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Empirical indicators of the affected human needs of puerperal women: Validation by focus group

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ABSTRACT

Problem: During the postpartum period, the biological, psychological and psychosocial needs of women are changed. This fact places them in a vulnerable situation. **Objective:** To validate the relationship of empirical indicators with human needs affected in the puerperium. **Method:** Validation study carried out with five experts by focus group. **Results:** We identified and categorized 78 empirical indicators. From the focus group process, twenty-seven (27) affected human needs were related, that is, sixteen (16) were psychobiological in nature, ten (10) were psychosocial and one (1) was psycho-spiritual. The results of the focus group demonstrated a consensus in terms of judges' opinions regarding all the items displayed, since they have obtained 70% of the concordance index. **Conclusion:** From the identification of empirical indicators in the puerperium, it was possible to establish a relationship with the human needs of Horta, as well as validate them by means of expert opinion.

Descriptors: Obstetric Nursing; Postpartum Period; Data Collection; Validation Studies.

INTRODUCTION

Postpartum is a complex period due to the intertwining of biological, psychological, behavioral, relational, social-cultural, economic and gender aspects. Moreover, it is in the puerperium that the demands of motherhood are exacerbated, resulting in major changes in the lifestyle of women and couples, that affect their affective and sexual relationships⁽¹⁾.

During the postpartum period, women experience a state of adjustment due to the biological, psychological and social changes imposed on them by pregnancy and birth, which places them in a vulnerable state. During puerperium, the women, who are also mothers and companions, experience an overlapping of roles that imposes specific needs in terms of their health condition. This reality, coupled with the socio-economic situation in which they live, submits puerperal women to a care system that does not provide the fulfillment of their real needs, leaving them in a vulnerable and risky position due to their pregnancy-puerperal status⁽²⁾.

Thus, skilled nursing care focused on puerperal women is needed, and it must be implemented holistically. Health professionals must identify and meet, or find ways to adapt to, women's problems in the postpartum period. These complications represent aggravations to women's health, since they can correspond to morbid processes, given that some cases result in death. As a result, it is considered necessary to evaluate their needs and the establishment of a care service to prevent complications.

Given this reality, we sought to know, through a review of the scientific literature, the empirical indicators (EI) - problems – in terms of Horta's Basic Human Necessities (BHN) affected by the postpartum period, in order to develop a data collection instrument to assess the real needs of puerperal women. The decision to adopt

BHN theory as a theoretical model was made due to its use in several studies and scenarios of practice and teaching through to the present time. However, Horta's theory lacks empirical indicators, which often hampers the identification of problems and the development of nursing diagnoses⁽³⁾.

The EI represent specific, observable and measurable concepts of a theory of nursing⁽⁴⁾. It is appropriate to know the EI because, when data collection is excessive and performed in an incomplete manner, it makes nursing care planning difficult and unfeasible. It is crucial to identify and standardize the essential data set that provides sufficient and necessary information for the initial assessment of the health condition of the patient⁽⁵⁾.

In this study, we adopted the classification of BHN based on Garcia and Cubas⁽⁶⁾. The authors introduced adaptations of some aspects related to the BHN in terms of the number, title and form and/or content of their settings. In addition, they provided data indicators to be collected with regard to the patients for which it will provide assistance.

The EIs were identified, but their relationship with the BHN was based on the experience of the researcher. Therefore this led to the need to acquire consensus with other specialists. For this, we conducted a focus group with the aim of obtaining opinions, completing information, and obtaining a consensus among nurses with respect to EI with regard to the human needs identified in the study.

METHODS

A non-experimental study was developed with the aim of contributing to the quality improvement of nursing care aimed at supporting postpartum women in terms of basic attention.

This type of design enables an investigation into methods for collecting and organizing data from the development, validation and assessment tools that are reliable, accurate and usable by other researchers⁽⁷⁾.

To organize the data to be collected with regard to puerperal women, the EIs were categorized according to Garcia and Cubas' approach and were presented to the focus group (FG) for evaluation. Among the techniques of data collection and analysis, the FG promotes a discussion of a specific topic by means of group interaction. These are group interviews in which participants are able to explore their individual views, in order to arrive at a group view on a particular subject⁽⁸⁾. The use of the focus group has the advantage of being efficient in generating dialogue and contributing to a consensus among the participants. In the development of the technique, the opinions and experiences of the judges are requested simultaneously⁽⁷⁾.

The aim of the FG is to deepen the meaning of a theme. It is a research technique that has emerged from group interviews that, when used in the construction of indicators, aims to achieve a consensus with regard to the data that will be analyzed by the investigator and transformed into instruments or devices⁽⁹⁾.

The project was approved by the Ethics Committee in Research of the Federal University of Rio Grande do Norte (ECR/FURN) under the Protocol 184,241. The technique participants were five experts who, after reading and signing the Informed Consent term (IC), were introduced to the instructional document. Through this document they proceeded with the validation of the indicators using the Content Validity Index (CVI) developed by Alexander and Coluci⁽¹⁰⁾. The CVI score was calculated by the sum of agreement of the items that were given a score of 3 and 4 by the experts. When the items received a score of 1 or 2, they were eliminated. The relative

level of each item of the instrument was assessed by means of alternatives:

- 4 - Extremely important - when the nurse considered the relationship between the item and the changed/affected human need very important, in terms of the evaluation, and also in terms of the elements of care for postpartum women;
- 3 - Relevant - important;
- 2 - Little relevance - in the assessment of the expert, the item was of little importance;
- 1 - Irrelevant - the item was not considered important as there was no relationship between the element of care and the human need.

In order to clarify any doubts that the experts could possibly have, an instructional guide containing concepts and description of the items under evaluation was attached to the document. Items that reached the minimum of 70% agreement were considered valid. For Polit and Beck⁽⁷⁾, the rate of agreement varies from 0.00 to 1.00. Higher values indicate greater validity, and the desirable values are 0.70 or more.

The construction of the focus group in the study

- **Step 1 - Definition of participants:** the first initiative was to define the profile of the FG participants. For this the following criteria were established: nurses who were involved in teaching or provided assistance to postpartum women in primary health care (N=5). Moreover, these participants should have at least two years professional experience in the area. Thus, a convenience sample was constituted.

Five nurses aged between 40 and 63 years participated in the FG, including four teachers involved in the women's health area. Two of these are doctors and one is a doctoral student; one is a teacher with a Master's degree who is also a nurse in primary care, and one is a specialist nurse with expertise in Family Health Strategy.

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In order to maintain the quality of the discussion, no more than eight participants should be used⁽⁹⁾; therefore eight nurses who met the aforementioned criteria were invited to participate in this study. The participation of the experts was determined by their availability, so that the FG could match their working schedules.

- **Step 2 - Contact members:** the participants were contacted by telephone. On this occasion, they were informed of the research objectives and of the use of the focus group, and their availability to take part in the technique was ascertained.
- **Step 3 - Setting the FG date:** after contact had been made and the participation had been confirmed, the participants were informed of the date, time, location and rules of the FG. Prior to the day of the meeting, the time and place of the meeting were confirmed by telephone, to remind the participants and to encourage their presence.
- **Step 4 - Preparation of a guiding script:** in order to carry out the activities, the researcher prepared a script with regard to the concept of BHN according to Garcia and Cubas and based on Horta in terms of the distribution of EIs and their relationship to the human needs of puerperal women, as proposed by the researcher. As part of the FG dynamics, the following guiding question was used: based on your understanding, are EIs and the affected human needs presented by the researcher during the puerperium, in accordance with the classification and definition provided of Garcia and Cubas?
- **Step 5 - Environmental preparation:** Some steps were taken prior to the meeting – provision of a previously scheduled site, room preparation (lighting, ventilation, upholstered chairs, snacks, water and coffee), advance selection and preparation of specific materials

and environmental organization (chairs set in a circle, in which the moderator remained in the center and the observer sat alongside).

RESULTS

Seventy eight (78) empirical indicators were identified and categorized. From this process, twenty seven (27) affected human needs were related as follows: sixteen (16) in the psychobiological level, ten (10) in the psychosocial and one (01) in the psycho-spiritual. For the grouping of identified EIs, there was a screening process guided by the set of information that professionals must collect from patients. These data should be listed so that they carry the diagnosis formulation, and determine nursing intervention to contribute to the achievement of the expected outcome⁽⁶⁾. The results demonstrated a consensus in terms of the opinions of judges with regard to all the displayed items.

Tables 1 and 2 present the evaluation of the judges in terms of the relevance of the EI. The concordance of responses corresponded to 100% with regard to all indicators. A change in the classification of the human need for nutrition used in Garcia and Cubas' classification was suggested and obeyed in this study. It was considered that, by using the term "nutrition", we are adopting an inappropriate use of the term that is exclusive to the professional nutritionist. Thus, the total content was valid, as the percentage exceeded the previously-established validation value of 70% agreement.

With respect to psychobiological needs, the EIs were identified in terms of needs such as: oxygenation, hydration, nutrition, elimination, sleep and rest, physical activity, sexuality and reproduction, physical security and environment, body and environmental care, physical integrity, vascular regulation, thermal regulation, neuro-

Table 1 - Concordance of experts as to the empirical indicators of postpartum women and affected physiological needs. Natal, 2013.

Necessidades psicobiológicas		
NH	Indicadores empíricos	IVC
Oxygenation	Cough	
	Secretion	1,0
Hydration	Fluid loss	1,0
Alimentation	Access to food	
	Breast-feeding	
	Appetite	
	Sudden weight gain	1,0
Elimination	Urinary elimination habit	1,0
Sleep and rest	Resting characteristic	
	Sleep characteristic	1,0
Physical activity	Habit of practicing physical activities	
	Ability to work out	1,0
Sexuality and reproduction	Sexual practices (sexual disinterest)	
	Use of contraceptive methods	1,0
Physical safety and environment	Violence (sexual and physical by the partner)	
	Risk factors for infection (loquia flow - breast)	
	Home and outdoor environmental conditions	
	Smoking	
	Alcoholism	1,0
Body and environmental care	Capacity for self-care (personal appearance and hygiene)	1,0
Physical integrity	Skin characteristics (integrity, color, turgor, texture)	
	Condition of breasts	1,0
Vascular regulation	Edema (+/++++)	
	Stress and coping mode	
	Blood loss	
	Blood pressure	1,0
Thermoregulation	Body temperature	1,0
Neurological regulation	Psychomotor activity	
	Intracranial capacity (headache)	
	Cognitive function	
	Level of consciousness	1,0
Hormonal regulation	Menstrual flow	
	Uterine involution	
	Lactation	
	Blood glucose level	1,0
Felt sense	Pain (Headache, in sexual intercourse, abdominal, lower back, in the surgical incision, in the perineal region, in the body, in the breasts, in the uterus)	1,0
Therapeutics and prevention	Health seeking behavior (of the Baby - gestational diabetes - anemia - counseling and professional support postpartum)	
	Problem coping Standard	1,0

Source: authors

Table 2 - Concordance of experts as to the empirical indicators of postpartum women and psychosocial and psych spiritual needs affected. Natal, 2013.

Psychosocial needs		
NH	Empirical indicators	IVC
Comunication	Family communication standard	1,0
Gregarious	Family interaction	
	Family coping pattern	
	Support network	
	Social network	
	Performance of family roles	
	Participation in community groups/institutions	1,0
Recreation and Leisure	Preferred activities of recreation and leisure	1,0
Emotional security	Coping with situations or problems	
	Recent stressful events	
	History of emotional problems	
	History of mental problems	1,0
Love, Acceptance	Performance of family roles	
	Family support network	
	Social support network	
	Family bond	1,0
Self-esteem, self-confidence, self-respect	Health condition Acceptance	
	Acceptance of personal condition	
	self-image	
	Confidence in themselves and in others	
	Adaptation or defense mechanisms	
	Sense of personal value	1,0
Freedom and participation	Knowledge of rights and duties	
	Community pattern of decision-making	
	Familiar pattern of decision-making	
	Personal pattern of decision-making	
	Participation in the therapeutic plan	1,0
Health education and learning	Access to information on health care	
	Capacity for self-care	
	Knowledge about the health status	
	Situations that interfere with adherence to treatment plan	1,0
Self-realization	Support for role play	
	Distribution of tasks in the family	
	Role within the family	
	Satisfaction with role playing	1,0
Space	Availability of personal space	
	Number of rooms in the household	
	Number of persons / families in the household	
	Family privacy preservation	1,0
Psychospiritual needs		
Religiosity and spirituality	Meaning of life	1,0

Source: authors

logical regulation, hormonal regulation, sensory perception and treatment and prevention.

The psychosocial needs of postpartum women were communication, gregariousness, recreation and leisure, emotional security, love and acceptance, self-esteem, self-confidence, self-respect, freedom and participation, health education and learning.

As to the psycho-spiritual needs, the indicators were identified in terms of the need for religiosity and spirituality.

DISCUSSION

Regarding the need for oxygenation, despite the fact that it is not important in a normal postpartum, we should consider it as an amendment to the presence of secretions, coughs and other issues that directly influence the quality of life of postpartum women⁽¹¹⁾.

Concerning the need for hydration in the puerperal period, the excessive loss of body fluids may be related to bleeding during childbirth and, in the postpartum period, to fever, prolonged fasting, and decreased water intake⁽¹²⁾. It is common for women to have anemia during the mediate and late postpartum. A study conducted in England involving 279 women in a two month postpartum period found that, among these women, 115 were anemic. Postpartum anemia is the cause of 25% of maternal deaths, making it important to investigate it and treat it accordingly⁽¹³⁾.

Regarding the need for health education and learning, changes were concentrated on the lack of knowledge regarding breastfeeding, leading women to early weaning. A short length of stay in hospital promotes the lack of information on exclusive breastfeeding. Another factor related to the discontinuance of breastfeeding is inadequate knowledge from people as a whole

due to the use of some types of tea and pacifiers. We can add to these factors the incorrect handling of the child, which can cause fissures, pain and discomfort due to breast engorgement. There is also misinformation in terms of the prevention, symptoms and treatment of urinary incontinence, which is a common problem in women whose vaginal delivery underwent episiotomy^(14,15,16).

A serious problem that affects women during postpartum is mental suffering. It should be diagnosed and assisted early in order to prevent depression and puerperal psychosis, which are more advanced states of mental disorders. In addition to the hormonal factors involved in causes, social, economic and emotional factors also have a direct inference on postpartum depression. These are related to marital status, lack of social support and partner, financial problems, breastfeeding difficulties and current marriage problems⁽¹⁷⁾.

Along with this there are the household chores: hygiene; cleaning and organizing of the home, crockery and linen; kitchen and pet care. Women prioritize household chores over their own needs. The lack of family support in caring for the baby at night also contributes to the daily burden of women, and this fact keeps them in a constant state of vigilance. Failure to reorganize daily activities and family roles leads puerperal women to suffer stress, fatigue, headaches and sleep deprivation^(18, 19).

In the United States, a study was conducted involving 28 women suffering from mental disorders developed during the first four weeks after birth. As a result of the narratives, the following categories emerged: disappointment with the birth, inability to care for the child, feelings such as guilt, fear, disorganized thoughts, feeling of malaise, anxiety, restlessness, insomnia, self-destructive behavior, lack of concentration, distrust and detachment from the child and the

world^(19, 20). Concerning the situation of these mothers, several needs are affected - sleep and rest, physical security, gregariousness, emotional security, self-esteem, self-confidence, love and acceptance, and physical security. Although the purpose of the study was to ascertain the Els in order to provide better nursing care to the puerperal women in primary care, the validation of these also enables the development of tools for assistance in other levels of care.

CONCLUSION

In the present study it was possible to evaluate and validate the grouping of empirical indicators and their relationship to the affected human needs of puerperal women by means of a focus group. Seventy eight (78) empirical indicators were identified and categorized. As part of this categorization process, twenty-seven (27) affected human needs were related as follows: sixteen (16) were psychobiological in nature, ten (10) were psychosocial and one (01) was psycho-spiritual.

From the identification of empirical indicators, the professional recognizes the health needs of puerperal women in order to plan nursing care for these patients. It is emphasized that the development of statements of nursing diagnoses occurs by means of the evaluation of problems and/or patient's needs by nurses. The selection of a nursing intervention is based on the identified diagnoses from a pool of indicators in order to achieve an expected outcome. The outcome is, in turn, the patient's response to the implementation of the nursing intervention. In this sense, it is concluded that it is possible to develop a tool for the collection of puerperal data from empirical indicators identified in women during the postpartum period, and validated by a group of experts. When us-

ing this document, nurses may apply both the diagnosis and nursing interventions. Therefore, they will have a tool to implement a systematic assistance to puerperal women. It is hoped that this research will provide a scientific basis that will help nurses working in the health care of puerperal women.

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