NURSING PROCESS BASED ON THE JOYCE TRAVELBEE MODEL
PROCESO DE ENFERMERÍA FUNDAMENTADO NO MODELO DE JOYCE TRAVELBEE

Rodrigo Jacob Moreira de Freitas¹, Natana Abreu de Moura², Rubia Mara Fialho³, Maria Vilani Cavalcante Guedes¹, Maria Célia de Freitas⁴, Lúcia de Fátima da Silva⁵, Ana Ruth Macêdo Monteiro⁶

ABSTRACT

Objective: to implement the Nursing Process, based on the classification systems, to an individual with a herniated disc, based on the Person-to-Person Relationship Model of the theoretical Joyce Travelbee.

Method: this is a qualitative, descriptive, case-control study. Data were collected with an individual, through a clinical interview and physical examination, following a guideline for the construction of the clinical case. The data analysis was based on the Nursing theory cited and the results are presented in figure form.

Results: it is revealed that the diagnoses, results and interventions followed the Nursing classification systems, being the chronic pain and the low situational self-esteem the main diagnoses worked. Through the Travelbee model, it was possible to look beyond physical and biological needs. Conclusion: critical thinking and clinical reasoning, based theoretically as important instruments and parts of the Nursing process for decision making, are pointed out. Descriptors: Nursing; Nursing Process; Nursing Theory; Displacement of the Intervertebral Disc; Self image; Pain.

RESUMO

Objetivo: implementar o Processo de Enfermagem, com base nos sistemas de classificação, a um indivíduo com hérnia discal, fundamentado no Modelo de Relação Pesso-a-Pessoa da teórica Joyce Travelbee.

Método: trata-se de um estudo qualitativo, descritivo, do tipo caso clínico. Coletaram-se os dados com um indivíduo, por meio de entrevista clínica e exame físico, seguido roteiro norteador para a construção do caso clínico. Fundamentou-se a análise dos dados na teoria de Enfermagem citada e os resultados apresentam-se em forma de figura. Resultados: revela-se que os diagnósticos, os resultados e as intervenções seguiram os sistemas de classificação da Enfermagem, sendo a Dor crônica e a Baixa autoestima situacional os principais diagnósticos trabalhados. Possibilitou-se, por meio do modelo de Travelbee, um olhar para além das necessidades físicas e biológicas.

Conclusão: apontam-se o pensamento crítico e o raciocínio clínico, embasados teoricamente, como instrumentos e partes importantes do próprio processo de Enfermagem para a tomada de decisões.

Descritores: Enfermagem; Processo de Enfermagem; Teoria de Enfermagem; Deslocamento do Disco Intervertebral; Autoimagem; Dor.

RESUMEN

Objetivo: implementar el proceso de enfermería, con base en los sistemas de clasificación, a un individuo con hernia discal, fundamentado en el modelo de relación persona a persona de la teórica Joyce Travelbee.

Método: se trata de un estudio cualitativo, descriptivo, del tipo caso clínico. Se recolectaron los datos con un individuo, por medio de una entrevista clínica y un examen físico, siguiendo el guión norteador para la construcción del caso clínico. Se fundamentó el análisis de los datos en la teoría de enfermería citada y los resultados se presentan en forma de figura. Resultados: se revela que los diagnósticos, los resultados y las intervenciones siguieron los sistemas de clasificación de la Enfermería, siendo el Dolor crónico y la Baja autoestima situacional los principales diagnósticos trabajados. Se posibilitó, por medio del modelo de Travelbee, un olhar para além das necessidades físicas y biológicas.

Conclusión: se apuntan el pensamiento crítico y el raciocinio clínico, fundamentados teóricamente, como instrumentos y partes importantes del propio proceso de Enfermería para la toma de decisiones.

Descritores: Enfermería; Proceso de Enfermería; Teoría de Enfermería; Desplazamiento del Disco Intervertebral; Autoimagen; Dolor.

¹Masters (doctorate students) State University of Ceará / UECÉ. Fortaleza, Brazil. E-mail: rojmflegal@hotmail.com ORCID iD: https://orcid.org/0000-0002-3528-2995; ²E-mail: natanaabreu@hotmail.com ORCID iD: https://orcid.org/0000-0002-2517-7944; ³Masters, University of Potiguar / UFP; Mossoró (RN), Brazil. E-mail: rubiafahre@hotmail.com ORCID iD: https://orcid.org/0000-0001-7418-1156; ⁴PhD, State University of Ceará / UECÉ. Fortaleza, Brazil. E-mail: vilani.guedes@iglobo.com ORCID iD: https://orcid.org/0000-0002-6766-4376; ⁵E-mail: cafrei@hotmail.com ORCID iD: https://orcid.org/0000-0003-4487-1173; ⁶E-mail: lucia.fatima@uece.br ORCID iD: https://orcid.org/0000-0002-3517-3681; ⁷E-mail: anaruhsmando@yahoo.com.br ORCID iD: https://orcid.org/0000-0002-1130-1293
INTRODUCTION

It is known that low back pain (low back pain) is one of the problems of the industrialized world that affects a large part of the population and constitutes a public health problem, given the burden generated for the health system with diagnosis, treatment and, for the social security sector, causes work absenteeism, premature retirement, as well as the psychosocial impact of the inability of the individual to develop his/her daily activities.

It is estimated that approximately 80% of the population suffers from back pain at some point in their lives. In research, the relationship between chronic low back pain and female gender variables, personal or family history of back pain, use of analgesics, poor quality of life, frequent headache, diffuse pain and a greater number of sensitive points. It is also mentioned, in the same, the association between the practice of certain physical activities and the occurrence of lower back pain.

Among the degenerative changes of the lumbosacral spine, disc herniation is the most common diagnosis, accounting for two to three percent of the population, and this is also the main reason for performing spinal surgery in adults.

Lumbar disc herniation (LDH) is a displacement of the contents of the intervertebral disc - the nucleus pulposus - through its outer membrane, the fibrous annulus, usually in its posterolateral region. Depending on the volume of herniated material, there may be compression and irritation of the lumbar roots and dural sac, clinically represented by the pain known as sciatica.

Sciatic pain is triggered by mechanical compression of the nerve root by disc herniation and, as a result, there is ischemia and phenomena that sensitize the membrane to pain. The patient complain of pain in the lumbar region radiated to the lower limb by nerve compression. The sciatic crisis can be so severe as to incapacitate the patient, having implications for work activity and reduction in quality of life.

Treatment involves blocking the affected root with anesthetic and corticoid, which acts directly on the hernia, reducing its volume, and on the root, reducing its inflammatory response. This treatment is used as the first option because it is effective in 80% of the patients. Physiotherapy and relaxation techniques are also recommended through exercises and stretching. It is proposed the surgical indication in the failure of conservative treatment, with discectomy being the most indicated. It is intended, by treatment, to relieve pain and stimulate neurological recovery, with an early return to activities of daily living and work.

It is important, given the consequences caused by the herniated disc and the frequent pain experienced by the individuals who are affected by this pathology, to think about the clinical work of the nurse in the care of these individuals, since it is a pathology that interferes with the way of life. In addition, due to physical incapacity, other problems of a psychic and emotional nature, such as sadness and low self-esteem, are generated, altering the way in which these subjects recognize themselves.

It is explained, for clinical care to become effective in this context, that it needs to have theoretical-scientific bases, being a care that is theorized, systematic, tested, validated and that generates a valuable knowledge for use in practice. It is necessary that this care be seen in an integral way, creating bonds and respecting each other’s beliefs and values.

As a guiding axis of care, the Nursing process of the use of scientific thought as a strategy to investigate Nursing care needs from the human responses to the health-disease process; identify nursing diagnoses, or outbreaks of care; to plan and implement nursing interventions, as well as to analyze the clients’ responses to the care provided. The NANDA International (NANDA-I) classifications for diagnoses become important; Nursing Outcomes Classification (NOC) for outcomes and Nursing Intervention Classification (NIC) for interventions, for standardizing communication among nurses and providing higher quality care.

It is necessary that the care is based on a Nursing theory to support the clinical practice of the nurse. In this study, Joyce Travelbee's Person-to-Person Model was used as a theory that works on the unique and individual interpersonal relationships between nurse and patient, seeking a harmony in the therapeutic process. It is a role of the nurse to enable the sick person to reflect on their experiences and give a new meaning to their illness and their life. It is also pointed out by theory, for the need to look at the subjective and spiritual issues of the patient required for the comprehensive clinical care about the human herniated disc.
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**METHOD**

This is a qualitative, descriptive study of a clinical case, developed in the discipline Concepts and Practices of Clinical Care in Nursing and Health of the Academic Master's Degree in Clinical Care in Nursing and Health (PPCCCLIS), State University of Ceará (UECE). The case study is characterized as an empirical investigation that deals with contemporary phenomena in a given context, especially when phenomena and context are not clearly defined.8

It is understood the case study method, in turn, as a process of organizing the data, preserving the unitary character of the object studied. It is considered the unit as a whole, including its development (person, family, set of relations or processes etc.).9

The study was developed from September to December 2015 and data were collected in November and December of that year. As a scenario for this study, the State University of Ceará-UECE was defined, specifically in the outpatient clinic, because it is a suitable place to conduct the Nursing consultation and preserve the user’s identity.

It is specified that the research subject was a female student, a UECE student, selected for convenience, according to the inclusion criteria: people working (teachers, students, technical-administrative servers and service providers) at the institution at daytime, healthy or in the process of becoming ill. The subject of the research was invited to participate and clarified on what this participation would be, the objectives of the activity and then, after accepting to participate in the research, the Free and Informed Consent Term (FICT) was signed.

The data was collected through a clinical interview and physical examination, followed by a guiding script in the university's outpatient clinic. Capillary glycemia, pulse count, blood pressure measurement, waist and hip circumference, and weight and height for BMI calculation were also performed to complement information collection.

The whole process of data collection, organization and analysis through the Nursing Process was mediated. It is the systematized model of raising customer care information (data collection); to identify nursing care situations (nursing diagnoses); to plan and implement Nursing interventions (Nursing interventions) and to evaluate clients' responses to Nursing interventions (Nursing results).

The NANDA International (NANDA-I) classifications for the diagnoses were used for the research in question; Nursing Intervention Classification (NIC) for interventions and Nursing Outcomes Classification (NOC) for outcomes. The process of collecting, interpreting and analyzing the results was based on the theoretical model of Person-to-Person Relationship, by Joyce Travelbee. It was supported the discussion of the data in the mentioned Nursing theory and based on the literature pertinent to the subject.

It complied with Resolution 466 / 2012,10 of the National Health Council, which governs the researches developed with human beings, being evaluated by the Ethics Committee of the State University of Ceará and approved with the number of opinion 446.753 and CAAE: 22739713.7.0000.5534 . The initials L.Q.C. to preserve the identity of the subject.

**RESULTS**

◆ Case Study

It is explained that the user sought the outpatient clinic of the State University of Ceará - UECE. The biographical data, the family history and the clinical history described, as follows.

There is the patient L.Q.C, 34 years old, brown, single marital status and catholic religion, being a graduate nurse who works as a university professor, with income of about ten minimum salaries. It is known, in relation to the clinical history, that the patient felt a severe pain in the lower back, radiating to the left leg, which made her seek the health service. A disc herniation at L5 and S1 was identified by resonance. Discectomy was performed by the neurosurgeon's physician, which made her stop her physical exercises. The hernia was reduced after surgery, but the patient continued to have pain. Treatment with acupuncture and pilates was suggested, with bodybuilding being suspended.

Referring to the patient, when reporting current complaints, pains in the lower back, which appear gradually, weak or nonexistent, when waking up, which intensify during the course of the day, as well as lack of sleep, which causes fatigue and irritability.

It is believed that this pain is associated with the emotional picture and the patient, having stopped with bodybuilding, gained nine
pounds and feels their self-esteem reduced. Her activities of daily living were also limited by this fact, since she was responsible for the problems of the family and felt a limited person.

It was determined, as far as the physical examination, that, for the operationalization of this examination, the musculoskeletal system would be emphasized, being: hygienic and hydrated skin, with preserved turgor; without presence of edema around the joints; normal convex curvature of the spine and symmetrical positioning of the knees when evaluating standing posture. There is slight lateral lateral deviation of the spine to the right side. Static pain was reported in the lumbar region, with smooth and coordinated movements during gait, but referring to pain in the squatting movement. The painful spinal processes in the lumbosacral region were referred to as throbbing spinal processes and, when seated, referred to greater discomfort, which is relieved when standing. Lumbar pain was intensified when the Valsalva maneuver was performed, and in the supine position, when the right and left leg was lifted, pain was felt and there was a decrease in the amplitude of the movements. The abduction movement of the lower limbs was limited and the Milgram Test was positive.

◆ Analysis of health data
◆ Nursing Diagnostics

From the analysis of the LQC case study, some nursing diagnoses based on the NANDA-I classification can be listed: 11 a Chronic Pain, which is in domain 12 (comfort) and class 1 (physical comfort) of the classification of NANDA-I. As defining characteristics, depression, fatigue, restlessness, irritability, changes in sleep pattern, verbal report of pain, responses mediated by the sympathetic nervous system (changes in body position) related to chronic physical incapacity. Another diagnosis, low situational self-esteem, was identified in the six domain of self-perception, class 2, self-esteem. It is defined as the development of negative perception about its own value in response to a current situation11, the defining characteristics being: self-evaluation as incapable of dealing with situations; report of feeling of worthlessness; self-negative verbalizations related to the body image disorder; functional impairment and changes in the social role.

◆ Nursing Results

The most relevant diagnoses for the case were discussed using the Pain Control result, present in the classification of the Nursing results (NOC), defined as “personal actions to control pain” 12 for the diagnosis of chronic pain.

It is added that the results Adaptation to physical disability, defined as an adaptive response to an important functional challenge due to physical disability; Psychosocial adaptation: life change, defined as an individual's psychosocial response to a significant life change and self-esteem, defined as personal judgment of self-worth, 12 were chosen to respond to the diagnosis of low situational self-esteem.

◆ Nursing Interventions

After the identification of the main nursing diagnoses, the interventions pertinent to the resolution of the case were implemented. Interventions, according to the NIC classification, were established as: comprehensive and standardized classifications of interventions performed by nurses.13

In order to achieve the desired result, the main intervention was Drug Administration and Pain Control. The activities of this intervention included administration of the oral medications prescribed by the physician for analgesia, dosage and correct times, since L.Q.C. taking the medications sporadically, and changing positioning always alternating standing positions, sitting and lying where possible, in order to lessen the pain. The relaxation therapy was carried out, including massage and therapeutic touch.

Improved body image, improvement of coping and improvement of self-esteem interventions were also established to achieve the results of the patient's health problems. Counseling, emotional support, spiritual support, the promotion of resilience, and active listening were included in the activities, and it was encouraged that she sought to participate in support groups. These activities were aimed at working the problem of low self-esteem, which appeared as a remarkable fact of the case study, since it diminished the will to live of L.Q.C.

The summary of the main diagnoses, results and nursing interventions of this case study, interrelating NANDA, NOC and NIC, 14 are presented below (Figure 1), based on the critical thinking and clinical reasoning necessary for the discussion and resolution of the case.
DISCUSSION

- Person-to-Person Relationship Model and Nursing Process

It is proposed, by Joyce Travelbee’s Model of Person-to-Person Relationship, that the relationship between nurse and patient happens through a harmonic interaction. In this interaction, communication, verbal and non-verbal, is an important instrument of nurses' work. It is suggested that nurses use their conscious self so that, with established therapy, it can enable the subject to go through their suffering or illness.

Harmony is understood as a complex and can be either a process, event or experience, simultaneous to the nurse and the patient, and can be composed of thoughts, feelings, attitudes that are interrelated and that occur in a communication.

In this model, the relation is represented by semicircles and the nurse and patient are at opposite poles. The poles are approached, through empathy, when the nurse and patient know each other, until they reach the point where the bond and trust in the relationship are established between them. Nursing and patient will be found within the same circle, symbolizing that the therapy has been reached. It is perceived that this model is unique for each individual, and it will only be possible to succeed if there is a commitment from both nurses, and the patient in maintaining the interaction.

This interpersonal relationship is shown to be important for clinical care. It is necessary to rescue the senses that this care has: when associating with the sense of compassion, try to put yourself in the place of the other; to help the other to accomplish what he can not do for himself, enabling the autonomy of the other; care as a sense of trust and, finally, put all the possibilities that exist to improve the life of the patient.

The stages of the relationship, by Travelbee, are defined as: first encounter, identity in emergence, empathy, sympathy and, finally, harmony. In articulating the theoretical basis of Travelbee to the case study, it can be seen that they can guide the Nursing process by establishing five steps necessary for care. It is the initial meeting of the first moment where the nurse and the patient L.Q.C break the stereotypes formed from one another when they met and made deals for therapy. It is revealed that this moment occurred in the data collection phase of the Nursing process, present in this case study, where the nurse seeks to know and understand more about his patient through the interview.

In this context, communication in the conduction of the Nursing process is highlighted. It means communicating to Travelbee, sending and receiving messages through symbols, words (written or spoken), signs, gestures, and other non-verbal means. It is necessary to be attentive to the messages that the patient wants to pass not only through the symptomatology of the body, but through the expressions, gestures and feelings.

The second moment, for Travelbee, is understood as the emergence of the emergent identities of the full development of the person-to-person relationship, when those involved, the nurse, and the patient express their identities, values, and meanings. It is emphasized that the nurse and the patient are unique individuals and the bond of a relationship begins to form. It is established, at this stage, a diagnosis of the problem.

From the analysis of the statements of L.Q.C., one can know the meaning of the disease for her and how it affects her life in the physical, psychic and social spheres.

I feel such great sadness that I think I am depressed [...] in no time, the doctor looked at my life story when I stopped exercising. I avoid picking up weight, jumping, practicing more intense sports, running, jumping, dances [...] only study lying down, I do not use high heels [...] this has greatly diminished my self-esteem. I am vain, the physique is even bearable, but it does much

**Table: NANDA-I Diagnosis, Nursing Results (NOC), Interventions (NIC), Nursing Activities**

<table>
<thead>
<tr>
<th>NANDA-I Diagnosis</th>
<th>Nursing Results (NOC)</th>
<th>Interventions (NIC)</th>
<th>Nursing Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic pain Related to herniated disc</td>
<td>- Pain control</td>
<td>- Administration</td>
<td>- Administration of oral medicinal products;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain Control</td>
<td>- Positioning;</td>
</tr>
<tr>
<td>Low situational self-esteem Related to weight</td>
<td>- Adapting to physical</td>
<td>- Body Image</td>
<td>- Counseling;</td>
</tr>
<tr>
<td>gain and physical disability caused by pain</td>
<td>- Physical disability</td>
<td>- Improvement of coping</td>
<td>- Emotional support;</td>
</tr>
<tr>
<td></td>
<td>- Adaptation: Life Change</td>
<td>- Improvement of Self Esteem</td>
<td>- Spiritual support;</td>
</tr>
<tr>
<td></td>
<td>- Self-esteem</td>
<td>- Self Esteem</td>
<td>- Promotion of resilience;</td>
</tr>
</tbody>
</table>

**Figure 1. Nursing Diagnoses, Results and Interventions identified in the case study, Fortaleza (CE), 2015.**

English/Portuguese  
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more with my psychological. [...] I am the center of the family, my father passed away ... I paid the bills, drove, took my mother to medical appointments, took weight and today I can no longer. (L.Q.C.)

Nursing diagnoses were established based on this disc. Chronic pain, related to disc herniation, and Low situational self-esteem, related to weight gain and physical incapacity caused by pain.

The third stage, empathy, is given by the desire to establish a mutual aid process. This phase corresponds to the preparation of care plans. It emphasizes the interest in wanting to understand the other person and the similarities of experiences.15

As in the fourth moment, there is the sympathy phase, where the nurse stands as a support to help the patient to face the problem, the illness and the treatment. It is the implementation phase of the actions, when the nurse assists the other, using their self, and tries to alleviate the cause of the suffering or illness of the other.15

In order to achieve the expected results, the counseling, emotional, spiritual and active listening activities that are fundamental to improving body image have been shown, since L.Q.C. was feeling sad that he had gained nine kilograms, with low self-esteem and difficulty adapting to the disease.

Nursing therapeutics is understood as everything the nurse does to help the individual to accept and find meaning for their experience, using Nursing interventions in the communication process.17

It is verified that the communication, in the meantime, is an important instrument for the construction of links with the patient, being relevant that L.Q.C. has a voice during the therapeutic process, so that she can express her problems, and the nurse listens, in order to understand and put herself in the position of the other, throwing instruments so that the subject (re) means his life.

It is established, through the speech of each subject, an approximation with his suffering, correlating it with his life history and the meanings he attributes to his illness.18

It is necessary to understand listening as a strategy that can and should be accessed by professionals in clinical practice. It is based on listening as a mutual understanding in the establishment of a dialogue, a conversation, a reflection on different interests between the professional and the user, which seeks to build humanized relationships, awareness of their role in relation to care and mitigation of conflicts without judgments. It involves, through listening, the recognition of the other as subject of singular experiences; subject that is transformed and is transformed into the meeting between the health professional and the user.18

In the speech:

I live in pain, I try to occupy my mind not to think about it. I am afraid to perform the most invasive surgery because I am afraid of becoming invalid [...] Today, I'm not feeling so much pain [...] there are good days, but there are few (L.Q.C.).

The patient expresses her fears and anxieties, stating that she lives more sad moments. It should be the clinical nursing care to care about the individual integrally, involving the spiritual and relational dimension of the world that surrounds him.

It warns, by Travelbee, for the fact that it is nurse's role to help the individual avoid or give another sense to the suffering. Nursing care is thus an interpersonal process by which the nurse helps a person with the goal of promoting mental health, coping with the experience of illness and mental suffering, and contributing to the discovery of a sense for these experiences.15

Finally, the phase of the term (harmony) is similar to the evaluation phase of the Nursing process, when the nurse reminds the patient of the commitment they have made, together they analyze the objectives achieved and prepare themselves so that the patient can structure herself to deal with it alone, where possible, with their suffering. This phase is marked by the recognition of the human condition of the subjects involved in the therapeutic process, when the nurse can really alleviate the patient's anguish in relation to their experience of suffering or illness and it is also when the patient trusts and believes in the nursing care attitudes.15

The nurse and L.Q.C. within the same circle, reaching the proposed therapies.

It is based, by the bond, a committed relationship between nurse and user, providing a coexistence that must be sincere and responsible. Facilitating, therefore, the establishment of links and the partnership, because, through the relationship, there is a more human, more singular, connection that will seek a service that best meets the needs of the user, implementing a performance of the more sensitive staff for listening, understanding of vulnerability points and the construction of individual therapeutic interventions.19

Humanization must be present in the Nursing know-how and, for this, it is necessary to develop the competence of knowing, such as intra and interpersonal communication and
intelligence. This competence is pointed out to the importance of the relationship with the other to be established from values such as listening, bonding, dialogue, recognizing oneself in the other, knowing the fragilities, since it could be “me” to be occupying the position of the “other”. It is necessary, therefore, the care of the nurse to be holistic and individualized.

**CONCLUSION**

It was possible, through the Nursing process, guided by the NANDA-I-NOC-NIC classification system and based on the Travelbee theory, a look at the subject present in the case study beyond the physical and biological needs of the same.

The limitations that the theory presents for the resolution of the case, especially with regard to reported lower back pain, are highlighted. It is known that no theory will alone account for all practice, and it is necessary to deconstruct it and (re) construct it according to reality or articulate with other theories, generating a new knowledge.

It is important to use Nursing theories and the dissemination of the knowledge produced by this science, for the construction of the Nursing science, linking knowledge to practice, since the Nursing process assists in clinical health care instrumentalizing care and structuring the know / make profession.

Critical thinking and clinical reasoning are important tools and important parts of the nursing process itself for decision-making. It is necessary to combine these with the knowledges that direct the Nursing process to the clinical needs of the subject, including the biological, social, psychic and spiritual.

**REFERENCES**

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