

PERCEPTIONS ABOUT ENVIRONMENT AND HEALTH OF WORKERS AND STUDENTS WORKING IN AN EMERGENCY ROOM

PERCEPÇÕES DE TRABALHADORES E ESTUDANTES ATUANTES EM UM PRONTO-SOCORRO, SOBRE MEIO AMBIENTE E SAÚDE

PERCEPCIONES DE TRABAJADORES Y ALUMNOS DE UNA GUARDIA HOSPITALARIA SOBRE EL MEDIOAMBIENTE Y LA SALUD

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ABSTRACT

Objective: to learn about the perception of the environment and health of workers and students working in an emergency room. **Method:** this was a qualitative and descriptive-exploratory study developed in the emergency room of a university hospital. Seventeen workers, professionals, and students participated in the study. The data were collected from November of 2011 to February of 2012 through a semi-structured interview and analyzed on the basis of the proposed referential for content analysis. **Results:** the participants presented a polarized vision about the environment, between a sense of belonging and a naturalized perception. The concepts about environmental issues are guided by the notion of detachment, and the perception of necessary engagement of individuals and public authorities in relation to the theme. The relationship between environment and health was understood as intrinsic and direct, however, sometimes focused on the disease. **Conclusions:** the key role of training and health institutions is highlighted as promoters of a discussion in the search of instigating reflection on the topic, offering not only a theoretical contribution, but also providing strategies that create opportunities for workers to rethink their actions from living experiences and individual reflection about the topic.

Keywords: Environment; Environmental Health; Nursing; Emergency Hospital Service.

RESUMO

Objetivo: conhecer a percepção de trabalhadores e estudantes atuantes em um pronto-socorro, sobre meio ambiente e saúde. **Método:** estudo de abordagem qualitativa, descritivo-exploratório, desenvolvido em um pronto-socorro de um hospital universitário. Constituem-se sujeitos do estudo 17 trabalhadores, profissionais e estudantes atuantes no setor. Os dados foram coletados durante os meses de novembro de 2011 a fevereiro de 2012, por meio de entrevista semiestruturada, e analisados com base no referencial proposto para a análise de conteúdo. **Resultados:** os participantes apresentam visão de meio ambiente polarizada entre uma noção de pertencimento e uma percepção naturalizada. A concepção sobre a problemática ambiental está balizada pela noção de distanciamento e pela percepção de necessário engajamento individual e do poder público em relação ao tema. A relação entre meio ambiente e saúde foi entendida como direta e intrínseca, embora, por vezes, centrada na doença. **Conclusões:** destaca-se o papel fundamental das instituições formadoras e de saúde como promotoras de uma discussão, na busca de instigar a reflexão sobre a temática, oferecendo não somente um aporte teórico a respeito, mas também oportunizando estratégias para que os trabalhadores possam repensar o seu fazer a partir das experiências vividas e da reflexão individual frente ao tema.

Palavras-chave: Meio Ambiente; Saúde Ambiental; Enfermagem; Serviço Hospitalar de Emergência.

RESUMEN

El objetivo de la presente investigación ha sido conocer la percepción de trabajadores y estudiantes de una guardia hospitalaria sobre el medio ambiente y la salud. Se trata de un estudio cualitativo descriptivo exploratorio llevado a cabo en la guardia de un hospital universitario. Los sujetos del estudio fueron 17 trabajadores profesionales y estudiantes del sector. Los datos fueron recogidos entre los meses de noviembre 2011 y febrero 2012, a través de entrevistas semi-estructuradas y analizadas en base a la propuesta del referente propuesto para el análisis de contenido. Los resultados señalaron que los participantes tienen una visión del medio ambiente polarizado entre un sentido de pertenencia y un sentido naturalizado. La idea de los problemas ambientales se basa en la noción de algo distante y se percibe la necesidad de participar de forma individual

y de compromiso por parte del gobierno. La relación entre el medio ambiente y la salud fue considerada como directa e intrínseca aunque a veces está centrada en la enfermedad. Se llega a la conclusión que las instituciones formadoras y las de salud desempeñan un rol fundamental como promotoras de discusión y de reflexión sobre el tema. Dichos establecimientos ofrecen no sólo aporte teórico sino que también generan estrategias para que los trabajadores puedan repensar sus tareas cotidianas a partir de las experiencias vividas y, asimismo, de la reflexión individual.

Palabras clave: Ambiente; Salud Ambiental; Enfermería; Servicio de Urgencia en Hospital.

INTRODUCTION

The debate on environmental issues has been increasingly intense over the years, especially in the last four decades. During this period, the media and various official documents, resulting from political and especial meetings, have been poring over issues related to the effects of global warming and importance of discussing the sustainability of the planet.

A fact of great relevance is related to solid waste management, which has motivated the formulation of specific public policies on the topic, both within the framework of urban agglomerations, and in specific scenarios of professional activity. Among these scenarios is the hospital, where a large amount of waste is generated on a daily basis, which can compromise the health of workers, communities, and the environment. Such a prospect imposes the need to deepen discussions on the subject on workers and managers of health systems and formulate strategies that minimize the environmental impact arising from health working processes.

A recent study shows that the relationship between health and environment should be discussed with more emphasis within hospitals because different factors may interfere in waste management processes in that setting; these factors include those related to contemporary social context and conceptions of health and environment, which permeate the work in health, and the influence of labor aspects that are specific to hospital and health-care work.¹ From this panorama, it is understood that the stimulation of the construction of social and environmental sensitivity becomes fundamental to responsibly act about the environment, especially among those whose purpose of work is health.

Among the various units that make up hospital institutions, the Emergency sector stands out as a place permeated with complex conditions, inherent to the environment itself and the humans who provide care and those who are being cared for. In addition, such sectors are characterized by the dynamism and speed required in health care, confronting professionals with many situations of stress and a peculiar work processes.² Thus, when assessing care to people in life limiting situations and death-threatening, one imagines that the worker will direct his focus to specific issues of daily lives at work at the expense of a more comprehensive vision of other aspects, not less important, and among them, those related to environmental care.

It is assumed that the perceptions and attitudes of health professionals may reflect the waste management strategies in

an institution and, consequently, generate social-environmental impact. Thus, the present study is justified by bringing the relationship between health and environment into discussion under the vision of health workers operating in an emergency room because, in addition to the overwhelming burden inherent to this sector, these workers are also directly responsible for the proper separation of residues.

Based on these considerations the study was developed based on the following research question: what is the perception of workers and students working in an emergency room on environment and health? Therefore, the objective of this study is to learn about the perception of workers and students working in an emergency room on environment and health. We highlight that this manuscript comprises part of research results concerning the perceptions of subjects about the environment and its interface with health. Other aspects investigated, connected with the question of waste management, are part of another publication.

METHOD

This study had a qualitative and descriptive-exploratory approach and was conducted with workers and students from the emergency room in a large hospital in the countryside of Rio Grande do Sul, Brazil. The study subjects included doctors, nurses, nursing technicians, sanitation workers, and academics (nursing students and resident doctors) operating in the emergency unit during the period of data collection. The inclusion criterion was to be actively working in the sector for more than one year. The exclusion criteria were to be temporarily acting in the sector or being on vacation or leave during the period of data collection.

Seventeen subjects were interviewed according to the data saturation criterion, i.e. the interviewing process ended when the answers stopped providing new insights about the object of study. The proportionality between the various healthcare subjects was maintained; they were selected through a drawing process and in accordance with the inclusion and exclusion criteria.

The data were collected between November of 2011 and February of 2012 through a semi-structured interview composed of open questions about the perception of subjects on the environment, environmental issues, environmentally responsible actions, relationship between health and the envi-

ronment, medical waste, relationship between waste and the environment, knowledge about waste management processes, factors that help and undermine the separation of waste in the emergency service, and perception of environmental responsibility as an employee or student working in health care. The interviews were conducted by the researchers in a reserved place, recorded, and subsequently transcribed.

The subjects were identified with the initials of their professional category followed by the number of their interview turn, namely: AE (nursing academic); E (nurse); FL (janitor); M (doctor); MR (resident); TE (nursing technician).

Data were analyzed based on the proposed referential for content analysis complying with the following steps: gathering of the data *corpus* of demographic information; reading out findings to identify similar features in the testimonials; in-depth reading to establish categories of analysis; and interpretative analysis of categories and discussion with the relevant literature.³ The study obeyed the precepts set out for research with human beings; data collection was performed after approval of the institutional research Ethics Committee (CAAE nº 0256.0.243.000-11). The subjects were given the opportunity to ask questions and read and signed the Volunteer Informed Consent of participation before being interviewed.

RESULTS AND DISCUSSION

The search for the establishment of convergence between the findings led to the construction of categories of analysis that allowed a vision about the participants' perception of the investigated topic. The categories are described below, interspersed with pertinent literature data.

CONCEPTIONS OF THE ENVIRONMENT

This category highlights the different perceptions about the environment, particularly directed towards a vision of amplitude that involves not only the natural and biological aspect but other interrelated issues. Thus, the manifestation of insertion in this space is notorious, denoting the feeling of belonging to the environment demonstrated in the following statements:

The environment is the physical space in which we live. The flora, fauna, and the people, the cities (E03).

The environment is the environment where we live; it is related with nature, with man, and with the habitat (TE02).

The concept of interrelation between the social and natural worlds is observed by the team of workers and students

who work in the emergency room. The answers lead to the notion of the environment as being the place where they live, inhabit, and relate among other features. This vision appears linked to historical, social, economic, and cultural determinants that permeate the process of living for every human being.

Conversely, despite the observed interaction, the vision driven by a naturalistic bias and ownership of the environment as an asset to be used is still noticeable in certain testimonials. In the context, one can describe the naturalistic vision as one that considers the environment as a synonym of untouched nature, with its ideological basis set on the conception that excludes man, society, and cultural and urban resources from the so called environment feeding the idea that there's a natural world formed in opposition to the human world.⁴ The described conception can be observed in the following testimonials.

Environment is that thing that we care for nature [...] not deforesting [...] not littering streets, sewers, things [...] I think that the environment is to preserve nature, mainly trees, not deforesting, not polluting a lot, burning [...] (FLO2).

It would be, the green, added to the issue of contamination, of not contaminating the environment, being cleaner, not using "chemicals", being more natural (E01)

As a characteristic of a vision oriented towards the environment and nature, the testimonials demonstrate more concern with the everyday pollution and a sense of detachment between social and natural. This perception may have its origin in the social-historical processes of the industrial age and great urban agglomerations, which reflected great destruction and environmental pollution generating concerns, particularly in the health sector.

In addition, the natural world has historically been perceived by humans as a right of use based on the sustainability of economic progress. As a result of this position, the environment is perceived as a foreign component, unrelated to social issues or the daily life and work of individuals. This realization is even more worrisome when reinforced by additional research in which some nurses use verbal manifestations that enhance the naturalistic bias and the idea of the environment as an asset to be used.⁵

Therefore, it is essential to search for an expansion of the environment's perception beyond issues that are strictly related to nature. Thus, efforts to raise awareness of workers and academics are needed, especially with regards to feeling as belonging to the environment, in which the environment is configured as a whole, intrinsically nestled in the process of living as a human in its multiple dimensions.

Some deponents raised issues related to waste recycling when asked about their perception of the environment. Al-

though the attitude of material recycling is of the utmost importance because it constitutes something beneficial and necessary in times of environmental crisis, this issue is perceived as something external to the working environment, as observed in the following statement: "it would be more for the garbage because nature would be out of my work because this is a closed environment [...]" (TE02).

The naturalized vision still remains as an ideological basis for the statement in which while showing concerns about the waste in the environment, the individual does not understand the workplace as an integral part of it. Similar studies oppose the data obtained here by showing that hospital workers are reflexively affected by environmental problems and show a general and incipient concern regarding environmental issues. However, this concern is usually related to the separation, recycling, and appropriate destination of garbage, which are also based on normative precepts in health services.^{6,7}

Such perspectives can be understood as responses to a reality found in contemporary hospital work, particularly in urgent and emergency services in which a demand of increasing attendances predominates contrasted with the precariousness of some services.⁸

Therefore, the promotion of the expression of the worker's subjectivity at work is understood as necessary because this condition is imperative to reflect on issues that drive knowledge on health, including environmental aspects. It should be noted that instigating workers to reflect on complex demands requires the elaboration of strategies that hold applicability in the dynamics of service to mitigate factors that can possibly interfere with the quality of care.⁸

Therefore, when considering the workplace as a possibility for actions on environmental preservation, the individuals are placed as agent/actors with capacity and responsibility to minimize the environmental impact caused by the process of labor, which demands, however, a concept of the environment that combines the social and natural worlds.⁷ Thus, the commitment with the environment raises a new way to relate with the world, guided also in ethical predispositions and naturally essential because caring for the planet is concomitantly caring for what is individual and collective.

THE CURRENT ENVIRONMENTAL ISSUES

Deepening the knowledge about the individuals' perceptions on contemporary environmental problems becomes relevant when considering the impact caused by residues in the environment, which consequently affect social welfare and the standardization on proper disposal and individual worker responsibility. With this, we observed some detachment when the perception of environmental issues was questioned:

I think it's hurting us; it's just hurting us, the human being is destroying the environment (FLO3).

Now that we see people worrying about the environment, we saw people throwing trash in the streets, now it looks like they stopped doing that a little bit, they are becoming aware these days. But, I think it will take time to show reflexes, the day when there will be no water and stuff, is when they will realize (TE01).

The individuals' distancing from responsibilities for the environment is noticeable when they emphasize the relationship of environmental issues with each other, exempting themselves from the commitment to environmental preservation. In this perception, it is understood that a review of current problematic postures is necessary to stimulate the involvement with the cause of everyone and, consequently, of each one, generating a commitment to change in different locations and in actions and ways of perceiving the complexity that involves social and environmental issues.

The distancing from responsibilities of mainly environmental aspects is also evidenced in a study conducted with nursing professionals, in which it was found that the maintenance of this distancing from waste management processes result from the worker's own activities in the workspace.¹⁰ Situations like that demonstrate the need to broaden discussions, through environmental education actions at all levels, building a sense of responsibility which should involve several issues and address more than the simple compliance with the legislation in place¹¹, which sometimes is insufficient before the indifference of some workers. We highlight this perspective because it is understood that the simple compliance with pre-established standards is not enough to generate awareness in relation to the topic, which, should emerge from a more complex reflection on labor and social living.

Considering humans as constituents of complex and plural societies, it is estimated that the responsibilities regarding environmental issues should begin from all and for all because although often individualized, the reflexes have unlimited range. This understanding, which is part of living in society, makes each being as someone with shared responsibility expressed as follows:

It is a concern that we all have to keep this balance [...] I don't know if the climate is changing or not changing; I don't know how much that is true, but I think that worrying about it is important (M03).

That all our actions, if not done correctly, can cause environmental problems, from the separation of waste [...] to pollution care [...] (AE01).

The vision of participation in the process of environmental degradation and behavioral change towards preservation of the environment transpires and is being seized. Such a perspective is also perceived in another study in which the topic stresses that improvements depend on the actions and attitudes of each individual, although broader results depend on the involvement of the majority.⁹

However, care should be taken, as perceived in the M03 manifestation, about daily circulating information in the media because although they can strengthen engagement with environmental issues they can also put in check the knowledge built that reveal the truth of current environmental issues, shaping perceptions and attitudes. Moreover, considering that conceptions and attitudes previously built are defied when dealing with these contemporary issues, the conflict between the reality of environmental events and its questionability is understood. This, in turn, often leads to conflicts of ethical, moral, and existential order.¹²

Some workers bring up that public policies are insufficient to protect the environment and reinforce the importance of their own participation and engagement in the process.

[...] I think in underdeveloped countries, mostly have weak laws and penalties are not applied, no one is afraid of doing what they do, so it has to evolve first in the justice part and then apply the law. So, we have a good Constitution, I just don't think it's followed (MR01).

I do not think it depends on the Government only, but that everyone needs to start at home, in schools, and think about all that you do every day (TE02).

The subjects demonstrate different perceptions about the responsibility with the environment alternating between the public power and individual sphere. However, both refer to governmental power and, although they are different perceptions, they can be understood also as complementary. It appears that the confrontation of environmental issues assumes this interdisciplinary and inter-sector intervention whose rulers and members of society hold their share of co-responsibility in the process, in the decision-making, and results from interventions.¹¹

A second challenge is presented from this accountability in which all are commissioned to promote change in the current panorama of environmental issues; this challenge is related to the pursuit of ecological and conscious act in the context of working in health. This assumes that an ecological attitude is more than the sum of good behavior and that having an ecological consciousness presupposes knowing why to act or not to act, that is, the motivations for a particular attitude that sometimes goes beyond the sphere of rationality, and involving feelings.¹³

Thus, the expansion of ecological consciousness on the part of the hospital worker depends on the deconstruction/reconstruction of meanings to allow for an ethical stance with environmental preservation.⁷ Therefore, it should be noted that this "task" is not an easy one that can be prescribed¹³, but it becomes crucial amid the environmental crisis that we experience.

HEALTH AND ENVIRONMENT

In addition to the early recognition of environmental changes affecting economic activities, infrastructure and ecosystems, it is now understood that they also represent risks to the health of the population.¹⁴ In this regard, the deponents, when asked about their perception of the relationship between health and environment, visualize the existence of a direct relationship between these issues. This conception can be perceived in the following accounts:

I think that the two go hand in hand; health depends on a well-being that depends on a healthy environment, and the environment must be preserved [...] (E02).

I think that health is linked to the environment; there's no way to separate them. We live in the environment, and if it is healthy we are too (TE02).

Integrative visions are indispensable for the pursuit of well-being and quality of life, especially under the understanding that the environmental problem is also a problem of health once society seeks to develop economically, often without due concern for the environment and the impact of its destruction for the current and future generations.¹⁵

To envision of perceptions that bring environmental care as a health care arouses hopes concerning changes in the current environmentally troubled scenario, which greatly affects social and environmental health. Such prospects also highlight positive responses, although discreet, in the face of repeated considerations reported in current studies where health professionals need to expand their sensitivity to the health and environment interface.^{5-7,9,10,13,16}

The following are among the effects already estimated in the field of human health as resulting from environmental changes: spread of infectious diseases; damage to health from natural or anthropogenic disasters; and chronic non-infectious diseases related to environmental changes and nutritional deficiencies.¹⁴ The promotion of health can be cited as a way to combat this situation because it embraces the health and environment interface when conceiving that health should not be restricted to the absence of disease; it requires the involvement of education, environment, recreation, and access to goods and essential services among others.¹⁷

The vision that the modified environment is a strong disease-spreader has become the consensus based on what was described previously. This perception can also be observed in this study, to the extent that participants have a vision of causality, placing the environment as the causer of diseases.

[...] the environment is polluted thing, you won't have a good health, so I think that taking good care of the environment is good for you to have a good health too (AE02).

If we have a healthy environment, we have a wealth of good water; you're going to get treated water, proper sewage disposal, it is part of the environmental policy also, you will be able to prevent diseases. If you have forests and a viable forest biome, you will let the bugs in their place. As it is the case of malaria that we invaded and ended up passing to various towns, and because of this a lot of other critters spread diseases, those that live in the bushes, but that we invaded their environments [...]. (MR01).

The perceived relationship about the environment as the causer of diseases does not translate into a misconception; however, one should be careful with the amplitude of the focus directed to the meaning of the environment because it must be understood in its macro meaning. Obviously, it is necessary to highlight that the respondents, who work in the emergency room, are involved in a labor activity that prioritizes rapid diagnosis and treatment of acute pathological conditions, which represent situations when the search for causal agents for such damages is quite common. Thus, this vision based on disease can also be explained from the perspective of the work environment because this involves high complexity and extreme health problems.

This perception can also be understood as remnants of the sanitarian movement which lasted until the mid-'60 and '70, in Brazil. We highlight this perspective because some initial classes in health area courses are still guided by concepts with a sanitarian bias in relation to the environment regardless that, from this historical period, the understanding of environmental problems as not only restricted to sanitation and vector control aspects has expanded, giving rise to the environmental movement.¹⁸

The centrality in the illness caused by the environment, when one reflects upon the relation health and environment is also noticeable in other studies in which the establishment of a cause-and-effect linear vision is noted on the part of healthcare students¹⁶, and the need of epidemics controls such as dengue fever in the vision of nursing workers.⁹ With this perspective, it appears to be necessary to stimulate healthcare workers from their formation, in a logic that inter-relates health and environment extending the thinking, the ability for reflection and to

see the world, and to make decisions, choices, and transform¹⁶ by rethinking individual everyday practices and considering that the conduct of each individual conditions that of others and reflect in a collective product.⁹

Thus, it becomes essential to discuss the health and environment interface seeking environmentally responsible attitudes, especially because this is such a complex process that involves the reflection on values and attitudes requiring the involvement of each subject with the awareness of being affected by the current environmental issues.¹³ Similarly, it requires the involvement of training and health institutions, especially those in which there are already studies demonstrating the absence of training or training programs on the topic¹⁰ bearing in mind their responsibility in promoting educational and formative processes in services that are focused on current social demands. Environmental issues are undoubtedly propellers of new debates, demanding new postures and attitudes from professionals, directed towards the commitment to environmental sustainability of the planet and the complex relationships that it involves, inherently, with health care.

FINAL CONSIDERATIONS

This study shows that subjects have different perceptions about the topic. Although some present an interactive vision about the environment, the fact that a naturalized vision on the topic predominates is still striking. The subjects realize that society is experiencing an environmental crisis and that there is a narrow interface between health and the environment. In this case, they cite the environment as the causer of diseases.

The limitations of this study are acknowledged, especially regarding the local characteristics; which does not allow nor was presented as the objective of research to present generalizations on the topic. It is believed, however, that the results presented can provide subsidies for new reflections and debates, as well as reveal the need of further studies to reaffirm the importance of the topic in the area of health and the contemporary scenario of socio-environmental crisis.

Hence, it is understood that the objective of the research was achieved because the obtained results demonstrate the lack of integrative visions between the environment and health on the part of professionals and students working in the health area; however, it is necessary to highlight that some subjects demonstrate more interactionist perceptions, revealing some sensitivity to the topic, even being still shy.

Therefore, the need of ethical, critical, and reflective stand by health professionals is stressed considering the current environmental issues because environmental oriented actions carry over a particular perception and subjectivity from those who perform them. We reiterate the importance of creating

spaces for instigating debates about reflection on the health and environment interface, constituting a fundamental attitude to the quest for a more inclusive vision on the topic. Thus, training and health institutions have a key role as promoters of this discussion, offering not only a theoretical contribution, but providing strategies that allow workers to rethink their actions from their experiences and individual reflections, including topics involving their social and environmental responsibility.

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