

Vision as an instrument of perception in trauma and orthopedic nursing care*

VISÃO COMO INSTRUMENTO DA PERCEÇÃO NA ASSISTÊNCIA EM ENFERMAGEM TRAUMATO-ORTOPÉDICA

LA VISIÓN COMO INSTRUMENTO DE PERCEPCIÓN EN LA ATENCIÓN DE ENFERMERÍA TRÁUMATO-ORTOPÉDICA

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ABSTRACT

More than being a sense, vision is a powerful instrument that identifies and selects, hence everything depends on what one has seen before to determine how to interpret what is currently being seen. The objective of this article is to discuss the role that vision plays as an instrument for holistic and quality nursing care. This is a qualitative, exploratory study, using the Sociopoetic method. The data was categorized as follows: (1) Vision as an instrument and (2) Outer body changes. In trauma and orthopedics, nurses should be able to provide patients with care in complex conditions and in an environment which changes fast. Results show that vision is a powerful health care instrument in trauma and orthopedic nursing, promoting professional practice that is truly appropriate to the patients' needs.

KEY WORDS

Vision, ocular.
Visual perception.
Orthopedic nursing.
Nursing care.

RESUMO

A visão, mais do que um sentido, é um poderoso instrumento que identifica e seleciona, de forma que tudo depende do que já se viu antes para determinar a maneira como interpretamos o que está sendo visto. O objetivo deste artigo é discutir o papel da visão como instrumento para uma assistência de enfermagem holística e de qualidade. É um estudo exploratório, de abordagem qualitativa, utilizando o método da Sociopoética. Os dados foram agrupados nas seguintes categorias: (1) Visão como instrumento e (2) Alterações corporais externas. Como em traumato-ortopedia, os enfermeiros devem ser capazes de conduzir à assistência a pacientes em condições complexas em um ambiente de cuidado que muda rapidamente. Os resultados demonstraram a visão como poderoso instrumento de cuidado em Enfermagem Traumato-Ortopédica, permitindo uma atuação profissional verdadeiramente adequada às necessidades do paciente.

DESCRIPTORES

Visão ocular.
Percepção visual.
Enfermagem ortopédica.
Cuidados de enfermagem.

RESUMEN

La visión, más allá de ser un sentido, es un poderoso instrumento que identifica y selecciona, de modo tal de que todo depende de lo que ya se vio antes para determinar la manera en la que interpretamos lo que está siendo visto. El objetivo de este artículo es discutir el papel de la visión como instrumento para una atención de enfermería holística y de calidad. Es un estudio exploratorio, de abordaje cualitativo, utilizando el método de la Sociopoética. Los datos fueron agrupados en las siguientes categorías: (1) Visión como instrumento, y (2) Alteraciones corporales externas. Como en tráumato-ortopedia los enfermeros deben ser capaces de brindar atención a pacientes en condiciones de complejidad en un ambiente de cuidado que muda rápidamente, los resultados demostraron que la visión es un poderoso instrumento de cuidado en Enfermería Tráumato-Ortopédica, permitiendo una actuación profesional verdaderamente adecuada a las necesidades del paciente.

DESCRIPTORES

Visión ocular.
Percepción visual.
Enfermería ortopédica.
Atención de enfermería.

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INTRODUCTION

Orthopaedic Nursing is a specialized area of health care in situations involving diseases, congenital and developmental process, traumas, metabolism disorders, degenerative diseases, infections and other illnesses affecting the musculoskeletal, articular and support connective system. The area encompasses clinical, surgical and rehabilitation health problems that are clarified as acute, chronic or incapacitating. It includes the prevention, care and rehabilitation of individuals of all age groups, families and communities. Most orthopedic diseases are developed over the years, in the long term, and, therefore, nurses should be trained to identify the problems and make early interventions. The body senses are strong allies in this process, working as instruments that, associated with technical and scientific knowledge, help health professionals provide holistic and quality care.

Body senses allow us to understand the world and how people interact through communication, which is a basic human necessity. Communication can take two forms: verbal, which refers to speaking and writing; and non-verbal, which occurs by means of gestures, expressions, postures, among others⁽¹⁾. Vision is the only sense that actually participates in the world of ideas, as it is connected with rational knowledge, and, therefore, is the mediator between one's inner- and outer-body and the reality. In association with the sense of vision, language is what nominates, adds meaning and intentions when communicating what is being seen. Both forms of communication are triggered by visual stimuli that first make an impression on the brain, and then develop perception, knowledge, judgment and understanding of differences, causing us to build awareness about the stimuli⁽²⁾.

The process of vision is composed by: the physical stimulus; the eye, as the structure for capitation; the conduction means; and, finally, by the interpretation system, i.e., the act of actually becoming aware about the presence of a given stimulus⁽³⁾. Therefore, the visual experience makes it possible to obtain the as much information as possible from the world generating a rich and dynamic archive of data that will be stored in the brain and then associated with the other senses to be used throughout one's life⁽⁴⁾.

The overall development of an individual, regardless of their anthropologic background or socio-cultural specificities is affected by multiple factors, and is strongly related to their visual experience since birth. This allows people to have different forms of mental representations and thus act differently in the world⁽⁴⁾. A deep change occurs every time a human being goes from the experience of seeing to that of rationally explaining the experience. Vision, through

intentionality, becomes more than a sense; it becomes a powerful tool that identifies and makes selections, in a way that everything depends on what one has already seen to determine the way that we interpret what is being seen⁽²⁾.

Different social contexts may determine unique visual experiences, as it is through vision that most of the information in the world reaches us. Individuals who live in a Cartesian world, as that of our society, are constantly receiving stimuli to use a discriminative vision for linear thinking and for recognizing the importance of vision as an instrument to obtain knowledge⁽⁴⁾.

OBJECTIVE

To discuss on the sense of vision as an instrument for providing holistic and quality nursing care.

METHOD

This exploratory, qualitative study was performed using the socio-poetics method. Socio-poetics is characterized by the collective construction of knowledge and helps the study subjects to develop a reflexive attitude as the transformation is in the sense of developing knowledge, though exercising careful observation of the process of creating/destabilizing the people and the group, permitting the emergence of reasons, emotion, and meanings that are usually hidden, forgotten or repressed, thus making it possible for the individuals to reveal and catalyze their thoughts and feelings⁽⁵⁾.

Inspired in Freire's notion of the culture circle, socio-poetics suggests that academic researchers become facilitators and study subjects become co-researchers, referred to as group-researcher. The data were produced by a group-researcher comprised by sixteen students (fifteen females and one male), who were nursing undergraduates attending the sixth semester of the course at a public university in Rio de Janeiro. The students' internship activities included assisting patients with orthopaedic disorders.

This study used partial data from a doctorate thesis named *O imaginário do estudante de graduação sobre o cuidado em Enfermagem Traumatológica - Undergraduates' imaginary about Orthopaedic Nursing Care*, conducted at Ana Nery School of Nursing at Federal University of Rio de Janeiro (EEAN/UFRJ). The data emerged from teaching experiences with undergraduates who assist patients with orthopaedic disorders, and was approved by the research ethics review board at EEAN/HESFA as per document number 025/07. All participants interested in participating in the study provided written consent.

Most orthopedic diseases are developed over the years, in the long term, and, therefore, nurses should be trained to identify the problems and make early interventions. The body senses are strong allies...

The data production workshop that originated this article used the *Free -Drawing Technique* associated with the *Socio-Communicating Senses of the Body*⁽⁶⁾ as is related with the analytical category *Care in Orthopaedic Nursing*. In this presentation, we have outlined only the data that were related with the sense of vision.

Considering the principle that one's body internalizes most of what is unconscious, an attempt was made for the subjects to express their unconsciousness using artistic techniques from Pedagogy and Psychology, shedding light on anything hidden under the shadow of their bodies, and thus favor the emergence of the awareness regarding what is hidden, both deeply and on the surface, seeking within the individuals his or her oppressed body that knows more than it speaks.

The workshop was open with an *Affective Breakfast*, which was a moment to collectively welcome the group members, allowing them to become closer both physically and emotionally, which is essential for the socio-poetics study. After the breakfast, the room was organized so that the relaxation process could be initiated, which had the objective to get body energies moving, help new ideas to emerge, and mess with the unfamiliar and unknown in us, with images and emotions of our unconscious⁽⁷⁾. During this process, the facilitator requested participants to focus on the care to patients with orthopaedic disorders, as a way to travel through imagination, making free associations.

Participants were then asked to pair up, and each pair received six sheets of paper, crayons, colored pencils, colored pens, colored glue, paint and a paintbrush to be used in the *Free Drawing Technique*⁽⁸⁾. This technique permits to use an image to portray the feeling of its author under a stimulus of a planned theme, thus accessing unconscious contents. To develop the technique, some words were taped to the wall in front of the group, which were related with the *Socio-Communicating Senses of the Body: vision, hearing, smell, touch, taste, heart*, surrounding the paper containing the phrase *Care in Orthopaedic Nursing*. Each pair of participants was asked to write on the respective sheet of paper what emerged during the relaxation activity, and their thoughts about each sense, as a way of illustrating the following questions: When I assist a patient with orthopaedic disorders ... what do I see? ... what do I hear? ...what do I smell? ...what do I touch? ...what do I say? ...what do I feel?

When all participants had completed their writing, the group formed a circle and they immediately presented what they had produced, explaining and/or analyzing the meanings that had been assigned. The moment of data production is dialogic; a semantic and conceptual polyphony that permits to obtain individual and collective data from the encounters between the participants. This permits the participants to act, reflect and focus on the world that need to be changed and humanized. Reflection is central to produce knowledge, and the more one reflects on his or her

condition, environment, and reality, the more aware and committed they become, which makes them ready to intervene on reality and make changes^(7,9).

RESULTS AND DISCUSSION

All the data obtained in the Workshop were put together, including the drawings, the writings, and the individual and group explanations/analysis. By analyzing the material it was possible to select words, expressions and phrases that were grouped according to similarity and then set into thematic categories, which, where then divided into subcategories with the objective to make a finer categorization of the data.

The data originated four categories that will be discussed in the next section, along with the subcategories that originated them:

Category 1: Vision as an instrument

In this category, vision is characterized as a powerful instrument that should be developed in Nursing. Most human experiences consist basically of sensations and emotion derived from vision. It is not possible to understand the world without first detecting it through our senses, and when we perceive the world through our vision, it becomes more solidly informative⁽¹⁰⁾.

Subcategory 1.1: Identifying the patient's needs

The group-researcher highlights vision as a powerful instrument to identify some of the affected needs of the patients, as it permits to judge and understand their surroundings. After this identification, effective communication is established by the health professional, who may then, together with the patient, identify the problems and plan and implement interventions. This reinforces the idea that the visual image is a sort of stimulus that permits humans to make distinctions, interpretations until reaching an awareness of the events related to them. The group-researcher points out that vision is the first sense that diagnoses any positive or negative changes in patients and in the environment. It permits to identify important alterations and any changes to previous conditions, including one's emotional condition. Because most human experiences are basically comprised of sensations and emotions derived from that experience⁽¹¹⁾, students realize the response to their care through the facial and body expressions of their patients; they diagnose any interference to the patient's process of recovery. Furthermore, vision permits them to re-evaluate health care plans through observation.

Vision is also referred to as an instrument used to evaluate the patient's emotional state and changes such as fear, distress, and sadness among others. These problems affect the students, who often consider themselves capable of helping only by offering emotional support in their pres-

ence any by saying positive things, because, to their understanding, they usually cannot make any intervention on the cause of those problems. The hospital environment implies having to deal with complex situations that involve distress and conflicts that reveal the fragile and vulnerable nature of human beings. Hence, when facing a patient in distress, our own human dimension is awakened, sensitizing us towards care, at the same time it makes us vulnerable to suffering⁽¹²⁾. These situations demand commitment, having a critical sense and responsibility.

Subcategory 1.2: Evaluation of the patient's comfort state

Vision was related with the identification and interpretation of non-verbal communication associated with pain and discomfort, through expressions and postures that the patient assumes while receiving the care. These conditions are somewhat easily realized by the students, who immediately try to resolve it, despite their reporting that their lack of experience and knowledge in Orthopaedic Nursing limits the effectiveness of the solution they provide. The student's sensitivity makes them naturally capable of noticing these expressions through the patients' non-verbal communication and their surroundings⁽¹³⁾. Communication is an essential competency in nursing because adequate communication facilitates interaction when delivering care and is the means to effectively meet the patients' needs in all of its dimensions⁽¹⁴⁾.

Students recognize that the patients' comfort may be physical, psychological or environmental. Different people have different understandings for the concept of comfort, and, therefore, it is necessary for students to use complex mechanisms to identify the patients' needs and expectations, in an intricate analysis to make decisions and solving the problems that appear. Human beings have different comfort needs according to the context of their existence, thus characterizing the multidimensional feature and holistic aspect of this phenomenon⁽¹⁵⁾. Our language is based on images, and when we compare two things (comfort and discomfort) we trust our vision to capture those actions, conditions or mood⁽¹⁰⁾.

Subcategory 1.3: Identifying the deficiencies in the care

The group-researcher reported that the identification of deficiencies in the care is one of the easiest things to diagnose, and it happens almost immediately, because, as they put it, *deficient care you can see from a long distance*. This critical analysis of the situation of providing deficient nursing reveals the ability of the group-researcher to evaluate the condition of the patient and his or her family member, besides establishing criteria to evaluate quality health care. Care is the previous condition for every human practice and for this reason belongs to human essence and consists of a loving relationship with the reality. Therefore, care is an adequate attitude towards the nature of life, protecting it, healing it and creating an atmosphere of its expression. The care sees the human being as an open system, in

a condition of dynamic exchange with the environment, where one system may change others or make adaptations as a way of trying to maintain a balance. Failing to compensate for this integrated system causes repercussions at several levels, and this understanding is central for making successful nursing interventions⁽¹⁶⁾.

Category 2: External body changes

Orthopaedic treatment, most of times, changes the aspect of the patient's body because of metal devices, immobilization systems and forms of restriction.

Subcategory 2.1 Orthopaedic procedures and devices

Vision is what captures the action, and, according to the group-researcher, seeing the human body with metal pieces, held by braces, and immobilized by weights is not an easy view to live with, even in a hospital environment. According to the students, the material used in the treatment of orthopaedic disorders, has a negative impact and impression. Metal parts, weights, pulleys, immobilization systems and other devices cause some affliction especially because when people look at these items, they immediately realize the limitations of handling the patient in that condition.

Orthopedic disorders are usually accompanied by restriction to one's mobility and/or function on the affect body region, which often affect the standards and roles of the regular activity and impose limitations to the activities of daily living in different degrees and complexities. For the group-researcher, the possibility of body changes due to the disorder, restriction (loss of body mass and muscle strength, ankylosis, and others) or because of the treatment (amputations, orthoses, prosthesis, etc) is expressed with some difficulty because it compromises the patient's life both physically and psychologically. To understand health or diseases, the individual and the environment cannot be considered separately. Health cannot be seen as a mere successful adjustment of one's system to the environment because a normal, healthy life implies not only in producing a balance that is appropriate to the demands of the relationship between the two extremities, but also on the capacity of recreating that balance based on different norms, whenever it becomes necessary. The disease may have explanations and accept several forms of intervention, but suffering demands relief. In addition to the physical suffering caused by an illness there is the moral distress of the person who sees him or herself with a compromised functioning in the world, in a process in which the physical cause becomes associated with the moral cause to a strength that permits the individual to fall ill, but have the capacity to become aware of the emerging condition and recover⁽¹⁷⁻¹⁸⁾. The boundaries between what is normal and what is pathological are only consistently determined when one sets aside any criteria that are merely objective and sets and focuses on changing the quality, changing the vital value imposed by the illness and that the individuals

recognizes as a limitation to his or her existence. The illness does not imply only changes to the function of one's system, but also a restructuring of his or her world and the emergence of a new way of living and the perception of a need to produce new rules to face the challenge set before him or her as a generalized reaction towards healing⁽¹⁷⁾.

CONCLUSION

In this article, we addressed the sense of vision as a powerful instrument of care in Orthopaedic Nursing, from

the experience of nursing undergraduates. This reflection of a conscious and critical practice permits to perform professional practice in a more realistic and truly adequate to the patient's needs. Care behaviors result from an environment of care, and, therefore, in orthopaedics, nurses should be able to conduct patient care in complex conditions, in an environment that changes quickly, and the conscious development of the body senses as an instrument of health care permits to efficiently identify the problems, perform planning and make holistic interventions with the quality that is needed.

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