Alvino Leite, Maria Clerya de Medeiros, Ana Lúcia Lima da Nóbrega, Maria Miriam Melo Fernandes, Maria das Graças

ASSISTÊNCIA DE ENFERMAGEM A UMA PUÉRPERA UTILIZANDO A TEORIA DE HORTA E A CIPE®


Universidade Federal do Ceará
Fortaleza, Brasil

Available in: http://www.redalyc.org/articulo.oa?id=324027985022
Case Study

NURSING CARE POSTPARTUM WOMEN USING THE HORTA’S THEORY AND INCP®

ASSISTÊNCIA DE ENFERMAGEM A UMA PUÉRPERA UTILIZANDO A TEORIA DE HORTA E A CIPE®

ATENCIÓN DE ENFERMERÍA A UNA PUÉRPERA USANDO LA TEORÍA DE HORTA Y LA CIPE®

Maria Clerya Alvino Leite¹, Ana Lúcia de Medeiros², Maria Miriam Lima da Nóbrega³, Maria das Graças Melo Fernandes⁴

This is a case study based on the Theory of Basic Human Needs of Horta, with the aim to operationalize the nursing process to a postpartum anemia. For collect data, we used a script adapted to psychobiological, psychosocial and psycho spiritual needs. For the identification of nursing diagnoses was used to ICNP®, establishing nursing outcomes and interventions that were implemented and evaluated. From psychobiological and psychosocial needs of affected puerperal women were identified in the following diagnoses: impaired oral hygiene, moderate pain, breast engorgement, nipple trauma, constipation, and solitude. It is concluded that the implementation of the nursing process with postpartum anemia was directed to the problems of breastfeeding and their management and improving the quality of life.

Descriptors: Nursing Process; Nursing Theory; Classification Systems.

Trata-se de um estudo de caso fundamentado na Teoria das Necesidades Humanas Básicas de Horta, com o objetivo de operacionalizar o processo de enfermagem a uma puérpera com anemia. Para coleta de dados utilizou-se um roteiro adaptado às necessidades psicobiológicas, psicossociais e psicoespirituais. Para a identificação dos diagnósticos de enfermagem empregou-se a CIPE®, estabelecendo-se os resultados esperados e as intervenções de enfermagem, que foram implementadas e avaliadas. A partir das necessidades psicobiológicas e psicossociais afetadas na puérpera foram identificados os seguintes diagnósticos: Higiene oral prejudicada, Dor moderada, Ingurgitamento mamário, Trauma mamilar, Constipação e Solidão. Conclui-se que a implementação do processo de enfermagem a puérpera com anemia foi direcionado aos problemas da lactação e seu manejo e a melhoria da qualidade de vida.

Descritores: Processos de Enfermagem; Teoria de Enfermagem; Sistema de Classificação.

Estudio de caso basado en la Teoría de las Necesidades Humanas Básicas de Horta, con objetivo de poner en práctica el proceso de enfermería a una puérpera con anemia. Para la recolección de datos, se utilizó un guión adaptado a las necesidades psicobiológicas, psicosociales y psicoespirituales. Para la identificación de los diagnósticos de enfermería, utilizó la CIPE®, estableciéndose los resultados esperados y las intervenciones de enfermería que fueron implementadas y evaluadas. A partir de las necesidades psicobiológicas y psicosociales afectadas en las mujeres fueron identificadas los siguientes diagnósticos: alteración de higiene oral, dolor moderado, ingurgitación mamaria, trauma del pezón, estreñimiento y soledad. La aplicación del proceso de enfermería a una puérpera con anemia se dirigió a los problemas de la lactancia materna y su gestión y mejora de la calidad de vida.

Descritores: Proceso de Enfermería; Teoría de Enfermería; Sistemas de Clasificación.

¹ Nurse. Master of Science in Nutrition. PhD student in Pharmacology from the Federal University of Paraíba (UFPB), João Pessoa, Brazil. E-mail: cleryaalvino@hotmail.com.
² Nurse. Specialist in Obstetrical Nursing and Family Health. Master from the Graduate Nursing Program of the UFPB, João Pessoa, Brazil. E-mail: aninhaips@gmail.com.
³ Nurse. PhD in Nursing. Associate Professor, Department of Nursing and Graduate Nursing Program of the UFPB. Brazil. CNPq Researcher. E-mail: miriam@ccs.ufpb.br.
⁴ Nurse. PhD in Sociology from UFPB. Professor, Department of Clinical Nursing and Graduate Nursing Program of the UFPB, João Pessoa. Brazil. E-mail: graacafernandes@hotmail.com.

Corresponding author: Maria Miriam Lima da Nóbrega
Rua Eutiquiano Barreto, 935, Bairro: Manaira, CEP: 58038-311 João Pessoa, Paraíba, Brasil. E-mail: miriam@ccs.ufpb.br.
Iron-deficiency anemia is currently the most common nutritional deficiency in the world. It is widely distributed in all continents and it reaches all socioeconomic groups. Although its susceptibility is universal, infants, children under five and women of childbearing age are the most vulnerable biological groups(1).

The World Health Organization (WHO) estimated that almost half of pregnant women worldwide are anemic, 52% in developing countries compared with 22.7% in industrialized countries. Among the consequences of anemia during pregnancy is an increased perinatal risk for mothers and newborns and increased overall mortality(1).

It is believed that nursing care should be systematized through a method backed into a theoretical framework - a nursing theory, that directs the view and justifies scientifically the nurses’ actions(2), enabling not only to guide their practice as well as enable and make concrete results of such assistance(3). This theoretical framework with its concepts, assumptions and propositions will set the guidelines to be followed by the nurses in the nursing care systematization (NCS), the selection of the theoretical reference may fall into one or more theoretical basis, provided that they are not antagonistic considering the goals of the institution and Nursing(4).

The application of the nursing process was based on the Theory of Basic Human Needs by Horta, which was developed from the theory of human motivation by Maslow. That theory has been continuously studied in various scenarios of nursing practices, because it has a focus on the human-centered care in meeting their basic needs, in order to make it independent from this assistance, through self-care teaching when possible; they are also based in restoring, maintaining and promoting the health of the individual in collaboration with other professionals(5).

The nursing process is configured as a methodological tool to organize and systematize care, based on the principles of the scientific method, whose goals are to identify situations of health-illness and the need for nursing care, as well as support interventions of promotion, prevention, recovery and rehabilitation of the individual, family and community. This methodology enables the development of actions that modify the state of the process of life and health-illness of individuals and it allows results to be achieved for which the nurse is responsible(6).

The nursing process consists of five stages: data collection, nursing diagnosis, planning, implementation and evaluation of care. This division does not occur in professional practice because the nursing process is a dynamic technology with interrelated steps(7).

Although the nursing process is incorporated into nursing practice at some institutions, the current demands require its development and enhancement, being necessary and undeniable the adoption of classification systems to describe and standardize nursing practice situations. The adoption of classification systems allows the use of a unified language, which facilitates the communication process, the gathering of information for care planning, the process of professional teaching-learning, research development and the provision of care with scientific basis(6).

By using this methodology, some nursing classification systems have been developed in order to satisfy the need to unify the language among nurses, among nurses and the nursing staff and other members
of the healthcare team. In nursing there are several
classification systems for some of the phases of the
nursing process, such as the International taxonomy of
NANDA (NANDA-I), the Nursing Interventions
Classification (NIC), the Nursing Outcomes Classification
(NOC), the Community Health System by Omaha, the
Home Health Care Classification (HHCC) and the
International Classification for Nursing Practice –
(ICNP®).

This growth is of paramount importance for the
recognition of the profession because it allows the
development of a universal, accurate and objective
nursing language to ensure the continuity of care
provided by nursing staff. It was with this purpose that
the ICNP® was developed(6).

The ICNP® aims to standardize and establish a
unified language that represents the concepts of
practice, nursing care, enabling the comparison of
nursing data between populations, provide evidence of
the practice in order to influence nursing education and
formulation of health policies, plan trends on customer
needs, provision of nursing treatments, resource
utilization and outcomes of nursing care that will
contribute to advances of the profession(9).

This terminology is a dynamic instrument, subject
to continuous change and for its maintenance it is
necessary an ongoing evaluation of the terms, as well as
a review and validation to minimize problems of
redundancies and ambiguities(10). The result of these
constant evaluations resulted in alpha versions in 1996;
Beta in 1999; Beta 2 in 2001; ICNP® 1.0 in 2005; ICNP®
Version 1.1 in 2008, and the ICNP® Version 2, in
2009(11).

The ICNP® Version 1.0 has some advantages over
Beta 2, as it is easy to understand and fix existing
problems, whose main novelty is that this version was
structured into two classifications (Phenomena and
Nursing Actions) totaling sixteen axes. The ICNP®
Version 1.0 unified these axes consisting of a single
simplified classification structure organized on the
model of Seven Axes, consisting of: Focus, Trial, Means,
Action, Time, Location and Client(12).

This study aimed to operationalize the nursing
process to a postpartum woman with anemia based on
the Theory of Basic Human Needs by Horta, using
ICNP® Version 1.0.

METHODS

This is a case study, developed in a qualitative
approach, characterized as a deep and comprehensive
study of one or a few objects, so that one can know it in
a wide and detailed way(13). The study was conducted in
the second half of 2009, with the involvement of a
puerperal woman suffering from chronic anemia taken
into the Obstetric Clinic of a teaching hospital, located in
the city of João Pessoa.

The operationalization of the nursing process
occurred during the period of 16 days. In the stage of
data collection one used a tool addressing the
physiological, psychosocial and psychospiritual needs
based on the Horta’s Theory. From the data collected
one built nursing diagnoses using the Model Seven axes
of ICNP® Version 1.0, from which were drawn the
expected results and the nursing interventions
developed for further evaluation.

For the construction of nursing diagnoses,
according to the ICNP® one used a term from the Focus
axis and one from the Judgment axis, both mandatory,
being possible to include additional terms if necessary.
For the construction of nursing interventions, we also
used mandatory terms, that is, a term from the Action
axis and a Target term, defined as terms from any of
the other axes, except the judgment axis, being possible to include terms from other axes if necessary.

This study was conducted after approval by the Ethics in Research Committee from the HULW/UFPB under the protocol number 054/2007. The postpartum woman was informed about the objectives and procedures of the study, and assured anonymity and confidentiality of information provided. Furthermore, they were requested to sign the consent form, in accordance with the requirements contained in Resolution 196/96 of the National Health Council. All recommendations of research involving human beings have been observed in the development of this study.

RESULTS

Clinical History

C. M. S, 39 years old, married for the second time, housewife, elementary school, protestant, admitted to the Obstetric Clinic in 11/18/2009, with a medical diagnosis of anemia (Hg: 7.5 g / dl), classified with severe anemia by the Ministry of Health of Brazil (15). In the following day, the pregnant woman with 41 weeks of gestation felt sick showing dyspnea on exertion, wheezing and crackles on auscultation. An electrocardiogram was asked and she sent to the Intensive Care Unit to monitor a coronary heart problem - medical diagnosis: left ventricular failure and chronic anemia. A blood transfusion was conducted with red blood cells, diuretics and supplemental O₂. On 11/20/2009 the patient's clinical condition stabilized and she returned to the ward. On 11/21/2009 hemoglobin increased to 9.5 g/dl and hematocrit of 30.1%. On 11/25/2009 she showed productive cough with yellowish expectoration. On 11/26/2009, considering the context of heart disease, functional class III, she underwent surgery with general anesthesia and cesarean section was performed and then tubal ligation. The newborn child is female, presented Apgar 1min/5min (09/10), weighed 3.300g, and stayed together with the mother. In 11/30 and 12/02/2009 Hg values were respectively 9.69 and 10.3 g/dl.

Asked about prenatal consultations, she said she had only two, however the pregnant woman’s card was not attached to the medical records. The postpartum woman reported not being able to attend all prenatal care because she took care of two daughters who are disabled, aged three and four years old. The mother reported this deficiency as "crooked feet", not knowing anything else about the deficiency of her daughters; she also said she did not receive any medical explanation about this deficiency, which was congenital. Gestation thirteen calving: X, number of abortions: three, one of them being twins, ten living children; she refers having a child weighing less than 2,500 g; previous deliveries: nine were normal and one Cesarean (current pregnancy with tubal ligation). The last pregnancy was classified as single, post-term, and unplanned, because the mother reported taking contraceptive, but due to dizziness stopped taking it. She reported her children are the breadwinner because her husband consumes too much alcohol and does not have a job; she assesses her family relationships as good and her marriage as bad and absent since the companion has not visited her in the hospital since her admission.

On examination it was found that the puerperal was conscious, oriented, showing preserved verbal communication, responding to verbal stimuli, had pale mucous membranes and skin, had symmetrical, painful and engorged breasts, protruding nipples, with colostrum, discreet cracked nipples; clean surgical scar, sleep and rest preserved, adequate fluid intake, normal
appetite, with good food acceptance, no difficulty in swallowing, flat abdomen, body care preserved, with two baths a day and inadequate oral care - the puerperal reported to be waiting for the material her family were leaving at the hospital. She was afebrile (T: 36.5 ° C); eupneic (R: 20 bpm) with normal chest expansion, chest auscultation altered with discrete snoring, productive cough; regular cardiac auscultation, fine pulse without the presence of edema and varicose veins in the lower limbs, normal pulse (P: 88 bpm), preserved peripheral perfusion, normal blood pressure (BP: 110 X 60 mm Hg); flat and painful abdomen; spontaneous bladder elimination with normal characteristic and frequency, intestinal elimination absent for two days and vaginal deletion without changes with physiological lochia. She walked without help, but referring moderate pain in the abdomen.

**Nursing Care Planning**

In this phase of the nursing process, the affected needs were identified, nursing diagnoses and nursing interventions were prepared using ICNP® Version 1.0, as described in Figure 1.
<table>
<thead>
<tr>
<th>Needs affected</th>
<th>Nursing Diagnoses</th>
<th>Nursing Outcomes</th>
<th>Nursing Interventions</th>
</tr>
</thead>
</table>
| Psychobiological needs | | | - Recommend adequate liquids intake, at least two liters/day;  
- Encourage moderate daily exercises (walking, changing positions);  
- Teach the importance of responding to the urgency to defecate;  
- Lead the importance of a high fiber diet;  
- Establish a regular time for bowel elimination.  
- Monitor bowel eliminations as frequency, consistency, shape, volume and color. |
| Elimination | Constipation | Absent constipation | - Perform gentle massage and relief milking between feedings;  
- Advise the use of supportive bra and wide straps, but not tight, to reduce pain;  
- Orient the observation of holding;  
- Encourage puerperal women to breastfeed often, freely;  
- Provide emotional and psychological support. |
| | Engorgement | Absent engorgement | - Orient the woman about the different positions she can use to breastfeed;  
- Apply breastmilk after feedings in the fissures;  
- Orient them to start breastfeeding with the least affected breast;  
- Instruct the puerperal to collect some milk before breastfeeding  
- Encourage postpartum women to maintain lactation. |
| Integrity mucocutaneous | Discrete nipple trauma (fissure) | Absence of cracked nipples | - Discuss the importance of daily oral hygiene;  
- Teach them the technique of brushing teeth;  
- Evaluate the ability to perform oral hygiene.  
- Orient them to use gauze moistened in saline on the tongue.  
- Rinse mouth with saline after meals.  
- Encourage them to continue the hygiene routine when returning to their homes. |
| | Poor oral hygiene | Oral hygiene preserved | - Evaluate the reports of pain;  
- Promote comfort to the postpartum woman;  
- Encourage walking and light exercise;  
- Apply cold compresses on the abdomen;  
- Modify or eliminate factors that contribute to pain. |
| Pain perception | Moderate pain in abdomen | Reduced pain | - Allow them to express their feelings and discuss their concerns;  
- Determine whether postpartum women feel comfortable at the moment;  
- Reduce noise and distractions in the environment;  
- Stay together when emotions are exacerbated. |
| Psychosocial needs | Love / gregarious / Acceptance / Self-Esteem / Participation | Social isolation | - Implement Assistance - It is observed that nursing diagnoses are related mainly to organic changes entailed by caesarian and problems related to breasts. As the puerperal woman’s state was already generally stable, the nursing interventions implemented were those directed to lactation management, psychological support and to promote an improvement in their quality of life. |
The nursing diagnosis **Constipation** is characterized by a decrease in the normal frequency of evacuation, followed by difficult or incomplete passage of feces and/or excessively hard and dried feces passage\(^{(16)}\). For this diagnosis the interventions performed were stimulation of ambulation, fluid intake, active/passive movement in bed, a diet high in fiber, and other interventions, described in Table 1.

The nursing diagnosis **Engorgement** refers to a complication of puerperal breast resulting from abnormal retention of milk accompanied by breast pain, sometimes presenting hyperemia and mild hyperthermia. It usually occurs in the first week after delivery or with milk letdown\(^{(17)}\). In engorgement, there are three basic components: congestion/increase in vascularity, accumulation of milk and edema due to the congestion and obstruction of lymphatic drainage\(^{(18)}\).

The engorgement can be restricted to the areola (areolar) or to the breast body (peripheral) or involve both. When there is an areolar engorgement, the child has difficulty in gripping, preventing the proper emptying of the breast, which increases engorgement and pain \(^{(18)}\). Nursing interventions were implemented, such as conducting massages, orientations regarding the use of firm grip bras, observation of holding and stimulation of the woman to breastfeed often and on demand, in order to empty the breast, as well as to give emotional support. The emptying of the breast is essential to provide relief to the mother, to reduce the mechanical pressure in the alveoli, to relieve the obstruction to the drainage of the lymph and edema, reduce the risk of compromising milk production and, especially, the risk of mastitis\(^{(18)}\).

In the beginning of breastfeeding, the majority of the women experience mild pain or discomfort at the start of feeds, which can be considered physiological. However, very sore and bruised nipples, though very common, are not normal. The **Nipple trauma** includes redness, swelling, cracking, blistering, white, yellow or dark “spots” and ecchymosis\(^{(18)}\). Once installed, the nipple trauma is extremely painful and is often an entry point for bacteria. Therefore, besides correcting the problem which is causing nipple pain (most often, by wrong holding), it is necessary to intervene to relieve pain and promote healing of injuries as soon as possible\(^{(18)}\).

The recommended procedures in nipple trauma are preventive and curative. The basic principle of prevention is to ensure the flexibility of the areolar region and of healing is to eliminate the causative factor, that is, error in the application of force by the newborn’s gum on the nipple. The strength of newborns’ gums should occur on the areola and not on the nipple\(^{(17)}\). Therefore, regarding these fissures, the puerperal woman was submitted to the planned nursing interventions, highlighting the importance of maintaining lactation and guidelines to minimize cracking, such as the alternation of positions in breastfeeding and breastmilk application in cracks soon after feedings.

The nursing diagnosis **Oral Hygiene** is the removal of much of the food debris (plaque) that are in the teeth and gums. Oral hygiene is a very old practice and is part of the construction and reinforcement of a positive self-image\(^{(19)}\). It is important to highlight that oral hygiene does not only help keeping the mouth, teeth, gums, tongue and lips healthy, but it also acts as a factor to prevent respiratory infections caused by micro aspirations\(^{(19)}\). The nursing diagnosis of oral hygiene has already been found in a mother using the Theory of Basic Human Needs by Horta and ICNP\(^{®}(20)\). The woman reported not performing oral hygiene for several days, due to the lack of hygiene materials.
because her relatives, until the time of data collection, had not brought her such material. With this, the patient had coated tongue and halitosis. Considering this necessity affected, the woman was instructed on how to perform, the importance and frequency of daily oral hygiene, as well as guidelines on the use of gauze moistened with saline at least three times a day, to assist in hygiene.

The nursing diagnosis **Acute pain** is defined as an unpleasant and individual sensation associated with a disease or with an actual or potential tissue damage or described in terms of such damage; sudden or slow start, of mild to severe intensity, with early or predictable end and duration of less than six months\(^\text{(16)}\). Acute pain is associated with tissue trauma, including surgery or some other identifiable recent etiology which, although initially intense, decreases with scarring and eventually disappears\(^\text{(7)}\). Nursing interventions were performed to control pain, such as modifying or eliminating factors that contribute to pain (full bladder, warm or cold environment, uncomfortable position), the teaching of techniques such as distraction and relaxation and cold application. According to the literature the cold reduces the local edema and vasodilatation decreases, which can be used in mild to moderate pain\(^\text{(7)}\).

The **Social isolation** is loneliness experienced by the individual and perceived as imposed by others and as a negative or threatening state\(^\text{(16)}\). According to the literature\(^\text{(7)}\), everybody has emotional needs for love, companionship and acceptance. This diagnosis may be related to the absence of her family during a long time of her admission, and the postpartum woman expressed feelings of rejection; situation that can be attributed to the limited financial resources of her family and the difficulty of going from her city to the hospital where she was admitted as reported by the woman. This distancing of the family undermined the patient’s oral hygiene, nursing diagnosis previously mentioned.

Study with men/fathers showed that they know the Law no. 11.108/05 authorizing the monitoring of women during labor, delivery and post-partum in health services and they want to accompany the women (53.8%)\(^\text{(21)}\). However, in this study, this fact was absent because according to reports of the woman, her husband consumes too much alcohol and was present neither in prenatal consultations, nor during labor and postpartum.

Seeking to minimize the feeling of loneliness demonstrated by the patient, it was necessary to reduce noise and distractions in the environment, but also the promotion of comfort and encouragement to the expression of her feelings and concerns. The therapeutic communication, empathic listening, sharing information and patient education are among the most basic processes in the context of the nurse-patient relationship\(^\text{(7)}\).

**Evaluation**

After implementing the interventions mentioned, it is considered that the expected results were achieved almost entirely, proving the importance of a systematic care. The only result which was not satisfactory was the social isolation nursing diagnosis, because the postpartum woman was still sad, alone and with low self-esteem for not having received a visit from her family yet.

**FINAL CONSIDERATIONS**

The application of the nursing process to a postpartum woman with anemia based on the Theory of Basic Human Needs by Horta associated with the use of a nursing classification system, the ICNP®,
subsidies for the provision of quality and individual care, providing evidence the real needs of the puerperal woman and perform specific actions for each affected need and get expected results.

The use of ICNP® Version 1.0 was of great importance in the operation of the nursing process, enabling the establishment of nursing diagnoses, expected outcomes and nursing interventions. Therefore, further studies need to be conducted using ICNP®, with the purpose to promote a common language among nurses and contribute to the improvement of this nursing classification system, namely the advantages and possibilities of using this taxonomy not only for patients, but for institutions and health professionals. It also required the insertion of ICNP® in undergraduate nursing courses by educational institutions, because what we have seen in our experience, is little or lack of knowledge of students and even professionals about this taxonomy.

**REFERENCES**


The ICNP® subsidizes the care system as it is an instrument for collecting data that allows us to categorize nursing care, implement the design of professionals, promote decision-making guided by reliable information, evaluate the quality of care provided to the individual and achieve development of the profession.

Based on these results, it was possible to identify the needs affected, psychobiological and psychosocial, which supported the identification of nursing diagnoses using ICNP®: Oral hygiene impaired, Moderate pain, Breast engorgement, Nipple trauma, Constipation and Loneliness.

In this study, the data obtained show that the operationalization of the nursing process to a postpartum woman with anemia was directed at further improving the quality of her life due to changes in the puerperal period and common problems of lactation.


Received: Sep. 9th 2012
Accepted: Feb. 24th 2012