

Nursing instrument to attend mothers who recently gave birth in primary health care

Instrumento para consulta de enfermagem à puérpera na atenção básica
Instrumento para consulta de enfermería de la puérpera en la atención básica

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ABSTRACT

Objective: To build a nursing instrument to attend mothers who have recently given birth in primary health care. **Method:** This is a methodological research developed in five stages: identification of empirical indicators associated with mothers who have recently given birth by reviewing integrative literature; evaluation of empirical indicators by focal group; instrument structuring by categorizing indicators; instrument validation using the Delphi technique; and application and development of diagnostic statements and nursing interventions. **Results:** The instrument comprises identification data on mothers who have given birth recently, on the assessment of their human needs, and on nursing Care items. In the final version, we selected 73 diagnoses and 155 nursing interventions. **Conclusion:** With the completion of this study, nurses will have an instrument for Nursing Care Systematization to attend mothers who have given birth recently in primary health care. Besides, this study will also work as a tool in research and teaching of Obstetric Nursing. **Key words:** Obstetric Nursing; Post-Partum Period; Nursing Care; Data gathering; Validation Studies.

RESUMO

Objetivo: construir um instrumento de Consulta de Enfermagem à puérpera na atenção básica. **Método:** trata-se de uma pesquisa metodológica desenvolvida em cinco etapas: identificação dos indicadores empíricos relativos à puérpera por meio de revisão integrativa da literatura; avaliação dos indicadores empíricos por grupo focal; estruturação do instrumento mediante a categorização dos indicadores; validação do instrumento pelos especialistas pela técnica Delphi; e aplicação e desenvolvimento das afirmativas de diagnóstico e intervenções de Enfermagem. **Resultados:** o instrumento é constituído por dados de identificação da puérpera, avaliação das necessidades humanas da puérpera e itens do cuidado de Enfermagem. Na versão final, foram selecionados 73 Diagnósticos e 155 Intervenções de Enfermagem. **Conclusão:** com a conclusão do estudo, a enfermeira disporá de um instrumento para Sistematização da Assistência de Enfermagem à puérpera na Atenção Básica. Além disso, o documento servirá como ferramenta ao ensino e à pesquisa em Enfermagem Obstétrica. **Descritores:** Enfermagem Obstétrica; Período Pós-Parto; Cuidados de Enfermagem; Coleta de dados; Estudos de Validação.

RESUMEN

Objetivo: construir un instrumento de Consulta de Enfermería para puérperas en la atención básica. **Método:** investigación metodológica desarrollada en cinco etapas: identificación de indicadores empíricos relativos a la puérpera mediante revisión integrativa de literatura; evaluación de indicadores empíricos por grupo focal; estructuración del instrumento mediante categorización de los indicadores; validación del instrumento por los especialistas aplicando técnica Delphi; y aplicación y desarrollo de las confirmaciones de diagnóstico e intervenciones de Enfermería. **Resultados:** el instrumento se conformó con datos de identificación de la puérpera, evaluación de necesidades humanas de la puérpera, e ítems del cuidado de Enfermería. En la versión final, fueron seleccionados 73 Diagnósticos y 155 Intervenciones de Enfermería. **Conclusión:** con la conclusión

del estudio, la enfermera dispondrá de un instrumento para la Sistematización de la Atención de Enfermería a la puerpera en Atención Básica. Además, el documento servirá como herramienta de enseñanza e investigación en Enfermería Obstétrica.

Palabras clave: Enfermería Obstétrica; Período Posparto; Atención de Enfermería; Recolección de datos; Estudios de Validación.

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INTRODUCTION

During the woman's life course, she experiences peculiar situations to the feminine self. Among these, we highlight the pregnant-puerperal period, extended from pregnancy to postpartum.

During pregnancy, the woman experience a state of adjustment because of the biological, psychological, and social changes caused by gestation and delivery, putting her in a vulnerable situation. Women who have given birth recently have to balance their role as a mother, partner, and housewife, which added to an unfavorable socioeconomic situation might be a risk to her pregnant-puerperal state⁽¹⁾.

According to the Brazilian Ministry of Health, the woman who has given birth recently and the newborn need a follow-up visit to the health unit, a medical home call in the period of 7 to 10 days of puerperium, and a medical or nursing appointment 42 days after childbirth⁽²⁾. In this context, we noted the lack of a systematized instrument to document all stages of nursing care to women who have given birth recently in primary health care.

In everyday life of health services, professionals, particularly nurses, when attending mothers who have given birth recently, prepare their own stages of postpartum care. This way, it lies under their responsibility to judge what is important to be observed, assessed or even questioned. Considering the lack of legitimate criteria to consider in the care of mothers who have given birth recently, the assistance provided in the postpartum appointment acquires an unsystematic character.

The reality of the exercise of attending woman who have given birth recently is far from the recommended in the practice of the Nursing profession according to the organs and laws that regulate it. To systematize the nursing care, professionals need to use a scientific method in their daily practices: the Nursing Process (NP). Accordingly, the resolution 358/2009 determined the implementation of NP in all public and private health units where professional nursing care occurs⁽³⁾.

When carried out in institutions that provide outpatient health services, households, schools, charitable associations, among others, the NP is named as nursing appointment. However, it is not fully implemented in public or private health institution yet.

Thus, we considered important to elaborate and validate an instrument with adequate scientific rigor to be used in nursing care of mothers who have given birth recently in primary health units. The level of agreement of above 70% among nurses who were part of the experts panel validated the instrument of nursing care to mothers who have given birth recently after hospital discharge.

In the construction of the instrument for the Nursing Care Systematization, we used the diagnostic and nursing interventions

from the ICNP⁽⁴⁾ terminology since it is a relevant methodology for nurses in professional practice. The results of the project CIPESC⁽⁵⁾ were also employed. This project was developed in Curitiba by nurses from the Brazilian Association of Nursing, using the ICNP⁽⁶⁾ terminology adopted by Garcia and Cubas⁽⁶⁾.

Furthermore, the construction of our instrument was based on the International Essential Data Set for Nursing, dividing it in three categories, namely: the clients' demographic items, nursing care items, and service items⁽⁷⁾. However, the classification of psychobiological, psychosocial, and psychospiritual needs was based on the Theory of Basic Human Needs by Horta⁽⁸⁾. This study aimed to build an instrument to document nursing care to mothers who have given birth recently in primary health care.

METHOD

To build a nursing care instrument, we developed a five phase study of methodological type:

1. Identification of the empirical indicators by carrying out a comprehensive review of the scientific literature;
2. The evaluation of the first version of the instrument by focal group. In this stage, we considered the empirical indicators identified in the first phase of the study.
3. Instrument structuring by categorizing the empirical indicators of women who have recently given birth with focal group evaluation, according to Garcia and Cubas⁽⁶⁾;
4. The validation of the content and of the second version of the instrument using the Delphi Technique. This study used data on the institution, identification data on women who have given birth recently, and also data on the evaluation of the human needs of the ones who have given birth recently. After the first evaluation, the document was submitted to correction;
5. Selection and development of nursing diagnosis statements/nursing interventions and results based on the validated items. And, finally, the structuring of the instrument final version divided into parts: data on the institution and identification data on mothers who have given birth recently; human needs evaluation; nursing care planning — nursing diagnosis/results and requirements.

As this research involves human beings, we ensured the rights and duties regarding the scientific community, as well as for the subjects under study according to the Resolution 466/CNS 2012⁽⁹⁾. The project was submitted to the Research Ethics Committee of the Federal University of Rio Grande do Norte (CEP-UFRN) via Plataforma Brasil.

RESULTS

Results of the 1st stage: Identification of empirical indicators of human needs in psychobiological, psychosocial and psychospiritual levels of mothers who have given birth recently with comprehensive review of the scientific literature.

Empirical indicators are experimental propositions used to measure and provide evidences on the concepts of a theory⁽¹⁰⁾. In this study, empirical indicators were considered changed manifestations of human needs of postpartum mothers.

For the identification of the empirical indicators of human needs in puerperium, during the months of January and February 2013 we searched for information on the postpartum period in the databases Scopus, Cinahl, Pubmed, Lilacs, and Cochrane, in the Journal of Midwifery and Women's Health, as well as in official documents of the Brazilian Ministry of Health and of the Nursing Regional Council of Rio de Janeiro.

In the comprehensive review of scientific literature, 98 empirical indicators were identified once they are associated with basic human needs, 46 of them being considered of psychobiological order, 51 of psychosocial order, and only 1 of them being of psychospiritual order.

Results of the 2nd stage: Evaluation of the first version of the instrument — empirical indicators and their relation with the human needs evaluated by a focus group.

The preliminary version of the instrument constituted by the empirical indicators identified in the literature was evaluated by five experts using the focus group technique. It is worth to highlight that this is a research methodology composed of group interviews that, when used in the construction of indicators, aims at getting a consensus on the data found. These data will be subsequently analyzed by the researcher and transformed into instruments or devices⁽¹¹⁾.

Participants discussed human needs and their relation with empirical indicators until they came to an agreement. In the category of psychobiological needs, they selected the ones for oxygenation, hydration, food, elimination, sleep and rest, physical activity, sexuality, physical and environmental security, body care, physical integrity, vascular regulation, thermal regulation, neural regulation, perception of sense organs, therapy, and prevention.

As for the psychosocial needs, participants considered the needs for communication, being part of a group, recreation and leisure, emotional security, love and acceptance, self-esteem, self-confidence, self-respect, freedom and participation, health education/learning, self-realization and space. At this stage, there was no empirical indicator concerning psychospiritual needs.

Results of the 3th stage: Instrument structuring by categorising the empirical indicators that affect the human needs of mothers who have given birth recently making use of the focus group evaluation, according to Garcia and Cubas⁽⁶⁾.

In this phase, from a total of 78 identified and categorized empirical indicators, we highlight 27 affected human needs, 16 of them being of psychobiological order, 10 of psychosocial order, and 1 psychospiritual order. Afterwards, we carried out

a categorization process guided by a set of information that professionals must collect from the clientele, as proposed by Garcia and Cubas⁽⁶⁾.

Following the categorization of indicators, the document was introduced to experts for the approval of the ones that would be part of the final version of the instrument. After signing and having the informed consent form in hands, nurses validated the instrument using the Content Validity Index (CVI)⁽¹²⁾.

Thus, they considered the total content valid, as the percentage exceeded the previously established validation value of 70% of agreement. However, there were no suggestions for changes in the terminology of human needs for food.

Results of the 4th stage: The validation of the content and of the second version of the instrument using the Delphi Technique.

We used the Delphi validation technique to obtain, compare, and guide the experts' judgment to come to an agreement on a particular subject⁽¹³⁾. The results showed that in the identification data mothers who have given birth recently, some items not obtained the minimum index of 70% of agreement to be considered valid, namely: *responsibility for the family*, need for physical activity, and also for *love and acceptance*.

Some experts considered not be the right time for practicing physical activities, being more important to assess whether the activity practiced by the mother is indeed inappropriate to her conditions in the period.

From the assessed items considered adequate, the agreement index was between 70 and 100%. They considered the content as valid, as the minimum percentage exceeded 70% of agreement. In this stage of assessment, participants suggested the inclusion and the exclusion of some components: to include "*date of medical appointment*", to exclude "*age*", and replace the term "*delivery time*" for "*delivery data*" with agreement index of 100%.

The experts suggested removing the question "*is there satisfaction/pleasure in sexual relations?*", and justified that during puerperium this aspect becomes irrelevant in the first week after childbirth. We have sent the changes to the participants once again for their approval, and, as we obtained 70% of CI, we excluded this question from the instrument. However, in the case of the first puerperal appointment, seven days after childbirth, this would be acceptable; however, after more days postpartum, it becomes relevant for us to investigate mothers' sexual satisfaction considering that usually sexual activities return in this period.

After these assessments, we also excluded the item: "*housing conditions (good, regular, poor)*", because, according to the experts, it is something that depends on the point of view. It obtained a 70% CI, thus being excluded from the instrument. Meanwhile, they suggested adding the "*uterine height ___cm*" in the need for hormonal adjustment with 100% CI.

The exclusion of "*most recent complete blood count result*" and "*most recent oncotic cytology result*" was suggested once that, depending on the date of the examination, results might be outdated. The reached indexes were of 70% and 50%, respectively. Regardless of this assessment, we maintained the items. This is explained by a study carried out in

England that included 279 mothers with 2 months postpartum, among which 115 had anaemia. Postpartum anaemia contributes with 25% of maternal deaths, being of great importance to investigate it and treat it properly⁽¹⁴⁾.

Regarding the need for religion and spirituality, we excluded the question: "Do you enjoy life? Why?". Experts considered it vague and embarrassing, and, therefore, we excluded it from the instrument since we obtained 80% of CI. After the application of the suggested alterations, we obtained a set of essential data to be collected about mothers who have given birth recently, considering these mothers are in their home environment and are seen from a holistic perspective that approaches their biological, psychosocial, and spiritual aspects. From the assessed and validated items, we corrected the second version of the instrument.

Results of the 5th stage: Instrument structuring by applying and developing nursing diagnosis statements/nursing interventions and results.

In the final drafting of the instrument, we selected 73 nursing diagnoses and 155 nursing interventions based on ICNP[®] terminology, according to Garcia and Cubas⁽⁶⁾. There were changes regarding the nursing diagnoses and interventions to avoid their repetition in more identified needs. The changes we have made are associated with the needs for food, elimination, sleep and rest, physical and environmental security, body care, and, finally, breastfeeding.

DISCUSSION

The speech on human needs for food is now "to encourage food intake according to nutritional needs, food preferences, and socioeconomic conditions". Considering the economical reality of the Brazilian population, we assumed that this is an essential factor for some of the families in what concerns the planning of their diet.

In the need for elimination, we added the nursing intervention "to advise patients to do Kegel exercises", since exercises attenuate the symptoms of urinary incontinence as they help with female pelvic muscle strengthening and perineal re-education⁽¹⁵⁾.

By applying nursing interventions on the need for sleep and rest, we developed the following interventions in this study: to advise patients to rest and sleep while the newborn sleeps; to advise patients to prioritize activities; to advise patients to delegate activities to other people. These are not included in the theoretical reference by Garcia and Cubas⁽⁶⁾.

We grouped the nursing diagnoses and interventions associated with breastfeeding in the category of need for health education and learning once they were also among other needs. Our idea is to give nurses more visibility concerning breastfeeding, thus being important to gather all interventions in one item. Breastfeeding is essential during puerperium, particularly when considering the establishment of a healthy diet for children and the strengthening of the bond between mother and child.

When applying the nursing interventions, we realized the need for development of the following: to stimulate breastfeeding; to advise patients to breastfeed in quiet places; to advise patients to return to the Health Unit; the child's vaccination schedule; and growth and development monitoring.

As for the structuring of nursing attendance to mothers who have given birth recently, we observed that the Resolution 358/2009 of the Brazil's Federal Council of Nursing on Nursing Care Systematization. This resolution states that, when performed in outpatient clinics and households, among others, nursing care corresponds to the NP organized in five interrelated, interdependent, and recurring stages: data gathering, nursing diagnosis, nursing planning, implementation, and evaluation⁽³⁾.

Figure 1 shows the final version of the nursing instrument to attend mothers who have given birth recently in primary health care.

Box 1 - Final version of the nursing instrument to attend mothers who have given birth recently in primary health care

Nursing instrument to attend mothers who have given birth recently		
Health Department		Name of the Health Unit
Identification data on mothers who have given birth recently		
Name:		Area: Medical record no.
Address:		Date of 1st medical appointment __/__/__ Date of 2nd medical appointment __/__/__
Education level __ years	Born on __/__/__	No. of children __ Age of the last child __ Gesta __ Para __
Date of delivery __/__/__ Date of hospital discharge __/__/__ Postpartum days _____		
Delivery/birth data: <input type="checkbox"/> normal <input type="checkbox"/> cesarean <input type="checkbox"/> forceps <input type="checkbox"/> term <input type="checkbox"/> preterm <input type="checkbox"/> postterm		

To be continued

Evaluation of the human needs of mothers who have given birth recently
PSYCOBIOLOGICAL
Oxygenation: FR _____ rpm <input type="checkbox"/> Cough <input type="checkbox"/> Expectoration
Hydration: <input type="checkbox"/> Frequency of liquid intake – how many cups a day: _____
Food Weight _____ kg - Height _____ cm BMI _____ Appetite: <input type="checkbox"/> maintained <input type="checkbox"/> increased <input type="checkbox"/> decreased Difficulty of access to food - Explain why: _____
Elimination: Urinary elimination -characteristics/frequency: _____ <input type="checkbox"/> Burning/painful sensation during urination Intestinal elimination -characteristics/frequency: _____
Sleep and rest: <input type="checkbox"/> Rest during the day <input type="checkbox"/> Sleep during the day – Duration: __ <input type="checkbox"/> Sleep well at night – Duration: __
Sexuality and reproduction: <input type="checkbox"/> Postpartum sex <input type="checkbox"/> Use of birth control methods - Which one: _____
Physical and environmental security: <input type="checkbox"/> Lives in risk/violent areas Domestic hygiene conditions <input type="checkbox"/> good <input type="checkbox"/> regular <input type="checkbox"/> poor <input type="checkbox"/> Presence of insects/rodents <input type="checkbox"/> Is the mother a victim of violence? Of which kind? <input type="checkbox"/> emocional <input type="checkbox"/> physical <input type="checkbox"/> sexual Does the mother make use of <input type="checkbox"/> tobacco <input type="checkbox"/> alcohol <input type="checkbox"/> illicit drugs
Body care: <input type="checkbox"/> Personal appearance <input type="checkbox"/> good <input type="checkbox"/> regular <input type="checkbox"/> poor - Personal hygiene conditions <input type="checkbox"/> good <input type="checkbox"/> regular <input type="checkbox"/> poor Domestic hygiene conditions <input type="checkbox"/> good <input type="checkbox"/> regular <input type="checkbox"/> poor <input type="checkbox"/> Does the mother do the housework? Which? _____
Physical integrity: Characteristics of the skin: <input type="checkbox"/> without wounds <input type="checkbox"/> with wounds - local/type _____ Tone: _____ <input type="checkbox"/> Inflammation signs - local _____ Breast conditions: <input type="checkbox"/> without wounds <input type="checkbox"/> engorged <input type="checkbox"/> turgid <input type="checkbox"/> presence of abscess
Vascular regulation TA _____ x _____ mmHg - FC _____ bpm ou P _____ bpm <input type="checkbox"/> Postpartum vaginal bleeding/lochia - Quantity <input type="checkbox"/> light <input type="checkbox"/> moderate <input type="checkbox"/> severe Characteristics of lochia <input type="checkbox"/> sanguineous <input type="checkbox"/> serosanguineous <input type="checkbox"/> serosa <input type="checkbox"/> purulent <input type="checkbox"/> Edema - local _____ +/+ + + + _____
Thermal regulation Temp. _____ °C <input type="checkbox"/> Does the mother usually feel cold? <input type="checkbox"/> Does the mother usually have chills?
Neurological regulation: <input type="checkbox"/> Settled in time/space <input type="checkbox"/> Anxious <input type="checkbox"/> Presence of affection <input type="checkbox"/> Presence of attention <input type="checkbox"/> Presence of good humor <input type="checkbox"/> Comprehensive language <input type="checkbox"/> Preserved sensorial perception <input type="checkbox"/> Preserved thinking process <input type="checkbox"/> Mental confusion <input type="checkbox"/> Preserved memory
Hormonal regulation: <input type="checkbox"/> Uterine involution - Uterine height _____ <input type="checkbox"/> Presence of milky secretion - Of type <input type="checkbox"/> colostrum <input type="checkbox"/> milk <input type="checkbox"/> blood <input type="checkbox"/> purulent - <input type="checkbox"/> Does the baby look satisfied? - Glucose _____ mg/dL - _____ mg/dL - Most recent oncotic cytology <input type="checkbox"/> normal <input type="checkbox"/> changed - Total blood count: _____ red blood cells _____ Hg _____ Ht (pregnant card)
Sensorial perception: <input type="checkbox"/> Pain - specify _____ <input type="checkbox"/> Discomfort - specify _____
Treatment and prevention: <input type="checkbox"/> Does the mother use iron supplements? <input type="checkbox"/> Does the mother need reference service - specify _____ <input type="checkbox"/> Does the mother have a preexisting disease? - specify _____ <input type="checkbox"/> Is the mother under some kind of treatment? - specify _____ <input type="checkbox"/> Soropositive for _____ <input type="checkbox"/> specify _____ <input type="checkbox"/> Your family adhered to a therapeutical health service
PSYCHOSOCIAL AND PSYCOSPIRITUAL
Communication and social abilities: Presence of good familiar communication <input type="checkbox"/> Planned parenthood <input type="checkbox"/> Familiar conflict - of type _____ <input type="checkbox"/> Presence of familiar interaction <input type="checkbox"/> Do you usually trust in people? <input type="checkbox"/> Are your older children happy with the baby arrival?
Recreation and leisure: Do you usually practice recreation and leisure activities? Which? _____
Emotional security: Are you facing this phase with: <input type="checkbox"/> joy <input type="checkbox"/> sadness <input type="checkbox"/> difficulty <input type="checkbox"/> fear <input type="checkbox"/> security <input type="checkbox"/> insecurity <input type="checkbox"/> anxiety <input type="checkbox"/> comfort <input type="checkbox"/> discomfort <input type="checkbox"/> overload <input type="checkbox"/> irritation <input type="checkbox"/> lots of crying for no reason <input type="checkbox"/> negative feelings

To be continued

Box 1

Self-esteem, self-confidence, self-respect: Regarding your body image, do you feel: satisfied dissatisfied
As a mother: satisfied dissatisfied

Freedom and participation: Do you have any employment bonds? Are you receiving the paid maternity leave? Are you part of some social group?

Health education and learning: Exclusive breastfeeding - Specify the reason _____
 Do you feel the need for help while breastfeeding? - What kind of help? _____
 Would you like to ask something about your postpartum? _____
 Would you like to ask something about how to take care of the child? _____

Self-realization: Do you have the support of your family and/or friends in this new phase? Do you have the support of your family with the baby?

Space: No. of rooms in the house _____ Number of family members _____ Do you have privacy?
Where is the child sleeping? with the parents with the siblings in their own room other _____

Religiosity and spirituality: Does the mother search for help with your spiritual problems?
 Does the mother feel good when searching for it?

Nursing care planning to mothers who have given birth recently

Nursing diagnosis	Nursing intervention	Results
<input type="checkbox"/> Changes in the mother's breathing pattern <input type="checkbox"/> Productive cough	<input type="checkbox"/> Encourage the mother to cough <input type="checkbox"/> Perform pulmonary auscultation <input type="checkbox"/> Encourage the mother to visit the Health Unit	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Inadequate liquid intake	<input type="checkbox"/> To advise the mother concerning the need for liquids intake	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Poor nutrition <input type="checkbox"/> Excess of body weight <input type="checkbox"/> Weight loss	<input type="checkbox"/> Encourage eating habits that follow the mother's nutritional needs, food preferences and socioeconomic conditions. <input type="checkbox"/> Assess the need for a change in eating habits <input type="checkbox"/> Encourage dietary re-education <input type="checkbox"/> Schedule an appointment with a nutritionist	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Changes in the mother's urinary elimination <input type="checkbox"/> Constipation	<input type="checkbox"/> Encourage the mother to control the sphincter during urination <input type="checkbox"/> Advise the mother to do the exercises of Kegel <input type="checkbox"/> Advise the mother on intimate hygiene <input type="checkbox"/> Schedule a medical appointment <input type="checkbox"/> Identify the factors that can contribute to constipation <input type="checkbox"/> Do research on the mother's eating habits <input type="checkbox"/> Encourage the increase in water intake <input type="checkbox"/> Encourage the increase in the consumption of vegetables, fruits, and foods high in fiber. <input type="checkbox"/> Encourage the mother to take walks	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Fatigue <input type="checkbox"/> Insomnia <input type="checkbox"/> Ineffective rest <input type="checkbox"/> Ineffective sleep	<input type="checkbox"/> Identify the reason for the mother's sleep disturbances <input type="checkbox"/> Encourage the mother to rest <input type="checkbox"/> Point out the factors that interfere in sleep, such as coffee, black tea, nicotine, soft drinks, long naps during the day, extreme temperatures, improper ventilation, inadequate lighting, noises <input type="checkbox"/> Advise the mother to limit nap time from 20 to 30 minutes in the morning or afternoon <input type="checkbox"/> Teach relaxation techniques <input type="checkbox"/> Advise the mother to rest and sleep while the newborn sleeps <input type="checkbox"/> Advise the mother to prioritize the activities <input type="checkbox"/> Advise the mother to delegate activities to others	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Changes in the mother's sexual pattern <input type="checkbox"/> Ineffective family planning	<input type="checkbox"/> Encourage the mother's verbalization of her feelings, perceptions, and fears <input type="checkbox"/> Clarify that situations of stress and the postpartum period can interfere in sex life <input type="checkbox"/> Give information on the use of contraceptive methods <input type="checkbox"/> Disconsider contraceptive methods for family planning	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved

To be continued

Box 1

<ul style="list-style-type: none"> <input type="checkbox"/> Exposure to socio-environmental violence <input type="checkbox"/> Domestic violence <input type="checkbox"/> Use of alcohol <input type="checkbox"/> Use of tobacco <input type="checkbox"/> Use of illicit drugs <input type="checkbox"/> Risk of suicide 	<ul style="list-style-type: none"> <input type="checkbox"/> Advise the mother to avoid risk behaviours <input type="checkbox"/> Assess the environmental hygiene conditions during the follow-up visit <input type="checkbox"/> Give information on the consequences of using tobacco, alcohol and/or drugs not only for herself but also for the child <input type="checkbox"/> Identify if the mother has family and community support <input type="checkbox"/> Advise the mother to attend to health services for women victims of violence <input type="checkbox"/> Advise the mother to participate of a support group <input type="checkbox"/> Identify risk of suicide <input type="checkbox"/> Establish a support relationship <input type="checkbox"/> Involve the family in the support and monitoring of the mother <input type="checkbox"/> Communicate situations of violence to the competent authority <input type="checkbox"/> Advise the mother to attend a medical appointment 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Inadequate self-care: bathing/hygiene and clothing 	<ul style="list-style-type: none"> <input type="checkbox"/> Encourage habits of hygiene and clothing according to the mother's conditions and to the weather <input type="checkbox"/> Advise the regular exchange of postpartum sanitary napkins 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Breast engorgement <input type="checkbox"/> Nipple fissures <input type="checkbox"/> Breast inflammation <input type="checkbox"/> Contaminated surgical wound <input type="checkbox"/> Changes in skin tone (specify local) <input type="checkbox"/> Risk for impaired tissue integrity <input type="checkbox"/> Infection (specify local) 	<ul style="list-style-type: none"> <input type="checkbox"/> Hand express breastmilk <input type="checkbox"/> Offer the milk to the child with a small spoon or cup <input type="checkbox"/> Advise breast exposure to the sun: 15 minutes in the morning before 10 a.m., or in the afternoon after 4 p.m. <input type="checkbox"/> Cleaning of the nipple with breast milk before and after feeding the baby <input type="checkbox"/> Discourage the excessive handling of the nipples <input type="checkbox"/> Discourage the use of soap, cream, and ointment in the nipples <input type="checkbox"/> Advise that hands need to be washed before handling the breasts <input type="checkbox"/> Monitor the healing process of the surgical wound <input type="checkbox"/> Put a dressing in the infected surgical wound <input type="checkbox"/> Monitor signs of infection <input type="checkbox"/> Examine episiorrhaphy 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Edema <input type="checkbox"/> Lochia (specify the type and if the case is light, moderate, severe) <input type="checkbox"/> Increased blood pressure 	<ul style="list-style-type: none"> <input type="checkbox"/> Put the mother's legs up <input type="checkbox"/> Examine pulse timing characteristics <input type="checkbox"/> Examine uterine involution <input type="checkbox"/> Observe lochia characteristics <input type="checkbox"/> Monitor liquid loss <input type="checkbox"/> Request for total blood count test <input type="checkbox"/> Treat cases of anaemia <input type="checkbox"/> Guide the bleeding cases identified in follow-up visits to the Health/Maternity Unit <input type="checkbox"/> Minister antihypertensive drugs <input type="checkbox"/> Control blood pressure <input type="checkbox"/> Give information on the preventive measures to avoid the increase of blood pressure 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Increased body temperature 	<ul style="list-style-type: none"> <input type="checkbox"/> Check body temperature <input type="checkbox"/> Minister antipyretic drugs <input type="checkbox"/> Keep the mother warm <input type="checkbox"/> Encourage liquid intake <input type="checkbox"/> Guide the mother to the Health Unit if the fever persists 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Anxiety <input type="checkbox"/> Changes in mental activities: level of consciousness <input type="checkbox"/> Changes in mental activities: orientation (time, space, self, others) <input type="checkbox"/> Confusion 	<ul style="list-style-type: none"> <input type="checkbox"/> Assess the mother-child relationship <input type="checkbox"/> Assess the changes in the level of consciousness <input type="checkbox"/> Investigate the presence of factors that contribute to mental confusion <input type="checkbox"/> Keep the mother informed about people, time, space <input type="checkbox"/> Avoid asking questions that the mother may not know how to answer <input type="checkbox"/> Keep the mother located in time and space (give her things such as a clock, a calendar, a mirror) <input type="checkbox"/> Plan playful activities to stimulate the memory <input type="checkbox"/> Use simple sentences during communication <input type="checkbox"/> Involve the family in the recovery process of the mother's mental capacities <input type="checkbox"/> Stimulate physical leisure activities <input type="checkbox"/> Guide the mother to a Mental Health Unit 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved

To be continued

Box 1

<input type="checkbox"/> Retarded uterine involution <input type="checkbox"/> Low milk supply <input type="checkbox"/> Unstable blood glucose	<input type="checkbox"/> Give information on the observation of lochia (characteristics and quantity) <input type="checkbox"/> Examine uterine involution <input type="checkbox"/> Help the mother during lactation <input type="checkbox"/> Explain the physiological changes involving decreased lactation <input type="checkbox"/> Advise the mother to let the child suck freely <input type="checkbox"/> Verify capillary blood glucose <input type="checkbox"/> Give information on the importance of monitoring blood glucose <input type="checkbox"/> Give information on the signs and symptoms of hypoglycemia and hyperglycemia <input type="checkbox"/> Guide the mother to the Health Unit/Hospital	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Pain (specify local and intensity)	<input type="checkbox"/> Encourage the mother to complain when she feels pain <input type="checkbox"/> Help the mother to relieve her pain <input type="checkbox"/> Guide the mother to attend a medical appointment	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Maintenance of altered health <input type="checkbox"/> Inadequate adherence to the treatment <input type="checkbox"/> Inadequate adherence to the diet	<input type="checkbox"/> Involve the family in the resolution of the mother's health problems <input type="checkbox"/> Encourage the mother to take part of groups <input type="checkbox"/> Give information on the therapy to be followed <input type="checkbox"/> Give information on the diet to be followed	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Ineffective familiar communication <input type="checkbox"/> Conflicting attitudes among family members <input type="checkbox"/> Inadequate social interaction <input type="checkbox"/> Potential for inadequate fatherhood/motherhood <input type="checkbox"/> Risk of social isolation <input type="checkbox"/> Risk of feeling lonely	<input type="checkbox"/> Asses the family's support dynamics <input type="checkbox"/> Identify the communication barrier of the family <input type="checkbox"/> Suggest opportunities for family members to get together and discuss the situation <input type="checkbox"/> Observe the mother's and child's behaviour during breastfeeding <input type="checkbox"/> Observe the interaction father/mother/children <input type="checkbox"/> Help the development of especial abilities <input type="checkbox"/> Help the family to recognize the strong points in their relationship <input type="checkbox"/> Encourage the interaction with friends, family, and community groups <input type="checkbox"/> Guide the mother to family counseling	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Insufficient recreation and leisure activities	<input type="checkbox"/> Identify social facilities for recreation and leisure activities <input type="checkbox"/> Encourage the participation in recreation and leisure activities	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Anxiety <input type="checkbox"/> Postpartum depression <input type="checkbox"/> Fear (specify) <input type="checkbox"/> Hopelessness <input type="checkbox"/> Feeling incapable <input type="checkbox"/> Sadness	<input type="checkbox"/> Assess behaviors that might indicate anxiety <input type="checkbox"/> Give information on the emotional changes in puerperium <input type="checkbox"/> Help the mother to relax <input type="checkbox"/> Help the mother to identify a supportive system <input type="checkbox"/> Develop a supportive relationship with the mother <input type="checkbox"/> Develop a relationship with the family <input type="checkbox"/> Involve the family in the mother's care and in household activities <input type="checkbox"/> Monitor symptoms of postpartum depression <input type="checkbox"/> Guide the mother to a Mental Health Unit	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Low self-esteem <input type="checkbox"/> Little trust in others	<input type="checkbox"/> Stimulate maternal self-confidence <input type="checkbox"/> Give information on personal care <input type="checkbox"/> Help the mother to identify her positive qualities and possible opportunities <input type="checkbox"/> Observe changes in self-esteem <input type="checkbox"/> Discuss the predictable physical alterations with the mother <input type="checkbox"/> Explain the process of self-image recomposition <input type="checkbox"/> Reinforce the positive aspects <input type="checkbox"/> Promote active listening <input type="checkbox"/> Encourage visits from friends, relatives and significant people <input type="checkbox"/> Help with establishing realistic goals	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<input type="checkbox"/> Low initiative <input type="checkbox"/> Lack of willpower <input type="checkbox"/> Indecision <input type="checkbox"/> Limited citizenship rights (specify) <input type="checkbox"/> Inadequate decision-making process	<input type="checkbox"/> Help family members to assess their own behaviour <input type="checkbox"/> Encourage the freedom to express feelings <input type="checkbox"/> Encourage the decision-making process	<input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved

To be continued

Box 1 (concluded)

<ul style="list-style-type: none"> <input type="checkbox"/> Insufficient knowledge on postpartum related aspects <input type="checkbox"/> Insufficient knowledge on breastfeeding <input type="checkbox"/> Insufficient knowledge on newborn care <input type="checkbox"/> Inadequate knowledge (specify the topic: health condition, medications, exams, treatments, among others) <input type="checkbox"/> Inadequate use of contraceptive methods 	<ul style="list-style-type: none"> <input type="checkbox"/> Give information on the care of surgical wounds/episiorrhaphy <input type="checkbox"/> Encourage exclusive breastfeeding <input type="checkbox"/> Teach the process of hand expressing and storing breast milk <input type="checkbox"/> Observe breastfeeding and how the mother handles the breasts <input type="checkbox"/> Teach the right positioning of the newborn during breastfeeding <input type="checkbox"/> Teach the mother a comfortable position for breastfeeding <input type="checkbox"/> Stimulate the mother to breastfeed according to the child's demand <input type="checkbox"/> Help the mother to breastfeed <input type="checkbox"/> Give information on the nutritional needs of the newborn <input type="checkbox"/> Give information on the need for breastfeeding in a calm location <input type="checkbox"/> Talk about the myths and beliefs around breastfeeding <input type="checkbox"/> Identify people that can help with the breastfeeding process <input type="checkbox"/> Give information on the care of breasts and nipples <input type="checkbox"/> Explain contraception methods <input type="checkbox"/> Help the mother to identify the informations she is more interested in <input type="checkbox"/> Advise the mother to return to the Health Unit, and give information on the child's vaccination schedule and on the monitoring of the child's growth and development 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Conflicting performance of the parents' role as mother/father <input type="checkbox"/> Ineffective performance 	<ul style="list-style-type: none"> <input type="checkbox"/> Encourage the parents to express their feelings and concerns <input type="checkbox"/> Assess the impact of child birth on the parents role and relationships <input type="checkbox"/> Encourage the participation of the parents in child care <input type="checkbox"/> Give information on the child's health conditions to the parents <input type="checkbox"/> Advise the mother on the importance of the mother-father-child relationship <input type="checkbox"/> Count on other family members in child care 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Lack of privacy <input type="checkbox"/> Inadequate personal space 	<ul style="list-style-type: none"> <input type="checkbox"/> Advise the parents to have a private space <input type="checkbox"/> Explain to the family the mother's need for privacy <input type="checkbox"/> Advise the use of home spaces to respect the family members need for privacy 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<ul style="list-style-type: none"> <input type="checkbox"/> Anguish <input type="checkbox"/> Perception of the lack of meaning in life 	<ul style="list-style-type: none"> <input type="checkbox"/> Assess the family's spiritual beliefs <input type="checkbox"/> Support the mother's or the family's spiritual practices <input type="checkbox"/> Encourage the expression of feelings concerning life, ego, emotion, subjectivity, beliefs, myths, expectations, among others <input type="checkbox"/> Talk about the visit of the spiritual leader at home 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved <input type="checkbox"/> Worsened <input type="checkbox"/> Unaltered <input type="checkbox"/> Solved
<p>Observations</p>		
<p>Nurse:</p>	<p>COREN:</p>	

CONCLUSION

This instrument was based on the theory of basic human needs and on the International Essential Data Set for Nursing, followed the terminology adopted by Garcia and Cubas, which by its turn is according to the language proposed by ICNP[®]. The development of this instrument was structured in three sections, namely: the identification data of the mother who have given birth recently, human needs assessment, and nursing care planning.

Our suggestions are associated with the future clinical validation of the instrument. So that it will be possible to test its operation in practice. The ICNP[®] terminology is little used among nurses of the Brazilian context, which makes it difficult for us to know if other nurses would approve the same diagnosis/results and nursing interventions applied in this study. We

consider this activity is dependent of theoretical basis, clinical trials, and assistential practice.

The instrument developed and validated will help the mother who has given birth recently in a systematized way, contributing to the operation of the nursing process in the context of the Brazilian primary health care. In addition, it will enable the establishment of diagnoses/results and nursing interventions using the ICNP[®] terminology. We recommend that the document for the nursing consultation be used from the first week postpartum to around the 40th day postpartum, preferably at home, i.e. inside the mother's home environment. Similarly, we consider important to include this taxonomy as a teaching tool in graduation courses, since students, professors, and nurses who work directly in the field show lack of knowledge on this classification.

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