



### **EXPERIENCE REPORT**

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# DATA COLLECTION IN MASTER'S AND DOCTORATE'S RESEARCH IN COVID-19 TIMES

## COLETA DE DADOS NAS PESQUISAS DE MESTRADO E DOUTORADO EM TEMPOS DE COVID-19

# RECOGIDA DE DATOS EN INVESTIGACIÓN DE MÁSTER Y DOCTORADO EN TIEMPOS COVID-19

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### **ABSTRACT**

Objective: to describe the experience involving the methodological and operational adaptations carried out for the continuity and development of research of theses and dissertations during the 2019 coronavirus disease pandemic in Postgraduate Health Programs at a Public University in the Southern Region of Brazil. Method: experience report of the adaptations carried out by the postgraduate students for the continuity of the research, carried out in August 2020. Results: there were adaptations to the approach of the participants, online data collection, development of skills for the use of technologies of information and communication, submission of amendments to the Research Ethics Committee, and extension of the academic calendar. Scholars were the most affected with negative impacts on daily life. Conclusion: the maintenance of research activities required adjustments to the original project, and information and communication technologies made it possible to continue in the midst of the pandemic, requiring attention to data security.

**Descriptors**: Coronavirus Infections; Data collection; Research; Education, nursing, graduate; Information technology

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### **RESUMO**

Objetivo: descrever a experiência envolvendo as adaptações metodológicas e operacionais realizadas para a continuidade e desenvolvimento de pesquisas das teses e dissertações durante a pandemia da doença do coronavírus 2019 em Programas de Pós-graduação em Saúde de uma Universidade Pública da Região Sul do Brasil. Método: relato de experiência das adaptações realizadas pelos pós-graduandos para a continuidade das pesquisas, realizado em agosto de 2020. Resultados: houve adaptações para a abordagem dos participantes, coleta de dados de modo online, desenvolvimento de habilidades para o uso das tecnologias de informação e comunicação, envio de emendas ao Comitê de Ética em Pesquisa, e prorrogação do calendário acadêmico. Os bolsistas foram os mais afetados com impactos negativos na vida diária. Conclusão: a manutenção das atividades de pesquisa exigiu ajustes no projeto original, e as tecnologias de informação e comunicação viabilizaram a sua continuidade em meio a pandemia, necessitando atenção para a segurança dos dados.

**Descritores:** Infecções por coronavírus; Coleta de dados; Pesquisa; Educação de pós-graduação em Enfermagem; Tecnologia de informação

### RESUMEN

Objetivo: describir la experiencia de las adaptaciones metodológicas y operativas realizadas para la continuidad y el desarrollo de investigaciones de tesis y disertaciones durante la pandemia de la enfermedad por coronavirus 2019 en Programas de Posgrado en Salud de una Universidad Pública de la Región Sur de Brasil. Método: relato de experiencia de las adaptaciones realizadas por los estudiantes de posgrado para la continuidad de la investigación, realizada en agosto de 2020. Resultados: hubo adaptaciones al enfoque de los participantes, recolección de datos en línea, desarrollo de habilidades para el uso de tecnologías de información y comunicación, presentación de enmiendas al Comité de Ética de la Investigación y ampliación del calendario académico. Los escolares fueron los más afectados con impactos negativos en la vida diaria. Conclusión: el mantenimiento de las actividades de investigación requirió ajustes al proyecto original, y las tecnologías de la información y la comunicación permitieron continuar en medio de la pandemia, requiriendo atención a la seguridad de los datos.

**Descriptores**: Infecciones por Coronavirus; Recolección de datos; Investigación; Educación de postgrado en enfermería; Tecnología de la información

### INTRODUCTION

In December 2019, in China, the emergence of the new coronavirus (SARS-CoV-2) was observed, responsible for the pandemic of coronavirus disease 2019 (COVID-19), which is an infectious disease, highly contagious, of rapid dissemination and that causes inflammation in the respiratory system. The transmission of SARS-CoV-2 occurs through contaminated droplets of

oropharyngeal secretions from one infected person to another, requiring the adoption of social distancing measures to prevent contagion, adoption of hygiene measures and awareness of the population to stay at home.<sup>2</sup>

Since the emergence of COVID-19, humanity has faced a serious global health crisis, which has required adaptations to the numerous changes imposed by the pandemic. Adaptations can be observed in people's daily

lives, in the social, economic and family spheres<sup>3</sup>, with the strengthening of the already emerging process of virtual connections, also bringing implications for conducting academic/scientific research.

Due to preventive measures of social distancing, data collection in academic research planned through groups, workshops and face-to-face interviews were made unfeasible in numerous scenarios, which brought impasses in the development of research. The scientific field was compelled to expand data collection strategies to contemplate adaptations and new resources that would allow the continuity of research in a pandemic scenario.<sup>4-5</sup>

A quick search on websurvey and COVID-19 in the PubMed/Medline database, referring to the first six months after the diagnosis of the first case of COVID-19 in China, returned 146 articles that certainly do not represent the totality of studies carried out worldwide, but they demonstrate the speed of planning a survey and obtaining the results<sup>6</sup>, boosting many studies with online data collection.

The performance of online data collection, that is, the one carried out through applications and programs in a virtual environment using the internet or telephone<sup>7</sup>, can be seen as one of the few possibilities for

the continuity of researches that use as a data collection method interviews, but there is still a shortage of publications on alternative methods for conducting non-face-to-face research in times of COVID-19.4 The online space can be considered a field of investigation into how human relationships are developed in digital environments, thematic that needs to be understood, and for that, it is necessary to start with the knowledge involving online data collection in surveys.8

this Higher In new scenario, Education Institutions (HEIs) that develop their attributions based on the triad "teaching, research and extension", have never been so important for the development of studies and dissemination of knowledge about COVID-19, in addition to other priority themes for the context of public health. 9-10 In view of this, it was also necessary to face the challenge of maintaining the performance of all its attributions. Thus, the objective is to describe the experience involving the methodological and operational adaptations carried out for the continuity and development of theses and dissertations research during the 2019 coronavirus disease pandemic in Postgraduate Programs in Health of a Public University in the Region South of Brazil.

### **METHOD**

Study with a qualitative, descriptive approach, in the form of an experience report, developed in August 2020, by a group of graduate students linked to the stricto sensu Graduate **Programs** of the Nursing Department of the Federal University of Santa Catarina. In the midst of the measures adopted to contain the spread of the new SARS-CoV-2 coronavirus, the students were faced with the impossibility of accessing health services to carry out data collection, and were looking for new options and adaptations for research continuity.

The study reports the main challenges experienced by graduate students anticipated the development who qualitative research, or with a qualitative stage, through face-to-face interviews as a data collection strategy. In search of assertive solutions, discussions were held with a group of graduate students linked to a supervisor, who were in the period of data collection, that is, the second year of the master's degree, and the third and fourth year of the doctorate. In addition to their own experiences, the graduate students also exchanged information with other colleagues from the same program. The issue involving the rapid need for adaptation was discussed in virtual meetings

via the Google Meet® and Whatsapp® platform, and in two research groups,

#### **RESULTS**

With the social distance imposed by the pandemic, there was a stoppage and consequent delay in data collection for a period that varied from two to seven months, depending on the initial schedule of each student, being necessary to use the extension added by the development agencies and the calendar of Graduate Programs.

Thus, it was necessary to carry out some type of adaptation in the original research project, and the main adaptations were the inclusion of Information and Communication Technologies (ICT) or even the adherence to a new data collection strategy, adjustment in the schedule, revision of the Informed Consent Form (TCLE), adjustments in the description of the research method, and even the reformulation of data collection instruments.

Access to potential participants was one of the difficulties that stimulated the inclusion of ICT for dissemination and invitation to participate in the research, mainly using Whatsapp® and e-mail. In addition to these, other ICT were also used for sending the informed consent form and for data collection, namely: Google Forms®, Google

Meet®, Microsoft Teams®, Zoom® and Skype®. The use of one or more ICT required the development of new skills by graduate students who sought help from colleagues, advisors or professors, used tutorials, watched videos on Youtube® or lives, or even learned by doing.

In view of the adaptations, referrals related to ethical aspects were necessary, such as sending an amendment to the Ethics Committee for Research with Human Beings. Furthermore, negative repercussions were observed in aspects of daily life, such as social, emotional, professional, family and financial aspects, especially for scholarship holders. Many students had to return to their hometowns and readapt their new study and research routines to new personal and family demands.

### **DISCUSSION**

The COVID-19 pandemic has triggered several impacts on society as a whole, including the expansion in the use of technologies for contact between people, demanding new processes, such as at work and in research. Additionally, other contingency measures have been adopted at the University to adequately face the pandemic, adapting activities and seeking the continuity of tasks remotely and with the

support of ICT, in addition to extending the academic calendar.

has contributed to the increasingly widespread use of online media, as well as to communication through computers, serving as a resource for data collection in research. The internet offers an interface for the relationships between people, facilitating and enabling new forms of data collection and dissemination of knowledge, overcoming challenges such as the distance between different geographic spaces, or enabling you to be in environments of your choice, and allowing access to research at different times, simultaneous or not between researcher and participant<sup>8</sup>, overcoming barriers of time and space.

Scientific research seeks answers to questions in different areas of knowledge, and has collaborated to minimize the impacts in situations such as the pandemic, a true race that requires structure, resources and funding for its maintenance. The answers range from general questions to government responses, and are based on knowledge and scientific evidence that make it possible to reflect and develop strategies that adapt to each reality and present better results.<sup>9</sup>

In our experience, among graduate students who suffered a negative financial impact due to the pandemic, scholarship holders were the most affected, which indicates that these students need more support in crisis situations. In this perspective, the development agencies extended the duration of the grants, however, although this is a significant contribution, we continue to experience a scenario of uncertainties, which requires going in search of more options that guarantee the sustainability of research in the long term .

The reduction in people's mobility and interactions that require physical proximity, that is, social distancing<sup>2</sup>, enabled virtual connections to be strengthened, so online data collection proved to be an alternative to enable the continuity of research as well as the development of new studies, attributing speed and overcoming physical distances.4 Furthermore. the transition between face-to-face data collection methods to "socially distant" methods must take into account that researchers need to feel prepared and comfortable for their use.<sup>5</sup>

The incorporation of ICT in people's daily lives requires adaptations that have contributed to the development of new skills, especially for qualitative studies with online data collection. 4-5 Our experience allows us to state that there is a need for ICT to be increasingly intuitive and self-explanatory. The search forsharing platformsvideos such as

YouTube® signal the search for learning methods that use image and sound, and the request for help from colleagues and teachers demonstrates the importance of interaction for learning. These issues refer to the importance of increasingly inserting the ICT theme in the educational system, as well as the development of digital skills.

ICT for conducting interviews and online meetings such as Google Meet®, GoToMeeting®, Zoom®, Skype®, Webex®, instant messaging applications and voice calls such as WhatsApp® are among the most used in Brazil and abroad<sup>4</sup>, a result that comes close to our experience using Google Forms®, Google Meet®, Microsoft Teams®, email, Whatsapp®, Zoom®, and Skype®.

In this sense, an issue that deserves special attention is the ethical aspects of the research. Most of the recommendations are the same as for face-to-face interviews, but in addition to the commitment to ethical issues, one must consider that participants may be affected by the research, and therefore greater awareness is needed about the care needed to conduct online interviews, observing the characteristics of the virtual environment and limitations on confidentiality, as there is a potential risk of data breach.<sup>7</sup>

Among the advantages of online data collection, audiovisual resources enable a

similar connection between those involved. For research that was ongoing, changes in the collection format required the submission of an amendment to the Research Ethics Committee. It is important for research participants to keep a copy of the TCLE signed by the researcher, specifying the preservation of integrity and assistance to those involved.<sup>4-5</sup>

#### **CONCLUSION**

There was an impact on carrying out the research and on aspects of the life of graduate students in the face of the Covid-19 pandemic, requiring measures to maintain research activities, with adaptations, new referrals or adjustments to the original projects, thus avoiding the stoppage of research activities activities and the shortest possible delay in deadlines for completion and defense of theses and dissertations.

To this end, information and communication technologies were used that made it possible to contact the research participants and collect data online, which overcame the barrier of geographic distance even for graduate students who needed to return to their homes of residence. origin. In addition, it was necessary to send an amendment for approval by the Research Ethics Committee and to be attentive to

precautions related to data security, informing participants about the potential risks of violation.

Postgraduate scholarship holders are the students who require the most support during times of crisis, and the extension of the duration of scholarships by development agencies favored the continuity of research. Another measure adopted by the University was the extension of the academic calendar, which granted the necessary time for graduate students to adopt security measures and adapt to the use of technologies.

Finally, it emphasizes the importance of developing skills for the use of information and communication technologies, and that they are increasingly self-instructive, with adequate usability, and inserted in the educational system. As limitations to the present study, it is considered that an experience report in a single Brazilian University does not allow generalizing the other alternatives results, and not contemplated in this study may have been used. However, it is believed that this study can contribute to researchers who, at some point in their career, are faced with the need to perform data collection remotely, especially in qualitative research.

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