

## Creation and validation of a nursing assistance protocol for the prenatal, delivery and recovery room\*

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### ABSTRACT

Our objective was to develop and validate an assistance protocol for nursing care in a prenatal, delivery and recovery room (PDR) from the Institute of Integral Medicine Prof. Fernando Figueira – IMIP. We used a methodologic study developed in three steps: an integrative review of the literature, construction of the assistance protocol and validation of the material using 26 specialists. The protocol was created based on 25 references and validated with the Index for General Content Validation (IVC) of 0.96; the objectives IVC varied from 0.96 to 1.00; content IVC ranged from 0.92 to 1.00 and, relevance IVC was 0.96. The protocol was structured with quality to guide nurses, resident students and nursing academics in assisting the parturient, therefore, we indicate its use.

**Descriptors:** Perinatal Care; Nursing Care; Obstetric Nursing.

### INTRODUCTION

The delivery is a unique moment that the woman experiences and it brings out many experiences that will result in psychological memories, which can be translated in good or bad moments, depending on the offered care<sup>(1)</sup>. It is configured as a natural event in the reproductive life, representing a meaningful and enriching moment<sup>(2)</sup>.

With the advances in scientific studies and the evidence-based practice, there is a reconfiguration of the delivery as a physiological

moment. Since 1988, the Brazilian Health Ministry together with the World Health Organization (WHO) has been stimulating the insertion of obstetric nursing to assist normal delivery without dystocia, and their work

is regulated by the Ordinances 2815/98 and 169/98<sup>(3)</sup>. Considering this professional having less interventionist and more humanized practice, able to efficiently detect and intervene earlier in interurrences and dystocia during labor<sup>(4)</sup>.

Prenatal, delivery and recovery (PDR) rooms were created and regulated by the Brazilian Resolution of the National Agency for Sanitary Vigilance (ANVISA) RDC 36/2008, to propitiate a calm and welcoming environment to the expectant mother during the clinical delivery periods, in a humanized way. With their creations, there was a re-dimension of professionals acting in low-risk natural births<sup>(3)</sup>.

Obstetric nurses working in PDR rooms welcome and conduct the pregnant women, so the risks are overcome by positive care results<sup>(4)</sup>. Through the implementing of humanized evidence-based practices, women have access to specialized knowledge that is recommended by the Brazilian Health Ministry, propitiating autonomy to become protagonists of their delivery<sup>(4)</sup>.

The limitation of assistance protocols in Brazilian PDR rooms incentivized the creation of material to support actions of the obstetric nursing team safely. Assistance protocols contribute to the improvement of attention quality to expectant mothers, in a regulated manner, facilitating the communication and, benefiting technical-scientific training of professionals involved in assisting labor and delivery<sup>(5)</sup>.

With the intention to practice the nursing process to the parturient, the objective of our study was to create and validate an assistance protocol for nursing care in the PDR room, allowing to identify issues and, to direct clinical evidence-based conducts safely.

## METHODS

We conducted a methodological study in the PDR room, also known as the Cozy Space (*“Espaço Aconchego”*) of the Institute of Integral Medicine Prof. Fernando Figueira - IMIP, Recife-PE, from March to September of 2015. The Cozy Space aims to provide obstetric nursing assistance to the woman during prenatal, delivery and recovery; so the birth happens naturally, with as little intervention as possible.

We structured the protocol according to the best available scientific evidence, and it considered the routine of obstetric nurses in the PDR room. We developed the study in three steps – Integral Review of the literature, conducted in March to June of 2015, using the databases Medical Literature Analysis and Retrieval System Online (MEDLINE), Latin American and Caribbean Literature in Health Sciences (LILACS), theses (Portal Capes), technical manuals and obstetric books. Therefore, we used the following descriptors: perinatal assistance, obstetric nursing, protocol, and labor.

The inclusion criteria were original articles, randomized controlled trials, cohort studies, case series, case-controls, and editorials; written in Portuguese and published between 2005 and 2014. We excluded texts that were unavailable on the internet and articles that were not meeting the objectives proposed by the study.

The second step – Protocol Construction, was subdivided in two moments: Textual elaboration, organizing the textual production to describe the criteria used in the diagnosis of labor, conducts with the

parturient and the newborn, the use of non-invasive care technologies for pain and nursing team attributions. In the second moment, called Layout, we verified language to avoid grammar mistakes and style deviations of Portuguese; we formatted and configured the pages following the norms nº 6029 from ABNT.

The third step – Validation of the Protocol by Specialists, was considered important once it constituted a fundamental element to create the instruments. In this phase, the items in the material are represented by the final construct to increase the quality of the project<sup>(6-7)</sup>.

The sample estimation followed the proposal of researchers from the nursing validation field<sup>(8)</sup> who recommend using statistical methods. Thus, we conducted a sample calculation based on the following parameters: level of confidence of 95.0% ( $Z=1.96$ ), an expected proportion of agreement between specialists of 85% ( $P=0.85$ ) and acceptable difference of 15.0% ( $e$ ).

We used the following calculation:

$$n = \frac{Z_{1-\alpha/2}^2 \cdot P \cdot (1 - P)}{e^2},$$

Resulting in 22 judge-specialists.

We selected the judges by convenience using the snowball technique. We used indications within the specialists, adopting the inclusion criteria: to be a nurse specialized in women's health or obstetrics, with clinical practice and/or teaching experience in this study field of at least one year, and we excluded the specialists that were helping create the protocol.

Thus, after the approval of the Ethics Committee nº 4615-15, all professionals meeting the inclusion criteria were invited to participate in the study through an invitation letter, accompanied of the Free and Informed Consent Term and the protocol. In total, we contacted 42 nurses, and only 26 of them answered. Eight nurses opted to receive the printed protocol and the other 18, by e-mail.

We used the Index for General Content Validation (IVC), recommended by POLIT and BECK that is widely used by nursing professionals to define efficiency patterns of a study, assessing the proportion or percentage of judges that agrees with the instrument's items. It also evaluates each item individually and the general instrument<sup>(8)</sup>.

After, we used the binomial test that re-codes the Likert-type scale from the IVC, so the scoring of concepts vary from one to four, being: 1= inadequate; 2 = little adequate; 3 = adequate; 4 = very adequate. After, we calculated the index score through the sum of item's agreement that was marked as "3" or "4", divided by the total number of answers. At last, we assessed the protocol as a whole, using the sum of all IVC that was calculated separately and divided by the total number of items<sup>(9)</sup>.

## RESULTS

### Step 1: Integrative Literature Review

Twenty-five references were selected, carefully analyzed in full and, used for the protocol synthesis.

We conducted the selection and summarized the relevant material about guidelines for obstetric nursing assistance to low-risk parturient. We read the studies in full and organized them by similar contents.

### Content survey

We consulted literature sources to select references addressing the following themes: birth mechanism, humanized birth, non-invasive technologies for pain relief during labor and, nursing assistance to the parturient.

### Content selection and summarizing

After the critical reading, we selected the scientific studies presented in Chart 1:

**Chart 1:** Main references for the planning of the “Protocol for Obstetric Nursing Assistance of the Institute of Integral Medicine Professor Fernando Figueira – IMIP”.

ID	TYPE	REFERENCE
Document 01	Book	Ricci SS. Enfermagem materno-neonatal e saúde da mulher. 1ª ed. Rio de Janeiro: Guanabara Koogan; 2008.
Document 02	Scientific paper	Amorim MMR, Porto AMF, Souza ASR. Assistência ao segundo e terceiro períodos do trabalho de parto baseada em evidências. <i>Femina</i> [Internet]. 2010 [cited 2016 dez 22];38(11):583-91. Available from: <a href="http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Feminav38n11_583-591.pdf">http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Feminav38n11_583-591.pdf</a> .
Document 03	Thesis	Beleza ACS. A dor perineal no pós-parto com episiotomia: mensuração, caracterização e efeitos da crioterapia [tese]. Ribeirão Preto: USP; 2008 [cited 2016 dez 22]. Available from: <a href="http://www.teses.usp.br/teses/disponiveis/22/22133/tde-06102008-144024/pt-br.php">http://www.teses.usp.br/teses/disponiveis/22/22133/tde-06102008-144024/pt-br.php</a> .
Document 04	Scientific paper	Borges MR, Madeira LM, Azevedo VMGO. As práticas integrativas e complementares na atenção à saúde da mulher: uma estratégia de humanização da assistência no Hospital Sofia Feldman. <i>REME - Rev Min Enferm</i> [Internet]. 2011 [cited 2016 dez 22];15(1):105-13. Available from: <a href="http://reme.org.br/artigo/detalhes/14">http://reme.org.br/artigo/detalhes/14</a> .
Document 05	Scientific paper	Crizóstomo CD, Nery IS, Luz MHB. A vivência de mulheres no parto domiciliar e hospitalar. <i>Esc Anna Nery</i> [Internet]. 2007 [cited 2016 dez 22];11(1):98-104. Available from: <a href="http://dx.doi.org/10.1590/S1414-81452007000100014">http://dx.doi.org/10.1590/S1414-81452007000100014</a> .
Document 06	Scientific paper	Frello AT, Carraro TE, Bernardi MC. Cuidado e conforto no parto: estudos na enfermagem brasileira. <i>Rev Baiana Enfermagem</i> [Internet]. 2012 [cited 2016 dez 22];25(2):173-84. Available from: <a href="https://portalseer.ufba.br/index.php/enfermagem/article/view/5093">https://portalseer.ufba.br/index.php/enfermagem/article/view/5093</a> .
Document 07	Scientific paper	Gallo RBS, Santana LS, Marcolin AC, Ferreira CHJ, Duarte G, Quintana SM. Recursos não-farmacológicos no trabalho de parto: protocolo assistencial. <i>Femina</i> [Internet]. 2011 [cited 2016 dez 22];39(1):41-8. Available from: <a href="http://files.bvs.br/upload/S/0100-7254/2011/v39n1/a2404.pdf">http://files.bvs.br/upload/S/0100-7254/2011/v39n1/a2404.pdf</a> .
Document 08	Scientific paper	Gayeski ME, Brüggemann OM. Métodos não farmacológicos para alívio da dor no trabalho de parto: uma revisão sistemática. <i>Texto Context - Enferm</i> [Internet]. 2010 Dec [cited 2016 dez 22];19(4):774-82. Available from: <a href="http://dx.doi.org/10.1590/S0104-07072010000400022">http://dx.doi.org/10.1590/S0104-07072010000400022</a> .
Document 09	Scientific paper	Magalhães Júnior JA. Protocolos obstétricos da Maternidade São Francisco, Niterói - RJ. <i>RFM – Revista Flum Med</i> [Internet]. 2012 [cited 2016 dez 22];3677(12):45-53. Available from: <a href="http://amf.org.br/Revista%20fluminense%20de%20Medicina/2012/13-Protocolos%20Obst%C3%A9tricos.pdf">http://amf.org.br/Revista fluminense de Medicina/2012/13-Protocolos Obstétricos.pdf</a> .
Document 10	Scientific paper	Moisés ECDD, Cavalli RC, Duarte G, Cunha SP, Berezowski AT, Duarte LB, et al. Arritmias cardíacas fetais: diagnóstico e tratamento não-invasivo. <i>Femina</i> [Internet]. 2006 [cited 2016 dez 22];34(5):357-63. Available from: <a href="http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Femina_34-5-53.pdf">http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Femina_34-5-53.pdf</a> .
Document 11	Scientific paper	Porto AMF, Amorim MMR, Souza ASR. Assistência ao primeiro período do trabalho de parto baseada em evidências. <i>Femina</i> [Internet]. 2010 [cited 2016 dez 22];38(10):527-37. Available from: <a href="http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Femina_v38n10_527-537.pdf">http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Femina_v38n10_527-537.pdf</a> .
Document 12	Scientific paper	Silva TF, Costa GAB, Pereira ALF. Cuidados de enfermagem obstétrica no parto normal. <i>Cogitare Enferm</i> [Internet]. 2011 [cited 2016 dez 22];16(1):82-7. Available from: <a href="http://dx.doi.org/10.5380/ce.v16i1.21116">http://dx.doi.org/10.5380/ce.v16i1.21116</a> .
Document 13	Scientific paper	Souza ASR, Costa AAR, Coutinho I, Noronha Neto C, Amorim MMR. Indução do trabalho de parto: conceitos e particularidades. <i>Femina</i> [Internet]. 2010 [cited 2016 dez 22];38(4):185-94. Available from: <a href="http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Femina_v38n4p185-941.pdf">http://www.febrasgo.org.br/site/wp-content/uploads/2013/05/Femina_v38n4p185-941.pdf</a> .
Document 14	Scientific paper	Souza GN, Sakita M, Lopes V, Ferreira DQ, Mohamed SHM, Souza E. Métodos de indução do trabalho de parto. <i>Femina</i> [Internet]. 2013 [cited 2016 dez 22];41(1):47-54. Available from: <a href="http://files.bvs.br/upload/S/0100-7254/2013/v41n1/a3781.pdf">http://files.bvs.br/upload/S/0100-7254/2013/v41n1/a3781.pdf</a> .
Document 15	Scientific paper	Teles LMR, Oliveira AS, Campos FC, Lima TM, Costa CC, Gomes LFS, et al. Development and validating an educational booklet for childbirth companions. <i>Rev Esc Enferm USP</i> [Internet]. 2014 [cited 2016 dez 22];48(6):977–84. Available from: <a href="http://dx.doi.org/10.1590/S0080-623420140000700003">http://dx.doi.org/10.1590/S0080-623420140000700003</a> .
Document 16	Scientific paper	Wei CY, Gualda DMR, Santos Junior HPO. Movimentação e dieta durante o trabalho de parto: a percepção de um grupo de puerpéras. <i>Texto Context - Enferm</i> [Internet]. 2011 [cited 2016 dez 22];20(4):717-25. Available from: <a href="http://ref.scielo.org/gxzkjtj">http://ref.scielo.org/gxzkjtj</a> .

ID	TYPE	REFERENCE
Document 17	Technical manuals from the Health Ministry	Ministério da Saúde. Gestação de alto risco: manual técnico [Internet]. 5ª ed. Brasília: Editora do Ministério da Saúde, 2012 [cited 2016 dez 22]. Available from: <a href="http://bvsmis.saude.gov.br/bvs/publicacoes/manual_tecnico_gestacao_alto_risco.pdf">http://bvsmis.saude.gov.br/bvs/publicacoes/manual_tecnico_gestacao_alto_risco.pdf</a> .
Document 18	Technical manuals from the Health Ministry	Ministério da Saúde. Protocolo para Utilização de Misoprostol em Obstetrícia [Internet]. Brasília: Ministério da Saúde, 2014 [cited 2016 dez 22]. Available from: <a href="http://www2.unifesp.br/proex/novo/eventos/eventos14/maistrinta/images/stories/misoprostol.pdf">http://www2.unifesp.br/proex/novo/eventos/eventos14/maistrinta/images/stories/misoprostol.pdf</a> .
Document 19	Technical manuals from the Health Ministry	Ministério da Saúde. Parto, aborto e puerpério: assistência humanizada à mulher [Internet]. Brasília: Ministério da Saúde, 2001 [cited 2016 dez 22]. Available from: <a href="http://pfdc.pgr.mpf.mp.br/temas-de-atuacao/mulher/saude-das-mulheres/enfrentamento-a-mortalidade-materna-menu/parto-aborto-e-puerperio-assistencia-humanizada-a-mulher-ms">http://pfdc.pgr.mpf.mp.br/temas-de-atuacao/mulher/saude-das-mulheres/enfrentamento-a-mortalidade-materna-menu/parto-aborto-e-puerperio-assistencia-humanizada-a-mulher-ms</a> .
Document 20	Technical manuals from the Health Ministry	Organização Mundial da Saúde. Assistência ao parto normal: guia prático. Genebra: Organização Mundial da Saúde, 1996.
Document 21	Technical manuals from the Health Ministry	Eleutério FJC, Soares RMR, Augusto KL, Brilhante AVM, Freitas M. Protocolos de obstetrícia da Secretaria da Saúde do Estado do Ceará [Internet]. Fortaleza: Secretaria da Saúde do Estado do Ceará, 2014 [cited 2016 dez 22]. Available from: <a href="http://www.saude.ce.gov.br/index.php/downloads/category/58-livros-revistas-e-folderes?download=1562%3Aprotocolos-de-obstetricia-da-secretaria-da-saude-do-estado-do-ceara">http://www.saude.ce.gov.br/index.php/downloads/category/58-livros-revistas-e-folderes?download=1562%3Aprotocolos-de-obstetricia-da-secretaria-da-saude-do-estado-do-ceara</a> .
Document 22	Technical manuals from the Health Ministry	Gomes ML. Enfermagem obstétrica: diretrizes assistenciais [Internet]. Rio de Janeiro: Centro de Estudos da Faculdade de Enfermagem da Universidade do Estado do Rio de Janeiro, 2010 [cited 2016 dez 22]. Available from: <a href="http://www.rio.rj.gov.br/dlstatic/10112/137240/DLFE-225904.pdf/1.0">http://www.rio.rj.gov.br/dlstatic/10112/137240/DLFE-225904.pdf/1.0</a> .
Document 23	Technical manuals from the Health Ministry	Secretaria de Saúde. Atenção humanizada à mulher no ciclo gravídico puerperal: pauta de obstetrícia. Recife: Secretaria de Saúde, 2008.
Document 24	Technical manuals from the Health Ministry	Soubhi Kahhale, Eduardo de Souza. Protocolos de obstetrícia: descrição, diagnóstico, tratamento [Internet]. São Paulo: Estação W Comunicação, 2012. [cited 2016 dez 22]. Available from: <a href="http://sms.sp.bvs.br/lildbi/docsonline/get.php?id=5191">http://sms.sp.bvs.br/lildbi/docsonline/get.php?id=5191</a> .
Document 25	Scientific website	Obstetric Care Consensus No. 1. Obstet Gynecol [Internet]. 2014 Mar;123(3):693–711. Available from: <a href="http://dx.doi.org/10.1097/01.AOG.0000444441.04111.1d">http://dx.doi.org/10.1097/01.AOG.0000444441.04111.1d</a> .

## Step 2: Protocol construction

### Text elaboration

We stated the document formulation with the content and the selected topics. The build protocol was entitled “Protocol for Obstetric Nursing Assistance of the Institute of Integral Medicine Professor Fernando Figueira – IMIP”, and it presents a constructivist proposal for the teaching-learning process. The texts were extensively revised to avoid grammar errors and deviations of the Portuguese language style, written using the font Times New Roman, size 12, 14 and 16; which is ideal for reading from a 30 centimeters distance.

Initially, we organized the front page with the protocol title, and after we presented the authors and their titles.

The themes in the protocol are described:

- ✓ **Presentation:** In this topic, we show the program content, the teaching methodology and, the objectives proposed in the protocol.
- ✓ **Considerations:** We present the considerations through the Resolutions, Constitutional Articles and, Ordinances that regulate the obstetric nursing exercise and the PDR rooms.
- ✓ **Fluxogram of the parturient attention:** The route that the woman follows after checking in the IMIP until her hospital discharge (Figure 1).
- ✓ **Definition of labor:** It brings the concept of low-risk normal birth and the differences between the latent and active phases of labor.
- ✓ **Labor diagnosis:** Explains the definition of labor diagnosis.
- ✓ **Assessment of the labor development and fetal vitality:** The intensity and frequency of the uterus contracting ability at the beginning and end of labor and, the standard for fetal auscultation assessment.
- ✓ **Cervicography:** The cervicography images of Phillipott are shown, and its use as an essential document to accompany labor, how and in which phase to complete it.
- ✓ **Amniotomy:** Presentation and definition. In this topic, the amniotomy concept is defined and the recommendations for its practice.
- ✓ **Vaginal exam:** Explains the purpose of the vaginal touch and the sequence of how it should be conducted, being careful to explain the importance to delay it as long as possible.
- ✓ **Caloric/diet offer:** Reports the fundamental importance of eating during labor, guaranteeing an energy reserve, beyond good clinical conditions to overcome the physical and emotional distress.
- ✓ **Monitoring of fetal heartbeats:** Presents literature data about fetal assessment and a scheme used in the institution for rigorous fetal cardiac monitoring.
- ✓ **Care practices towards the woman during labor:** Presents techniques about pain relief, as: relaxing, hydrotherapy, music therapy, aromatherapy, massage, walking, use of swiss ball, warm shower, use of stool, rebozo, breathing technique, and crouching.

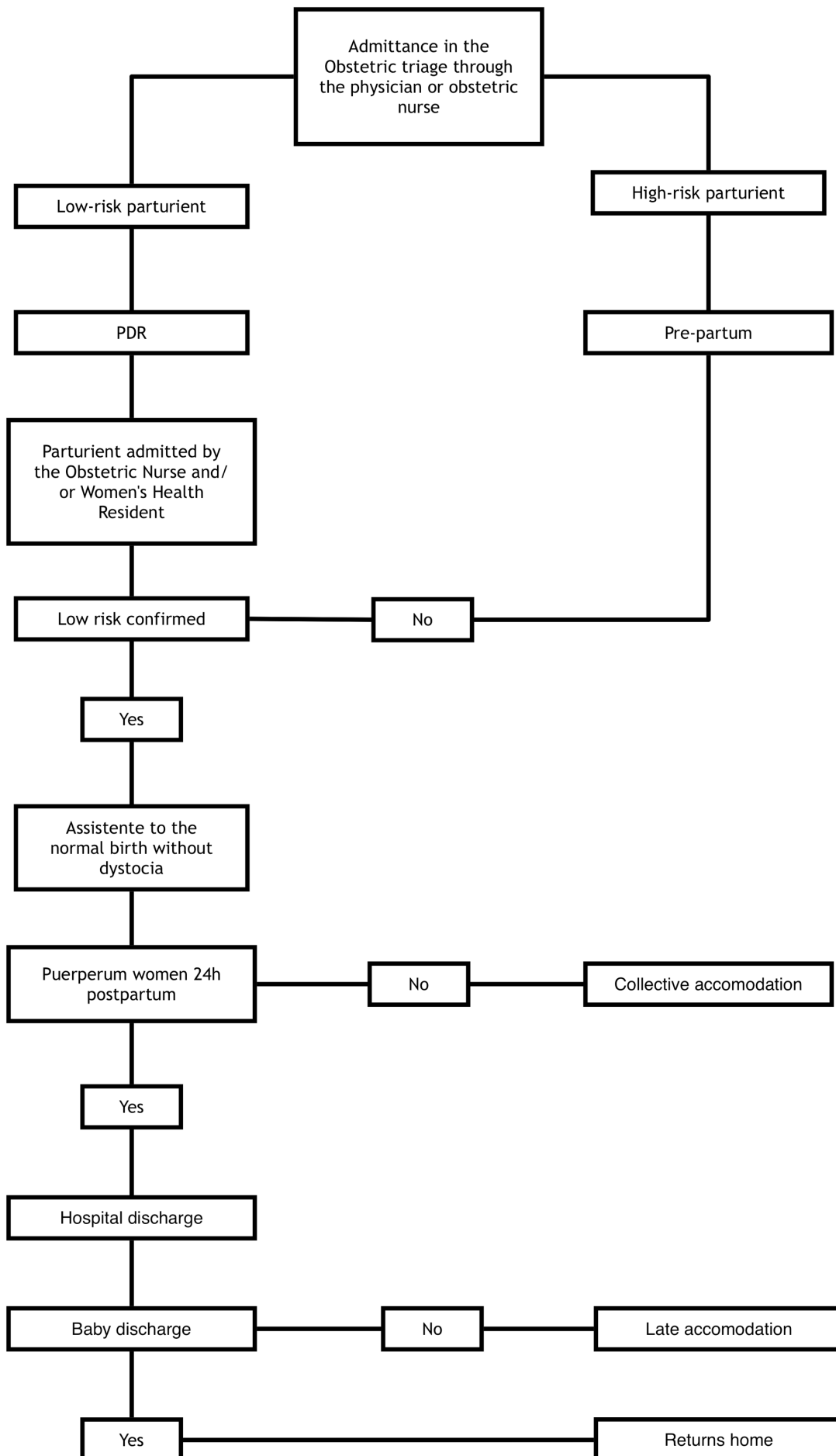


Figure 1: Fluxogram of Parturient Attention at IMIP.



- ✓ **Care for the woman during the expulsive period:** It brings literature information about the expulsive period, the free choice of the woman about the position when delivering, and it brings subtopics referring to conducts that should be adopted by the professional who will assist the delivery: 1- Hands hygiene; 2- Indication of vulvar perineal antisepsis; 3- Use of sterile fields; 4- Skin-to-skin contact between the mother and the newborn; 5- Clamping and late cutting of the umbilical cord; 6- Indication of laceration correction; 7- Indication of revision of the uterine cavity.
- ✓ **Criteria for admission and obstetric nursing assistance in the Cozy Space/PDR:** Necessary rules for parturient admission in the PDR room: 1- Low-risk expecting women at gestational age  $\geq 37$  weeks and  $\leq 42$  weeks, single pregnancy, cephalic fetus, flexed; 2- Amniorrhexis with clear Amniotic Liquid and with favorable modified BISHOP; 3- Cardiotocographic exam within normality; 4- Excreted uterine cervix with dilation higher or equal to four centimeters; 5- Prenatal with normal laboratory exams; 6- Latent labor phase IF (and only if) the cervix dilation is  $\geq$  seven or gestational age  $\geq 41$  AND  $< 42$  weeks, with favorable modified BISHOP; 7- Syphilis treated during pregnancy.
- ✓ **Criteria for transferring the pregnant to the prepartum:** Intrapartum complications requiring the parturient transference from the low-risk to the high-risk room: progression stop, intrapartum fever, an indication of instrumental/cesarean delivery, non-tranquil fetal situation and changes in the contributions of the maternal/fetal well-being.
- ✓ **Indications to induce labor:** It shows clinical situations to start the labor induction, the points for observation and, the assessment through the Bishop index.
- ✓ **Labor induction:** Explains how to induce labor using oxytocin and misoprostol through charts and dosage schemes.
- ✓ **Postpartum hemorrhage:** Presents the postpartum bleeding definition with the scheme of conducts adopted by the institution and the 4Ts Theory (tonus, trauma, retained tissue and thrombin) table
- ✓ **Attributions:** Responsibilities of the nursing team about work hours, contributions in the sector and, care provided to women and newborns.

## Layout

In the last creation step of the assistance protocol, we performed the layout, a function corresponding to the formatting of topics, presenting a total of 55 pages (Chart 2 and Figure 2).

**Chart 2:** Chart of Obstetric Nursing indications and orientations about the use of non-invasive care technologies.

TECHNOLOGY	INDICATION	FOUNDATION	START MOMENT
Eating (clear liquids, light diet, chocolate)	Secures maternal and fetal wellbeing, providing nutritional intake.	To replace energy sources, it prevents dehydration and ketoses. Hydration and provides glucose to the fetus (Document 16 from Chart 1).	Woman's desire
Respiratory movements	Helps the woman to centralize.	Reduces anxiety levels (Document 7 from Chart 1).	When uterine contractions starts
Walking	To activate labor;	Increases uterine activity, fetus alignment, distraction from discomforts during contractions, strenghtening of the maternal control, promotes more interaction between parturient and her companion, besides increasing the wish to push (Document 7 from Chart 1).	At any moment during labor
	Fetal descent and rotation.		
Aromatherapy	To stimulate the production of relaxing, stimulating and sedative substances.	It uses active principles from essential oils during labor, glimpsing aromatherapy as science.	When noticing the need, and after the woman's permission.
Relaxants: camomille, green tea, Orange blossom and lavender.		(It is indispensable the appropriate training to handle the oils) (Document 8 from Chart 1).	
Stimulating: cinammon, ginger, fennel and jabuticaba.			
Swiss ball	Perineal massage;	It simulates the crouching position; it helps the dilation of the pelvic diameter and fetal descent (Document 7 from Chart 1).	Since pregnancy.
	Fetal descent and rotation.		
Waddling	Fetal descent and rotation;	When the woman stops to follow her instinct, she tries to move following the rhythm of contractions, moving her pelvis from front to back, from side to side, or in circular movements facilitating the baby rotation, helping the baby to dislocate to the position (Document 7 from Chart 1).	Since the admission. The ideal is to associate it with walking.
	Baby displacement inside the pelvis;		
	To activate labor;		
	To release endorphins.		

- ✓ Na presença de alterações da frequência cardíaca fetal durante o uso de ocitocina, a infusão deve ser **IMEDIATAMENTE** suspensa e realizada avaliação rigorosa de acordo com o quadro 1.
- ✓ Falha de indução: ausência de atividade uterina após 2 horas de infusão máxima ou após 2 horas da amniotomia (MAGALHAES Jr, 2012).

#### DOSES RECOMENDADAS DE OCITOCINA

Tabela 3 - Utilização da ocitocina em bomba de infusão contínua (BIC)

Diluir 01 FA (05UI) de ocitocina em 500 ml de Solução Fisiológica ou Ringer Lactato. Aumento a cada 30-40min		
1mUI/min	6 ml/h	02 gotas/mm
2mUI/min	12 ml/h	04 gotas/mm
3mUI/min	18 ml/h	06 gotas/mm
4mUI/min	24 ml/h	08 gotas/mm
5mUI/min	30 ml/h	10 gotas/mm
*6mUI/min	36 ml/h	12 gotas/mm
*7mUI/min	42 ml/h	14 gotas/mm
*8mUI/min	48 ml/h	16 gotas/mm
*16mUI/min	96 ml/h	32 gotas/mm
*32mUI/min	192 ml/h	64 gotas/mm
Vigilância da hiperestimulação e avaliação da monitorização fetal são fundamentais		
* ALTAS doses, CUIDADO!!!		

Fonte: Adaptado de MAGALHAES JR, 2012.

O uso do Misoprostol como método de indução do parto **NAO** deverá ser utilizado no Espaço Aconchego, nos casos em que após a decisão compartilhada entre as enfermeiras obstetras e/ou médico obstetra ficar decidido o uso deste, a parturiente deverá ser transferida para o Pré-Parto. Porém, em nível de **CONHECIMENTO** é sabido que a dose de Misoprostol recomendada para indução do parto é de 25µg via vaginal a cada 6 horas ou 25µg via oral a cada 2 horas. O uso de misoprostol é proscrito

Figure 2: Page from the Assistance Protocol

### Step 3: Validation by specialists

#### Selection of specialists

At Table 1, we expose the characteristics of specialists who validated the assistance protocol.

**Table 1:** Characteristics of specialists from the validation step of the protocol. Recife, PE, Brazil, 2015.

<b>Specialist Nurses (n=26)</b>		
<b>Titles</b>	<b>f</b>	<b>%</b>
Ph.D in Nursing	3	11.53
Master in Nursing	4	15.38
Thesis or dissertation in the field of interest	2	7.69
Residency in Women's Health/Obstetrics	22	84.61
Specialized in Women's Health/Obstetrics	4	15.38
Published article about the field of interest	8	30.76
Teaching experience in the study field	16	61.53
Supervision of academic work in the field of interest	11	42.30
At least one year of clinical practice in the approached theme	19	73.07

Among the specialists, 92.30% were female. About the scientific production, most specialists presented their residency monograph about women's health/obstetrics (84.61%). Specialists reported to supervise academic work (42.30%) and, to publish articles related to obstetrics (30.76%).

Regarding their professional activity, most specialists had at least one year of clinical practice and teaching experience (73.07% and 61.53%), respectively).

The average age was 32.92 years, the minimal age was 24 years and the maximum was 51 years. The mean time since graduation was nine years, the minimal time was one year and five months, while the maximum time was 29 years.

### Protocol validation by the specialists

The specialists validated the protocol from an adequacy perspective for its use when teaching, and for a better assistance in the PDR room. They assessed the protocol's quality, objectives, content and, the relevance. The results revealed the protocol being adequate for use by teaching students, residents and, nursing professionals. The general protocol IVC was 0.96.

Considering the criteria judged by specialists not altering the protocol content, we decided that there was no need for a new assessment.

We present the appreciation of the criteria judged by content specialists (Table 2).

**Table 2:** Criteria judged by specialists regarding the protocol. Recife, PE, Brazil, 2015.

Judged Criteria	IVC
<b>1. Objectives</b>	
1.1. The objectives are clear	1.00
1.2. They are coherent with the presented content	0.96
1.3. It can circulate in the scientific obstetrics field	0.96
1.4. It meets the sector's objectives	0.96
<b>2. Content</b>	
2.1. It meets the proposed theme and objectives	0.96
2.2. It is updated and contain correct information (sources and references)	0.96
2.3. The texts are easy to read	0.96
2.4. The writing style is compatible with the level of the proposed targeted public	1.00
2.5. The information is well structured with correct spelling	0.96
2.6. The information is coherent in the front page, back over, acknowledgements and/or presentations	0.96
2.7. The title and topic sizes are adequate	0.92
<b>3. Relevance</b>	
3.1. The items cover important aspects that should be reinforced	0.96
3.2. The protocol proposes to the reader to acquire knowledge about assistance techniques and the parturient	0.96
3.3. To be adequate for use of students, residents and nurses working in the PDR room	0.96

According to the specialists, the educational objectives of the assistance protocol are adequate for use. The objectives are clear (IVC=1.00), with coherent content (IVC=0.96) and meet the sector's objectives (IVC=0.96). There were no suggestions for objective items.

After, the specialists analyzed the theoretical content criteria of the assistance protocol. The protocol attended the proposed theme and objectives (IVC= 0.96); it is updated and contain correct information (sources and references) (IVC=0.96); it is easy to read (IVC=0.96); its writing is compatible with the proposed targeted public (IVC=1.00); the information is well structured, and with good spelling (IVC=0.96); the information of front page, back over, acknowledgements and/or presentations are coherent (IVC=0.96); and, the size of the title and topics are adequate (IVC=0.92).

Proceeding, the specialists assessed the protocol relevance (IVC=0.96), the knowledge about assistance techniques and parturient (IVC =0.96) and its adequacy to be used by students, residents, and nurses working in the PDR room (IVC= 0.96).

### Protocol adequacy

We asked the specialists to include suggestions as needed at the end of the assessment to improve the protocol. The following ideas were considered pertinent, thus we accepted them and added in the protocol:

- In the item considerations, to add that nursing assistance is performed without necessary interventions and conducts are based on scientific evidence;
- To remove the topic referring to some attributions from dressers, once these professionals are not part of the nursing team;
- To include more information about the non-invasive technologies for pain relief during delivery;
- To better clarify about the hospital discharge criteria.

## DISCUSSION

The obstetric nursing assistance to the parturient is comprehended by a complicated process, and it requires a series of competencies and responsibilities that including practical and theoretical knowledge of various phases of labor. It is necessary for the nurse to know how to act in a natural birth and risky situations<sup>(10)</sup>.

The obstetric nurse also works educating the parturient, her family and companion, answering questions and informing about the labor steps, providing emotional and physical support<sup>(10)</sup>.

Considering the many options of instructive strategies, continuing education is noteworthy for nursing. Its concept is of practices intended for the personal and professional development of workers, through a continuous educational process that tries to improve knowledge and consequently, improving the assistance provided by these professionals<sup>(11)</sup>.

Continuing education can be conducted in many ways, including the reading of printed material. Because it is an old teaching method and well used, the reading of texts propitiate a personal moment, and it is capable of mediating between the content and reader's learning<sup>(12)</sup>.

A review identified the importance of expert's selection criteria in nursing research, once the detailed description of the expert's selection criteria is essential to guarantee data reliability. Thus, it is important to value the assessment of the experience, academic titles, knowledge and abilities related to what it is intended to study<sup>(13)</sup>.

These results are in agreement with a study conducted for the creation and validation of an instrument to analyze the adherence of the best care practices during delivery and birth, in which the agreement between specialists was of at least IVC = 80%<sup>(14)</sup>.

The creation of objectives establishes the content that will be presented and taught, delimitating the strategies that will be applied, the selection of teaching resources that will be used, as an assessment method, directly assessing in the teaching-learning process<sup>(15)</sup>.

The educational objectives are also used to guide the reader about what is expected throughout the reading, it is the moment when what will be learned is defined, making it easier and enjoyable<sup>(16)</sup>.

The content and the layout of the printed material should present its epistemological, methodological and political principles, according to the pedagogic project of the pertaining institution. Because it is a resource of easy transport and handling, it had an advantage to be read in many places, respecting the limitation, the rhythm of the individual learning and the time flexibility of the reader<sup>(17)</sup>.

A study that analyzed the use of images to create didactic materials reported that images are a way to solidify information that is passed on about a specific theme, simplifying the interaction of who reads the material within the educational context, besides highlighting the importance of images for being a popular method and of easy communication<sup>(18)</sup>. The illustrations with figures, charts, and tables used in our protocol propose facilitating the reader's comprehension.

When creating the assistance protocol, it was necessary to have a connection between the content

and the language used, so that readers could easily comprehend it. A study conducted in 2014 demonstrated that the language, in the conception of the impressed didactic material, should be analyzed with the intention to attract the reader's attention at the same time that it is clarifying and concise<sup>(19)</sup>.

The presence of the obstetric nursing is crucial for the rescue of the physiology of the normal birth in a way that it offers dignity and safety for the parturient at birth. When scientifically working with resident and students, these professionals can create a welcoming environment during the labor process to the woman and family<sup>(20-21)</sup>.

All deliveries should be carefully monitored with the intention to detect any kind of early abnormality<sup>(21)</sup>.

Using the assistance protocol, the nursing team will offer a technical support for the management and conduct of certain obstetric situations, decreasing unnecessary interventions and producing favorable results, cooperating with the learning and acquisition of information through a relevant and updated content. The assessment of specialists allowed to offer a didactic, safe and relevant material, with reliable information about health<sup>(19)</sup>.

## CONCLUSION

The development of a nursing assistance protocol for the delivery room directed to obstetric nurses is a great challenge, considering the difficulties to present all the necessary knowledge in a simplified and attractive way.

The protocol guidance will promote the acquisition of knowledge, besides contributing for a facilitating practice in the care towards the parturient. With the function to reinforce care in humanized assistance and to serve as a guide to knowledge, it will help in the decision making, emphasizing the role of the obstetric nurse in the support to normal birth.

It is important to highlight the difficulty in this study at the validation step, as it was a fatiguing task to obtain answered questionnaires. However, this obstacle did not compromise the study validity, and it opens space for future research.

The protocol intention is not to substitute book and article readings; it is only a facilitator of actions. Considering that none didactic material is finished, we recommend its annual revision to update it according to recent scientific evidence, and new studies to assess its efficacy in the sector.

We believe that the "Protocol for Obstetric Nursing Assistance of the Institute of Integral Medicine Professor Fernando Figueira – IMIP" is apt to contribute to the technical and professional training of obstetric nurses, residents and nursing students, allowing a more humanized assistance to the parturient.

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