

# Health and environment: (in) visibilities and (dis) continuation in nursing professional training

Saúde e ambiente: (in) visibilidades e (des) continuidade na formação profissional em enfermagem Salud y ambiente: (im) visibilidades y (des) continuidad en la formación profesional en enfermería

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#### **A**BSTRACT

Introduction: Know the perception of nursing professors concerning the relationship health and environment and how the approach to the issue occurs in nursing professional training. Methods: Qualitative, exploratory, descriptive research with seventeen nursing professors from five nursing undergraduate courses. Data collected through semi-structured interview and analyzed by content analysis. Results: The interface health and environment is perceived from two perspectives: cause-effect, understanding environment like disease causing, and collective-ethical-complex, integrating social relationships and human behavior with the environment. Concerning the approach in the training, it has been noticed that although it is presented, it is still superficial, and a gap is found in the profesional training. Final considerations: It is considered that the weakness in the approach of the training issue, as well as the discontinuation in the spaces where the issue is present, there is a lack of theoretical basis which covers the complexity involved.

Keywords: Nursing; Environmental health; Education higher; Faculty.

#### RESUMO

Objetivo: Conhecer a percepção de enfermeiros docentes sobre a relação saúde e ambiente e como se dá a abordagem da temática na formação profissional em enfermagem. Métodos: Pesquisa qualitativa, exploratória e descritiva, com dezessete enfermeiros docentes de cinco cursos de graduação em enfermagem. Dados coletados por meio de entrevista semiestruturada e analisados por análise de conteúdo. Resultados: A interface saúde e ambiente é percebida a partir de duas perspectivas: causa-efeito, entendendo ambiente como causador de doenças, e coletiva-ética-complexa, integrando relações sociais e o comportamento humano com o meio. Quanto à abordagem na formação profissional, verificou-se que embora haja, ainda é superficial, demonstrando-se como lacuna. Considerações finais: Evidenciou-se a fragilidade da abordagem do tema na formação, assim como a descontinuidade naqueles espaços onde o mesmo é presente, carecendo de base teórica que contemple a complexidade envolvida.

Palavras-chave: Enfermagem; Saúde ambiental; Educação superior; Docentes.

#### RESUMEN

Objetivo: Conocer la percepción de enfermeros docentes sobre la relación salud y ambiente y como se da el abordaje del tema en la formación profesional en enfermería. Métodos: Investigación cualitativa, exploratoria y descriptiva, con diecisiete enfermeros docentes de cinco cursos de graduación en enfermería. Datos recolectados por medio de entrevista semiestructurada y analizados por análisis de contenido. Resultados: La interfaz salud y ambiente es percibida a partir de dos perspectivas: causa-efecto, entorno de la comprensión de la enfermedad que causan, y colectiva-ética-compleja, integrando las relaciones sociales y el comportamiento humano con el medio ambiente. Relacionado al abordaje en la formación, se verificó que a pesar que haya, aun es superficial, demostrándose una laguna en la formación profesional. Consideraciones finales: Se evidenció la fragilidad del abordaje del tema en formación, así como la discontinuidad en espacios donde el mismo es presente, careciendo de base teórica que contemple la complejidad involucrada.

Palabras clave: Enfermería; Salud ambiental; Educación superior; Docentes.

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## INTRODUCTION

In the last decades society has experienced a growing debate about the impact of environmental problems on people's lives and on the planet. The news that are broadcast by the media about reemerging diseases, infectious outbreaks and environmental disasters, shortage of drinking water, among others, often linked to the current global economic model and the effects of globalization have favored the emergence of a line of discussion regarding the importance of a social and environmental approach when it comes to such issues¹.

Under this view, the expectation is that, beyond a superficial look at the environmental consequences that arise from the broadcast environmental problems, society can establish a debate on this matter from its genesis, which essentially is originated from a strict relationship between socio-cultural and environmental issues. In terms of rethinking responsibilities, educational programs, in their different forms, structures and approaches, have presented initiatives towards the spreading of the issue and its importance, aiming at pushing humanity to move towards a political and social culture of sustainability¹, where people may rethink the relationship between men and the environment, from a critical and reflective perspective on the matter.

However, the intervention of the educational sector, the health care area being included in it, should be carried out based on the complex knowledges about the environment, using the different links in the environmental issues with the area to be problematized. An educational system established through complex thinking is the one that can help humanity to leave the state of dislocation and fragmentation that is characteristic of the contemporary knowledge, whose simplistic approaches undermine the knowledge and the ways of living in society<sup>2</sup>.

In the health field, and consequently in nursing, the discussions on health problems can not be restricted to catastrophic environmental changes, although it is known that these are extremely important and need attention from the government in order to prevent potential damages. The complexity of looking at the contemporary social and environmental problems, should include reflections on the socio-economic model, discrepancies in the health care of the people, access to food, care for the environmental rights of different cultures, among other current issues<sup>3</sup>.

Based on what was previously exposed, it is clear that in nursing this topic is still peripherally and little discussed, with incipient engagement of the professionals from this area in actions that focus on environmental health<sup>4</sup>. The investigation points to the theme of the incipient performance of nursing professionals in the area, once the participants nurses demonstrated difficulties in elaborating considerations about social and environmental issues and their work environment<sup>5</sup>. Another example worth mentioning is related to the management of solid waste, which, as it demands specific actions and responsibilities from the professional in their daily work lives, it also involves failures and doubts as for its management<sup>6</sup>.

It is presented, then, a lack to be fulfilled in health and environment training courses in the nursing area, where there is a need for building new knowledge on such topic. This matter becomes even more important as it is understood that professional training is extremely important in the formation of values of future professionals, including therein, those related to environmental sustainability. Undoubtedly, the great challenge of our time lies in educating in and for the planetary era, which involves criticizing the simplification and fragmentation, and recognizing that in a scenario of uncertainty, complex issues require a broader approach, involving natural, social, ethical, and political aspects, among others<sup>2</sup>.

Thus, it is understood that the nursing professor plays a crucial role in this process, since they have the potential to drive the debate on issues related to the training, which includes also tensioning discussions on cross-cutting themes, which have extreme relevance to the professional practice, among them, those that refer to the relationship between health and the environment. The nursing area has been facing recent issues, and it needs to make efforts to acquire knowledge and skills to care under new paradigms that address the entire individual and their insertion and inseparability with the environment<sup>7</sup>.

Given the above, the understanding of how the professors in nursing perceive the relationship between health and environment is useful to weave up thoughts on the subject and therefore insert this problematization into the training in nursing. Therefore, this study sought to find answers to the following questions: what is the perception of nursing professors on the relationship between health and the environment and how much important approaching this topic is in the professional training in the nursing field? It has as its objective: to learn about the perception of nursing professors on the relationship between health and environment and how to approaching this topic in the professional training in nursing.

## **METHODS**

It's a qualitative research, with exploratory and descriptive approach, carried out in five undergraduate courses from the Nursing Courses from the Federal University of Rio Grande do Sul. The courses included in the research were the ones located in Rio Grande do Sul, that belonged to a federal institution and that had already graduated at least a group of nurses. In general, the courses had the same characteristic: they receive public funding and support and offer a graduation course in nursing. The university professors consisted predominantly of civil-servant nurses.

The participants were nursing professors linked to the researched institutions. The access to the list of nursing professors was given, first, via the electronic addresses of the Educational Institutions (Els), with subsequent contact with the Els to confirm the obtained information. They inclusion criteria were: to be a permanent employee from the institution researched and to be more than a year on the job of teaching. As exclusion criteria there were: being away, due to any leave

or vacation, during the data collection period and having some link with this project.

The selection of participants was carried out aleatorily and conducted by the researcher, when in possession of the list of professors from each El. The quantitative of professors ranged from 17 to 76 according to each institution. The number of participants by El obeyed the data saturation criterion, and for such it was necessary the transcription, reading and analysis of the data concurrently to their collection. So, a total of 17 nursing professors from different Els were interviewed. From the first three institutions three professors were selected from each, and from the remaining two institutions, four professors were selected from each. Data collection took place between January and April 2013.

The semi-structured interviews were conducted in private areas, recorded with a digital recorder and transcribed by the researchers themselves. A script with the following questions was used: What do you understand by environment? What do you think of when we talk about health and the environment? Taking into account your practice as a professor at this institution, how do you perceive the approach on environmental issues? In order to respect the anonymity of the participating subjects, they have been identified by the letter "E" corresponding to nurse, and a number according to the chronologic sequence of the interviews (example: E1, E2, E3).

Data analysis was guided by the content analysis framework, according to the different step. In the pre-analysis or the gathering of the corpus to be analyzed, the transcribed recordings were put together, and subsequently organized in folders on the computer, each consisting of a audio file and the transcribed document. The study of the material was given through their exhaustive reading, in order to capture at that time, the contents and any resemblance existing in the statements. The treatment of the findings followed the categorization of ideas, through coloring and textual segregation, cutting and grouping. Then, each each category was placed in a file/document specifically typed. Finally, there was the interpretation and discussion of the data, problematizing them with the textual findings in the literature and in order to copile a single file for the final writing of the study<sup>8</sup>.

The research project was submitted for approval to the Heads of Department where the nursing professors in the study employed, and then it was approved by the Ethics Committee in Research (CAEEN 12192612.0.0000.5346). The subjects participated in the study only after reading the Informed Consent, and the data collection began after the approval of all the requirements and in accordance with Resolution Nº 466/12 of the CNS, in respect to the guidelines and regulatory standards for research involving human subjects.

# **RESULTS AND DISCUSSION**

The results allowed us to seize the participants' perceptions about the relationship between health and the environment, as well as their approach to the training of nursing professionals. Thus, according to the understandings of the nursing professors, the data could be organized into two categories: The health and

environment interface: distinct areas; and Thematic approaches in the professional training of nurses: contexts and challenges.

#### The health and environment interface: distinct areas

The relationship between health and environment can be understood as interdependent, changeable, systemic. The relationship between human beings and nature can not be conceived in a reductionist and fragmented way, as a simple sum up of elements<sup>2</sup>. The relations of cooperation, interdependence and symbiosis, in the search for a balanced whole, show the impossibility of talking about health without mentioning, at the same time, the environment<sup>9</sup>.

So, from the speeches of the participants, it is clear that some nursing professors corroborate the perspective exposed above.

- [...] There is a strong link, certainly what happens in the environment impacts on our life and on the interventions, on the identification of the health needs of our population, there will also be direct relationship [...] (E1)
- [...] I think health and the environment are intimately linked, interconnected. There is a very close interface. As I was telling you before, the health status depending on the environment where you're inserted [...] (E14)

It is evident through the statements, that participants realize that there is an interface between heath and environment. Acknowledging this relationship is essential for those who are trained in the health care area, especially in the nursing field, if we consider that this field has the care as its essence.

The line of thinking exposed above must be highlighted once the very precursor of modern nursing, Florence Nightingale, embraced in her understanding about health the importance of environmental variables, as she understood that these could affect the health conditions. This relationship is also perceived by other workers in the area, in other studies, which reveals, in part, certain consensus on this aspect<sup>5,9</sup>.

Undoubtedly, bringing up the important legacy left by Florence Nightingale is critical since it is presented as a strategy for seeking an awareness on the subject of this study in the context of work in the health field. However, it should also be emphasized that this involves the understanding that the environmental problematic is a complex event, socially constructed, and therefore it requires individual and collective efforts for its solvability, that are an important impact on the health-disease process<sup>10</sup>.

Nonetheless, participants build their ideas through different aspects to justify such interaction. In the first aspect, participants understand the relationship between health and environment from the perspective of cause and effect, in which the environment is seen as causing diseases, especially when altered by human actions.

[...] You have no health if you don't have an environment that is also healthy. Then, I believe one thing is connected to the other. Therefore, we must care for the environment, we need to take care to keep having water, sanitation,

garbage collection, all of that to have heath. If we neglect this, neglect the environment, if we don't preserve it, we also will not have health. This will directly affect the health, pollution, air, water [...] (E4)

For example, the sun is hotter and hotter. We see that the solar standard is changing is, then this will affect my health. I can't expose myself to the sun so much. If I go to the beach there are certain periods I can't lie in the sun. This could cause some skin problems, a skin cancer, so many problems that we don't know if they are going to happen, stains, and those will harm my health. Therefore, we can see that they are linked, and because of this we have to preserve the environment and take care of where we live [...] (E5)

The relations between the environment and human illness are numerous, and such fact is reflected on the increase of research on this issue and the spread, more and more, of news of this topic. All in all, what is usually observed is the diffusion of environmental disasters as cause of illnesses, among these: floods, hurricanes, streams of intense heat and cold, melting poles, insects and other animals epidemic. However, It should be mentioned that very little is addressed as for the participation of us humans as responsible for such issues, mainly because the capitalist society understands these events as externalities of the current economy, as if they were intrinsic to the natural course of the development<sup>11</sup>.

In addition to the large climatic changes, environmental influences on the health of human beings can be perceived in other ways, such as respiratory disorders caused by pollution, malnutrition due to intake of inadequate food, indiscriminate use of pesticides in food, etc. That is, when it's possible to refer to physical/visible changes and aspects of illness. Added to that, it's worth mentioning the causes of illness that are invisible or obscured, but that result from the contemporary way of life and originated from heavy workloads, such as stress, depression, fatigue, fragility of family relationships, etc.

Thus, it's important to highlight the interaction perceived by the participants as for the interface existing between health and environment, about the determiners or conditioners of the "being healthy" or "being sick". They understand that the health-disease process is also a consequence of environmental variables. From this perspective, it is interpreted that the environment can both promote health, and create hazardous conditions for individuals or human groups 12.

This point of view, that has as basis the illness of men, is also perceived in other studies that had nurses as participants, and where they pointed the need for control of epidemics and the factors that provide the occurrence of cancer<sup>4,5</sup>. These results lead to the understanding that in order to reach a proper health status, it's necessary the enhance the sustainability and care actions towards the environment, or else the illness of populations will grow more and more.

According to the other point of view, it was observed that the participants changed from the perspective of cause and effect in the relationship between health and environment, to a perspective that integrates social relationships and human behavior with the environment. In this sense, they conceive the interface heath and environment as a collective, ethics and complex perspective. Such perception is anchored in the current health perspectives that understand the health-disease process as complex, multidimensional and interdisciplinary, and that include also aspects of human subjectivity.

As for the matter of health and environment, I think that within the expanded concept of health, we have to be able to think beyond the concept of the disease.[...] Nowadays, we don't see health is that physical, social, psychological well-being, which is an old concept from the WHO. but we understand it thought the idea of quality of life, which is an expanded concept of health. I think all this interaction of a person with the environment, may include both concrete issues, and also subjective questions, as of understanding that doing certain things involves an ethical look at life [...] an ethical look of coexistence, of being able to look at oneself in this whole world, beyond navel-gazing actions, beyond one's generation. I think that today's expanded concept of health involves dimensions that aren't merely focused on curing the disease, but constituting citizenship, ethical relationships, solidarity, and that all of that will eventually influence the living conditions of a population, the way that the people relates to one another, with the places, with things. Therefore, I believe that everything nowadays is connected, I think there's no way to separate [...] (E6)

[...] I see all these issues of solidarity, concern, responsibility, commitment, for example, of workers as a whole, and from there we have the interdisciplinarity we all search and talk about. It's not always that we can have interdisciplinary actions that is established with respect, ethics, with all these points that I mention, but in the sense that we must always appreciate what other people do[...]So, if we evaluate our own social issues, such as housing, we will see that people need education, the spiritual issues themselves, I think we end up talking about a "N" number of issues [...] (E16)

The perception about the interface between health and environment from the social relations perspective and based on ethics, on the enhancing of the environment and interpersonal behaviors is essential for understanding the health phenomenon that can not be reduced only to the analysis of diseases<sup>11</sup>. Nor this comprehension should be understood based on the economic activity of a population where consumption indicators attempt to portray the quality of life, well-being, happiness and harmonious relationships between men themselves and the environment<sup>13</sup>.

Ethical relationships, solidarity and concern for others have been replaced by individualism, obtention of status, profit and unconcern with the environment in the process of evolution of building the contemporary society. In addition to that, we also experience the worsening of such situation related to the denial as for the causes of the environmental crisis and the obsession with economic growth, which incipiently considers the environment sustainability<sup>3</sup>.

In this way, discussing the causes that lead society to establish predatory relationships must be the first step for the change, as well as to the rescue of the belonging and responsibility aspects. Then, possibly, positives reflexes will be sensed in the heath field. Engendering this debate needs to be an essential condition, for example, in nursing, with focus on the search for citizenship in the constitution of the professional, through rescuing the knowledge that integrates men and the environment, with all the complexity of this relationship.

The point of view that sees health and the environment as a complex thought, based on the relationship, interaction and inter-connection between the beings, enables deconstructing the fragmented and isolated way for noticing this interface, and makes the way for a new look on healthcare. The mission of education is to strengthen the conditions for the emergence of a society of protagonist citizens who are aware and committed to building a planetary civilization<sup>2</sup>.

It should be reiterated then the importance of the participants to bring up reflections of the relationship between health and the environment, seeking to learn the inherent complexity of the topic and thus find approaches that encourage environmental values in professional training. Accepting the interface between health and the environment as a collective, ethical and complex issue is essential for the training of nurses-citizens, committed to the health of populations and the planet. This perception makes itself indispensable, once it reveals the recognition that the ramifications of the current environmental issues are intertwined with social, economic, political and technological aspects that have strong influence of human-nature relationships in the process of health-disease in the human species<sup>13</sup>.

# Thematic approaches in the professional training of nurses: contexts and challenges

In order to find more subsidies to answer the question that has guided this study, the nursing professors were asked about how they perceive environmental issues in the current professional training of nurses. In general, respondents pointed out that there seems to be a greater approximation of such debate in the nursing care practice in the hospital setting as well as in the context of community. However, They point out that there still are gaps to be filled, and that require the need for progress regarding the approach on the subject.

Thus, approaching the subject in the nursing care practice in hospitals is one of the links built by nursing professors, as highlighted in the following statements:

Well, I can do this inter-connection with the environmental issues in the discipline of Systematization of the Nursing Care, which is a theoretical and practical discipline. Then in this discipline I can perceive very closely theses environmental issues, this interrelationship, because we consider the patient as a whole, trying to implement the assistance in a full way and there I can see the point better [...] There are two practical activities, where a pair of students is responsible for each patient and we carry out an interview addressing all these interrelations between the patients in other contexts [...] (E2)

In terms of curriculum, it isn't in it, but we end up discussing these topics mainly in field. Then, from the care for the correct waste disposal, treatment of the water, to sum up[...] but we have done it, and it is present as a matter of cat in our practice, because we are the identification model. The nurse is the identification model when they lead a team, or when they are coordinating a practical activity. Exemplifying is also a way of approaching it [...] (E10)

For the participants, the theme is intrinsic to the nursing exercise, and it is present in the patient care, the collection of socioeconomic data and also in nursing management. However, although professors reinforce this approximation between the environment with the nursing care, this does not seem to occur in a manner that is previously planned or scheduled, making it clear that, especially in the speech of the E10, the link depends much more on the particular attitude of some nursing professors in the field of practice, rather than its implementation in the course curriculum or the practice of all professors.

The work in the hospital environment guided by an environmental sensitivity, that may comprise the interrelationship between environment and health, appears to be essential in times of crisis, especially when it's clear that hospitals are large producers of waste, great consumers of materials, and source constant work accidents and that, in turn, they can be disseminators of knowledge for different populations through the education in health. Recognizing that capability is an important step for the new practices to overcome those that merely focus on the well-being and the healing. It will lead then to the construction of sensitive and attentive teams to the environmental issues<sup>5,14</sup>.

Thus, it becomes essential to insert the contents related to the interface between health and the environment in the professional training, as determined by the Law Nº 9795, April 1999 and Decree 4281 of June 25, 2002, where it was established the National Environmental Education Policy in order to encourage future nurses to reflect on the contemporary problems in the pursuit of a more sensitive, critical, responsible and engaged care with social and environmental issues<sup>15</sup>.

From another perspective, the study subjects have elicited links between educational activities in primary care and their links with environmental issues, evidencing then how it is set up in the context of community. The following statement is illustrative:

We have discussed a lot with students about these issues in this new curriculum format, because they go. in the first semester, to a basic health unit and make the diagnosis of the situation of the community, in terms of infrastructure of the house, garbage disposal, water supply, sewage treatment. I think we have called their attention enough about the social determination of the health-disease process, which includes the environment, then in the advanced semesters [...] we observe that the most of what was discussed in the first semesters have already been overcome. But sometimes they have not incorporated it in practice, then you need to make a revisiting, even if it's on the seventh semester in order to rescue those contents from the first one. Because once they go through the hospital, it seems that their focus is more on the disease and not on the health, for the prevention and promotion of health. Then I think these issues are not yet introjected in the people as a whole and this can be reflected in the practice [...]I think we might have shown things more, perhaps, and sensitized the students that this is a problem and that there is a strong relationship between the health-disease processes [...]I think the topic is exposed, but not studied deeply, but in a superficial way. That is, it permeates all the semesters I think [...] (E7)

The approximation between environmental issues with primary care is admittedly of easier apprehension, given the environmental problems of physical or visible order, to which communities are exposed, such as: waste accumulation, lack of infrastructure, damages to the natural environment, climate changes, among others. In the study, the interface health and environment under the perspective of primary care seems to be more relevant. In the context of health care, the socio-economic aspects related to illness are more densely addressed, because it becomes possible to know the context in which the subject is inserted and the conditions that are involved, such as beliefs, values, work, housing, and not only the perception of the disease<sup>16</sup>.

The approach on the conditions and determinants of health from the environmental perspective, through the deepening of this look at the individual context analysis, family and community, is fundamental to the advancement and enhancement of the environmental care, especially when one acknowledge the intrinsic relationship between the health of individuals and the environment. However, for this it is necessary that the professional is imbued with an environmental knowledge where the environment is viewed as the starting point in its entirety and complexity<sup>3</sup>.

Thus, it becomes necessary an approach that demands the graduates to also employ the care to the environment, because by caring for the environment, they will caring for health. This perspective is justified, especially when it's observed that in the communities children suffer from respiratory diseases that are

caused by the pollution, diseases cause from from inadequate water treatment, insect infestations and consequent spread of diseases, etc., as well as many other environmental problems that are not restricted to the modification of the physical space<sup>17</sup>.

Again, it is important that future nurses are prepared and aware of these demands present everywhere, including in the community. It will be necessary to this end, the stimulation of this reflection from the nursing professors, courses, programs, disciplines, and others in order to improved the existing initiatives, in spite of the understanding that only by sensitizing the professors might not be the only sufficient to engender the changes.

If public policies keep their perception of the environment as, primarily, the aggravating element of health conditions, the reductionist view of the environment will be kept, once it will be understood as the responsible for the health problems, without undertaking more complex reflections on the socio-economic model that has been experienced in the present days. The education, in this perspective, should collaborate with reflections that bring up the progress as historical certainty, enabling to critically rethink the matrix of society's development, and then reinforcing aspects such as community involvement, in what concerns to the respect for cultures, ethics, solidarity and compassion<sup>2</sup>.

Although participants have portrayed the different types of approaches to the environment in professional training in nursing, whether in a hospital or community, they also highlighted some weaknesses of the training in nursing. These frailties can identified below:

Now that you have mentioned it, I do not remember talking about environmental issues, I speak from one aspect, the environment issues are very little explored in my discipline [...] I think that as a professor, we have been neglecting this point, and here I speak for myself because I can't speak for my colleagues[...] And here in the university I believe this is something that I think, I have been exploring unsatisfactorily. I know that I mention a few things, but then we do not try to find solutions, we just say, "Well, there are these and these problems," and then, what can we can do to improve this? We hear very little about it [...] So, I believe that it is a very serious problem and that we should start addressing it, and try to find a way to bring it to the classroom. I haven't seen, but we it's important to say that I don't teach to all classes, nor talk to all professors, but I see that there are some people that are a lot more environmentally conscious, through the emails, conversations, their work, but it is one out thirty, I guess. Well, it is something very little, but that I am aware that I lack much in this part [...] There is a discussion but it is still very incipient. I think we can improve it a lot, organize it better, come up with a line of discussion since the second semester, or the first, which is when they have the discipline of environmental health. All professors should be working on it, but that's not what happens. Then there are some of them from the seventh semester, the ones from the PET, ones from the second semester, but they don't communicate among themselves. (E3)

[...] I see that some colleagues try to force a situation, even to account for this situation, and we are able to do so. Because we lack subsidies and readings. Then I believe that we have to insert gradually the environmental issues, or the issue of education as for what concerns to the environment, because by participating in these discussions, we will be at the same time acquiring the knowledge to teach it, even if it is by reading, debates between colleagues, like an exchange. When you bring a professor from environmental education it is something very rich for us, because we are instigated as well to read more about the topic. So, this is what I think, that I still need to discuss more, as much as I already have something in the discipline, as much as I try to do these relationships with the environment and intensive care, with the student, with the family, with the workers. (E16)

The deficits of information or lack of information and the need to move on are exposed in the statements of the nursing professors. It's possible to see that the main obstacles to a more forceful approach in the training are: a lack of preparation, the many errands, the little communication between professors, the few partnerships with other bodies of the university and the government, as well as the discontinuation of the reflective process in the different disciplines and semesters. Still, the perceptions of the participants meet the conclusions of a study which emphasizes the need for the training of health professionals to revive and deepen the debate on thinking and acting towards the environmental issues<sup>13</sup>.

The reports of the nursing professors also corroborated, in some cases, with the lack of continuity in the approach of the thematic, as a major weakness. This aspect is important, especially when considering the (dis) continuity of the theme during the course and on the interdisciplinarity that aims to overcome the modernity that fragments the knowledge. Indeed, the traditional education separates, shapes and fragmentes the knowledge, therefore destroying the possibilities of understanding and reflecting on global problems that are more and more complex, and that requires questioning, at first, our status in the world, knowing how to face uncertainties, to build up one earthly identity, based on ethics and solidarity<sup>18</sup>.

Faced with this, it is understood that the courses need to find an alternative to the current compartmentalization of knowledge. The disciplinary education of the modern world, while providing a lot of knowledge, is guided through specialization, and is unable to comprehend multidimensional problems<sup>19</sup>. This problem can be circumvented from the effective operationalization of cross-cutting themes throughout the curriculum, resulting in the sedimentation of values, attitudes and knowledge.

The environmental issues, in particular, require a multidisciplinary approach, that may communicate with different disciplines in order to foster a contextualized and integrative view of the relationship between heath and environment. The human being needs to be located in the universe, not apart from it. And that requires gathering the knowledge of the natural sciences and social sciences, emphasizing the multidimensionality and completeness that are necessary for the future education<sup>18</sup>.

The need for deeper discussion on the interface between health and environment in the training of nurses, finds support even in the perception of some nursing students that, in a study, where they addressed some superficial concepts about the subject, not referring to critical discussions or future effective professional interventions even in the final years of the course<sup>14</sup>. In this perspective, it is reaffirmed the importance of liberating pedagogical proposals, committed to the development of solidarity and citizenship, focusing on actions whose essence is to improve the quality of life and of the environment<sup>20</sup>.

In this sense, to perform changes, it is equally important that the professors organize themselves in order to discuss the health and environmental concepts by drawing new perspectives and links to the existing structures of disciplines from the curriculum so that they prevent the fragmentation of the knowledge, by making it transversal, complex and sensitive to the new demands. From this perspective, it is important that the nursing area develop educational practices to enable the rethinking of care for oneself, for others and for the multiple interactions that they cover. It should belong and be responsible for the environment, so that the individual is perceived in the care and, guided by care in its different dimensions<sup>15</sup>. Therefore, it is imperative to reconnect knowledge, leaving backwards the disjunctive thought that has fragmented the practices and made the interactions, the retroactions, the contexts and complexities of the planet's problems invisible<sup>18</sup>.

Thus, the educator, in this sense the nursing professor, is presented as the one able to develop and play an active role in building new relations in the world and society interrelations with the environment<sup>20</sup>. However, as important as exercise of such responsibility by the professor, it is essential that this be trained and instigated to reflect on the theme, building from there conceptions that are wider and more as for the environmental perspective. In this way, this can be accomplished through seminars, courses, lectures, exchanges between the professors themselves, among others, so that it will be possible to employ a professional training chained to the new perspectives, perhaps a new paradigm, based on the environmental assumptions as a response to the precarious environmental conditions experienced in the present days.

# **FINAL CONSIDERATIONS**

The participants realize that there is an intrinsic relationship between health and environment, which is polarized on the one hand, on a perception that is linked to a cause and effect perspective, and on the other hand, on the collective-ethicscomplex perspective, that embraces the complexity that involves the theme, and brings value to social aspects and human values.

Regarding the approach on environmental issues, in the professional training of nurses, it is concluded that it has been addressed at different moments, although sometimes it seems to lack further reflections. The participants mentioned approximations with the theme in the hospital setting, especially during the practical sessions, and courses related to the context of communities, and in practices carried out in primary care, where it seems to have more emphasis.

Thus, it is concluded that there is (in) visibility, (mis) information and (dis) continuity, to the extent that there are still gaps in addressing the relationship health-environment, which shows that advances in the discussion on the relationship between health and environment constitutes a challenge in the professional training of nurses.

It should also be highlighted not only the importance of addressing this issue in the process of training of nurses, as well as its discussion from a theoretical basis that addresses the complexity involved in the matter, as opposite to the reductionist and fragmented approach. It stands out as essential that nursing courses formalize the environmental approach in their pedagogical projects as a way of ensuring opportunities for discussion on the subject in nursing and to meet the environmental education policy in force.

Based on these, it is understood that the study has built subsidies and at the same time, contributions to new researches on the approach of environmental issues in the graduation courses in nursing. Thus, although it presents the limitations characteristic of qualitative studies, the research has important notes about the need for nursing professors reflect on the theme and bring them to the training process.

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