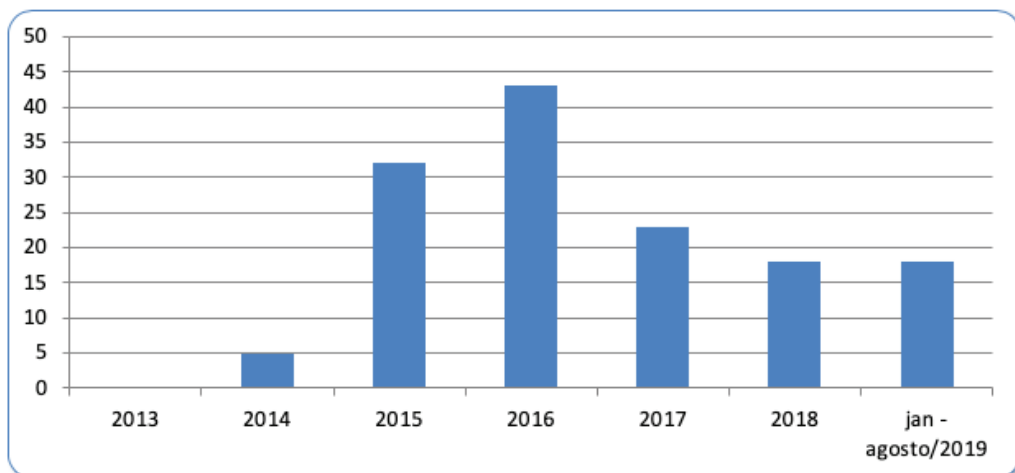
Figure 4: HealthNET Platform home screen image for Teleconsultation request.



Source: HealthNET Teleconsultation Platform, 2019

About the Second Formative Opinions, 139 teleconsultations were selected and published during this period, in 2014 (05), 2015 (32), 2016 (43), 2017 (23), 2018 (18) and 2019 (18) in the Virtual Health Library (VHL) as shown in (Graph 3).

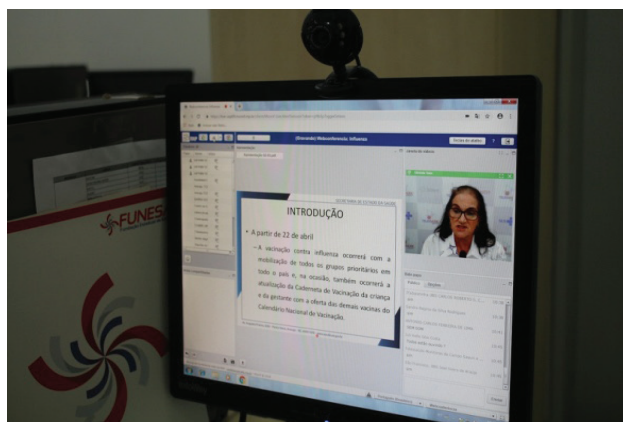
Graph 3: Second Formative Opinion published in the Virtual Health Library from 2013 to August 2019.



Source: Sergipe Telehealth Management Reports

Regarding Tele-education, a total of 45 seminars were held during the analyzed period, covering a total of 8,759 professionals from the participating family health teams (Figures 5 and 6).

Figures 5 and 6 - Tele-Education on Immunization/Influenza in May 2019 at the Sergipe Telehealth Center.



Source: Sergipe Telehealth Management Reports

Although the qualitative instruments point to a satisfactory evaluation of the telehealth program, a more expressive use of the tool is expected since Permanent Education is foreseen and standardized as part of the work process of PHC teams¹⁵.

Infrastructure, connectivity and lack of knowledge issues of some professionals and managers are some of the critical telehealth nodes that need to be problematized in a broader context, as previous studies on the subject when analyzing the incorporation of Distance Learning as a part of the SUS worker training policy warn of the importance of investigating how this strategy in public health organizations is configured as an element of innovation or organizational change¹⁶.

In the meantime, it is worth asking the extent to which telehealth in Sergipe has managed to disseminate the understanding of distance learning as a technological innovation that focuses on the processes of management and organization of work within the municipal secretariats as a permanent health education strategy complementing the work management policy.

On the other hand, according to the guidelines of the National Policy of Primary Care, the redirection of the health care model clearly imposes the need for permanent transformation of the functioning of the services and the work process of the teams, demanding from their actors (workers, managers and users) greater capacity for analysis, intervention and autonomy for the establishment of transformative practices and the strengthening of the links between conception and execution of work¹⁵.

Similarly, the articulation of state and federal governments with municipalities is important, seeking to respond to their needs and strengthen their initiatives through institutional support and/or matrix strategies. In this sense, telehealth would be responsible for developing support actions, cooperation, qualification and offering diversified initiatives for different contexts.

However, given the territorial extension of Sergipe, and because it contains mostly small municipalities, many medium and high complexity services are offered only in the capital, leaving it overloaded. Added to this, the increasing number of referrals to specialized consultations that could often be avoided and treated in PHC and made without the proper information for definition and risk classification in order to ensure fairness and comprehensiveness of care, making the service time consuming and difficult for users to access. As well as the increasing number of hospitalizations for PHC sensitive causes due to complications that could be preventable.

Thus, the expansion of telehealth is referred to as a necessary instrument for the integration of care networks, and the involvement of researchers and health professionals is essential, aiming at a greater supply of evidence-based knowledge in a timely manner, in order to improve the quality of care provided¹⁷.

CONCLUSION

The results obtained in this experience report show that telehealth Sergipe, in the period from 2013 to 2019, contributed to the fulfillment of SUS principles and guidelines, being a primordial tool for training workers to develop their practices in the best way and to ensure higher quality of health care, providing conditions for these professionals to face new situations with more resolution and thus promoting the standardization of services and practices in ensuring the integral and longitudinal care of users.

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Indication of responsibility:

Celina Sayuri Shiraishi Takeshita: responsible for idea design, study design, work organization, data collection, bibliographic research, study design, analysis and interpretation of results and discussion, writing, final critical review of the article.

Karla Cunha Barbosa: contributed to the work organization, data collection, bibliographic research, study design, writing, critical review, final review of the article.

Eneida Carvalho Gomes Ferreira: data collection, analysis and interpretation of results and discussion, final critical review of the article.

Graziane Ribeiro Couto: contributed to the bibliographical research, critical review of the study content, final revision of the article.

Fagner Santos Fiaes and Kenneth Bradley: Santos Nascimento performed part of the data collection process and contributed to the bibliographic research.

All authors approved the final version of the manuscript and stated to be responsible for all aspects of the work, ensuring its accuracy and integrity.

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