

## Environmental education for nursing faculty members: perception and relation to nurse training



*Educação ambiental para docentes enfermeiros: percepção e relação com a formação do enfermeiro*

*Educación ambiental para docentes enfermeros: percepción y relación con la formación del enfermero*

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### ABSTRACT

**Objective:** to describe the perception of nursing teachers on environmental education and its relation to the professional training received by nurses.

**Method:** exploratory-descriptive, qualitative study performed with 17 nurses working in Undergraduate Nursing courses at Federal Institutions of Higher Education of Rio Grande do Sul. Data were collected between January and April 2013, through semi-structured interviews and the analysis of pedagogical projects. Content analysis framework was used for data analysis.

**Results:** the following categories emerged: *multiplicity of perceptions about environmental education*, where environmental education, although still perceived through a naturalist bias, also includes a well rounded vision for socio-cultural context and human values; and *environmental education in in the nursing education program*, showing an incipient approach in vocational training, while recognizing its importance in nursing care.

**Conclusions:** Environmental education must be fostered with the goal of providing training committed to environmental sustainability.

**Keywords:** Nursing. Environmental education. Environmental health. Nursing faculty. Practice of nursing faculty. Millennium Development Goals.

### RESUMO

**Objetivo:** Descrever a percepção de enfermeiros docentes sobre a educação ambiental e sua relação com a formação profissional do enfermeiro.

**Método:** Estudo exploratório-descritivo, qualitativo, realizado com 17 enfermeiros docentes atuantes em Cursos de Graduação em Enfermagem de Instituições de Ensino Superior Federais do Rio Grande do Sul. Os dados foram coletados entre janeiro e abril de 2013 por meio de entrevista semiestruturada e de análise de Projetos Pedagógicos. Utilizou-se o referencial de análise de conteúdo para a análise dos dados.

**Resultados:** Emergiram as categorias: *multiplicidade de percepções sobre a educação ambiental* na qual a educação ambiental, embora ainda percebida por um viés naturalista, também abarca uma visão balizada pelo contexto sociocultural e por valores humanos; e *educação ambiental na formação profissional em enfermagem*, evidenciando uma abordagem incipiente na formação profissional, embora se reconheça sua importância no cuidado com a enfermagem.

**Conclusões:** A educação ambiental precisa ser fomentada, visando uma formação comprometida com a sustentabilidade ambiental.

**Palavras-chave:** Enfermagem. Educação ambiental. Saúde ambiental. Docentes de enfermagem. Prática do docente de enfermagem. Objetivos de Desenvolvimento do Milênio.

### RESUMEN

**Objetivo:** describir la percepción de enfermeros docentes sobre la educación ambiental y su relación con la formación profesional en enfermería.

**Método:** estudio exploratorio descriptivo, cualitativo, realizado con diecisiete enfermeros docentes actuantes en el Cursos de Graduación en Enfermería de Instituciones de Enseñanza Superior Federales de Rio Grande do Sul. Los datos fueron recolectados entre enero y abril de 2013, por medio de entrevista semiestruturada y análisis de los Proyectos Pedagógicos. Se utilizó el referencial de análisis de contenido para análisis de los datos.

**Resultados:** las siguientes categorías surgieron: *la multiplicidad de percepciones sobre la educación ambiental*, donde la educación ambiental, a pesar de ser percibida por un bias naturalista, también abarca una visión limitada por el contexto sociocultural y los valores humanos; y *la educación ambiental en la formación profesional en enfermería*, donde el abordaje es incipiente en la formación profesional, a pesar de que se reconozca su importancia en el cuidado de enfermería.

**Conclusiones:** la educación ambiental precisa ser fomentada, buscando una formación comprometida con la sustentabilidad ambiental.

**Palabras clave:** Enfermería. Educación ambiental. Salud ambiental. Docentes de enfermería. Práctica del docente de enfermería. Objetivos de Desarrollo del Milenio.

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## ■ INTRODUCTION

Confronted with the ongoing environmental changes that have taken place since the dawn of civilization, but perceived and studied with greater intensity as of the twentieth century, the need to raise awareness of the different social actors for the construction of changes in the man / environment relationship is perceived. Different sectors and governmental and nongovernmental organizations, have made efforts to establish measures in support of environmental sustainability. Among them is the United Nations (UN), which, through the Millennium Development Goals (MDGs), set priority actions aimed at improving living conditions on the planet. Among the eight listed objectives, the seventh is of particular relevance, prioritizing the fight against degrading actions of the environment, aiming for sustainability and improved quality of life on the planet.

However, it is noted that overcoming this contemporary scenario is urgent. Seen as a point of crisis (of the environment, thought, economics, politics, culture), there is a need for reviewing attitudes and values built by society, who in search of development, eventually fragmented knowledge, going against the systemic approach and holistic knowledge, so necessary for overcoming environmental problems.

Along these lines, rebuilding a point of view, looking and being, environmental education (EE) emerges as a strategic process, sensibilizing those who study it for a new ethic that guides social values and behaviors towards sustainability<sup>(1)</sup>. In Brazil, the National Guidelines for E.E. (environmental education) indicate that it aims to build knowledge, develop skills, attitudes and social values, care for the community, justice and environmental equity, and protect the natural and built environment<sup>(2)</sup>.

However, some studies show that EE has not found consensus on its approach and basic fundamentals in the different educational levels, showing gaps, especially in vocational training in higher education, which is based on reductionist conceptions when present<sup>(3-4)</sup>. Based on this, it appears that the attention given at EE, within college education, seems to be weakened in many areas, among them, nursing.

Although Florence Nightingale can be considered the forerunner in building the link between nursing and the environment<sup>(5)</sup>, there is still a long way to go. Also noteworthy is the importance of the attention that should be given by nurses to the contemporary environmental crisis, seeking strategies to overcome them through EE, example.

The relationship between health and environmental sustainability is considered an important focus of attention on the part of health professionals, for the health-disease process is directly related to the environment, mentioning as examples the increased incidence of infectious or respiratory diseases. In view of this, the need to articulate knowledge in pursuit of nursing training that is environmentally sensitive is evident, adding critical values and reflection to the theme, already provided by the National Curriculum Guidelines for Nursing Courses.

Based on the foregoing, there are questions about how the nursing teachers perceive EE and how this has been addressed in professional nursing education. Research developed with nursing faculty points out that, even though they have clarity about the losses arising from the current environmental issues and their implications on the health of populations, there is still no effective discussion on the subject, which must be configured as a cross-cutting theme in the training process<sup>(6)</sup>.

Thus, bringing educators to the discussion of EE and professional education constitutes a precondition to enhance their educational activity, exposing them to dialogue and participation, while reaffirming commitment to the future nurse and society<sup>(3)</sup>. It is noteworthy that this prerogative meets the goals set by the UN, particularly in relation to environmental sustainability, since they are closely linked to the health, performance, particularly of nurses, it is of great importance, as it may result into shares with varying impacts<sup>(7)</sup>.

Environmental sustainability, highly regarded as a "condition to build a new production rationality, founded on ecological potential and in new directions of civilization", consists with the ability to "reinvent the world, made up of a diversity of worlds, opening the siege of the globalized economic-ecological order"<sup>(1,31)</sup>.

However, in order for EE to be structured in the search for a new understanding of the world and behavior change, it is necessary to know under which perspective the debate on the subject is seated among those who, as social actors, are responsible for the materialization of EE in professional practice. This perspective gains greater scale when these players are nursing teachers, in view of their responsibility to students and society.

Theoretical and reflective study addresses the inclusion of social and environmental practices in the professional training of nurses, and presents the environmental rationality as a tool able to redirect health actions in nursing, as well as a coordinating mechanism of teaching and learning processes<sup>(8)</sup>. Another study shows environmental considerations into nursing for the participation of nurses in school,

characterizing it as a favorable environment to awaken an empowering ethic of environmental awareness, along with health institutions and society<sup>(9)</sup>.

Thus emerges the following research question: what is the perception of nursing teachers about EE and its place in professional nursing education? The objective was to describe the perception of nursing teachers on environmental education and its relation to the training of nurses.

## ■ METHOD

The study is part of the dissertation "Perceptions of nursing teachers on health interface and the environment in professional education"<sup>(10)</sup>, and is characterized as exploratory, descriptive, with a qualitative approach. It was conducted in Five Graduate Courses in Federal Higher Education Institutions for Nursing (IES) of Rio Grande do Sul: (Federal University of Santa Maria-Centro de Educação Superior Norte/ UFSM-CESNORS; Federal University of Pampa / UNIPAMPA; Federal University of Pelotas / UFPEL; Federal University of Rio Grande / FURG, and Federal University of Rio Grande do Sul / UFRGS) with nursing faculty members. The IESs (higher education institutions) were selected for their composition as federal institutions and the research time feasibility. The exclusion of the following Universities is hereby emphasized: the Federal University of Santa Maria - headquarter campus - due to the nursing teachers having already participated in a study that used a similar approach, and the Federal University of Health Sciences of Porto Alegre (UFCSA) because it had not yet formed the first group of nurses.

The data production occurred through the analysis of semi-structured interviews and educational projects from January to April of 2013. To begin the survey, the number of teachers of each ISE was verified through their respective e-mail addresses, and assessing the actual number of faculty members after actual contact in order to update the information collected. The inclusion criteria of the participants were: being a faculty member at a researched institution with over one year in that position. Exclusion criteria was: a leave for any reason, or vacation, and having any having a connection with the project.

For the interviews, participants were selected through a simple draw from the list of faculty members of each IES, therefore avoiding bias. 17 nurses were interviewed in a ratio of three to four per institution in order to keep proportionality between them. All of those selected agreed to participate. The sample closure followed the data saturation criterion<sup>(11)</sup>. Interviews were conducted<sup>(11)</sup> in a location free from interference of the researcher.

Prior to the interview, the Pedagogical Projects of the Courses were analyzed, obtained from the websites of institutions in order to give any support possible to questions and comments during the interview and later, in the data analysis. Thus, the following data were extracted from the documents: profile of the IES; profile of the course; concepts used as the theoretical foundation for EE; course subjects; summary of disciplines that focused on the theme; and additional information that was related to the object of study. The interview itself followed a list of questions that addressed the understanding of teachers about EE; the perception of the discussion of EE in nurses' training; the responsibility of a nurse in the face of environmental issues.

Data analysis was referenced by the content analysis<sup>(12)</sup>, protecting the structure: pre-analysis or collection of the analysis *body*; exploitation of material with exhaustive reading in order to capture existing content in the reports; processing of the results obtained with subsequent categorization and interpretation. The theoretical framework was based on "Environmental Knowledge"<sup>(1)</sup>.

The research was subject to the approval of the Heads of Department Heads of the participating courses and the Ethics Committee for Research Involving Human Beings of UFSM (CAEE No. 12192612.0.0000.5346). The Free and Informed Consent Form was presented and signed in two copies, one kept by the researcher in charge and the other by the participant. Anonymity of the participants was preserved with the cutouts of the interviews identified by the letter "E" corresponding to nurse, then a cardinal number.

## ■ RESULTS AND DISCUSSION

The analysis made it possible to organize two categories: the multiplicity of perceptions of environmental education; and environmental education in nursing professional education.

### **The multiplicity of perceptions about environmental education**

The wider debate about the interface health and environment, the training of nurses is essential and needs to be intensified, since both the development of actions that promote health, and rehabilitation constitute an opportunity to produce environmental education that is worried about the awakening of ecological subjects based on the complex web of relationships between man and the environment<sup>(6)</sup>. However, it is necessary to demarcate that the environmental design should not be limited to the bi-

ological component, given that the environment involves a complexity that joins different aspects of human life such as: social, economic, cultural.

Among the environmental education aspects expressed by interviewees, ecological bias, especially the preservationist perspective stood out initially. The cutouts below exemplify this perspective.

*[...] respect all that you have for free, so to speak, in terms of air, soil, water, even when you think about how you will circulate through a particular city, and what you will leave behind when you camp, you will leave your stuff there, so I think it's a matter of respect and living with nature in this sense of nature being water, air and soil. And, in environmental education, there is also the issue of accountability for what you produce in terms of waste [...]* (E7)

*I think we have to have this component as well, ecological, natural resources that we have to preserve [...]. If I live in a city with few trees I miss that [...] then comes the ecological question, the issue of use of natural resources [...]* (E12)

Perceptions linked to preservationist actions of fundamental importance are made evident in the current environmental crisis context, but that can not be the end of the man/environment reflections. The responsibility for the conservation of natural spaces is intrinsic to the whole society, because it represents not only the maintenance of untouched nature, but the condition of existence on earth, health, culture, respect for others and so many twists that come from caring for the environment.

Another study also showed that perceptions of EE are, mostly, supported by naturalistic perspectives, directed to the physical aspects of the environment, emphasizing the need to preserve the quantity and quality of natural resources, such as water, soil, plants, animals and all that can be obtained from them <sup>(4)</sup>.

Another aspect that may influence the way people perceive EE might be related to documents that deal with the subject, because, commonly, it reinforces the perspective of biological or ecological aspects of the environment, an obstacle even for the achievement of the objectives of their own National Environmental Education Policy (PNEA) <sup>(13)</sup>. This observation restricts the concept of a natural environment, weakening the idea of complexity making way for the formation of new attitudes, knowledge and behavior <sup>(1)</sup>.

In another area, some nursing teachers made connections between the context, the culture of a particular place and EE, somehow rescuing the idea of belonging to the

space where we live, and being responsible for it and looking after it. Here are some examples of this perception:

*[...] I think that part of education is in the sense that we are studying, discussing and bringing the guidelines forward, in that space, what would be best for that population, or what would affect that population the least. I see this in the sense of discussion, analysis, reflection and guidance, a set of things [...]* (E9)

*Environmental education for me means working with the community to care for the environment where they live. So it is looking at that community, knowing the context, how it lives, and working with it in the sense that the practices that do not enter the environment, are modified for healthier practices of care for the environment.* (E15)

Participants indicate the need to guide EE on an approach that values the context in which a particular person, family, community, population, reside and interact, while considering the interfaces on a global level is also key. Although in a subtle way, they add the idea that nurses should be used for health spaces to promote reflection on environmental issues, using EE as a strategic tool for such purpose.

The link between EE and health education, manifested by the participants, is shown to be enriching, given the interdependence between health and environment. It is noteworthy, however, that this debate must be associated to the use of methodological approaches that encourage the student to reflect on these issues in order to build a critical view of reality, motivating them to take a proactive stance on social and environmental sustainability.

The vision of context as part of EE was also perceived in a study with undergraduates and teachers of biological areas <sup>(4)</sup>. From this perspective, this perception appears as a form of intervention through the search for solutions to local environmental problems, where the community, realizing it is responsible for the environment they live in, assumes the role as lead actor of the change process, making it a possible multiplier of this relationship <sup>(4)</sup>.

Environmental issues set up in a mobilizing factor of planetary solidarity, creating a local / global symbiosis through its power to share actions with ethical and humanistic principles with different individuals, groups and contexts, a perspective that transcends borders <sup>(14)</sup>. Thus, it is necessary for nurses to seek a path to the structuring of collective action, identifying reality based also on the ecological well-being <sup>(15)</sup>. Such perspective can still provide the nurse with a means to come closer to the community with

the intention of caring for the space and environmental health, strengthening the sense of belonging and solidarity values.

Participants also exposed that EE can be understood as a change in social relations, where the appreciation of others, solidarity, sharing and interdependence take center stage to care for the environment. This means that, in a society in which man does not respect himself, possibly will not respect the environment to which it belongs. This perspective is reinforced by the following statements:

*Not only see the environment as the ecological question, garbage, water, water control, light but also respect between people [...] Therefore, environmental education is a very broad concept, very comprehensive, it permeates many areas, not just this physical environment we are used to seeing, so as to identify the same environment, the one visible thing. The environment has many things that have invisible networks too, and education should cover that part [...] (E12)*

*[...] Our moral values, responsibility, commitment, solidarity, even the very interdependence of human beings, living beings [...] that have a commitment to the planet, may I be responsible, I will not do things that will bring me harm, on the contrary, I'll have a conscience in the future. That is why, when I think about it, the matter of ethics [...] is not doing what I want and just that, it is taking into account this interdependence of others as well [...] So, as human beings, not only in health care, nursing care, but care in the sense of respect for others, solidarity, the way of being [...] (E16)*

Faculty members conceive EE as a set of values that society must build or rebuild, to overcome the environmental crisis. Thus, apart from the actions of environmental preservation, knowledge of the problem and the care of the local and global context, the education based in overcoming individualistic, consumer society corrupted by power that segregates man from one another and the environment is necessary.

The construction of values that integrate human beings and raise awareness to more careful and friendly relations with the environment are among the objectives of the EA. This perspective allows us to infer that this education should be the driving element of environmental knowledge, ie one that exceeds "environmental science", as a set of specializations that incorporate ecological approaches to traditional disciplines to open up the field of ethical values, practical knowledge and traditional knowledge <sup>(1)</sup>.

Awakening responsibility values in nursing education is a fundamental condition so that future nurses sensitize themselves with the environmental demands that are present in their professional life. Such training should be used as a permanent and continuous process that enables the subject to build political, critical, reflective values and a commitment to the transforming the current social-environmental crisis scenario. Thus, it is essential to discuss the formation of the educator himself, who, to raise such values needs to be sensitized to the topic.

This way, the perceptions of nursing faculty members show themselves to be complementary, given the amplitude and complexity existing in regards to the expression EE. It can be said, therefore, that EE claims all perspectives noted by nursing professors, in order to redeem the human interrelation with the environment. The idea that EE is tied to building values and must be present in both informal and formal education, forming education for life is reinforced.

Considering the complexity surrounding the issue and the limitation that sometimes is attributed to EE, such as education for nature conservation, it is important to know how nursing teachers perceive the approach of this issue in professional education in nursing, the discussion target of the following category.

### **Environmental education in professional education for nursing**

Participants realize that EE in professional nursing education as an emerging issue, particularly when they reflect on the inclusion in nursing education.

*[...] I understand it as a thematic that is still young, not all people are sensitized. We still need more time, like everything else, for our training process, of life [...] arguably the development will be very important to develop actions, strategies, I do not know whether to think of subjects in this area, most likely, other subjects may also add to the theme [...] (E1)*

*[...] I think this issue is still somewhat fledgling. (E2)*

*[...] I think we have to further strengthen EE [...] Because it seems that the environment has to do with nursing, it seems it has to do with agronomy, biology, with whoever gets the most involved in this, but is actually a discussion that must involve society and we have an important social role. (E10)*

The perception that EE is still embryonic in nursing courses is evident among the participants, requiring more discussion on the topic, though they believe that the issue has gained ground, over the years, in the graduate curricula.

From this perspective, PPP analysis of nursing courses shows that the approaches to the subject are still limited, with significant differences between different IESs. It is noteworthy that only one undergraduate course cites EE as content to be explored by a subject; the other, environmental issues appear linked to specific disciplines, aimed at environmental sanitation, for example, when they appear.

Another aspect to be highlighted refers to some difficulties listed by the participants, which indicate certain inhibition related to a closer look at the subject. Among the aspects highlighted, there is: the fact that it is a recent issue that is rarely discussed and valued by nurses, and they felt unprepared for such approach.

Although the theme is shown as incipient, it is necessary to point out that nursing education is perceived as the product of a multiplicity of social processes that result, historically, from the practice of the profession and of the social groups where the practice is developed, dynamically modifying itself adjusting to changing circumstances <sup>(16)</sup>. Such a possibility for change in nursing practices and the construction of their knowledge, allows questions about how nursing has behaved in the face of new social and environmental demands, for this is a current demand and calls on the various professions to rethink their commitments and responsibilities.

Thus, it appears that the debate on environmental sustainability should be the agenda for discussion in all areas of knowledge and should permeate the activities of teachers and researchers, students and their families <sup>(17)</sup>. Corroborating this view is the need for discussion on the topic among teachers, aiming to build a position regarding EE, emerged forcefully among the study participants.

*[...] there is no use in changing the curricula if the mindset is still the same, because all we do is change the place of the pawns. So let's see if people are start having awareness [...] but we still see that people are very closed, each in their practices in their activities, in their content [...] we see that some teachers do, most do not, and can even implement it in your home, but it's not something you bring into your daily life to be stimulating, of saying, "we will not print, we will bring, we will do", why not send materials by email ?! [...] I think there is a lot more to improve and we have a great responsibility, for sure. (E3)*

*[...] sometimes you end up being so absorbed by the "do, do, do," that this is the kind of thing we need time to think about. So bringing an environmental approach into the workplace, it demands time and a discussion, because only you can do it, so it would have to be the kind of activity that is done jointly by all faculty members so that no one is comfortable not doing it. So, I can say that I do not blame myself as much as I should about it [...] we sometimes end up with as many assignments as a professor, the professors themselves do not get together to discuss issues that are relevant to the graduate pedagogical issues. So it ends up being left alone, you get in involved with the survey, with the extension, with the items that you have to publish, with expectations that are laid on you as a teacher, and the pedagogical reflection issues meant for contributing, that will make a difference in nursing education, are left to be forgotten [...] (E11)*

Participants point to some issues that hinder communications between them and their colleagues to a greater or lesser extent, in the different IES'. Understanding the complexity that involves the theme, it is soon realized that it can be really difficult to structure a unified thought, bringing together the specifics of perceptions, particularly when educators do not usually discuss this subject in nursing education.

The nursing teachers observed an aspect that can also hinder the approximation between the nursing and environmental issues, such as the fact that the process of teaching and learning in nursing, in general, still overvalues technique, a biologicist and interventionist paradigm. The reason for maintaining this paradigm can be answered by the difficulty of the interdisciplinary challenge, given that educators were mostly trained in a traditional perspective, where the courses were organized, but did not interact or communicate with each other <sup>(18)</sup>.

Another finding relates to the fact that only adding aspects related to environmental issues to the nursing curricula is not enough to lead to changes. As noted by the participants without awareness, criticality, interest and, consequently, an approach to the subject, content, it will possibly become just one more to be delivered in a dense workload of disciplines.

The remains of modernization are still experienced when a deeper analysis is applied, where knowledge is dissociated and far from the ideal and desired interdisciplinarity, necessary to work in a environmental perspective. However, knowledge may totalize/unify once again through the inclusion of environmental thought in the formation process based on environmental principles<sup>(1)</sup>.

In order to achieve this, teachers need to be open to new ways of conceiving knowledge, such as from the environmental perspective, reorienting the current disciplinary fragmentation towards interdisciplinarity. In this sense, the theme must be driven towards interdisciplinarity and capable of evaluating the relationship between the humans, health and environment, from a change in the way we relate to and interact with the environment itself <sup>(6)</sup>.

Teachers also engaged in thoughts that show the current trends and open new possibilities, rethinking nursing education in a socio-environmental perspective.

*[...] I think the question is not only a sanitarian know-how, but of actually thinking [...] that today you will work hardly with the possibility of quality of life [...] But then you have to look at the things that are now part of contemporary problems in our society [...]* (E6)

*[...] they [students] have to include the relationships that will emerge from care giving. It is the relationships they will establish with the environment, even if they are taking care of "John Doe" there inside the hospital, they have to have this conception of an extended environment, and in this care, they also act as educators of this patient because he or she can be a multiplier out there in the environment in which he lives.* (E11)

*[...] I think we need to reinforce that he see that space otherwise, because sometimes we come with our prejudice, we come with our training, and I think the teacher's role is to facilitate the learning. So forcing this, making the student think about what he is doing, how he's doing it and how he is seeing this and making these issues arise in a way that the student can identify and can have a good discussion about it and have another look at it. So I think our role as a teacher, in relation to the environment is this, to ease some of this discussion, this environment integration and health in many ways, raising the discussion, raising questions, providing the student with practical experience and theoretical expertise I think that within the college itself, keeping discussions about the university space is also important for him to understand that, "Well, I'm part of it, is not something that is far from me", trying to link [...]* (E17)

Understanding the environment as a potential for health and not only focusing on the disease is essential. However, it is seen that the incorporation of environmental education was limited to internalize the nature conservation values, highlighting some of the most visible

problems of environmental degradation, such as contamination of natural resources, waste management and disposal of Industrial waste. Environmental knowledge should not be viewed as a content included in the subjects to be explored, but as the developer of disciplines, reorganizing the way of seeing the world, the starting point of knowledge<sup>(11)</sup>.

The professional education of nurses in Brazil, has gone through specific changes regarding the PPP of courses in the last 10 years. This perspective is supported in a study where it is made evident that schools / nursing courses have mobilized regarding the formation of Nurses, so that there were concept incorporations from critical pedagogy, among them: autonomy, the questioning of reality and the need to train professionals able to learn how to learn and committed to addressing the health problems of our society<sup>(19)</sup>.

However, the analysis carried out in educational projects enables the realization that the link between environmental issues and the different disciplines of the courses is not explicitly characterized, even though almost all PPP express, in one way or another, the need to pay attention to the contemporary environmental issues. Such non-specific approach of the PPP with regard to the environment lies in the fact that some courses conceptualize environment, when referring to the health-disease process, understanding it as a determinant / condition; or when they express the idea that they follow institutional policies regarding the sustainability of the environment, without specifying them.

In this sense, it is emphasized that there is a major challenge for the teaching of Graduate Nursing Programs, because it needs to form a general professional, taking into account the political and economic issues, and meeting the various specializations that emerge with competence and visibility. Furthermore, that said process becomes more complex in view of the need of concern with the whole, the environment <sup>(20)</sup>.

Based on the perceptions of environmental education and its approach to the nurse formation process, it became clear that it needs to be stimulated to reflect on social and environmental issues currently put at a critical and purposeful perspective, either through curriculum subjects or the approach given by different articles on the theme. Regardless of how knowledge is presented, it must be designed and built with the complexity that goes with it, enabling nurses to perceive, act and educate a social and environmental perspective of health care.

It appears that the approach to EE in the training process of nursing, has convergence with the MDG related to promoting sustainability of the environment

and improving the quality of human life needing to be transformed into a discussion agenda in the context of educational institutions. By incorporating EE in training practices, teachers have the opportunity to form a professional committed to human beings and the environment, with which it maintains a complex web of relationships <sup>(6)</sup>. The MDGs represent an opportunity for decision-making and review of postures, public policy and academic programs, since global problems are everyone's responsibility, leaving the universities with the responsibility to train more innovative, flexible and committed professionals <sup>(17)</sup>.

## ■ FINAL CONSIDERATIONS

The nursing teachers perceive EE differently. A preservationist bias that lead to an ecological vision of EE was shown. Other participants understood it as intrinsic to the sociocultural context and related to human values and something that should be used to raise sensitivity, responsibility and belonging promoting more supportive relationships between social actors with the environment and with themselves.

Perceptions of how EE is addressed in professional nursing education, revealed that the theme is incipient in the training scenario. This perspective was reinforced by the analysis of the pedagogical projects of the courses, where it was found that the subject receives little space in the curriculum or is linked to the reorganization of environment sanitation.

A perception associated to the need for further discussion on the subject as a way of seeking information in order to explore the subject was also shown. In addition, participants stressed the importance of EE as a strategy to rethink nursing education, in order to incorporate social and environmental perspectives in health care.

It is believed that the study may provide a basis for further reflection on the theme, although the inherent qualitative studies limitations are known. However, it presents contributions that establish an emerging discussion agenda for nursing worldwide, particularly in light of the scenario presented on the contributions of the profession to the MDGs. It is suggested that the development of new investigations, especially proposals on how to effectively incorporate EE in nursing education be made.

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