



Training of nurses during the COVID-19 pandemic in southernmost Brazil: a cross-sectional study

Formação de enfermeiros durante a pandemia de COVID-19 no extremo sul do Brasil: estudo transversal

Formación de enfermeras durante la pandemia de COVID-19 en el extremo sur de Brasil: estudio transversal

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ABSTRACT

Objectives: To identify the strategies adopted to proceed to education nursing during the COVID-19 pandemic. **Methods:** A cross-sectional study was carried out with coordinators of undergraduate nursing programs in the Rio Grande do Sul, Brazil. Data collection was carried out online between November 2020 and March 2021. **Results:** A total of 48 coordinators participated. Higher Education Institutions adopted Emergency Remote Education in an average time of 26.9 days after determining social distance and the median of 45 days concerning mandatory internships. In 2020/1, 81.3% of institutions kept students in this activity, and in 2020/2, the number increased to 85.4%. Direct supervision was carried out in 50% of institutions in internships. Access to platforms and digital libraries and asynchronous access to content stood out as an aid to students. **Conclusion and implications for practice:** Strategies for continuity of teaching included adopting an online strategy, resumption of curricular internships, reducing the number of students per class in practical classes, and student aid. The present study involved the identification of initiatives that ensured nursing education in the context of the pandemic, encouraging the need for new investigations that focus on assessing the impact of such measures on education quality.

Keywords: Coronavirus; Education, Nursing; Nursing; Pandemic; Teaching.

RESUMO

Objetivos: identificar as estratégias adotadas para a continuidade da formação de enfermeiros durante a pandemia de COVID-19. **Métodos:** estudo transversal, realizado com coordenadores de curso de graduação em Enfermagem do Rio Grande do Sul, Brasil, e coleta de dados *on-line*, entre novembro de 2020 e março de 2021. **Resultados:** participaram 48 coordenadores; as Instituições de Ensino Superior adotaram o Ensino Remoto Emergencial no tempo médio de 26,9 dias após a determinação do distanciamento social e a mediana 45 dias em relação aos Estágios Obrigatórios, sendo que em 2020/1 81,3% das instituições mantiveram alunos nesta atividade e em 2020/2 o número passou para 85,4%. A supervisão direta, nos estágios, foi realizada em 50% das instituições. Como auxílio aos estudantes, destacaram-se o acesso a plataformas e biblioteca digital, e acesso assíncrono ao conteúdo. **Conclusão e implicações para a prática:** as estratégias para a continuidade do ensino incluíram a adoção de estratégia *on-line*, a retomada de estágios curriculares, a redução do número de alunos por grupo nas aulas práticas e a disponibilização de auxílio aos estudantes. O presente estudo identificou iniciativas que garantiram o ensino de Enfermagem no contexto pandêmico; há necessidade de novas investigações que avaliem o impacto de tais medidas na qualidade do ensino.

Palavras-chave: Coronavírus; Educação em Enfermagem; Enfermagem; Ensino; Pandemia.

RESUMEN

Objetivos: identificar las estrategias adoptadas para continuar la formación de enfermeras durante la pandemia de COVID-19. **Métodos:** estudio transversal, realizado con coordinadores de cursos de pregrado en Enfermería en Rio Grande do Sul, Brasil, y recolección de datos en línea, entre noviembre de 2020 y marzo de 2021. **Resultados:** de un total de 48 coordinadores participantes, se identificó que las Instituciones de Educación Superior adoptaron Educación Remota de Emergencia en un tiempo promedio de 26,9 días después de la determinación del distanciamiento social y la mediana de 45 días en relación a las Pasantías Obligatorias. En 2020/1, el 81,3% de las instituciones tenían alumnos en esta actividad y, en 2020/2, el 85,4%. La supervisión directa, en pasantías, se realizó en el 50% de las instituciones. Como ayuda a los estudiantes se destacó el acceso a plataformas y biblioteca digital, y el acceso asincrónico a contenidos. **Conclusión e implicaciones para la práctica:** Las estrategias para la continuidad de la docencia incluyeron la adopción del formato en línea, la reanudación de las prácticas curriculares, la reducción del número de alumnos por clase en las clases prácticas y la asistencia al alumno. El presente estudio implicó la identificación de iniciativas que garantizaron la formación en Enfermería en el contexto de la pandemia, incentivando la necesidad de nuevas investigaciones que se centren en evaluar el impacto de tales medidas en la calidad de la educación.

Palabras clave: Coronavírus; Educación en Enfermería; Enfermería; Enseñanza; Pandemia.

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Submitted on 12/08/2021.

Accepted on 02/25/2022.

DOI: <https://doi.org/10.1590/2177-9465-EAN-2021-0447en>

INTRODUCTION

Intense changes have marked the last decades in the field of health, whether driven by cultural phenomena or guided by the advancement of science and technology, also impacting on the incorporation of more advanced methods for the prevention, diagnosis and treatment of diseases.¹ Such advances modify the care process in the nurses' clinical practice, requiring continuous updating and improvement of their knowledge.

Given the aforementioned, when we are affected by the largest public health crisis of our generation on a global scale, with the advent of the Coronavirus Disease (COVID-19) pandemic, detected in China in December 2019, a challenging scenario is assumed, which fosters the need for constant improvement and critical action by health professionals.² If, on the one hand, it is intrinsic in nurses' daily work to improve their work processes and the characteristic found for molding themselves due to the adversities, updates regarding new organizational strategies and arrangements by institutions, teams and health professionals have never been so urgent and frequent as in the current context.

In the meantime, not only did the health field need to constantly reinvent itself, but also other segments, with education being one of the most affected sectors with regard to the deployment of actions that sought to reduce the negative impacts caused by the measures adopted to combat the pandemic. With regard to Higher Education Institutions (HEIs), the harms to be minimized related to public health are added to the equation, especially the pedagogical ones, reflected in the teaching and learning quality. In this context, we highlight quality and safety regarding the teachers' decisions regarding their way of conducting the academic disciplines, which would need to undergo changes in planning in order to achieve the desired professional training objectives.³

In the midst of the pandemic, Emergency Remote Teaching (ERT) was put into vogue, bringing to light necessary issues regarding new perspectives and the possibility of reinventing itself in the context, creating ways to ensure teaching-learning continuity and quality since, in addition to technical-scientific skills, professional nurses need leadership capacity, global vision, use of evidence-based practice, patient-centered care and communication skills, among others.^{4,5} The use of Information and Communication Technologies (ICTs) has contributed to the resumption of activities in ERT, through the establishment of pedagogical strategies subsidized by the use of the Internet, while at the same time requiring efforts to ensure means of reducing the harms arising from this teaching-learning process.⁶

From the perspective of Nursing education, ERT only partially meets the teaching needs, as these professionals necessarily need to practice skills that involve handling of diverse equipment and materials intended for health care, as much as they need to exercise interpersonal relationships. Thus, practical classes in the laboratory and in health services, as well as mandatory curricular internships, are essential for the preparation of professionals to take care of human lives. Ensuring such a practice in a pandemic scenario represents a challenge. In this context, the objective of

this study was to identify the strategies adopted for the continuity of Nursing education during the COVID-19 pandemic in the state of Rio Grande do Sul.

METHOD

This is a cross-sectional study, guided by the STROBE tool. Data collection took place between November 2020 and March 2021, together with coordinators of undergraduate Nursing courses in Brazil. For this paper, the answers from the state of Rio Grande do Sul were listed, which was constituted as the locus for this research.

In this state there are 56 Higher Education Institutions (HEIs) that offer undergraduate degrees in Nursing in the face-to-face modality.⁷ For a 95% confidence level, 5% margin of error and sample heterogeneity, the expected "n" was 49 coordinators of undergraduate Nursing courses.

The exclusion criteria were as follows: inability to answer the questionnaire due to unfeasibility of Internet access; vacation and leave of any kind, and course coordinators who have been discontinued or have not started performing their duties.

All the possible participants were contacted via email, from the database of the Directorate of Education in Nursing of the Brazilian Nursing Association (*Associação Brasileira de Enfermagem*, ABEn), RS section. Additionally, a search was carried out in the institutions' websites or telephone contacts were made, with subsequent forwarding of an invitation via email. The invitation comprised a brief explanation of the research, followed by a link to a *Google* form containing a FICF, followed by the data collection instrument, consisting in 26 open and closed questions.

After collection, the data were extracted directly from the spreadsheet generated by the *Google* form, in Excel® format. This was organized, excluding duplicate answers, followed by statistical analysis, carried out with the aid of the *Statistical Package for Social Sciences* (SPSS), version 25.0.

The results were presented using descriptive statistics, in absolute and relative numbers; measures of central tendency (mean and median) and variability (standard deviation and interquartile range), with study of the symmetry of the continuous distributions, analyzed by the *Kolmogorov-Smirnov* test. An association analysis was performed between categorical variables, using Pearson's chi-square test or Fisher's exact test. Chi-square homogeneity test was used when comparing proportions of a single variable. The analyses involved comparison of continuous variables between the regions (independent groups), which were performed using the *Kruskal-Wallis – Post Hoc Dunn* test.

The research was approved by the Research Ethics Committee on 10/15/2020, under opinion number 4,341,226. The participants' consent was obtained by their signing of the Free and Informed Consent Form (FICF), immediately prior to online data collection, via *Google* forms.

RESULTS

Answers were obtained from 48 coordinators of the undergraduate Nursing courses in Rio Grande do Sul, Brazil. Regarding the administrative category, such courses came from private (n=19; 39.6%), community (n=14; 29.2%), federal (n=13; 27.1%), and philanthropic (n=2; 4.2%) higher education institutions.

The totality of the HEIs represented joined Emergency Remote Teaching (ERT), taking a mean of 26.9±48.1 (range: 0 – 180) days to resume theoretical classes through Information and Communication Technologies (ICTs). On the same data, the median was 5.0 (1st – 3rd quartile: 2.0 – 15.0) days.

Regarding synchronicity, a mean of 75.6 ± 21.8 (20 – 100)% and a median of 80.0 (60.0 – 95.0)% of synchronous classes in ERT were identified.

Regarding the mandatory Curricular Internships, from determination of social distancing, the median for the number of days that separated this determination from their resumption was 45.0 (1st – 3rd quartile: 16.0 – 90.0) days. As for the specific characteristics related to the internship, the items most frequently mentioned were the provision of personal protective equipment (PPE) to students and professors, each one reported by 77.1% (n=37) of the sample. Also noteworthy was the permission of the granting unit to resume the activities, with limitation of the

number of students per field, in 75.0% (n=36) of the HEIs, as can be seen in Table 1.

In the diverse information regarding the number of students in mandatory curricular internships, it was found that, in 2020/1, 81.3% (n=39) of the institutions kept students in this activity, while in 2020/2, this number increased to 85.4% (n=41).

Regarding the number of students, in 2020/1 the median was 29.0 (1st – 3rd quartile: 20.0 – 45.0) students, while in 2020/2 it was 28.0 (1st – 3rd quartile: 19.0 – 44.0) students.

Considering the number of students who carried out activities in the Brazil Counts on Me Strategic Action (*Ação Estratégica o Brasil Conta Comigo*, AEBCC), in 2020/1 there were 37.5% (n=18), and in 2020/2, 35.4% (n=17). Regarding the number of students in AEBCC activities, in 2020/1 the median was 4.0 (1st – 3rd quartile: 1.0 – 6.0), while in 2020/2 the estimate was 4.0 (1st – 3rd quartile: 1.0 – 10.0) days.

Regarding the percentage of workload completed at AEBCC, leveraged for mandatory curricular internships, the median was 15.0% (1st – 3rd quartile: 0.0 – 100.0%); however, it was found that 43.8% (n=21) of the institutions reported that no hour of completed workload was used. Information on AEBCC is found in Table 2.

The number of students in mandatory curricular internships was compared to the administrative category of the institution, and there was no statistically significant difference (p=0.582).

Table 1. Time to return to activities, PPE supply and conditions related to mandatory Curricular Internships. Rio Grande do Sul, Brazil, 2021. n=48.

Variables	Sample	
Number of days between social isolation and resumption of activities^A		
Mean±Standard Deviation (range)	63.9±64.8 (0 – 270)	
Median (1 st – 3 rd quartile)	45.0 (16.0 – 90.0)	
PPE supply^B		
The HEIs provided the necessary PPE to the students	37	77.1
The HEIs provided the necessary PPE to the teachers	37	77.1
The Internship Granting Unit (health service) provided the necessary PPE to the students	20	41.7
The Internship Granting Unit (health service) provided the necessary PPE to the teachers	7	14.6
The teachers provided the necessary PPE	4	8.3
The students provided the necessary PPE	13	27.1
Conditions for the occurrence of the mandatory internships		
The guiding professors performed direct supervision	24	50.0
The HEI hired nurses to carry out direct supervision	5	10.4
The guiding professors performed indirect supervision	18	37.5
The Internship Granting Unit allowed resumption of the activities, limiting the number of students per field	36	75.0
The Internship Granting Unit did not allow resumption of the activities	5	10.4
There was no supervision, as there were no curricular internships	5	10.4

SOURCE: Research data, 2021.

A: Percentages obtained based on the total sample; B: Percentages obtained based on the analysis of the number of occurrences of cases (multiple choice question).

Table 2. Number of students in mandatory Curricular Internships and in the Brazil Counts on Me Strategic Action. Rio Grande do Sul, Brazil, 2021. n=48.

Variables	Sample ^A	
Curricular Internships		
Number of students in Curricular Internships in 2020/1	39	81.3
Mean±Standard Deviation (range)	36.1±24.7 (8 – 120)	
Median (1 st – 3 rd quartile)	29.0 (20.0 – 45.0)	
Number of students in Curricular Internships in 2020/2	41	85.4
Mean±Standard Deviation (range)	34.7±25.1 (8 – 120)	
Median (1 st – 3 rd quartile)	28.0 (19.0 – 44.0)	
Number of students at AEBCC in 2020/1	18	37.5
Mean±Standard Deviation (range)	11.9±28.2 (1 – 122)	
Median (1 st – 3 rd quartile)	4.0 (1.0 – 6.0)	
Number of students at AEBCC in 2020/2	17	35.4
Mean±Standard Deviation (range)	12.5±30.7 (1 – 130)	
Median (1 st – 3 rd quartile)	4.0 (1.0 – 10.0)	

SOURCE: Research data, 2021.

AEBCC: *Ação Estratégica o Brasil Conta Comigo* (Brazil Counts on Me Strategic Action). A: Percentages obtained based on the total sample.

The participants were asked about the assistance provided to monitor classes in the ERT modality, and this information was compared with the institution’s administrative category. A statistically significant difference was identified in the “Access to digital platforms” item (p=0.011), in which, in the community institutions, 85.7% (n=12); and private institutions, 100.0% (n=19), this access was higher when compared to federal public institutions, 53.8% (n=7).

In the “Training for the use of digital platforms” item, it was verified that this aid, in the community institution, 78.6% (n=11), was significantly higher (p=0.039) when compared to the cases of the federal public institutions, 38.5% (n=5).

Regarding the provision of a physical library, the significant difference (p=0.043) occurred between private institutions, 36.8% (n=7), and federal public institutions, 7.7% (n=1). These findings can be seen in Table 3:

DISCUSSION

It was possible to observe that, although there was heterogeneity in the number of days for the resumption of theoretical education through the use of ICTs, establishing ERT, there was agility in the implementation of this new education modality, in which most of the classes occurred synchronously, pointing to a difference in the teaching adopted in the situation of public health emergency and Education at a Distance (EaD). Although the adoption of ICTs has been essential for the continuity of teaching during the pandemic and it has pointed to similarities in relation to EaD, its characteristics are closer to face-to-face education, due to student-professor the interaction in real time and the

methodologies used for to materialize the teaching-learning process.⁸ The proximity made possible through this range of tools can be considered assertive when considering that the National Curriculum Guidelines (*Diretrizes Curriculares Nacionais, DNCs*), common to courses in the health area, highlight the relevance of the integration of the teaching-service-community triad, giving rise to strengthening the links between academia/services and the population, so that the specific DCNs of the undergraduate Nursing program foster the significance of the training processes of Nursing professionals focused on care, highlighting the insurmountable use of pedagogies that provide characteristics such as autonomy, participation, dialog and political, critical and reflective engagement of future nurses.⁹

However, although theoretical classes have been resumed quickly through ICTs and their articulation consists in the effort to develop a teaching that considers the pedagogical needs related to the Nursing curriculum and its particularities, they are not sufficient to account for teaching of the profession, as this requires interpersonal relationships and immersion in the world of work to ensure the development of skills necessary for the professional practice. It is understood that such spaces are basic for the construction of professional identities that go beyond the dimension of care production, and contemplate a set of knowledge that is articulated with the health reality of the population, therefore being insurmountable for the development of primary skills in the professionals.¹⁰ In addition, it is understood that deployment of these competences requires field experience, in a face-to-face manner, and, with regard to the return of Curricular Internships, it was observed that their resumption required a longer period of time to be reestablished.

Table 3. Absolute and relative distribution for the assistance made available to the students to follow-up classes in the ERT modality according to the institution's administrative category. Rio Grande do Sul, Brazil, 2021. n=48.

Assistance offered to the students to follow-up classes	Total ^A		Institution's administrative category ^B								p [†]
			Federal public (n=13)		Community (n=14)		Private (n=18)		Philanthropic (n=2)		
	n	%	n	%	n	%	n	%	n	%	
Access to digital platforms	40	83.3	7	53.8	12	85.7	19	100.0	2	100.0	0.011
Training in the use of digital platforms	28	58.3	5	38.5	11	78.6	10	52.6	2	100.0	0.039
Digital library	43	89.6	11	84.6	13	92.9	17	89.5	2	100.0	0.256
Physical library	13	27.1	1	7.7	3	21.4	7	36.8	2	100.0	0.043
University restaurant	2	4.2	0	0.0	1	7.1	1	5.3	0	0.0	---
Possibility of accessing class content asynchronously	38	79.2	11	84.6	10	71.4	15	78.9	2	100.0	0.366
Internet	36	75.0	12	92.3	9	64.3	15	78.9	0	0.0	0.106
Other aids	10	20.8	5	35.7	5	26.3	0	0.0	0	0.0	---

SOURCE: Research data, 2021.

A: Percentages obtained based on the total sample; B: Percentages obtained based on the total for each administrative type category of the institutions.

†: Chi-square adherence test.

If, on the one hand, it is indispensable to carry out activities in health services, on the other, it is essential to guarantee the safety of the entities involved in such actions, such as students and professors, and, at the same time, that health services have structural conditions and resources for the reception and transit of apprentices in their premises. These facts justify the offer of PPE by the HEIs and, to a lesser extent, by the students and teachers themselves, even though this is responsibility of the internship granting unit,¹¹ and denote the concern with maintenance of the health of such actors, when carrying out activities that are indispensable to achieving the academic curriculum and developing skills appropriate to the demands of society and public education policies.¹²

It is worth noting that part of the HEIs had not resumed the internships until conclusion of the data collection stage of this research, as well as some granting units did not allow resumption of the activities in their premises. In the period, vaccination had not yet been implemented and, as Brazil is one of the countries most affected by SARS-COV-2, the danger and fear of exposure to a global health crisis was present among students and teachers, although everyone was aware of the importance of training nurses, especially at that moment.¹³

It is necessary to consider some obstacles in this context, as both the teams of the receiving institutions and the students inserted there handled factors of overload and exposure to occupational risks, with the possibility of illness, as well as insufficiency and/or limitation of human and material resources, thus demanding conflict management skills, quick decision-making, bargaining/negotiation, communication and leadership, aiming to mobilize different resources to meet the current needs.¹⁴ In view of the

current context, several new problems were unfolded, including the lack of psychological support for professors; the low quality in teaching, which is a reflection of the lack of planning activities in "digital media" or ignorance to manage them; the workload attributed to the professors, given the new demands added to those already existing; the students' dissatisfaction, implying their various factors for this purpose; and the students' limited access, previously nonexistent, to the necessary technologies.¹⁵ In addition, articulation of the use of digital tools involves planning and using singular management strategies, which include aspects such as offering an adequate information structure, technical support to professors and students, elaboration and availability of teaching materials to be used in class and their allocation in the virtual environment, as well as pedagogical support accessible to students and continuous training to technologies for the professors.¹⁶ On the other hand, as the current situation is emerging and unusual in the midst of a health crisis, other dimensions are considered, such as the unique opportunity to learn and adapt to exceptional scenarios, undisputed contributors to the development of nurses' professional competences. In this sense, the pandemic scenario required the HEIs to make decisions about the alternatives to deal with the teaching and learning processes, so that the agents involved (professors, students and employees) were properly protected from contamination and spread of the virus.¹⁷

The health emergency introduced by the COVID-19 pandemic triggered a number of governmental initiatives. One of them aimed at increasing the contribution of health professionals to face the pandemic.¹⁴ At AEBCC, in addition to recruiting professionals to work in different locations throughout the national territory, it was planned to anticipate the graduation of Medicine, Nursing,

Pharmacy and Physiotherapy students, who were in mandatory curricular internships. They could obtain their degrees with 75% of the workload of a completed internship. In addition to that, the students could register to work in the fight against the pandemic, having the opportunity to use the time worked in this activity as hours of curricular internship.¹⁸

Nevertheless, it was verified that, despite this possibility, the percentage of hours spent in the AEBCC was low, with more than 40% of the HEIs represented in this study not using any of the hours spent in the AEBCC, possibly related to the fact that the HEIs had no management over the AEBCC activities, which did not include planning or pedagogical follow-up. Thus, little adherence to AEBCC was observed among the students, with a median of 4 students performing the action per semester at each school, while medians of 29 and 28 students/school were performing supervised curricular internships in semesters 2020/1 and 2020/2, respectively. If, on the one hand, the pandemic can be seen as an opportunity for the development and consolidation of competences worked on during academic training, on the other hand, the students can become viral transmission vectors in the community and, at the same time, it cannot be stated that the students' participation would guarantee improvements in the health outcomes.¹⁹

In time, studies developed about AEBCC point out that training through it, in this period, was permeated by weaknesses and insecurities, such as access to PPE items, as they were provided by the granting institution and varied according to the resources available and regardless of the risk present as to the preceptors' overload in having to articulate and reformulate their daily actions, which intensified with the pandemic, added to the direct supervision of students without the presence of the professor.²⁰

Furthermore, it should be noted that AEBCC ends up delegitimizing evidence-based practice, in addition to increasing the workload of the professionals who are working on the front line, as the newly graduated professionals, with 75% of the mandatory curricular internship load, will need supervision during their care activities. Therefore, AEBCC characterizes an involution in the field of education, a decision that does not envisage the future harms that the anticipation of the training of these professionals can cause.²¹

Regarding the assistance provided to the students, there was a difference in the offer of "access to digital platforms", training for the use of "digital platforms" and "physical library", when the HEIs in different administrative categories were compared. Regardless of the type of aid offered, although there has been a cut in spending in public institutions and evasion of university students during remote studies, there was a significant amount of aid made available. This may have contributed to keeping students active at the university.^{22,23}

In addition, it must be considered that this context generates uncertainty and instability, sometimes due to unpredictability regarding the guarantee of safety conditions and, in another

aspect, the impact of traumas caused by the irreparable loss of loved ones, which affects the mental health of society as a whole.²⁴

CONCLUSIONS AND IMPLICATIONS FOR THE PRACTICE

The study presented an overview of the training of nurses in Rio Grande do Sul during the COVID-19 pandemic, from the perspective of 48 coordinators of the courses in the state. Most participants were from private HEIs, followed by federal public institutions.

With social isolation due to the pandemic, resumption of the teaching activities through ERT occurred heterogeneously across public and private HEIs; however, there was agility in the incorporation of new methodologies to deal with the obstacles caused by the pandemic. In most of the HEIs, the teachers were prepared for the transition from face-to-face to remote teaching, which began to occur mostly synchronously, via digital platforms.

Among the types of assistance provided to the students by the HEIs, those related to digital technologies stood out, with digital library, Internet and training for the use of digital platforms statistically differing between public and private, but not differing between regions of the country.

For resumption of the practical activities, most of the HEIs offered preparation of the academic community. Curricular internships were resumed in a median of 45 days after social distancing was decreed. To this end, PPE items were provided by the HEIs or internship granting units to professors and students. A percentage of them needed to provide their own PPE. Supervision of interns was carried out directly or indirectly. Most of the internship granting units allowed return of the activities, limiting the number of students per field.

Regarding the practical activities in the laboratory, the alternatives pointed out by the coordinators were substitution of theoretical classes, their non-performance, occurrence in a synchronous way, via digital platforms, with the teacher in the laboratory and the students at their homes. As for the practical classes in health services, there was a reduction in the number of students in the two semesters evaluated. For these occurrences, there was a lower percentage of PPE supply to professors and students by the HEIs, in relation to the curricular internships.

Regarding the study limitations, it is cited that no answers were obtained from the sample "n". In addition, this is the panorama of a unit from the Federation, which prevents generalization to the other Brazilian states. This study contributes to the elaboration of a comprehensive panorama regarding the implementation of new strategies in teaching by the HEIs with regard to Nursing courses, increasingly necessary in the context of education, as well as to fostering future studies on the theme that focus on articulating better responses to the current demands.

New studies are needed to assess the quality of teaching and the impact of the initiatives used to train nurses in this context

ACKNOWLEDGMENTS

To coordinators of Undergraduate Nursing Courses of Rio Grande do Sul, Brazil, who kindly participated in the research.

AUTHOR'S CONTRIBUTIONS

Study design. Claudia Capellari. Joel Rolim Mancia.

Data collection or production. Claudia Capellari. Joel Rolim Mancia. Dagmar Elaine Kaiser.

Data analysis. Claudia Capellari. Joel Rolim Mancia. Dagmar Elaine Kaiser.

Interpretation of the results. Claudia Capellari. Joel Rolim Mancia. Dagmar Elaine Kaiser. Tamires Viviane Aparecida Diehl. Gabriela de Carvalho Muniz.

Writing and critical review of the manuscript. Claudia Capellari. Joel Rolim Mancia. Dagmar Elaine Kaiser. Tamires Viviane Aparecida Diehl. Gabriela de Carvalho Muniz.

Approval of the final version of the article. Claudia Capellari. Joel Rolim Mancia. Dagmar Elaine Kaiser.

Responsibility for all aspects of the content and integrity of the published article. Claudia Capellari. Joel Rolim Mancia. Dagmar Elaine Kaiser. Tamires Viviane Aparecida Diehl. Gabriela de Carvalho Muniz.

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