

Adaptation of Women's Questionnaire to Reality of Assistance Before, During and After Delivery

ORIGINAL

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Abstract

Background: Use "Women's questionnaire" will allow the health-care professional to meet previously an area in which a woman gets better care during labour and delivery, enabling thus an implementation of strategies for the care and promotion humanized childbirth. On exposed, this research aims to adapt the "Women's Questionnaire" to the reality of assistance in Ceará.

Method: methodological study adopted the procedures recommended in psychometric of face and content validation by seven judges, semantic analysis by 30 mothers and a pre - test involving 30 postpartum women interned in rooming hospital from April to September 2013. It has been considered necessary to have the agreement of at least 80% of the judges for validation, for pertinence and Content Validation Index.

Results: This paper shows that most items have been considered clear, comprehensive and relevant by the judges. The final Content Validity Index of the questionnaire was 0.88. The suggestions of the mothers were accepted.

Conclusion: The questionnaire finished with 21 items showing up adapted to the reality of the assistance of Ceará, being considered in the context of assistance as a tool to evaluate the care provided to women during labor, delivery and postpartum.

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Keywords

Nursing; Humanizing Delivery; Nursing Methodology Research; Validation Studies.

Introduction

The use of nursing technologies to evaluate the promoted care on pregnant and puerperal women, especially related to humanized delivery, is important, as they permeate and influence the theoretical and practical bases of Nursing, as well as the interaction, human communication and the observation [1].

In this context, a nongovernmental organization the International Motherbaby Childbirth Organization (IMBCO) was created to develop regularly update and to promote the International MotherBaby Childbirth Initiative (IMBCI). IMBCO developed the "Woman's questionnaire" to assess the care provided to women in pre, trans and postpartum.

IMBCI promotes the health and well-being of all women and babies during pregnancy, childbirth and birth by setting a higher standard of excellence [2].

The use of the "Woman's questionnaire" will allow the health professional to know in advance the area where the woman receives the best assistance during labor and delivery (by checking the score of each assertion), thus enabling the implementation of strategies of care and promotion of humanized delivery.

Therefore, this study aimed to adapt the "Woman's questionnaire" to the reality of care in Ceara State, Brazil. It is believed that the adaptation of this questionnaire will be extremely relevant for the promotion of maternal and child health in the northeastern scenario. Thus, the adaptation of the "Woman's questionnaire" may provide support for personalized interventions according to the health condition of each pregnant/ puerperal woman.

Methods

To guide the adaptation of the "Woman's questionnaire", the Psychometric Model [3] was adopted, which is divided into three poles: theoretical, em-

pirical or experimental and analytical or statistical. However, in this study, only the stage of the theoretical pole was performed, the theoretical analysis of the items, once the instrument had already been constructed. The other procedures for the other poles will be planned and carried out in subsequent studies.

This is a methodological study that occurred from April to September 2013. Prior to the preparation of the study, contact was made with a Canadian and a Brazilian member of IMBCO through electronic mail. Both encouraged the research, showing interest in its results. The authorization to adapt the IMBCI questionnaire was given.

The "Woman's questionnaire" has two versions, one for vaginal delivery with 27 items and another one for cesarean section also with 27 items (**Table 1**). However, 20 items are common to both questionnaires and the remaining 14 are different, 7 are exclusive for vaginal delivery and 7 for cesarean delivery, totaling 34 items. The 7 separate items of the "Woman's questionnaire - cesarean section" were labeled with the letter c (7c, 8c, 15c, 16c, 17c, 18c, 19c) and the 7 items in the "Woman's questionnaire - Vaginal delivery" were denoted by the letter v (7v, 8v, 15v, 16v, 17v, 18v, 19v). The other items did not receive modifications in the identification because they were identical for the two questionnaires.

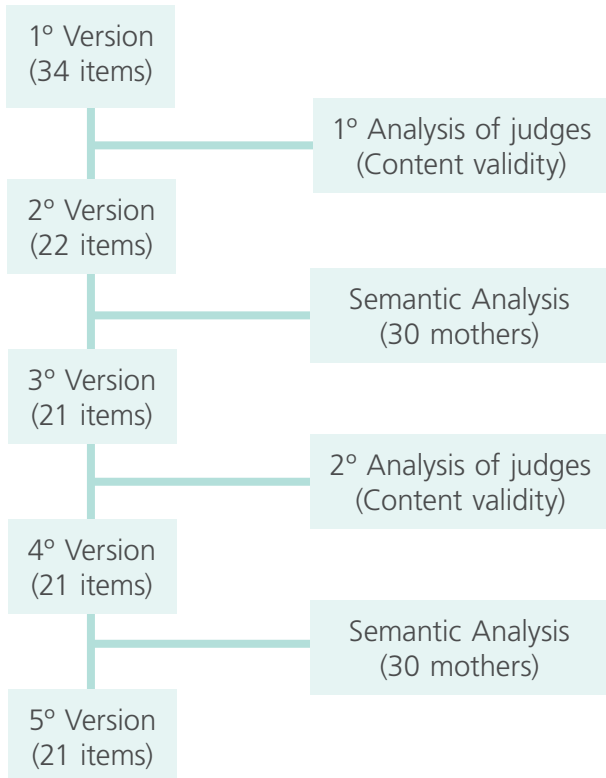
Content validation included theoretical evaluation by judges and semantic analysis, to check the understanding and relevance of items. The questionnaire was also evaluated by the target audience. The steps in this process are described in **Figure 1**.

To proceed with the adaptation following the steps of content validation, it is necessary to analyze each item by a group of judges. To avoid confusing questions and to eliminate the risk of a tie in the evaluation, an odd number of judges were used [3]. Through the snowball sampling, it was possible to select seven judges who met the inclusion criteria: Being a doctor or master, having a thesis or disser-

Table 1. "Woman's questionnaire" in the original version (cesarean section and vaginal delivery)

1.	All the professionals who looked after me (doctor, midwife, nurse) introduced themselves at the first time they came in the room: <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
2.	During my stay in hospital the information I was given was explained in a way that I could understand easily: <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
3.	I felt like I could talk about everything (worries, fears, thoughts, etc.) I wanted to with the person looking after me: <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
4.	I felt that my privacy was preserved when I was in labor or just before and just after my C-section: <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Most of the time <input type="checkbox"/> Always
5.	The professionals who looked after me (doctor, midwife, nurse) included me in all the decisions about my care and my baby's care in the hospital: <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
6.	I felt like my choices were respected (both consent and refusals) at the end of my pregnancy, during labor or during my C-section: <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
7c.	During my C-section I had the support person of my choice: <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
7v.	When I was in labor I had the support person of my choice: <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
8v.	When the baby was born I had the support person of my choice (Please mark all the ones that apply):; <input type="checkbox"/> Husband/partner; <input type="checkbox"/> Family member; <input type="checkbox"/> Friends; <input type="checkbox"/> Doula; <input type="checkbox"/> Others; <input type="checkbox"/> No one was allowed to stay with me; <input type="checkbox"/> I did not want anyone with me apart from the team
9.	If I had a doula with me during labor and the birth she would have been well accepted by the team: <input type="checkbox"/> I did not have a doula; <input type="checkbox"/> She would never be well accepted; <input type="checkbox"/> She was sometimes well accepted; <input type="checkbox"/> She was well accepted most of the time; <input type="checkbox"/> She was Always well accepted
10.	During labor I felt free to use comfort techniques such as (circle all the ones that apply below – look at the drawings if you need to): <input type="checkbox"/> Massage/touch; <input type="checkbox"/> Bath; <input type="checkbox"/> Labor in birthing pool; <input type="checkbox"/> Hot/cold compresses; <input type="checkbox"/> Aromatherapy; <input type="checkbox"/> Music; <input type="checkbox"/> Physiotherapy ball; <input type="checkbox"/> Rope/ladder; <input type="checkbox"/> Rebozo; <input type="checkbox"/> Acupressure; <input type="checkbox"/> Adjustable bed positions; <input type="checkbox"/> Birthing stool; <input type="checkbox"/> Auto-hypnosis; <input type="checkbox"/> I did not use any of these techniques; <input type="checkbox"/> I was not offered any of these
11.	I was free to move around and use these positions (circle all the ones that apply below – look at the drawings if you need to): <input type="checkbox"/> Stand up/walk; <input type="checkbox"/> Kneel; <input type="checkbox"/> Stay on all fours; <input type="checkbox"/> Knee to chin; <input type="checkbox"/> Kneel on one knee and supported on the other; <input type="checkbox"/> Pelvis lifted; <input type="checkbox"/> Sitting or leaning; <input type="checkbox"/> Squatting; <input type="checkbox"/> I did not want to use any of these positions; <input type="checkbox"/> I was not offered any of these
12.	I used these positions for the second stage – when I was pushing (circle all the ones that apply below – look at the drawings if you need to): <input type="checkbox"/> Lying on my side; <input type="checkbox"/> Vertical; <input type="checkbox"/> Squatting; <input type="checkbox"/> Kneeling; <input type="checkbox"/> Supported on all fours; <input type="checkbox"/> On the birthing stool; <input type="checkbox"/> Crouching; <input type="checkbox"/> I did not want to use any of these positions; <input type="checkbox"/> I was not offered any of these
13.	During my labor I had access to non-pharmacological pain relief; <input type="checkbox"/> Only medications; <input type="checkbox"/> never; <input type="checkbox"/> sometimes; <input type="checkbox"/> most of the time; <input type="checkbox"/> Always
14.	I could eat and drink as much as I wanted during my labor;; <input type="checkbox"/> I did not want <input type="checkbox"/> never; <input type="checkbox"/> sometimes; <input type="checkbox"/> most of the time; <input type="checkbox"/> Always
15c.	Until it was decided that I needed a C-section I was supported and helped to have a natural birth/non-medicated birth: <input type="checkbox"/> I did not wish to be supported/helped to have a natural birth/non- medicated birth; <input type="checkbox"/> Yes, I wanted support and help and I received it; <input type="checkbox"/> No, I wanted support and health for this but I did not receive it
15v.	I assumed the position of my choice when my baby was born: <input type="checkbox"/> Yes; <input type="checkbox"/> No
16c.	During my stay in hospital I received adequate information about everything I wanted to know about what was planned for my care or what was happening, including a variety of alternative options: <input type="checkbox"/> I did not want to know; <input type="checkbox"/> never; <input type="checkbox"/> sometimes; <input type="checkbox"/> most of the time; <input type="checkbox"/> Always
16v.	I was supported and helped to have a natural birth/non-medicated birth: <input type="checkbox"/> I did not wish to be supported/helped to have a natural birth/non- medicated birth; <input type="checkbox"/> Yes, I wanted support and help and I received it; <input type="checkbox"/> No, I wanted support and health for this but I did not receive it
17c.	I was encouraged to have skin contact immediately after the birth:: <input type="checkbox"/> Yes; <input type="checkbox"/> No; <input type="checkbox"/> My baby or I had complications so I could not hold the baby immediately after the birth
17v.	During my stay in hospital I received adequate information about everything I wanted to know about what was planned for my care or what was happening, including a variety of alternative options: <input type="checkbox"/> I did not want to receive information; <input type="checkbox"/> Never; <input type="checkbox"/> Sometimes; <input type="checkbox"/> Most of the time; <input type="checkbox"/> Always
18c.	In the operating theatre I could hold my baby and have skin contact immediately after the birth;; <input type="checkbox"/> Yes; <input type="checkbox"/> No; <input type="checkbox"/> My baby or I had complications so I could not hold the baby immediately after the birth
18v.	I was encouraged to maintain skin contact with my baby in the first hour after the birth;; <input type="checkbox"/> My baby or I had complications so I could not do this; <input type="checkbox"/> Yes; <input type="checkbox"/> No
19c.	In the recovery room my baby stayed in skin contact with me the whole time: <input type="checkbox"/> Yes; <input type="checkbox"/> No; <input type="checkbox"/> My baby or I had complications so I could not hold the baby.
19v.	I was able to maintain skin contact with my baby in the first hour after the birth: <input type="checkbox"/> My baby or I had complications so I could not do this; <input type="checkbox"/> Yes; <input type="checkbox"/> No
20.	I was encouraged to breastfeed my baby in the first hour after the birth. If yes, did you do it?;; <input type="checkbox"/> Yes, I was encouraged to do this; <input type="checkbox"/> No, I was not encouraged to do this; <input type="checkbox"/> Yes, I breastfed the babe.; <input type="checkbox"/> No, I did not breastfeed the babe
21.	I received guidance about breastfeeding in the first hour after birth;; <input type="checkbox"/> I did not need any guidance; <input type="checkbox"/> Yes, I needed guidance and I received it; <input type="checkbox"/> No, I needed guidance and I did not get any
22.	My baby stayed with me and/or members of my family for the whole time after the birth: <input type="checkbox"/> No because I/my baby had complications; <input type="checkbox"/> Yes; <input type="checkbox"/> No
23.	If my baby stayed in the Intensive Care Unit (ICU) I felt I could go there at any time, whenever I wanted to;; <input type="checkbox"/> This does not apply to my situation (my baby was healthy); <input type="checkbox"/> Yes; <input type="checkbox"/> No; <input type="checkbox"/> I had complications so I could not do this
24.	I received information about effective family planning methods during my pregnancy or since I had my baby and I perfectly understand what I was told;; <input type="checkbox"/> Yes; <input type="checkbox"/> No
25.	I will be discharged from hospital with everything I need for effective family planning (oral and written information, skills, methods, prescriptions, etc.): <input type="checkbox"/> Yes; <input type="checkbox"/> No; <input type="checkbox"/> I don't know
26.	In general, the care I received during labor and the birth was: <input type="checkbox"/> Excellent; <input type="checkbox"/> Good; <input type="checkbox"/> Medium; <input type="checkbox"/> Not good
27.	Would you come back here to have a baby in the future and would you recommend this place to a pregnant friend? <input type="checkbox"/> Yes; <input type="checkbox"/> No

Figure 1: Flowchart of validation steps.



tation in the subject of Maternal Health, Humanization of Childbirth and Birth or Obstetrical Nursing; Having practice (clinic, teaching or research) in the area; Being a specialist in the field and have authorship of articles published in periodicals that approach the subject [4-5].

In the instrument used by the judges to analyze the questionnaire the 34 items were allocated so they proceeded evaluating its clarity and comprehension, association with the puerperal woman's perception and degree of relevance of each item (irrelevant, relevant and very relevant). In addition, this instrument included a place for suggestions by the judges. Regarding the apparent validity, the items that obtained agreement of at least 80% of the judges were considered clear and comprehensible. The item that reached a Content Validity Index (CVI) equal to or greater than 0.8 was considered pertinent and relevant, so the items that did not reach that value were discarded from the second

version of the instrument [3, 6]. Subsequently 30 postpartum women who were hospitalized in a secondary maternity hospital in Fortaleza city evaluated the instrument (semantic analysis).

After the evaluation of the target public the instrument returned to the group of judges who analyzed the suggestions of the mothers. Finally, a pilot instrument was obtained and applied to 30 other puerperal women of the same maternity.

For the subsequent phase, women who had participated in the semantic analysis step of the survey were excluded from the sample, as this could influence the degree of understanding of the women about the items in the questionnaire. During the pre-test, the difficulties and observations of the mothers were analyzed, so the necessary modifications were made, which resulted in the fifth version, that is, the pilot instrument that remained with 21 items.

As recommended by the National Health Council of Brazil, in accordance with Resolution 466/2012, this study was submitted to the Research Ethics Committee (REC) of the Ceara State University and approved by the number nº 314.363. All participants signed the informed consent form.

Results

Seven judges and 60 postpartum women participated in the study. In relation to the judges, they had experience from 5 to 23 years in the area of humanized assistance to the pregnant and to the puerperal woman.

All of them were directly involved in the care of the pregnant woman/puerperal woman and five (71.7%) had simultaneous experience in the areas of care, education and research. Three (42.9%) judges presented previous experience with instrument validation. It should be noted that, in order to maintain the confidentiality, each judge was referred to by a number, which represented the order of delivery of the forms to the researcher.

In the analysis of apparent validation, 13 items had 100% agreement according to the judges' assessment of clarity and comprehension and 7 items had agreement above 80%. The items 9, 10, 11, 12, 13, 14, 16c, 17v, 17c, 18v, 18c, 19v, 24 and 25 were not considered clear and not comprehensible by the judges since they presented less than 80% agreement.

Among these 14 items that were not considered comprehensible, four items (9, 12, 13, 14) were elected by the judges as not significantly associated with the perception of puerperal women regarding the type of care provided to them.

Regarding the relevance of each item in the scale, it was verified the presence of 27 items that were judged relevant by the judges.

The overall CVI calculation of the questionnaire first version resulted in 0.80, indicating a good level of agreement among the specialists and evidencing that the content of the questionnaire encompasses situations common to the daily life of the Brazilian pregnant/postpartum woman. Therefore, it makes sense to be evaluated in the cultural context of Bra-

zil. However, it was verified that eight items had individual CVI values lower than 0.8 (7c, 8c, 12c, 16c, 17c, 18c, 19c), so all eight were removed from the questionnaire.

It should be noted that five experts recommended that the questionnaire should be applied in the form of an interview (not self-applied) due to the educational level of the population. Although the "Woman's questionnaire" was designed to be self-administered, the experts' suggestion was followed and there was no resistance from the puerperal women. The phrases that had the personal pronoun in the first person were changed to the second person. **(Table 2)**

From these data, some items have been modified to meet the opinions of the judges, as well as to make them more intelligible and clear. Some suggestions were also accepted for some items, which were merged and/or excluded reaching the second version with a total of 22 items.

After this stage, the questionnaire followed for the semantic evaluation by 30 mothers. The women were aged between 15 and 40 years (M =

Table 2. Presents the changes suggested by the judges. Some items have been modified, grouped, and/or deleted.

First version of the questionnaire		Suggestions to improve the Items	Second version of the questionnaire	
2	During my stay in hospital the information I was given was explained in a way that I could understand easily:	J3 e J7 suggested grouping	2	During your stay, you received information about what was planned and what happened at the birth in a way that you could easily understand;
7v	When I was in labor I had the support person of my choice:	J1, J2, J3, J5, J7 suggested grouping	7	During labor and delivery of the cesarean section until the birth of your child you had the opportunity to stay with a companion of your choice;
8v	When the baby was born I had the support person of my choice:			
9.	If I had a doula with me during labor and the birth she would have been well accepted by the team:	J1, J2, J3, J4, reported that a doula already works with the health team.	8	If you had labor, there was a community doula accompanying you;
10.	During labor I felt free to use comfort techniques:	J1, J2, J3, J7 suggested grouping	9	During labor, you were offered techniques that increased your comfort and decreased pain such as:
13.	During my labor I had access to non-pharmacological pain relief:			
15v	I assumed the position of my choice when my baby was born:	J3, J5 e J7 Suggested adding, "If you had vaginal birth."	12	If you had vaginal birth you assumed the position of your choice when your baby was born:

First version of the questionnaire	Suggestions to improve the Items	Second version of the questionnaire
17v During my stay in hospital I received adequate information about everything I wanted to know about what was planned for my care or what was happening, including a variety of alternative options:	J3 e J7 suggested grouping	2 During your stay, you received information about what was planned and what happened at the birth in a way that you could easily understand
20. I was encouraged to breastfeed my baby in the first hour after the birth:	J1, J2, J3 e J5 suggested grouping	16 You have been encouraged and helped to breastfeed your baby for the first hour after birth.
21. I received guidance about breastfeeding in the first hour after birth:		
24. I received information about effective family planning methods during my pregnancy or since I had my baby; <input type="checkbox"/> Yes; <input type="checkbox"/> No	J4 e J6 suggested replacing Effective for Contraceptives and modifying Yes/No answer options for Never; Sometimes, most of the time; always.	19 You have been informed about family planning contraceptive methods during your gestation or before you leave the hospital; <input type="checkbox"/> Never; <input type="checkbox"/> sometimes; <input type="checkbox"/> most of the time; <input type="checkbox"/> always
25. I will be discharged from hospital with everything I need for effective family planning (oral and written information, skills, methods, prescriptions, etc.): <input type="checkbox"/> Yes; <input type="checkbox"/> No; <input type="checkbox"/> I don't know	J4 e J6 suggested modifying the item and the response options from Yes/Not to: Unsatisfactory; Regular; Good; Excellent.	20 Rate your knowledge about contraceptive methods and family planning (explanations, flyers, prescriptions etc.) after hospital discharge: <input type="checkbox"/> Unsatisfactory; <input type="checkbox"/> Regular; <input type="checkbox"/> Good; <input type="checkbox"/> Excellent
26. In general, the care I received during labor and the birth was: ; <input type="checkbox"/> Excellent; 4 <input type="checkbox"/> Good; <input type="checkbox"/> Medium; <input type="checkbox"/> Not good	All judges agreed to modify the personal pronoun and modify response options for: Unsatisfactory; Regular; Good; Excellent.	21 In general, you felt that your experience with this admission for your baby's delivery was; <input type="checkbox"/> Unsatisfactory; <input type="checkbox"/> Regular; <input type="checkbox"/> Good; <input type="checkbox"/> Excellent
27. Would you come back here to have a baby in the future and would you recommend this place to a pregnant friend? <input type="checkbox"/> Yes; <input type="checkbox"/> No	J1, J2, J3 e J7 suggested modifying Yes/No answer options for Never; Sometimes, most of the time; always.	22

25.4, SD: 7.1); 20 (66.7%) married or in stable union; 19 (63.3%) had 9 years or more of study; And 14 (46.7%) had cesarean sections.

In this step, items 14 (You were encouraged to put your baby in skin-to-skin contact immediately after delivery) and 15 (In the first hour after delivery you kept your baby in skin-to-skin contact) of the second version, which were items 18n and 19n respectively, in the first version, were grouped according to the suggestion of 13 (43.3%) woman who considered them very similar, forming the new item 13.

Thus, the third version of the questionnaire was completed with 21 items, emphasizing that the great majority of suggestions from the woman who

participated in the semantic analysis stage were followed.

A second validation phase was conducted with the same judges from the first phase to improve the formulation of the items. The judges evaluated only the remaining 21 items in relation to the relevance and degree of relevance of the questionnaire.

All items were considered relevant by at least 6 (85.7%) judges, obtaining the minimum acceptable value of 80% of agreement.

The fourth version was submitted to a pre-test, being applied to another sample of 30 puerperal woman hospitalized in the delivery room of the same maternity. The time of application varied between 8 and 10 minutes. Among the 30 women

who participated, 13 (46.4%) were between 20-29 years of age, 21 (70.9%) were married or were in a stable union, 18 (59.1%) were housekeeper and 7 (21.8%) lived with less than a minimum wage.

During the pre-test, the puerperal woman suggested modifications in the response options, as they realized that the questions were being addressed to them and the answers were in the first-person singular, generating misunderstandings when the interviewers read the options. After making these changes, the fifth version of the questionnaire was created (21 items).

Discussion

Considering that there are no validated questionnaires that evaluate the variables of care provided in the pre, trans and postpartum from the perspective of the puerperal woman, the findings could not be discussed comparing with similar studies.

The adaptation of the "Woman's questionnaire" to the Brazilian reality, initially considering the context of Ceara, was made by grouping some items due to the similarity of interpretation. The form can be changed intentionally to maintain the equivalence of meaning [7]. Other items were considered unnecessary and therefore eliminated.

An important modification was the addition of the words "During labor" or "During the onset of the cesarean section", thus the item could be applicable to the post partum woman who performed vaginal or cesarean delivery, respectively. Modifications of expressions and response patterns also occurred in other instrument adaptations [8, 9].

Another relevant change was to let the questionnaire to be applied to women as interviews and not self-employed due to the different educational levels of our population in order to allow the access of all to the questionnaire.

Regarding specific items were made some important changes. Item 9 was considered inadequate by the judges, since they stated that the doula

is already part of the service and in this case she would not have to be accepted by the professionals. In addition, some institutions in Ceara do not have doulas. However, it was decided, in common agreement between the researcher and the judges that the item should remain with some modifications, since the presence of doulas is certainly part of the reality of health institutions in other states.

During childbirth, the doula acts as a bridge between the health team and the couple. She speaks in an accessible language about the techniques and procedures to be performed, developing an active listening and being more receptive [10].

The experts 1, 2, 3 and 7 agreed with grouping item 10 with item 13. They reported that the phrase of item 13 "Non-pharmacological methods" would not be understood by the mothers, however the term "Techniques that increased their comfort and decreased pain" would be more understandable to them.

There are several non-pharmacological methods that relieve pain and promote comfort. Researches have shown that the touch and massage work as a technique to provide comfort and reduce pain, symbolizing the breaking of barriers between professional and user [11, 12].

Studies also refer to positive interventions that have generated good perceptions of women, such as: walking, rocking horse, birthing ball and shower bath. These techniques work by strengthening the pelvic muscles, contributing to cervical dilation and relieving pain through relaxation [13-15].

Item 15v has been modified its structure to add at the beginning the phrase: "If you had normal birth you assumed the position of your choice when your baby was born" (J3, J5, J7), once the questionnaire will meet the vaginal birth and cesarean delivery demands.

The vertical position provides an active participation of the woman in childbirth, even more convenience which facilitates the birth of the baby. In contrast, the horizontal position makes these aspects

difficult. As the movements are limited it causes suffering, fatigue, longer duration of the expulsive period and usually more occurrence of obstetric interventions [16].

Items 20 and 21 were grouped according to the suggestions of judges 1, 2, 3 and 5 who considered similar items. Item 24 had the term "effective methods" changed to "contraceptive methods" (J4, J6) because they considered that the woman would be more familiar with it.

Item 25 had its structure modified, because even if the woman was informed about family planning, it does not mean that she has acquired the necessary knowledge. Therefore, the suggestion was made to change the structure of the item to: "Your knowledge about contraceptive methods and family planning (explanations, leaflets, prescriptions etc.) after discharge was" (J4, J6) and modify the Answers from "Yes or No" to "Unsatisfactory, Fair, Good or Excellent". Thus, the woman can state what degree of knowledge she considers to have acquired after discharge.

For items 26 and 27 suggestions for response options were made. The item 26 had its answers modified from "excellent, good, fair or unsatisfactory" to "unsatisfactory, fair, good or excellent" in a progressive sequence of satisfaction. In item 27 the answer options were restricted to "Yes" or "No" being changed to "Never", "sometimes", "most of the time" or "always". In fact, the judges agreed that the second option of answers can better represent the woman's opinion.

After the analysis of the instrument's first version by the judges, the second version of the questionnaire (22 items) was generated and applied to 30 puerperal woman for the semantic analysis stage. This step has as main objective to verify if all the items are comprehensible for the users [6]. In the present study, it was possible to observe that 73.3% of the woman were confused about the items or indicated suggestions in at least one item of the questionnaire. These results are similar to another

study, in which 76.6% of the women indicated suggestions or mentioned some questions about the items [9].

On the second analysis of the judges, only the remaining 21 items were involved and these were analyzed in relation to their degree of relevance. There was also a blank space intended for any suggestion or change. Comparing the CVI values between the first and second analysis of the judges, they rose from 0.80 to 0.88 with a considerable improvement in the validity of the "Women's Questionnaire".

Conclusion

It is concluded that the "Women's Questionnaire" has proved to be a valid instrument from the point of view of appearance and content. It can be considered adapted to the context of Ceara assistance as an instrument able to access the assistance provided to women during pre, trans and postpartum.

This research contributed to the adaptation of an instrument that could be used by nurses, health managers and other professionals from Ceara, making it possible to construct new evidence regarding the attitudes of professionals and women towards the parturition process. Furthermore, it can instigate discussions in the scientific and clinical community to promote the development of new strategies for the promotion of sexual and reproductive health.

The study had as a limitation the fact that the puerperal woman and judges were from the same State. It may have been a bias to detect significant differences in the responses and the questionnaire may not be able to be extended to other regions of Brazil. It is suggested to replicate the research with other groups of patients, in other Brazilian states, in order to better adapt to the reality of the country.

Thus, the need for interventions to improve the care for the mother-child binomial is highlighted and this knowledge is essential for planning public

policies directed to them. Considering the relevance of construct validation steps, the other psychometric properties of the "Women's Questionnaire" are being evaluated for subsequent publication.

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