

ORIGINAL ARTICLE

REMOTE WORK EXPERIENCES IN THE COVID-19 CONTEXT: REFLECTIONS WITH NURSING TEACHERS

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ABSTRACT

Objective: to reflect on how undergraduate Nursing teachers experience the activities of their work process in the COVID-19 pandemic context. Method: a qualitative and reflection study of the action-participant research type, grounded on Paulo Freire's assumptions. The participants were 20 undergraduate Nursing teachers from public and private universities in southern Brazil. Paulo Freire's Research Itinerary was carried out through Thematic Research, Coding, Decoding, and Critical Unveiling, in a Virtual Culture Circle held in August 2020. Results: the Nursing teachers discussed about the repercussions of remote teaching on their health. They reflected on their feelings in facing this teaching modality and on how they develop in the pandemic context. Conclusion: the results contribute to the nurses' evidence-based practice, strengthening decision-making regarding the teachers' work process in the COVID-19 pandemic context.

DESCRIPTORS: Nursing Teachers; Remote Education; Education in Nursing; Infections by Coronavirus; Pandemics.

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INTRODUCTION

In March 2020, the World Health Organization classified COVID-19 as a pandemic situation; thus, protective measures were adopted to prevent spread of the disease, including hand hygiene, use of Personal Protective Equipment (PPE), and rapid testing⁽¹⁾. In addition to that, social isolation and distancing measures were introduced into this set of actions, consequently culminating in a change of the population' routine. In an attempt to stop spread of the virus, contamination and overcrowding in health institutions, businesses, churches and every place that could cause agglomerations were closed: only services considered essential remained operational, but with restrictions⁽²⁾.

In this context, the in-person activities developed in teaching institutions were interrupted, including universities. Nursing training integrates teaching contexts with insertion in health services and assistance and management activities, where face-to-face contact and human interaction are fundamental. Practical training sessions in laboratories and the students' insertion in the services are indispensable for a complete teaching-learning process⁽³⁾.

However, given the pandemic scenario, it was necessary to reinvent the ways to develop the teachers' work process, with the emergence of remote teaching. However, it has been a challenge for them to connect to this modality, in Nursing being even more challenging, since non-face-to-face teaching minimizes activities that require human contact, which has repercussions in the reorganization of actions that can equate health contexts to benefit in the teaching-learning process⁽¹⁾.

There is lack of reflection on the use of technology-mediated teaching or non-faceto-face teaching in higher education courses, which may lead to lack of knowledge about this modality, which will reflect and guide discussions about its use in health training⁽²⁾. Consequently, the objective of this study was to reflect on how undergraduate Nursing teachers experience the activities of their work process in the COVID-19 pandemic context.

METHOD

A qualitative and reflective study of the action-participant research type⁽⁴⁾, grounded on the theoretical and methodological framework of Paulo Freire' research Itinerary. Such framework is organized in three dialectic moments which are intertwined among each other: Thematic research; Coding and Decoding; and Critical Unveiling⁽⁵⁻⁶⁾.

These three moments occur in the Culture Circle, a space characterized by a group of individuals with common interests, who talk in a liberating pedagogical perspective, discussing their backgrounds and life experiences, in search of expanding knowledge and transforming their reality⁽⁵⁻⁶⁾. However, due to the pandemic situation, it became necessary to hold the Culture Circle virtually, using a free application and a computer camera, which allowed for the simultaneous interaction of the professors, even if they were geographically distant.

To organize the participants of the Virtual Culture Circle (VCC), the first step was to invite four teachers from an undergraduate Nursing course in Santa Catarina. By resorting to the snowball method⁽⁷⁾, they invited other colleagues to join the Circle. Thus, the total of participants were 20 undergraduate Nursing teachers from different universities in southern Brazil. All the invited professors accepted to participate in the VCC, with no refusals. The inclusion criterion considered was as follows: undergraduate Nursing teachers who worked in the remote teaching modality during the COVID-19 pandemic. Regarding the exclusion criteria, those with less than two years of experience in teaching.

The VCC was held on August 28th, 2020, for approximately three hours, under mediation of a research nurse experienced in this type of approach, with the support of a field diary to record the themes discussed in the meeting and audio recording, with due authorization from the participants. So that the VCC was more interactive and creative, Paulo Freire's Research Itinerary was conducted by means of an analogy to a computer. Such element was chosen for being a significant and intensely used instrument by the teachers during remote teaching, which instigated dialog and interaction.

In the Thematic Research, which is the first moment of Paulo Freire's Itinerary, the mediator investigated which participants were using the computer to connect to the VCC and everyone answered positively. Thus, the nurse instigated them to discuss, from the use of the computer in the experience of the pandemic situation, asking them the following question: How do you face and develop Nursing teaching in the pandemic context?

All the participants discussed the challenges and development of Nursing teaching while the mediator recorded their perceptions using a representative term. After all the teachers answered the question, the mediator presented, read and validated the answers and, together, they organized and selected two themes to discuss in the VCC, namely: 1) Challenges of remote teaching in Nursing; and 2) Developing Nursing teaching in the pandemic context.

For Coding and Decoding, which are part of the second stage of Paulo Freire's Itinerary, the mediator highlighted the relevance of cables and the Internet so that the professors could connect to the virtual world through their computer and, in this way, develop their classes, seeking to code and decode different action strategies. To stimulate reflection about the two generating themes, two guiding questions were formulated: How do you approach Nursing teaching in the pandemic context? How have you developed Nursing teaching the COVID-19 pandemic?

At this point, the professors were asked to record on a sheet of paper, on one side, their perceptions regarding the challenges of Nursing teaching; and, on the other side, the development of teaching during the pandemic, while listening to '*Tente outra vez*' ('Try again'), by Raul Seixas. At the end of the song, each professor shared their perceptions about the two generating themes, with meanings emerging that expressed the situation experienced during the pandemic, while the mediator recorded the statements in short sentences, projected onto the shared computer screen.

To encourage reflection again on the two themes, the mediator read the records made during the professors' sharing, validating their meanings and sealing the action-reflection process⁽⁵⁾. This gave them the opportunity to redefine their ability to face the challenges raised during Nursing teaching in the pandemic context, as well as to share proposals to overcome these challenges and to develop their work with higher quality in a non-face-to-face manner. The representation of the codings of the two generating themes is shown in Chart 1.

Chart 1 – Representation of the two generating themes coded and unveiled in the Culture Circle.		
Chapecó, SC, Brazil, 2020 (continues)		

1) Challenges of remote Nursing teaching	2) Developing Nursing teaching in the pandemic context
Difficulties accepting the new normal	Relearning how to teach
Excess of lives and of online information	Adaptation to the virtual space
Intense work	Adaptation to the new normal
Stress	Accepting the new

Anxiety	Can't do it as before
Lack of sleep	Listening to the students
Tiredness	The students can help
Insecurity	Empathy
Fears and concerns	Sharing experiences in learning
Hypertension	Recognizing that they need help
Lack of time	Searching for information
Weight gain	Doing one thing at the time
It affected their mental health	Prioritizing the actions
Lack of training to work in remote teaching	Virtual teaching opened new possibilities
Older adults find it more difficult to adapt	Developing according to the possibilities
Concerns about the quality of teaching	Promoting health
Concern with hour load and employment	Seeking peace
Challenge, being a teacher, mother, wife and housewife	Organizing the house before starting the classes

Source: The authors (2020)

Thus, the professors entered the last moment of Paulo Freire's Itinerary, Critical Unveiling, in which they (re)defined the two generating themes and critically recognized their real situation by visualizing their meanings on the computer screen, sharing experiences and mutually strengthening themselves in search of possibilities to transform their reality and overcome the challenges in the development of non-face-to-face Nursing teaching. Analysis of the themes was concomitant with development of the VCC, as set forth in Paulo Freire's Itinerary.

To end the VCC, the mediator asked the following question: Which is the meaning of having participated of this virtual meeting in the midst of the pandemic? All the participants answered, sharing their perception on the relevance of the VCC for their lives and for the development of remote teaching.

The study was developed according to the ethical precepts of resolution No. 466 of 2012. The Free and Informed Consent Form was emailed to the teachers, who signed it and returned it to the researchers. To ensure anonymity and secrecy, the teachers were designated with names of computer components. The research was approved by the Ethics Committee of a university from southern Brazil, under opinion number 4,068,387.

RESULTS

The 20 teachers were aged between 30 and 53 years old, three (15%) being male and 17 (85%), female. Among the participants, 14 (70%) were PhDs and six (30%) were Masters, with three to 19 years of experience in teaching, and working in public and private universities in the Brazilian South region.

In the discussion of the first generating theme, the professors reflected on the challenges of non-face-to-face Nursing teaching, pointing out their difficulties in accepting the pandemic situation, which generated an excess of information and online programming,

resulting in intense work and consuming their time: I find it difficult to accept the new normal. (Mouse)

There's many lives and it tires me a lot. (Screen)

There's an excess of online information. (Camera)

I had never worked so hard in my life as now in this pandemic. (Audio)

I don't have time for anything anymore. It's pretty rushed. (Webcam)

The accumulation of virtual activities triggered tiredness, stress, anxiety, lack of sleep, concerns, hypertension and weight gain in the teachers, impairing their mental health:

I feel terribly tired in this pandemic. (Motherboard)

I'm very much stressed. (Keyboard)

It triggered a lot of anxiety. (Cable)

I'm not sleeping enough, I'm worried. (RAM memory)

I had hypertension in this pandemic. (SSD)

I'm putting on weight. (Processor)

I think it affected the teachers' mental health in general. (Generator)

The teachers pointed out that non-face-to-face teaching generated insecurity and fear, and they lacked more training in the use of virtual technologies, especially older professors:

I feel insecure with these virtual technologies, I find that everything is complicated. (Cooler)

I'm afraid of not making it right, afraid of not being able, afraid of this remote teaching, what will come out of it? (Touchpad)

There's lack of training to work in remote teaching. (USB jacks)

I'm already older, it's more difficult to adapt to remote teaching. (CD ejection button)

In the teachers, remote teaching triggered concern regarding the quality of the future nurses' training:

I'm concerned about the quality of these nurses' training. (Slots)

This thing of remote Nursing teaching is worrying. (Power source)

The teachers also showed concern in losing their job and their current class hour load as a consequence of the pandemic situation in Brazil. In addition to that, the challenge of delivering classes in their own houses was addressed, having to be mothers, wives, and housewives at the same time:

I'm concerned about my class hour load. (Video board)

I'm concerned about losing my job. (Power button)

I'm finding it hard to deliver classes and to be a mother, wife and housewife at the same time. It's really complicated, really a challenge (Video board)

When discussing the second generating theme, the teachers discussed the

development of Nursing teaching in the pandemic context, highlighting that they had to adapt to the new moment and, thus, relearn how to teach, with willingness to accept the virtual space as a possibility to carry out the teaching-learning process:

We'll have to adapt to the new moment, to this new normal. (Mouse)

We now have to relearn how to teach. (Screen)

It's adaptation to the virtual space to be able to develop the teaching-learning process. (Camera)

We need availability to accept this new normal. (Audio)

To develop non-face-to-face Nursing teaching, the professors shared some of their experiences, such as listening to the students and practicing empathy, readapting the classes when it is not possible to deliver them in the same way as face-to-face, as well as seeking information and recognizing that they need help to improve the classes in the virtual space:

We can't deliver classes as we did before, we have to adapt them. (Keyboard)

We have to listen to the students. (Cable)

The students help the teachers. (Motherboard)

It is necessary to develop empathy. (Cooler)

I'm looking for information to develop my classes better. (SSD)

I recognize that I need help. I've never delivered virtual classes. (Generator)

The study participants highlighted the relevance of sharing the remote Nursing teaching experiences, stating that it has given rise to new possibilities:

I think that sharing remote teaching experiences is enriching for all of us. (Touchpad)

Remote teaching opened new possibilities, because today we can invite people from all over Brazil and even the world to participate in our classes. Then, there's good things too. (Slots)

To overcome the challenges concerning the development of non-face-to-face teaching, the teachers stated that they need to promote their health, seeking peace in everything around them, having the wisdom to prioritize what is most important, doing one thing at a time. Added to that, they also reported that they try to organize their children and the house before starting remote classes, in order for everything to go uneventfully during the classes:

We can't forget to promote our health. (Power button)

We have to seek peace and health, even in this turmoil of information and news all around us. (RAM memory)

I try to be wise and do one thing at the time; if not, I'll go crazy. (USB jacks)

I try to prioritize what's more important. (CD ejection button)

I do things according to my possibilities, because we can't to do everything we'd like to. (Power source)

I organize my children and my house, before starting the online classes, so that there are no mistakes. (Video board)

The teachers had the opportunity to reflect on their experience in the VCC, which they found to be a space that promotes hope, sharing of knowledge, learning, support, welcoming, humanization, motivation, empowerment, reflection, transformation, mutual help and dialog. They pointed out that the VCC instilled courage, strength and faith that everything will work out, considering it as a therapeutic moment, in which they realized that there are more professionals experiencing the same situations in facing and developing non-face-to-face teaching in Nursing training due to the repercussions of COVID-19, as illustrated in Figure 1.

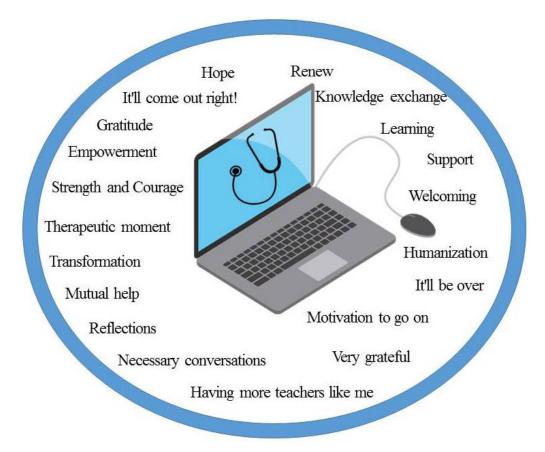


Figure 1 - The teachers' statements about the experience in the VCC. Chapecó, SC, Brazil, 2020 Source: The authors (2020)

DISCUSSION

During the conversations about the first generating theme, it was evidenced that the demands and overloads are part of the daily teaching routine, but the pandemic has considerably worsened this scenario, interfering negatively in these professionals' health-disease process. Due to the current situation and the resumption of non-face-to-face educational activities, the implementation of a new teaching methodology has become inevitable, requiring adaptation to the technological tools and adequacy of the teaching strategies to offer remote education⁽⁸⁾.

The recent strategy of resuming classes, without a convenient plan to offer pedagogical continuity to the students, causes an overload of information and difficulties in the teachers' adaptation, training and in the planning. These new challenges tend to trigger physical and mental malaise and symptoms such as stress, anxiety and depression, which results in harms to the health of these professionals⁽⁸⁾.

As a matter of emergency, the Nursing teachers needed to adapt the contents and classes, previously offered in a face-to-face setting, to be used with Digital Information and Communication Technologies (DICTs). However, many do not master these tools and technologies because they are not used in face-to-face teaching, and lack of experience in this modality culminates in insecurity regarding the new ways of teaching⁽⁹⁾.

Lack of knowledge about the DICTs throughout many professors' educational process has implications on the current way of teaching, and there is an urgent need to offer training to improve the use of digital tools, so as to add positively to Emergency Remote Learning (ERL). The need for the institutions to prioritize easy-to-use platforms to ensure inclusion of all the teachers is emphasized, aiming at the individual adaptation difficulties of the professionals involved, stressing that training must be brief and demand immediate mastery⁽¹⁰⁾.

During the reflections on the second generating theme, in which the development of Nursing teaching in the pandemic context was discussed, the challenges that permeate the professors' current daily lives emerged. A crucial factor, on which the success of the remote activities and the continuity of teaching depends to a large extent, is the bond with the students, which is fundamental to make the teaching-learning process effective and to promote dialog, mutual collaboration and empathy. Socioemotional skills and competences are crucial at this time and contribute to maintaining healthy relationships, making decisions and designing more specific and effective pedagogical approaches in each context⁽¹¹⁾.

Training in Nursing requires the development of a professional relationship between teachers and students. In addition to that, the professors need to develop the teaching process integrally, involving the students, as well as the individuals, their families and the community, with the task of training nurses with specific knowledge, competences and skills. In this sense, it also raises the need for teachers with skills compatible with reality, as well as significant modifications in teacher-student relationships⁽¹²⁾, especially in pandemic times.

The incidence of various factors on the working conditions and mental health is inherent to teaching. However, many are not yet prepared to deal with the adversities of teaching in the pandemic, which is requiring the professors to immediately remodulate to the virtual environments for continuity of the university academic year⁽¹³⁾.

Despite the urgent needs and concerns arising from this process, the provision of teaching in Nursing was reinvented with the insertion of virtual tools and discussions about different forms of approach, opening new possibilities. In this scope, virtual technologies have contributed to the teaching-learning process in health, stimulating reflections that change educational paradigms and transform the ways of knowledge construction. However, it must be considered that the technological tools are not self-sufficient, being necessary to carefully think beyond them in the pedagogical approach⁽²⁾.

Due to the complexity of these tasks and the increase of work and permanence in the institution, demands for efficiency and adequacy and consequent overload, it is indispensable that the teachers avoid blaming themselves for personal discontent in order to remain psychologically and emotionally healthy, despite the troubled moment full of doubts and concerns⁽¹³⁾. In this context, it is important that they organize their own routine, to involve all the dimensions of their personal life, prioritizing the most necessary activities and respecting their own limits, in favor of their well-being.

At the moment, impacts caused directly by the COVID-19 pandemic and those produced by the changing conditions of the professional profile and their performance in the face of the demands are coexisting. Situations like these can generate distress in the teacher, as they promote uncertainties. Consequently, their health must be preserved, mainly their mental health, with the need to implement health promotion actions to reduce the implications of the current context⁽⁸⁾.

The balance between work and personal life, leisure, physical activity, healthy eating and participation in knowledge and mutual help groups are health-promoting practices that are aligned with the strategies proposed by the National Health Promotion Policy, based on favorable environments, skills development and collective actions⁽¹⁴⁾. Even in the pandemic context, collective actions can occur, although not face-to-face, as the sharing of experiences and the collective search for reliable information are enriching and promote well-being.

The reflections on how undergraduate Nursing teachers experience the activities of their work process in the COVID-19 pandemic context are still under development. The sources that emphasize this phenomenon in the literature are still incipient, characteristics that present themselves as limiting factors to understand this theme in depth. However, the development of future studies is encouraged for a better understanding and reflection on the phenomenon, considering the impacts on the teachers' health and the quality of Nursing teaching.

The results of this research present limitations, such as the fact that it was developed with participants from only one region of the country. Another limiting factor was to reconcile a schedule for the VCC with all the nurse professors, given the accumulation of activities that they develop in their work process, especially in pandemic times.

FINAL CONSIDERATIONS

In the VCC, the Nursing teachers shared their experiences in the work process during the pandemic, in which the health of these professionals became evident, since the work activities have compromised their well-being, reinforcing the need for care and health promotion. Therefore, there is an urgent need to seek and adopt health-promoting actions, as well as to consider strategies to protect the lives of university professors, especially Nursing teachers, who teach about Nursing care, although sometimes forget to develop their own self-care.

The teachers also discussed their difficulties and hopes given the remote teaching experience during the COVID-19 pandemic. Such factors provide support for the evidencebased practice. The teaching world is experiencing a unique moment of transformations, difficulties with the new context and the organization of its routine, fatigue and stress due to the increase of work and the excess of information, fear and worries about the ERL to be offered. There is insecurity when faced with teaching technologies, but there is hope and acceptance as to the need for adaptation and rediscovery, with the recognition that virtual teaching has also opened possibilities for the work process of Nursing teachers.

The results of this study contribute to the nurses' evidence-based practice, strengthening decision-making regarding the work process activities in the pandemic context. Applicability of the Virtual Culture Circle stands out as an innovative way to hold collective meetings that promote emancipation of the individuals and enable reflection and mutual learning, being an educational strategy that can be implemented to reflect on practices in the teaching and learning process, in addition to other aspects in this unique moment, with full need for reinventions.

REFERENCES

1. Oliveira WA de. COVID-19: desafios e oportunidades da enfermagem brasileira. Rev de Saúde - RSF [Internet]. 2020 [accessed 05 set 2020]; 7(2). Available from: <u>http://revista.faciplac.edu.br/index.php/RSF/article/view/648/264</u>.

2. Scorsolini-Comin F, Melo LP de, Rossato L, Gaia R da SP. Educação à distância na formação em enfermagem: reflexões sobre a pandemia da COVID-19. Rev baiana enferm. [Internet]. 2020 [accessed 31 ago 2020]; 34:e36929. Available from: <u>http://dx.doi.org/10.18471/rbe.v34.36929</u>.

3. Bezerra IMP. Estado da arte sobre o ensino de enfermagem e os desafios do uso de tecnologias remotas em época de pandemia do Corona vírus. J Hum Growth Dev [Internet]. 2020 [accessed 05 set 2020]; 30(1). Available from: <u>http://dx.doi.org/10.7322/jhgd.v30.10087</u>.

4. Felcher CDO, Ferreira ALA, Folmer V. Da pesquisa-ação à pesquisa participante: discussões a partir de uma investigação desenvolvida no facebook. Experiências em Ensino de Ciências [Internet]. 2017 [accessed 12 jun 2020]; 12(7). Available from: <u>http://if.ufmt.br/eenci/artigos/Artigo_ID419/v12_n7_a2017.pdf</u>.

5. Freire P. Pedagogia do oprimido. 60. ed. Rio de Janeiro: Paz e Terra; 2016.

6. Heidemann ITSB, Dalmolin IS, Rumor PCF, Cypriano CC, Costa MFBNA da, Durand MK. Reflexões sobre o itinerário de pesquisa de Paulo Freire: contribuições para a saúde. Texto contexto – enferm. [Internet]. 2017 [accessed 30 jun 2020]; 26(4). Available from: <u>https://doi.org/10.1590/0104-07072017000680017</u>.

7. Ghaljaie F, Naderifar M, Goli, H. Snowball sampling: a purposeful method of sampling in qualitative research. Strides Dev Med Educ. [Internet]. 2017 [accessed 01 abr 2021]; 14(3). Available from: <u>http://doi.org/10.5812/sdme.67670</u>.

8. Pereira HP, Santos FV, Manenti MA. Saúde mental de docentes em tempos de pandemia: os impactos das atividades remotas. Boletim de Conjuntura (BOCA) [Internet]. 2020 [accessed 14 set 2020]; 3(9). Available from: <u>http://doi.org/10.5281/zenodo.3986851</u>.

9. Rondini CA, Pedro KM, Duarte C dos S. Pandemia do Covid-19 e o ensino remoto emergencial: mudanças na práxis docente. Interfaces Científicas [Internet]. 2020 [accessed 14 set 2020]; 10(1). Available from: <u>https://doi.org/10.17564/2316-3828.2020v10n1p41-57</u>.

10. Ludovico FM, Molon J, Franco SRK, Barcellos P da SCC. Covid-19: Desafios dos docentes na linha de frente da Educação. Interfaces Científicas [Internet]. 2020 [accessed 14 set 2020]; 10(1). Available from: https://doi.org/10.17564/2316-3828.2020v10n1p58-74.

11. Gomes VTS et. al. A Pandemia da Covid-19: repercussões do ensino remoto na formação Médica. Rev Bras de Educ Med. [Internet]. 2020 [accessed: 01 abr. 2021]; 44(4). Available from: <u>https://doi.org/10.1590/1981-5271v44.4-20200258</u>.

12. Giordano DP, Felli VEA. Processo de trabalho dos docentes de enfermagem. Rev. Latino-Am. Enfermagem [Internet]. 2017 [accessed 24 set 2020]; 25. Available from: <u>https://doi.org/10.1590/1518-8345.1941.2946</u>.

13. Monteiro BMM, Souza JC. Saúde mental e condições de trabalho docente universitário na pandemia da COVID-19. Research, Society and Development [Internet]. 2020 [accessed 09 set 2020]; 9(9). Available from: <u>https://doi.org/10.33448/rsd-v9i9.7660</u>.

14. Antonini FA, Heideman ITSB. Itinerário de Pesquisa de Paulo Freire: contribuições para Promover a Saúde no Trabalho Docente. Rev. Bras. Enferm. [Internet]. 2020 [accessed 24 set 2020]; 73(4). Available from: <u>https://doi.org/10.1590/0034-7167-2019-0164</u>.

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Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - Souza JB de, Brum CN de, Walker F, Schleicher ML; Drafting the work or revising it critically for important intellectual content - Souza JB de, Heidemann ITSB, Brum CN de, Araújo JS. All authors approved the final version of the text.

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