

## **PERCEPTION OF NURSES ABOUT NURSING TELECONSULTATION IN PRIMARY CARE**

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### **ABSTRACT**

**Objective:** analyze the nurse's perception about nursing teleconsultation in Primary Health Care through the workflows characterization, potential, challenges and teleconsultation in nursing feasibility.

**Method:** exploratory-descriptive study with a qualitative approach. Data were collected, between the months of May and June 2021, with 19 nurses from four health districts of a capital in south of Brazil, using digital questionnaire. Data were systematized in Microsoft Excel<sup>®</sup> and analyzed following the criteria of the Discourse of the Collective Subject. This process was carried out with the support of the DSCsoft<sup>®</sup> Program.

**Results:** the results were organized into five thematic categories: Nursing teleconsultation flow in Primary Health Care; Teleconsultation process; Instruments used during the teleconsultation; Potentialities and challenges identified during the teleconsultation in the Primary Health Care; and, Applicability: services that can be resolved through teleconsultation. Among the challenges are the inherent problems of communication and internet connectivity and the distrust of users in relation to this new consultation modality.

**Conclusion:** telecare in nursing is a recent technological innovation, with several challenges as: the possible failure in communication between the professional and the user; internet connection problems; lack of ability to travel from new tools; lack of privacy and excessive noise and distrust of users about the service provided. With the teleconsultation, there was an extension of the users' access to the health services, there was greater agility and efficiency in the services provided to the population.

**DESCRIPTORS:** Health services accessibility. Technology applied to health care. Primary health care. Remote consultation. Nursing.

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# PERCEPÇÃO DOS ENFERMEIROS SOBRE TELECONSULTA DE ENFERMAGEM NA ATENÇÃO PRIMÁRIA

## RESUMO

**Objetivo:** analisar a percepção dos enfermeiros sobre teleconsulta de enfermagem na Atenção Primária de Saúde através da caracterização dos fluxos de trabalhos, potenciais, desafios e viabilidade da teleconsulta em enfermagem.

**Método:** estudo exploratório-descritivo, com abordagem qualitativa. Os dados foram coletados, entre os meses de maio a junho de 2021, com 19 enfermeiros que atuam em quatro distritos sanitários de uma capital do Sul do Brasil, utilizando um questionário digital. Os dados foram sistematizados no *Microsoft Excel*<sup>®</sup> e analisados segundo os critérios do Discurso do Sujeito Coletivo. Esse processo foi realizado com o apoio do Programa DSCsoft<sup>®</sup>.

**Resultados:** os resultados foram organizados em cinco categorias temáticas: Fluxo da teleconsulta de enfermagem na Atenção Primária à Saúde; Processo de realização da teleconsulta; Instrumentos utilizados durante a realização da teleconsulta; Potencialidades e desafios identificados durante a teleconsulta na Atenção Primária à Saúde; e, Aplicabilidade: atendimentos passíveis de resolução por meio da teleconsulta. Entre os desafios estão os problemas inerentes à comunicação e à conectividade com a internet e a desconfiança dos usuários em relação a esta nova modalidade de consulta.

**Conclusão:** o teleatendimento na área da enfermagem é uma inovação tecnológica recente, com diversos desafios, como: a possível falha na comunicação entre o profissional e o usuário; problemas de conexão com a internet; falta de habilidade para manuseio das novas ferramentas; falta de privacidade, excesso de ruídos e desconfiança dos usuários sobre o atendimento realizado. Com a teleconsulta ocorreu a ampliação do acesso dos usuários aos serviços de saúde, houve maior agilidade e eficácia dos atendimentos realizados à população.

**DESCRITORES:** Acesso aos serviços de saúde. Tecnologia aplicada à assistência à saúde. Atenção primária de saúde. Consulta remota. Enfermagem.

# PERCEPCIÓN DE LOS ENFERMEROS EN RELACIÓN LA TELECONSULTA DE ENFERMERÍA EN LA ATENCIÓN INICIAL

## RESUMEN

**Objetivo:** analizar la percepción de los enfermeros en relación a la teleconsulta de enfermería en la atención inicial de salud a través de la caracterización de los flujos de trabajo, potenciales, desafíos y la viabilidad de la teleconsulta en enfermería.

**Método:** estudio exploratorio-descriptivo, con abordaje cualitativa. Los datos son colectados con 19 enfermeros que actúan en cuatro distritos sanitarios de una capital del sur del Brasil, utilizando un cuestionario digital. La colecta de los datos fue realizada entre los meses de mayo a junio de 2021 de forma totalmente online; los datos fueron sistematizados en el *Microsoft Excel* y analizados según los criterios del Discurso del sujeto colectivo, que utiliza las representaciones sociales y el senso común retratado la manifestación o posicionamiento de cada individuo y posibilita agrupamientos de pensamientos y/o opiniones individuales sobre determinado asunto. Ese proceso fue realizado con el apoyo del Programa DSCsoft.

**Resultados:** los resultados fueron organizados en cinco categorías temáticas: Flujo de la teleconsulta de enfermería en la Atención Inicial de Salud; Proceso de realización de la teleconsulta; Instrumentos utilizados a lo largo de la realización de la teleconsulta; Potencialidades y desafíos identificados a lo largo de la teleconsulta en la Atención Inicial de Salud; y, Aplicabilidad: atendimientos pasibles de resoluciones por medio de la teleconsulta. Entre los desafíos están los problemas inherente a la comunicación y la conectividad con la internet y la desconfianza de los usuarios en relación a esta nueva modalidad de consulta:

**Conclusión:** el teleatendimiento en la área de la enfermería es una innovación tecnológica reciente, con diversos desafíos, como: la posible falla en la comunicación entre el profesional y el usuario; problemas de la conexión con la internet; falta de habilidad para manejo de las nuevas herramientas; falta de privacidad, exceso de ruidos y desconfianza de los usuarios a los servicios de salud, ocurre mayor agilidad y eficacia de los atendimientos realizados a la población.

**DESCRITORES:** Acceso a los servicios de salud. Tecnología aplicada a la asistencia a la salud. Atención primaria de salud. Consulta remota. Enfermería.



## INTRODUCTION

Nursing teleconsultation has been incorporated into the nurses' work process, with the expansion of the use of information and communication technologies (ICT) in health. This type of care can be understood as an innovative technology in care practices that increased strength as from March 2020 when the World Health Organization (WHO) recognized the existence of the COVID-19 pandemic. A disease with a high rate of transmissibility, with symptoms that could initially be mistaken for a cold, flu or upper respiratory infection, but which caused enormous damage, including over than 5.8 million deaths worldwide<sup>1-2</sup>.

According to the Pan American Health Organization, teleconsultation can be defined as a remote consultation that includes interactions between a health professional and a patient with the aim of providing diagnostic or therapeutic advice by electronic means<sup>1</sup>.

After several studies showed that social distancing was the most effective way to avoid the COVID-19 transmission and infection, the health services sought to make available teleconsultations to minimize the contagion risk of professionals and users. And slowly the teleconsultations became more frequent, especially in Primary Health Care (PHC), after the standardization of such practice by professional councils and by *Sistema Único de Saúde* (SUS)<sup>3-6</sup>.

The importance of this practice in nursing was recognized in Brazil by the Federal Council of Nursing (COFEN) which regulated nursing teleconsultation - during the pandemic - through Resolution N<sup>o</sup> 634/2020 which was later expanded by Resolution N<sup>o</sup> 696/2022, ensuring the role of the profession in Digital Health. These norms are in line with others that are already well established in the profession, such as Resolution/COFEN No. 358/2009, which provides for the Systematization of Nursing Care and the Nursing Process. The process is organized into five steps: data collection, nursing diagnosis, nursing planning, implementation of actions and nursing evaluation (assessment). The Nursing Consultation must be formally registered involving the collected data, nursing diagnoses, planned actions and the results achieved<sup>7</sup>. The nursing teleconsultation, on the other hand, must follow the entire systematization of care according to the nursing process and also has the obligation to apply the consent form to the patient<sup>8</sup>.

Nurses in Primary Care are part of multidisciplinary teams, playing an important role in the health care of individuals, families and groups, as well as prescribing medications and ordering exams, according to protocols and technical and professional regulations. Works in health promotion, in disease prevention, at outpatient, home and community spaces, as well as managing health units and coordinating collective work, especially the nursing team<sup>9</sup>. In addition to these obligations, during the coronavirus pandemic (Sars-Cov-2), the nurse offered teleconsultation in order to reduce exposure to the pandemic disease. Also the nurses act in health surveillance, attending, notifying, monitoring and accompanying the patients with COVID-19, which during the pandemic situation had an exponential growth, as well as playing a fundamental role in the planning, execution and evaluation of vaccination.

The nursing consultation is considered an activity of great relevance in the work of nurses in Primary Care, but according to studies, nurses are not always able to perform it fully<sup>10-12</sup>. This can be directly linked to the fact that the Nurse has multiple roles, including bureaucratic activities and managerial actions of the unit, and many times the duplicity of function coexists<sup>13</sup>.

Teleconsultation is a recent technological innovation in the field of nursing and the introduction of innovations can generate an increase in workloads for health professionals, depending on the way in which the change process takes place, the conditions and institutional motivations for its use. Innovations usually lead to changes in the work process and often do not replace the old way of performing the work, they add new actions, in addition requiring training of those professionals involved for the management and effectiveness of innovation<sup>14-15</sup>. The professionals' health, on the

other hand, are strongly related to workloads. Increased loads can generate wear-and-tear and illness, as well as increase the possibility of errors, putting the safety of professionals and users of health services at risk<sup>14</sup>.

Considering the importance of teleconsultation and the possibility that this innovation be maintained in health and nursing work, the professional perception is relevant to understanding the phenomenon. Thus, the research aimed to analyze the perception of nurses about nursing teleconsultation in PHC through the characterization of workflows, potentials, challenges and feasibility of teleconsultation in nursing.

## METHODS

Descriptive-exploratory study, with a qualitative approach, carried out with nurses who developed teleconsultations in PHC, in Florianópolis, the capital of a Santa Catarina state in southern Brazil. COREQ was adopted, meeting the criteria for reporting qualitative research.

The Family Health Strategy county was consolidated since 2007 and disposes of well-structured nursing protocols that were established in the daily lives of nurses.

The inclusion criteria for study participants were: belonging to a family health team and routinely performing teleconsultation. The Snowball method was adopted to identify and invite participants, using a key informant inserted in the current reality of nurses as a starting point. Thus, from the first participant, the others were included, totalizing 19 nurses, distributed in all health districts of the municipality. Exclusion criteria included professionals on vacation or another type of leave during the data collection period, as well as non-compliance with the Free and Informed Consent Form (TCLE). There were no withdrawals from the selected participants.

Data collection took place through a digital questionnaire via Google Forms®, sent to the participating nurses, through which the authors provided questions and instructions tested by a pilot test. The duration was the time to complete the questionnaire, which takes an average of 15 minutes, in which case the field notes do not apply. The sample was described with demographic data, in the results section, through the characterization of the participants, which included age, education (postgraduate) and places of work. In this questionnaire, the Free and Informed Consent Form (FICF) was available for reading, acceptance and consent of the participant. Data collection was carried out between the months of May and June 2021, online, therefore, no repeated questionnaires were carried out, as well as there was no use of audio or visual recording to collect data. This was necessary in view of the pandemic situation caused by the coronavirus (Sars-Cov-2) experienced in the months of data collection.

Data were collected were systematized and organized using the Microsoft Excel® Program and analyzed from the perspective of the Collective Subject Discourse (CSD) method, that uses social representations and common sense represented in the manifestation or positioning of each individual and these allows groupings of individual thoughts and/or opinions about a specific subject<sup>16</sup>. Analyzing the responses was possible to recognize the key expressions, which are significant passages cited by the participants individually and correspond to the collective responses synthesis of the content. With the key expressions, it was possible to build a discourse with the synthesis of collective thoughts in the first person singular, which is the CSD. Thus, groupthinking appears as an individual discourse<sup>17</sup>.

Data saturation was discussed and the questionnaire responses mirror of the responses sent were returned, in full, to the participants. The number of data encoders was 14, and the description of the coding tree was given through the abbreviation CSD followed by the number of the encoder number.

The software used to manage the data was Microsoft Excel® for data systematization and the DSCsoft® Program that helped in the process of categorization and analysis of the meanings of the participants' testimonies, grouping thoughts, beliefs, values and representations of the same

meaning about the nursing teleconsultation in PHC. The summary speeches of the participants were presented to illustrate the findings, through the acronym CSD, followed by a sequential number. There was consistency between the data presented and the results. Thus, from the testimonies collected, the main themes emerged, visibly presented in five categories of CSD analysis that versed about teleconsultation flow; the teleconsultation process; the instruments used; the potentialities and challenges, as well as the applicability of this technological innovation.

The research project was approved by the Ethics. All ethical aspects involving research with human beings were respected, as recommended by Resolution No. 466/12 of the National Health Council.

## RESULTS

The 19 nurses who participated in the survey are aged between 23 and 49 years; in relation to education, post-graduate degrees, ten (52%) have specific residency in the area of PHC, six (31%) have some specialization and three (15%) have a master's degree. Regarding the places of proceedings, eight (42%) work in the continent health district, five (26%) in the center health district, three (16%) in the north health district and three (16%) in the south health district, representing the set of existing districts in the municipality.

After analyze the data related to the nursing teleconsultation work process, the results were organized into five thematic categories: Nursing teleconsultation flow in PHC; Teleconsultation process; Instruments used during the teleconsultation; Potentialities and challenges identified during the teleconsultation in the PHC; and, Applicability: services that can be resolved through teleconsultation.

### Nursing teleconsultation flow in PHC

The primary care, in the municipality studied, there are care flows based on pre-established criteria aiming at the basic principles of the Brazilian Unified Health System (called SUS), in particular, universality, integrality and equity. Teleconsultation is an innovative form of care, developed by health professionals, including nurses, according to the flow described in the speeches that follow.

*[...] the Family Health Teams have a smartphone with institutional whatsapp, the patient can get in touch through this whatsapp requesting an appointment. At this point, a google forms® link is sent to the person to describe the assistance reason for the service that was requested. When we receive the form response, we evaluate (doctor or nurse) according to the order of arrival, priorities that depend on the case and whether the demand can be solved through a teleconsultation. If possible, we schedule the teleconsultation in our agenda, which is open every week. We notify the patient the day that was scheduled and which a professional will contact him/her through a call (video or phone call). If, during the call, we find that the person needs face-to-face assistance, we schedule a time for the person to come to the health center in person. The team also considers the demands coming from community health agents, nursing technicians and we adapt this flow to illiterate patients or those with digital difficulties (CSD1).*

According to the participants, the reading of the messages received is the responsibility of the team as a whole, but it is the nurses and doctors who daily do this work of reading, sorting, classifying and organizing the demands with appointments. When asked about the screening performed, they describe a worksheet filled in by patients through a form sent automatically in conversations by Whatsapp.

*[...] we sort the demands through the google forms® spreadsheet fed with the filling of the demand by the patients. The google forms® link is sent to all patients who start a conversation with institutional Whatsapp. Messages received via Whatsapp are also read and patients in each area are checked at the address provided by the community health agents. The doctor or nurse classifies these demands by the type of care (urgency or routine) to schedule a nursing or medical teleconsultation (CSD2).*

According to SCD2, [...] *the demands received are sorted by the clinical team in order of priority and scheduled according to availability. When this demand can not be resolved via teleconsultation, a face-to-face appointment is made or the patient is advised to seek the specialized health service. When it is possible to resolve the demand for remote care, the patient is advised that the care be provided in a quiet, private location with a good internet connection.*

After scheduling, the teleconsultation takes place via video or call, following the steps of the Systematization of Nursing Care (SNC) according to Resolution/COFEN N° 358/2009. Before starting it, the nurses confirm the users' consent on the modality of care, respecting the legal aspects of art. 3 of Resolution/COFEN N° 634/2020. The physical assessment of the patient takes place through assisted self-assessment, which allows the use of instruments such as scales, digital sphygmomanometer, among others.

Nurses describe (SCD5) [...] *some complex demands presented by patients, which were not described in the initial form. When this happens, a face-to-face service is scheduled due to the complexity. During the service, the professional can send recipes, exam requests, guidelines and other documents through the whatsapp® messaging application.* The teleconsultation is recorded in the medical record, following the SAE plus the means/instruments used to carry it out, the day with the start and end time of the service as recommended in art. 4 of Resolution/COFEN N° 634/2020.

About the consent form: twelve (63.1%) respondents described that they ask verbally or in writing, in the Whatsapp conversation, about the patient's consent to carry out a teleconsultation and also mention the importance of recording this consent in the patient's medical record; five (26.3%) nurses clarified that they know about the existence and importance of consent, but do not use it; Another two (10.5%) nurses chosen not answer this question.

### **Teleconsultation Process**

Regarding the teleconsultation process, the participants described how it is performed, stages of the nursing process, difficulties encountered, among other aspects.

[...] *the patient's demand is evaluated to identify the possibility to solve it through teleservice, then they are separated by specialty (medical and nursing) and passed on to professionals. Next was scheduled, with prior notice to the patient if he/she agrees with the modality and time. It is requested that the service be carried out in a quiet place, which maintains privacy, where the user can hear and see the professional. The patient's medical record is briefly analyzed before care. It is prioritized that the service be carried out by video call using whatsapp, or using the Whereby virtual platform. Occasionally, there is an internet connection failure, when this happens, it is performed a telephone call, without video. During care, the steps of the nursing process are followed and nursing protocols are used with some adjustments. Physical assessment is performed with self-measurement of anthropometric data, blood pressure with a device at home - when available, and other actions within the possibilities. If, at the time of the teleservice, there are additive demands or alarm signals that require a physical examination in person, this service is rescheduled in a face-to-face form. Furthermore, more investigation about these demands can be carried out, including the request for photos or documents regarding the complaint, in order to verify what types of care and waiting time will be given to that patient. Still, the record is made in the medical record in a structured way with the steps of the nursing process and signaling that it was through teleconsultation. Teleconsultation is not always carried out by call, sometimes it is carried out by text message, when it happens in this way, questions are sent about the clinical situation by Whatsapp itself, being sent one message at a time, avoiding doubts. If necessary, it is requested to send photos or exams for the complementary evaluation. Quick messages are commonly used, as well as sending materials according to the users' need, as prescriptions, exams and guidelines (CSD3).*

For eighteen nurses (94% of the participants), teleconsultation is considered a tool that expands access to users, allowing an appointment without the need to go to the unit. But it is also considered a tool that complements face-to-face care, which helps in health promotion, prevention and surveillance.

### **Instruments used during the teleconsultation**

During the participants' previous responses, the number of different instruments used by them in their work process was notorious. These instruments have different ways of viewing, accessing, login and passwords, working method, among other aspects. Therefore, we asked the nurses to describe the instruments used:

*[...] I use Google forms®, WhatsApp®, e-mail, nursing protocols, the Celk Saúde® medical record system, digitized materials, PACK (practical guide used in the county's PHC), voice messaging resource, video call, Guide teleconsultation advisor from Florianópolis (2020), Assistance guide for primary care (2020), consent form, BMJ best practice, SISCAN, Whereby platform, Google docs®, Google drive®, computer, cell phone and landline phone (CSD4).*

*Still, to carry out remote care, some instruments mentioned by nurses are used. WhatsApp® is the main instrument, installed on the teams' smartphones (CSD5).*

*[...] the use of e-mail, medical record system, Whatsapp Web platform, nursing protocols and care guide are common during consultations. Landlines, cell phones belonging to another team, government platforms such as SISCAN or SISREG and cloud storage systems such as Google Drive® are often used, as evidenced in the nurses' discourse (CSD4).*

All these new instruments do not replace those previously used. The face-to-face consultation still happens daily in the nurses' agendas and the management processes of the health services still imply in nurses' work time.

Some participants mentioned as a suggestion the creation of integrated tools to the medical record to facilitate the professional to send files as a consent form and important documents. In addition to ensuring greater safety for the patient, it would enable the archiving of teleconsultations and these documents directly in the medical record. This system would still need to be easily accessible for patients and with a good internet connection for remote care.

### **Potential and challenges identified during the teleconsultation in the PHC**

Regarding the potential and challenges of teleconsultation, the findings are summarized in the speeches that follow, starting with the challenges and difficulties.

*[...] there are many challenges, among them are the difficulty of handling the new Whatsapp® tool or Whereby platform (for professionals and for users), conducting the teleconsultation, limitation of the physical examination, internet instability, excessive noise and lack of privacy during the call, high demand for face-to-face consultations added to high demand for virtual consultations and limited human resources, complex demands to be understood by teleconsultation, lack of information in the demand description, communication difficulties, emergence of technological problems during consultations, lack of infrastructure (1 cell phone per team, few computers, technological limitations). Some consultations become more extensive due to the facility of the patient to put all existing complaints in their daily life in the teleconsultation, this makes the resolution process difficult and, sometimes, it is necessary to schedule a face-to-face consultation for the same patient (CSD5).*

Health communication has a fundamental role in the professional practice of nurses. When it comes to a remote consultation, communication becomes even more crucial, because the nurse does not always have access to all the patient's gestures/expressions. Communication needs to be clear and objective, in order to minimize possible confusion with the information provided about the

health-disease process. This communication is not always effective. Therefore, we question the main communication difficulties encountered by nurses.

They affirm that [...] *many patients have difficulty in writing, reading, some patients have another native language, in addition to the difficulty in handling cell phones or computers. Some patients do not see emails or messages in time for their scheduled appointment. There are also some communication problems and, perhaps, patients come in person at the time of the scheduled teleconsultation, they send a message on weekends asking for an answer* (CSD6).

Regarding the potential of this remote service, the participants were unanimous about expanding access to health actions for users and also highlighted some other positive points, as described below:

[...] *the teleconsultation allowed the expansion of access for users, reduction of exposure to risk environments to COVID-19, facilitated contact between patients and teams, optimizes/facilitates some specific care, a route of quick information between the health unit and its patients, possibility of sending materials, information leaflets, prescriptions and documents to patients, increases the relational link with health teams, possibility of carrying out telework for professionals complying with social isolation/detachment for health reasons, allows results of exams evaluation and also allows the follow-up of patients with chronic diseases/mental health. Teleconsultation has the potential to identify the patient's routine and, sometimes, to identify the environment in which the user is inserted - household* (CSD7).

When asked to evaluate remote care during the pandemic, differences were found between the participants, which gave rise to collective discourses eight, nine and ten.

Some consider that [...] *it is a useful and important tool, due expands access, prevents patient displacement to the unit, reduces unnecessary exposure for professionals and patients during the pandemic, enables active search, increases the relational link with patients and enables quality and continuity of care* (CSD8).

Other participants consider that [...] *initially there were many barriers, however it is a tool of great potential and benefit for patients and professionals. However, it still needs to be better structured to continue being carried out after the pandemic. Currently, teleconsultation is compromised due to the high demand for consultations in the care room of patients with respiratory symptoms* (CSD9).

Some professionals consider that [...] *it is not being resolved due to disorganization in the implementation of the tool, work overload and poor physical examination* (CSD10).

In addition to the advantages, regarding innovation, were described some challenges. [...] *the lack of knowledge/ability to handle tools and instruments, such as Whatsapp® and Google forms, is common and recurrent. As well as problems with the internet connection. Instabilities with the internet occur both in the health service and in the homes of users and teleworking professionals* (CSD5).

[...] *currently, each team has a cell phone to be shared among professionals, often consisting of a doctor, a nurse, one or more nursing technicians and one or more community health agents. As they only have one cell phone, the team needs to share this work tool. This was evidenced as a challenge for nurses* (CSD5).

[...] *another difficulty described by respondents is the ability to conduct remote care. Many patients do not respect the rules for performing in a safe and private place. Sometimes there is too much noise and lack of privacy. With this, the professional is more concerned with the questions asked. In addition, patients take the opportunity to report various demands for ease of access. This directly implies the process of resolving demands, making the nurse's work even more difficult* (CSD5).

In addition to all the existing complexity in nursing teleconsultation, there are still new communication problems in the face of existing barriers in an electronic medium. Among them, can be mentioned distrust, lack of bond with the patient and difficulty in interpretation (as described in CSD6).

[...] some participants cited teleconsultation as an important tool in the follow-up of compensated chronic patients already known by the team. Users with, for example, Systemic Arterial Hypertension or Diabetes Mellitus who need semi-annual/annual follow-up, to renew prescriptions for continuous use and/or check their health-disease status, can be approached by teleconsultation (CSD13).

Among the services considered as viable and resolving in the perception of the participants are: the monitoring of patients with diseases with compulsory notification; active search for patients not found; solving doubts about symptoms, medications and their side effects; care for users with various complaints, as long as they do not show signs and symptoms of alert/severity; and follow-up of compensated chronic patients already known by the team.

One of the questions on the form was referring to teleconsultation becoming a post-pandemic service modality. Although this remote care goes through some challenges, the nurses believe so and explain why:

[...] yes, due it expands users' access with greater agility, guaranteeing effectiveness and security. It also allows the optimization of some processes, in addition avoiding unnecessary displacements of users to the health unit. With this, teleconsultation allows greater integration and relational link between patients and the health team. But it still needs to be better structured with availability of professionals, organization of appointments and exclusive time determined for carrying out this activity to avoid overlapping the other duties of the nurse (CSD11).

### **Applicability: services that can be resolved through teleconsultation**

Observing the potential and dissemination of teleconsultation in primary care, as well as its limits, recognizing that not all demands can be solved by remote care, the participants were asked about which appointments can be solved through teleconsultation.

Some nurses responded that [...] it is currently widely used to monitor confirmed and suspected COVID-19 patients, but it is also viable in active search, solving general doubts about symptoms and medications, renewing prescriptions, providing care orientation and first evaluation/contact with the health team. It is still possible to meet some demands for family planning, mental health, prenatal care without signs of seriousness, routine consultations for children, acute complaints without signs of seriousness, evaluation and request for exams, smoking cessation, among others. It is also an important tool in health promotion and prevention (CSD12).

Other participating nurses believe that [...] teleconsultation is viable to carry out follow-ups of patients already known to the team, to carry out the monitoring of patients with notifiable diseases, compensated chronic patients such as Systemic Arterial Hypertension and Diabetes Mellitus, patients with symptoms of COVID-19 during the pandemic, monitoring of mental health cases, doubts about reproductive planning and contraception, among other demands (CSD13).

It was still considered pertinent to question about the impracticable and/or non-resolving consultations to be carried out by teleconsultation. Nurses described that services [...] that require a physical examination or with signs of severity are impossible for teleconsultation, such as risk prenatal care, childcare, consultations which involve exam collection, gynecological complaints, procedures and urgency complaints such as chest pain, dyspnea and others. In addition to people who do not master digital platforms or have difficulty understanding (CSD14).

## **DISCUSSION**

Teleconsultation is a technology which, with the Covid-19 pandemic, assumed relevance in the work process of Brazilian nurses. The reality studied demonstrates that the service flow is well disseminated by the health units in the municipality studied. This finding is close to that found in other

studies that also register the expansion of teleconsultation in the work process in health and nursing. Through CSD1, we can observe that nurses receive users' demands through an instrument (google form) filled in with symptoms/complaints. The team is also free to signal any special case that needs attention/preferred service. In this context, in order to prevent patients with other comorbidities or health needs from being exposed to environments with a high risk of contagion by the coronavirus, remote care was intensified. This measure was particularly targeted at elderly people with chronic illnesses, who are more vulnerable and need more frequent care<sup>18</sup>.

The incorporation of teleconsultation corroborates with studies related to the nurses' work process, understanding it as intentional and conscious aiming the determined object transformation into a determined product, through the intervention of the human being, using instruments. Thus, the actions of the nursing professionals promote changes to obtain a planned result, and this includes the care of individuals, the family and the community. In this process, nurses use different knowledge and equipment available as work tools, according to specific needs<sup>19</sup>. Thus, the nurse's work process aims to promote, maintain and recover health using the Systematization of Assistance and nursing procedures so that individuals reach health or death with dignity and comprises three elements: the activity suited to an end - work; the matter to which the work applies - object of the work; the means and instruments that facilitate the work<sup>19</sup>.

According to 2nd art. of Resolution/COFEN N° 634/2020, the electronic means used for teleconsultation must be sufficient to safeguard, store and preserve the electronic interaction between the nurse and their patient, respecting the all integrity aspects of the information resulting from the consultation, which will constitute the patient care record<sup>7</sup>. whatsapp® respects some requirements, as the call is not stored in the history, ensuring confidentiality between professional and patient. Written messages are filed in the conversation history and stored.

In the same view, from the perspective of the services, studies indicate that the implementation of teleassistance implies ethical care; investments in technological resources; in sizing of physical space, training of professionals, agreement and articulation with the health network and dissemination of services to the population, which cannot be disregarded<sup>20-21</sup>. Already, from the perspective of the worker, it is known technological innovations in the health system lead to an increase in the workload of professionals, due the necessity to train professionals for handling. This increase is directly linked to the worker' health, increasing the possibility of errors, putting the safety of professionals and users of health services at risk<sup>14</sup>.

Teleconsultation brought numerous advantages to health services, especially to PHC and to users. Among the potentialities highlighted by nurses is the expansion of access; improving geographic accessibility and organizational accessibility of services. Geographic accessibility reflects the distance between the population and resources, and can be measured by distance, displacement time, transport cost, among other constraints. Organizational accessibility encompasses the characteristics linked to the way in which health services are organized that hinder or facilitate people's ability to use them. It includes aspects such as: time to get an appointment, type of appointment, working shifts, time to do laboratory tests, continuity of treatment<sup>22</sup>.

Professionals can carry out their work from anywhere with internet access. This has considerably changed the scenario of health services. Became telework possible during distance due to health problems, in periods of social isolation, among other moments. But it was not only advantageous for professionals, users were also benefited. Often, communities are territorially extensive, with hills and mobility problems. Teleconsultation allows users to access the health system without leaving their homes, without having to go to the health unit, using only a cell phone and an internet connection. It is possible to have an appointment, receive a health certificate, prescription for medication/care and guidance without having to leave the house, pay for a bus ticket or miss work<sup>10,23-24</sup>.

The teleconsultation supports the attributes of PHC (first contact, longitudinality, integrality and coordination). Ensures user accessibility during the coronavirus pandemic (Sars-Cov-2). Accessibility can also be conceptualized as the user's ability to obtain health care whenever they need it, in an easy and convenient way<sup>22</sup>. It contributes to longitudinality, offering this service with integrality regardless of the pandemic situation, following the SNC, ensuring agile, safe and effective care<sup>6,22</sup>. But it also provides coordination, articulating services and actions to control the coronavirus (Sars-Cov-2)<sup>22</sup>.

Teleconsultation also contributes to health surveillance, enabling patient care and monitoring, allowing the monitoring of users who need this attention. Especially during the COVID-19 pandemic, teleconsultation proved to be fundamental to monitor and follow-up patients with suspected or confirmed cases of coronavirus who need mandatory notifications<sup>20,25</sup>.

Health communication through a technological instrument needs to be clear and objective. Sometimes, users have reading and writing difficulties, use an informal language or have another native language (other than Portuguese). In person during the consultation, it is possible to observe in the facial expression or gestures, the understanding on the part of the user. In teleconsultation, this is not always possible to observe. The professional needs to be attentive to the clear and objective dialogue, with strategic pauses, opening space for the user to make some observation during the teleservice. Even with the aforementioned challenges, the nursing teleconsultation has proved to be relevant in the context of PHC. It expands access to the health service, ensures agility, effectiveness and safety in care, allows greater integration and emotional link with users<sup>26-28</sup>.

Teleconsultation proved to be effective in monitoring patients with diseases with mandatory notification, active search for patients who were not located and solving doubts about symptoms and medications/side effects. The new modality of care is also applied to patients with different complaints, as long as they do not show signs and symptoms of alertness/severity.

It should be noted that the findings of this study are limited by the short time elapsed between the implementation of the technology and data collection, as well as the context in which it was incorporated. Future studies are suggested that include a longer period of implementation of nursing telecare.

## CONCLUSION

Teleconsultation benefits the population, as it expands users' access to health services, promoting viable, which can be quality, safe and effective care. On the one hand, teleconsultation expanded users' access to health services, facilitated communication and streamlined services to the population, until then suspended due to the health emergency; In addition, it is necessary to consider that telecare in the nursing area is a recent technological innovation, and as such, it reveals external causes: possible failures in communication between the professional and the user; internet connection problems; lack of ability to travel from new tools; lack of privacy and excessive noise and distrust of users about the service provided.

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## NOTES

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### CONTRIBUTION OF AUTHORITY

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### APPROVAL OF ETHICS COMMITTEE IN RESEARCH

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### CONFLICT OF INTEREST

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