Objective: to know the conception that the nurses of a public hospital and of teaching have on the environmental assumptions of Florence Nightingale. Method: a descriptive, exploratory, qualitative approach study with eight nurse assistants. The data were collected from a semi-structured individual interview and analyzed by the Content Analysis Technique. Results: nurses consider the conditions of hygiene, food, accommodation and air quality offered to patients and professional staff in their work, corresponding to Nightingalean environmental assumptions, even though they do not have a solid knowledge of Nightingalean theory and its usefulness to professional practice. Conclusion: a permanent educational process is necessary to overcome this lack of knowledge. Descriptors: Nursing; Environment; Health; Nursing Care.
INTRODUCTION

Florence Nightingale's environmental theory (1820-1910) marks the beginning of modern Nursing. The environmental assumptions of Florence Nightingale theory were firmly established in the second half of the nineteenth century as the very foundations of scientific Nursing. They duly emphasize the environment as a force capable of promoting and recovering the health of the human being, indicating that a balance between them must exist to revitalize health.1

The word theory has its origin in Greek, \textit{t\'heoria} meaning a "vision". Theory is defined as a body of systematized concepts that allows us to know a given domain of reality. The theory provides means to know this reality. The means are the concepts, which, systematized, form the theory. The observation of practice and reflection led to the consensus that the central concepts of Nursing were human beings, the environment, health and Nursing itself. Nursing theories began to be constructed relating these concepts. The importance of the use of theories is emphasized in that they aim to direct the nurses' thinking, their observation and their interpretation of reality.2

The nurse must be able to go through different Nursing theories. Theories reflect the thinking that underlies the development of knowledge oriented to professional practice. Knowing well theories of Nursing means the first condition for nurses to take on the different perspectives of care. Nowadays, due to the increasing complexity of actions and the context of health care, professionals should guide their practices based on more than one theory of Nursing.3

Florence Nightingale advocated the centrality of the physical environment as a determinant of health and the cure of illness in people. In its conception, the concept of the environment encompassed the psychological and social environments. Human health depended on the interaction of environmental factors. Florence emphasized in her environmental theory, as it is considered today by the doctrine, the important elements in maintaining a healthy environment: ventilation, provision of fresh and pure air; lighting, brightness and direct sunlight; heat, related to avoiding the cooling of the patients; cleaning, reference to infection prevention; the noise, the need for observance of silence; odors and food. The variety of objects, forms and colors offered to the sick, plus a conversation about good things, are also cited as contributing to their mental, and physical recovery.4

Florence Nightingale focused on hygiene prioritization and highlighted five essential components of the ideal cure: clean air, pure water, sanitation, cleanliness and light. These nightingalean thinking assumptions are of vital importance at present, given, the issue of hospital infection. Increasingly common, deadly, and resistant, hospital infections emerge as the greatest worldwide threat.5

The increase in technology and the development of medicine have altered the roles and responsibilities of Nursing, causing changes that, for many, hamper patient care. However, despite improved treatment and health care, the key aspects of Nursing care, first established by Florence Nightingale, remain vitally important to global health.5

There is a lack of resumption of the Nightingalean assumptions and the solidification of the discussion on the health-environment interface in in-service education and lifelong education. Florence's environmental theory has fundamental importance for the discussion of many aspects related to our socio-environmental responsibility. Nightingalean thinking helps us to confront the environmental problem, a complex event that has an important impact on the health-disease process, and which requires individual and collective efforts for its resolubility.6

The reality shows a scenario in which environmental elements are not yet fully considered by health workers. It is urgent to change this perception, especially in the hospital scenario, marked by influences that contribute to the segregation between health and the environment. Education is fundamental for the re-evaluation of visions, positions and actions. The implementation of a process of permanent education allows the expansion of the health concept in order to incorporate other dimensions, as recommended in the various international events on health promotion.7

Knowing the assumptions of Florence Nightingale's Theory of Environmentalism is essential for the foundation of professional practice, a basic requirement of actions and health care. The search for and acquisition of this knowledge is therefore a real professional challenge of our day, which, overdue, will allow a more conscious and informed environmental action in the context of Nursing hospital practice.

From these reflections, the objective was:
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- To know the conception that the nurses of a public hospital and teaching institution have about the environmental assumptions of Florence Nightingale.

**METHOD**

Exploratory, descriptive and qualitative approach. The research site was the Antônio Pedro University Hospital of the Fluminense Federal University (HUAP / UFF) in Niterói, Rio de Janeiro. This study included eight nurses who met the following inclusion criteria: being a statutory employee for more than one year in the institution, providing direct patient care and volunteering to participate. In choosing the subjects to be interviewed, care was taken to elect nurses from seven different care areas, keeping proportionality, as far as possible, between the different sectors.

The ability of a sample to reflect multiple dimensions of a totality is the criterion of selection of subjects for the study in the qualitative approach, not the numerical criterion. The sample should contain a certain number of recidivism of information, without neglecting those odd, whose explanatory potential must be taken into account. The set of informants must be diversified enough to allow the apprehension of similarities and differences, enriching the research. ¹

Data were collected through semi-structured individual interviews in the months of February and March 2014. The interviewees were invited by the researcher to participate and, informally, clarified about the purpose of the study, the ethical issues involved, the approximate duration of the interview, the use of recording and prior scheduling.

At the time of the interview, all the information was reprinted and started only after reading and signing the Informed Consent Term. The interviews took place during the interviewee's working hours, in a reserved place in the hospital, and had an average duration of 30 minutes. The subjects were identified with the letter E, of nurse, followed by the number corresponding to the interview order performed. An interview script was used in order to guide the researcher on the issues of interest. After the interviews were finished, the files were recorded, stored and transcribed, constituting a data body for analysis.

Data from the interviews were analyzed according to the Content Analysis Technique. ⁹ The process of data organization and treatment consisted of the following steps: a) composition of the analysis corpus: gathering and organization of the information collected; B) pre-analysis: preliminary decomposition and categorization of each type of data, firstly with floating reading and subsequent deepening, and with search for "significant expressions", which resulted in the organization of the material into categories of analysis; C) recombination of the data in significant categories / sub-categories, from a more detailed reading of the material collected; D) in-depth analysis, based on the interpretation of the categories elaborated in the light of the theoretical reference.

The main categories that emerge from the analysis of the interviews and that configure the main points of discussion and reflection for the object of study were: a) Florence Nightingale's environmental theory: nurses' perception; B) environmental determinants and responsibility of nurses and c) permanent education: nurses-environment.

The research project was submitted to the Ethics Committee in Research with Human Subjects (CEP), Faculty of Medicine / HUAP, Federal University of Fluminense, and approved by the National Research Council (CONEP), process nº 24900913.9.0000.5243, in order to meet To the ethical precepts contained in Resolution CNS 196/96 dealing with research on human beings. In order to observe the norm, the subjects of the research could only participate after reading and signing the Free and Informed Consent Term.

**RESULTS AND DISCUSSION**

- Florence Nightingale's environmental theory: nurses' perception

The nurses evidenced vague, sparse, and distant memories, usually from college days, about the life and thought of Florence Nightingale. The interviewees did not comment on the author's works. The common vision referred to was the question of hygiene, present in the life and teachings of Florence Nightingale, besides the organization of the work in the wards and the improvement of the hospitals. The recommendation of cleaning the hospital environment was the assumption of the nightingalean thought most remembered by the interviewees. The following statements illustrate this category of analysis:

I do not remember anything else about Florence [...] Crimean War [...] we learned this in the historical part [...] (E6)

I do not remember [...] the history of Nursing, we do not give much priority, it does not mean that it does not matter. (E8)
Florence instituted principles of hygiene […] created a means for the soldier to recover. (E1)

She worried about the non-proliferation of diseases[…] washing her hands[…] She perceived or knew that if she treated the patient without washing her hands, she would pass on the disease to another. (E2)

Historical knowledge cannot be relegated from professional practice. The historical study of Nursing allows, through historization and whatever its starting point, to provide an operational weapon to counteract the effects of naturalization that hinder, or even impede, an awareness. Historical knowledge can create the opportunity to break with the naturalization present in Nursing, allowing us to envisage alternatives to take a new trajectory. 10

Lack of hygiene and failure to implement basic Nursing care are responsible for many hospital deaths. Hand washing is the first step you should take to avoid getting a hospital infection. This procedure, in conjunction with the cleaning of the wards, remains a current concern to remind us of Florence Nightingale’s insistent recommendations. Nurses have only recently begun to revisit these basic tasks. 5,11

The analysis of nurses’ testimonies allows the understanding that, for some, it is important the encounter of theory with professional practice, given, the theory cooperate for practice. However, we perceive other visions, such as the lack of knowledge of which theory to use in practice; The lack of perception of the usefulness of theories for the practice of Nursing; The sense of distance between theory and professional practice; the lack of distinction between process/procedure/technique/new Nursing knowledge and Nursing theory; and the frequent confusion between the various theories. The following statements demonstrate these positions:

In my time, it was the theory of Wanda Horta, the theory of fashion. Today it is out of date, unknown […] I thought NIC, NOC and NANDA were people […] ah, ah, ah […] but, they are acronyms. I do not know […] protocols and assignments of different foreign nurses. (E1)

The very broad theory cannot come to fruition. The theory cannot encompass the whole practice, and the practice cannot encompass the whole theory. In dealing with the patient, one discovers and perceives things that are not in theory; the theory that has not yet reached where practice arrives. (E2)

The theory helps a lot to practice. I did not know until I met, after I met, I saw that they are important and it is all about.

The difficulty in relating theory to practice occurs because many nurses perceive it as a very theoretical activity, which is only on paper and very distant from reality. The demonstration of this fragility in the implementation of theory by nurses needs to be understood in order to create strategies that can help overcome this, so that nurses can develop a planned and organized care.

The gap between Nursing theory and practice is a result of the professional training process, usually carried out from a theoretical framework that is not suitable for Nursing practice. The model that prevails in the academic environment is still the rational-technician, who describes Nursing as a hierarchical, theoretical and academic status knowledge. Significant learning must come from situations promoted by committed teachers that stimulate students’ critical and reflective reasoning, making them perceive to be active subjects in the teaching-learning process. 12-13

In this sense, it is imperative that the nurses’ training model be rethought, which will enable not only changes in program content, but, also the transformation of the way knowledge is constructed. The democratically produced knowledge will take into account the values and the subjective of teachers and students. This permanent process of construction of knowledge will be accomplished, in the hospital environment of work, through the permanent education, still not understood properly.

- Environmental determinants and nurse responsibility

The perception that the environmental conditions influence and contribute to the health and the reestablishment of the
patients was identified in the statements analyzed. The convergence of nurses’ thinking with the central focus of the Florence Nightingale theory lies in the recognition of the importance of environmental determinants, such as ambient air, cleanliness, food, bedding, noise and varieties, which contribute positively to patients’ health and health professionals. The following comments illustrate this view:

In a comfortable, pleasant, clean and painted environment the patient and the person who arrives feel better. I desire this for all other sectors. (E1)

I think it’s important to clean water, air, sunlight […] environmental control is important […] a healthy person lives in a healthy environment. (E2)

Among the interviewees, some highlighted the environmental determinants present in the work sector, which contribute negatively to the health of both patients, and employees. The following statements reveal this position:

It is a badly planned sector, set up and having an inadequate environmental condition. Patients who should be in isolation are on the side of others colonized […] I hope this will change in the future. (E3)

Negative determinants are inadequate physical structure and unheated wards. The temperatures here in the summer are unbearable. (E6)

Inadequate ventilation, excessive noise, lack of distraction. (E7)

I think that the cold, the inadequate ventilation, the broken appliances, the cleaning that the firm’s employees do not know how to do […] cleaning the environment contributes to the patients’ health. (E8)

The interviewees showed concern about the hospital cleaning performed by a third party company. Cleanliness was considered to be precarious and, according to nurses, increasing the number of employees and better training of employed staff would improve the quality of health care in the hospital environment. The following two comments are significant, in the sense of being the only ones of the interviewees, to highlight a direct responsibility of the nurse in the question:

The nurse should be attentive, drawing attention, a function that should be the nurse responsible for the cleaning team, not the nurse. (E6)

The cleaning here is reasonable, but we have to be charging the routines and remembering, otherwise it is forgotten. (E7)

Florence Nightingale understood that most Nursing is to preserve cleanliness, so it is not necessary to tell a nurse that she should always be clean, keep the patient clean, and observe the most scrupulous cleaning of the patient’s room or ward. Ventilation is important, but, it is not efficient in a dirty environment. The author observed that it is sheer nonsense to say that a room cannot always be kept clean and that most of the hospitals in its time proved just the opposite.4

The measures proposed by Florence Nightingale are valid until today to face the current and dangerous conditions of infection. The first Nursing theory invites us to understand the connection between cleaning and infection spread, even though the science of microbiology is not developed in its time. Florence learned through observation that dirt, contaminated air, and poor hygiene spread disease.4

The nurses’ responsibility in relation to hospital environmental determinants was addressed in interviews. Nurses generally consider themselves responsible for maintaining a supportive and healthy environment that allows the recovery of the patient’s health. They claim that they stay 24 hours a day with the patient and, in this sense, perceive better the environmental conditions of the wards and rooms. However, asked about their responsibility, some interviewees pointed to a shared responsibility with other hospital professionals, provided, the nurses participate in a multidisciplinary team. The following accounts reflect the issue:

Nursing does, historically, many administrative things and, even disagree, ends up doing […] is the drain, vase, floor, food served, etc. You can and should have other professionals involved to maintain the ambience. In practice, we will not get rid of this role. Who takes care of the infirmary is Nursing […] is not our role, but we stayed 24 hours, we are who realize what is working. (E1)

Nursing has responsibility, but it is part of a professional team. (E4)

Yes, but a lot of things are out of our reach. We encourage the patient to seek the best adaptation to the hospital. The nurse already assumes many responsibilities that are not his. It gets overwhelmed and your activity you can not do well done. (E5)

The true dimension of nurses’ responsibility to environmental determinants is given by the thought of Florence Nightingale when she observes that nurses often consider only the
patient as their responsibility and not their room and their conditions.4

Florence Nightingale showed that, in order to achieve the necessary changes to good health care, it was important for nurses to remain linked to political activities.15 In this sense, a nurses’ unique testimony regarding their environmental responsibility deserves to be highlighted, since it meets this professional understanding:

Claim improvements for the industry; encouraging patients to spend time with reading activities; to worry about the food in the schedule and with the needs met to be able to collaborate with the recovery of the patients; guide cleaning as well, to keep the industry clean, even with some resistance from them. (E8)

The Nursing professional can do much in the hospital environment, with small adjustments and better adaptations, to reduce the stress of patients and satisfy their needs. Florence Nightingale’s theory largely means, as a method to practice, to make basic good sense of cleanliness around the patient, to provide adequate light, to guide visitors to provide amusement or stimulation in the environment, to avoid Excessive and unnecessary cold, provide a more calm and quiet atmosphere. These simple measures seem guaranteed, however, they are often overlooked. Dispensing attention to these aspects helps Nursing to reduce or avoid forgetfulness that often occurs in relation to care, such as food and hygiene, in whole or in part.16-7

Nurses have recognized the value of environmental determinants that contribute positively to the health of patients and staff. They pointed out flaws in the hospital environment, such as inadequate physical plant, which contributes negatively to the recovery of health. However, improvements in this situation will only occur when professionals feel politically responsible for a greater participation in hospital management.

● Continuing education: nurses-environment.

Questioned about continuing education in health and Nursing in the university hospital, as a promoter of events and meetings that could address the health-environment relationship, the nurses interviewed showed different opinions. The identification of permanent education as an important activity carried out by a small and hard-working group of professionals that does not meet the demand for services was demonstrated in the following statements:

It is a strenuous but little group. It is necessary, the hospital is manpower of various professional categories [...] is multidisciplinary. (E1) They do what they can. They do not have much leg. (E2) It is very good, beneficial, this improved look. Continuing education has a fundamental role in awakening this look in the team [...] to improve our work routine, for us and for the patient, always, under the conditions of the institution. Improvements that can be made, why not? Facilitating our vision in relation to this, to the appropriate environment. (E6)

The dissatisfaction with the few educational activities promoted at HUAP was highlighted by some nurses. In a testimony, it was possible to identify this dissatisfaction, that, along with the limited number, the activities of permanent education do not take into account the needs that the group presents:

Continuing education does not meet demand, the need the group needs [...] they train some procedures, but they do not value the professional and their knowledge. (E3).

In another report worthy of note, it can be seen the disappointment of the nurse with the supposed impossibility of solving the problems, by the permanent education team. The interviewee manifested ignorance and disbelief in the capacity of the educational process to produce changes in the management practices of the hospital’s health services:

The permanent education does little, it does not act much [...] because it does not depend on them. The direction is that you have to act to make a favorable environment. How to educate if the environment is inadequate? You will say it is so, and the environment is otherwise. If Florence were here [...] she would condemn this environment. (E4)

Rescuing the “others” in the relationship of learning is important, since it is from the mutual exchange and the dialogue that builds and reconstructs the knowledge. There is a dichotomy between theoretical and practical teaching in the Nursing area. It is fundamental to problematize the practice, in the concrete work of each team, to produce changes in management and attention in health services. Continuing education in health can guide the initiatives of professional development and strategies of transformation of health practices.18-20

The questioning of permanent education, in relation to the environmental determinants of the health-disease, process led to the
finding that some nurses identify permanent education with continuing education. We can even perceive a certain lack of knowledge in the possibility of a strategy of knowledge that starts from the practice. Strategy that identifies the professional as true responsible for the production of knowledge, not mere receiver, and also, creator of alternatives of action. This fact demonstrates the validity, even in health institutions, of a conception of learning based on the old school or academic model:

Permanent education [...] I thought about the training, the training of the professional. (E5)

What kind of training? Here are activities [...] fast things, like a representative, a new device. And rarely have one course or another to explain something to us to participate. It is all lightning, of irregular form, has a great space between one and another. (E8)

Permanent health education establishes a new paradigm, distanced from continuing education, which focused on the transmission of up-to-date knowledge, but away from the concrete, integral and complex problems of health services. Continuing education shares the view that knowledge is built from the doubts and questioning of current practices. As opposed to isolated actions, such as classes and courses, permanent education prioritizes long-term processes and includes the search for teamwork training, the integration of cognitive dimensions, practical attitudes and skills.21

The new concepts of health promotion, that emerged from the First World Conference on Health Promotion, in 1986, recapture nineteenth-century sanitary ideas, and in particular those of Florence Nightingale, based on education for the creation of healthy environments. Nurses’ reports show that it is extremely important to implant a broad and real permanent education in the hospital community, which will allow the proper valuation, creation and maintenance of a healthy hospital environment, as recommended by Florence.

CONCLUSION

This research revealed a vague and imprecise conception of Florence Nightingale’s environmental theory by nurses, however, interviewees consider in their professional practice many of the nightingalean assumptions, even without realizing it. Professionals perceive the importance of the environmental determinants established by Florence Nightingale and who are involved in the health-disease process.

This study identified the difficulty of nurses to relate the value of theory, as a conceptual basis, to allow a reflection on the indispensable environmental dimension in the health care process. This fact evidences a gap in the processes of formation and permanent education, necessary for a conscious and responsible action in the context of hospital work.

It was evidenced that the Florence Nightingale theory has fundamental importance for the current Nursing, since it provides subsidies for the discussion of many aspects related to the socio-environmental responsibility of the professional. It offers particularly relevant knowledge in the acquisition and maintenance of a healthy hospital environment, and also allows reflection, an indispensable process for the Nursing professional to perceive himself as a social actor who acts in a responsible and environmentally correct manner. This process is fundamental for the valorization of its environmental responsibility and the solidification of this discussion necessarily goes through the professional training, education in service and permanent education in health.

It was clear, from this experience, that the nurses’ way of thinking and feeling are fundamental for the first step towards social mobilization to be taken in favor of improvements in the hospital environment. This study revealed the relevance of continuing education. The sharing of knowledge and perceptions among professionals should be promoted and stimulated in the research institution. However, it is known, that in order to achieve change, it is necessary to transform personal, social and political spheres.

This study sought to contribute to this need to implement a continuous educational process at the Hospital Antônio Pedro, which allows nurses to use their knowledge well, even to learn. He hopes to collaborate with the renewal of the understanding of health in the face of the complex and intimate subject relationship and its environment. Finally, it intended to allow nurses to recognize Florence Nightingale in their current activities, which will enable them to discuss the practical value of the famous but unknown Nightingalean Environmental Theory. In this way, the nightingalean environmental determinants, valid until today, can be fully valued and implemented.
REFERENCES


21. Davini MC. Enfoques, problemas e perspectivas na educação permanente dos recursos humanos de saúde. In: Ministério da Saúde (BR), Secretaria de Gestão do Trabalho e da Educação na Saúde. Departamento de...
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