THIEME OPEN ACCESS

Assistance to Normal Delivery in Two Public Maternities: Perception of the Health Professionals

Assistência para parto normal em duas maternidades públicas: percepção dos profissionais da saúde

Nayara Rodrigues Gomes de Oliveira[1] Thaís Rocha Assis[2] Waldemar Naves do Amaral[3] Valdivina Eterna Falone[4] Lívia Maria Oliveira Salviano[5]

[1] Division of Infectious and Parasitics Diseases, Department of Health Sciences, Universidade Federal de Goiás, Jataí, Goiás, Brazil
[2] Department of Health Sciences, Universidade Federal de Goiás, Jataí, Goiás, Brazil
[3] Division of Infectious and Parasitic Diseases, Department of Health Sciences Program, Universidade Federal de Goiás, Goiânia, Goiás, Brazil
[4] Department of Women's Health, Clínica Fértile, Goiânia, Goiás, Brazil
[5] Department of Medicine, Universidade Federal de Goiás, Goiânia, Goiás, Brazil

Address for correspondence Nayara Rodrigues Gomes de Oliveira, MSc, Departmento de Ciências da Saúde, Universidade Federal de Goiás, Av. Walquiria n. 81, Vila Santos Dumont, Casa 81, Aparecida de Goiânia; CEP: 74910439, Brazil (e-mail: nanargomes@hotmail.com).

Rev Bras Ginec Obst 2017;39:202–208.

Abstract

Purpose To evaluate the perception of health professionals involved in the labor process and the assistance to normal delivery, comparing two hospitals in the city of Goiânia, Brazil, regarding the perception of these professionals when they are performing the routines and practices recommended by the World Health Organization (WHO).

Methods This is an analytical comparative study with a quantitative approach, performed in two public hospitals in the city of Goiânia, in the state of Goiás, Brazil. The study included 86 professionals working in assistance to immediate labor in two hospitals. A questionnaire containing 40 questions was applied. The questionnaire related to the Program for the Humanization of Prenatal and Childbirth Care (PHPN, in the Portuguese acronym) of the Brazilian Ministry of Health, the presence of a companion, and the procedures performed. For the data analysis, we used the chi-square and Fisher's exact tests.

Results Most of the professionals claimed to know about the PHPN proposed by Brazilian Ministry of Health in the two hospitals. With regard to good practices, most professionals said that they are performed in maternity ward 2, while on maternity 1, although many of them are present, there are still many unnecessary interventions.

Conclusion When comparing the two maternity hospitals, maternity 2, which was created as a routine humanization model, manages to better adhere to the WHO recommendations. In maternity 1, there was a series of interventions considered by the WHO as ineffective, or used in an inappropriate manner.

Keywords
- labor
- delivery care
- perception
- professional

received
September 5, 2016
accepted
March 15, 2017
published online
May 18, 2017

DOI https://doi.org/10.1055/s-0037-1603315.
ISSN 0100-7203.

Copyright © 2017 by Thieme Revinter Publicações Ltda, Rio de Janeiro, Brazil

License terms

Resumo

Objetivos avaliar a percepção dos profissionais de saúde envolvidos no processo do trabalho de parto quanto à assistência ao parto normal, e comparar duas maternidades de Goiânia quanto à percepção desses profissionais na realização das rotinas e práticas recomendadas pela Organização Mundial de Saúde (OMS).

Métodos Trata-se de um estudo analítico, comparativo, com abordagem quantitativa, realizado em duas maternidades públicas da cidade de Goiânia-GO. Participaram do estudo 86 profissionais que atuavam na assistência ao trabalho de parto imediato nas duas maternidades. Foi utilizado um questionário contendo 40 questões relacionadas ao programa de humanização no pré-natal e nascimento (PHPN) do Ministério da Saúde (MS), presença do acompanhante, e os procedimentos realizados. Para a análise dos dados, utilizou-se os testes Qui-quadrado e Exato de Fisher.

Resultados A maioria dos profissionais afirmou conhecer sobre o PHPN proposto pelo MS nas duas maternidades. Com relação às boas práticas recomendadas, a maioria dos profissionais afirmou que elas são aplicadas na maternidade 2, enquanto, na maternidade 1, apesar de muitas delas estarem presentes, ainda há muitas intervenções desnecessárias.

Conclusão quando comparadas as duas maternidades, a maternidade 2, que foi criada como modelo de humanização, a rotina se adéqua mais às recomendações da OMS. Já na maternidade 1, observou-se uma série de intervenções consideradas pela OMS como ineficazes ou utilizadas de forma inadequada.

Palavras-chave
- trabalho de parto
- assistência ao parto
- percepção
- profissionais

Introduction

In 1985, with the goal of improving the quality of obstetric care in several countries, the Pan American Health Organization (PAHO) and the World Health Organization (WHO) met to discuss the cautious use of technologies in the attention of labor and birth.[1] In 1996, the WHO[2] published a practical guide describing a series of practices and recommendations for childbirth care, from the results of international discussions and scientific evidence-based data, providing a framework to combat high maternal and neonatal mortality rates. Since then, several governments have issued and tried to implement these practices, contributing significantly to reducing avoidable deaths.[1]

In Brazil, with the movement of favoring the improvement of the assistance to delivery, the Brazilian Ministry of Health created the Program for the Humanization of Prenatal and Childbirth Care[3] (PHPN, in the Portuguese acronym) on January 6, 2000. This program aims to improve the assistance during the gestation, childbirth and puerperal periods, guaranteeing the women's civil rights throughout this process.

There is scientific evidence that several practices followed during the assistance to gestation and childbirth or pregnancy outcomes promote better obstetric results and are important for the reduction of negative perinatal outcomes. Appropriate obstetrical care with the use of convenient technology may significantly decrease the number of complications that occur during childbirth. However, the inappropriate use of technology and unnecessary interventions can cause maternal and fetal harm.[4]

However, even with all the governmental initiatives to implement these practices, unnecessary interventions and high maternal mortality rates persist in the national and international scenario.[1] The WHO, in 2013, reported that ~ 289,000 women worldwide died during pregnancy, childbirth and the puerperium, with a worldwide death rate of 210 mothers per 100,000 live births.[1]

Given this reality, the present study aims to evaluate the perception of the health professionals involved in the labor process regarding normal deliveries, and to compare two maternities hospitals in the city of Goiânia, Brazil, regarding the perception of these professionals on the routines and practices recommended by the WHO on delivery care.

Methods

This is an analytical, comparative study with a quantitative approach, performed in two public maternity hospitals in the city of Goiânia, in the state of Goiás, Brazil, and maternity 1, a maternity of low complexity, is one of the oldest in the city, and has a structure oriented to the "hospital-centered" model of care, but is beginning to follow the process of humanization. Maternity 2, also of low complexity, which was opened more recently, was designed to be a model for humanized care.

The study was conducted with 86 health professionals who assisted in immediate labor and delivery in the two maternity hospitals. Of these, 43 professionals belonged to maternity 1, and 43 professionals were from maternity 2. The participants fulfilled the selection criteria and consented to their participation in the research after the responsible

researcher provided them with explanations about the nature of the study, and after they signed the free and informed consent form (FICF). We used convenience sampling to compose the study group, that is, the total number of professionals was achieved by the spontaneous presentation of volunteers during the period of data collection.

The study included professionals involved in the labor process in maternity wards 1 and 2 who had worked for more than one year in their respective institutions. Health professionals who worked in other sectors of the maternity ward and who had no direct contact with women in parturition were excluded from the study.

The health professionals were approached during their shifts at the maternity. Those who agreed to participate in the study answered a questionnaire about the delivery assistance adapted from the questionnaire used in the study by Boaretto.[5] This questionnaire was scientifically validated, and evaluated the perception of the hospitals' board of directors regarding the PHPN in twenty public maternity hospitals in the city of Rio de Janeiro, Brazil. The adaptation made for this study was the inclusion of data such as time of graduation and amount of time working at the institution for each participant. Later, we performed a pilot test with 10 participants to observe the difficulties of the application of the questionnaire, as well as their doubts.

The questionnaire used in this study contains 40 questions divided into four blocks, namely: data from the registry, humanization policy, presence of a companion and procedures performed.

A descriptive analysis of these data was performed. For the quantitative variables, the mean and standard deviation (SD) were calculated. Data analysis was performed using the Chi-square test and Fisher's exact test. In addition, a comparison was made between the two maternity hospitals regarding the perception of the professionals about the humanization policy, and the performance of practices considered useful and those considered ineffective by the WHO. The following variables were compared: knowledge about the PHPN, appreciation of prenatal care, presence of a companion, an obstetric nurse as a team member, analgesia, stimulus to walk, delivery in vertical position.

The study was performed in accordance with the Directives and Norms Regulating Research Involving Human Beings (Resolution 466/12 of the Brazilian National Health Council), after having been approved by the Research Ethics Committee of our institution (protocol no. 861,536).

Results

Regarding the characterization of the sample, 43 professionals were interviewed in each maternity ward. ►**Table 1** presents information about the health professionals. In maternity ward 1, other professionals were involved in childbirth besides doctors and nurses, but there was not any obstetric nurse present.

Table 1 Data about the professionals in each maternity. Goiânia-GO, 2015

Information	Maternity 1 ($n = 43$)		Maternity 2 ($n = 43$)		p
	N	%	N	%	
Time of graduation (years)					
< 5	11	25.6	12	27.9	0.128*
5-10	5	11.6	13	30.2	
10-20	19	44.2	14	32.6	
≥ 20	8	18.6	4	9.3	
Time working in the institution (years)					
0-1	21	48.8	15	34.9	< 0.001*
2-3	3	7.0	14	32.6	
3-6	5	11.6	12	27.9	
≥ 6	14	32.6	2	4.7	
Profession					
Doctor	11	25.6	19	44.2	0.001#
Obstetric Nurse	—	0.0	10	23.3	
Nurse	9	20.9	6	14.0	
Physiotherapist	2	4.7	—	0.0	
Psychologist	3	7.0	—	0.0	
Nurse Technician	18	41.9	8	18.6	

Note: *Chi-square test; #Fisher's exact test; $p < 0.05$.

Table 2 Knowledge about the policies of humanization in each maternity. Goiânia-GO, 2015

Humanization policies	Maternity 1 ($n = 43$)		Maternity 2 ($n = 43$)		p
	N	%	N	%	
Knowledge of the PHPN					
Yes	40	93.0	43	100.0	0.241*
No	3	7.0	–	0.0	
Appreciation of prenatal care					
Know and disagree	1	2.3	1	2.3	0.005#
Know, agree, but do not perform	15	34.9	3	7.0	
Know, agree, and perform	25	58.1	39	90.7	
Do not know	2	4.7	–	0.0	
Presence of a professional obstetric nurse					
Know and disagree	2	4.7	10	23.3	< 0.001#
Know, agree, but do not perform	31	72.1	–	0.0	
Know, agree, and perform	7	16.3	33	76.7	
Do not know	3	7.0	–	0.0	

Abbreviation: PHPN, Brazilian Program for the Humanization of Prenatal and Childbirth Care.
Note: *Chi-square test; #Fisher's exact test; $p < 0.05$.

►**Table 2** shows that most of the professionals interviewed said they knew about the program. Regarding the prenatal care appreciation, most professionals know it, agree with it, and perform it in both maternities ($p = 0.241$).

Regarding the knowledge about the importance of the presence of an obstetric nurse, in maternity 1, most professionals know about it, agree with it but do not follow it, while in maternity 2, most professionals said they know about it, agree with it and follow it.

►**Table 3** provides information on the procedures considered useful by the WHO. There was a significant difference between the two maternities regarding non-pharmacological methods ($p = 0.010$) and vertical birth ($p < 0.001$).

►**Table 4** presents the procedures considered ineffective or that should be used with caution according to the WHO. There was a significant difference between the two maternities regarding trichotomy ($p < 0.001$), analgesia ($p < 0.001$), routine use of oxytocin ($p = 0.006$) and episiotomy ($p < 0.001$).

Discussion

In the present study, the health professionals in maternity 1 mentioned the practices recommended by the WHO that form part of their routine: the use of the partograph and encouraging women to move and deliver in non-supine positions. On the other hand, the practices considered ineffective or performed inappropriately were the routine use of oxytocin, episiotomy and trichotomy. In maternity 2, regarding the practices recommended by the WHO, most of the professionals reported using the partogram, encouraging women to move and deliver in non-supine positions, the presence of a companion, as well as having the obstetric nurse as part of the team. Regarding the practices considered ineffective or inappropriate in this maternity hospital, only epidural analgesia was mentioned.

The Brazilian Ministry of Health recommends the presence of an obstetric nurse as part of the team, since this contributes to the reduction of unnecessary interventions, besides reducing the rate of cesarean sections.[3,6] The presence of a physiotherapist, for example, in the attention to labor is not an established practice in maternities. However, this professional plays an important role in this process, since it is her job to assist the pregnant woman in childbirth, guiding the control of the pelvic floor musculature, and suggesting positions that relieve pain and facilitate labor.[7] In the two maternities investigated, only the one that followed humanized assistance models has an obstetric nurse as part of their team and, consequently, less ineffective procedures were observed there. However, in maternity 1, other professionals compose the team that manages childbirth.

Many professionals believe that the presence of a companion would make things difficult for them because of the risk of interference in their jobs; they even think that their service is being inspected by the companion.[8] In the study conducted by Bruggemann et al[9], the health professionals' expectation about the presence of a companion in labor was initially negative, but was overcome after the experience.[9] In maternity 1, it was observed that most of the professionals did not follow the recommendations due to the lack of physical structure, since the pre labor room is very small and designed to accommodate more than one patient at a time, which makes the presence of a companion uncomfortable, because it makes the progress of the service difficult. In this room there is no accommodation for the companions, no

Table 3 Routine implementation of procedures considered useful by the WHO in each maternity. Goiânia-GO, 2015

Useful procedures	Maternity 1 ($n = 43$)		Maternity 2 ($n = 43$)		p
	N	%	N	%	
Use of the partogram					
Yes	38	88.4	38	88.4	0.435#
No	3	7.0	1	2.3	
Not able to report	2	4.7	4	9.3	
Stimulus to Movement/non-supine positions					
Yes	40	97.6	42	100.0	0.309#
No	1	2.4	–	0.0	
Non-pharmacological methods of combating pain					
Yes	30	75.0	40	95.2	0.010#
No	10	25.0	2	4.8	
Childbirth in the vertical position					
Yes	3	8.6	25	64.1	< 0.001#
No	32	91.4	14	35.9	
Presence of a companion					
Know and disagree	5	11.6	–	0.0	$< 0.001^*$
Know, agree, but do not allow	32	74.4	4	9.3	
Know, agree, and allow	3	7.0	39	90.7	

Note: *Chi-square test; # Fisher's exact test; $p < 0.05$.

screen dividing the beds; therefore, it is uncomfortable for the parturient and for her companion, because they are forced to share this very intimate moment with strangers.

The partograph is a communication instrument that allows the observation of the evolution of labor through a graphic representation. It contains information about dilation, uterine dynamics and heart rate.[10] The WHO recommends the use of the partograph in labor, with the aim of improving care, avoiding unnecessary interventions and reducing maternal and fetal morbidity-mortality.[2] In a study performed in a maternity school in the state of Alagoas, Brazil, it was observed that the use of the partograph is scarce. In addition, when it is used, the necessary items are not completely filled.[11] In a meta-analysis performed by Lavender, Hart and Smyth, five clinical trials were evaluated, and two studies evaluated the use or not of the partograph involving 1,590 women. It was concluded that there was insufficient evidence to recommend the routine use of it, with no difference between the use of the partograph and the reduction of the cesarean rates.[12] However, according to the Brazilian Ministry of Health, the use of this device improves the quality of delivery care, since it allows the identification of possible complications, so the health professionals can intervene effectively.[3] In the present study, it was observed that the partogram is widely used in both maternities (88.4%).

As to the stimulus to movement and delivering in non-supine positions, most of the professionals of the two maternities said that they carry out this type of practice. In a meta-analysis involving 21 studies with a total of 3,706 women, it was observed that the vertical position decreased labor time in about one hour. In addition, women in the non-supine position who walked required less analgesia and perceived more comfort throughout the process.[13]

Many doctors still use the lying position (lithotomy) because, according to them, it facilitates the examination to verify the dilation of the uterine cervix and the evolution of the birth through observation and palpation, allowing the active conduction of the delivery by the doctor, even though they are aware of the fact that this position does not favor the evolution of labor.[14] In the Brazilian study called "Nascer no Brasil"("Being Born in Brazil"), which was conducted in the five regions of the country in 266 hospitals, it was observed that the lithotomy position was present in 90% of deliveries, and in the Midwestern Region, it was more frequent. However, it was observed that freedom of movement in the first phase of labor reduces labor time, but it does not appear to be associated with increased interventions or negative effects related to the well-being of mothers and newborns.[4]

One of the practices considered ineffective or inappropriately used is analgesia.[2] In the present study, most of the professionals in maternity 1 said they did not perform this type of procedure, whereas in maternity 2 the majority reported performing it. In the "Being Born in Brazil" study, which involved 23,840 women, it was observed that women with higher education and who had delivered in private

Table 4 Routine implementation of procedures considered ineffective or that should be used with caution according to the WHO in each maternity. Goiânia-GO, 2015

Ineffective procedure	Maternity 1 ($n = 43$)		Maternity 2 ($n = 43$)		p
	N	%	N	%	
Routine trichotomy					
Yes	28	65.1	6	14.0	$< 0.001^*$
No	12	27.9	33	76.7	
Not able to inform	3	7.0	4	9.3	
Enema					
Yes	–	0.0	2	4.7	0.340#
No	39	90.7	38	88.4	
Not able to inform	4	9.3	3	7.0	
Routine use of oxytocin					
Yes	28	65.1	14	32.6	0.006^*
No	15	34.9	27	62.8	
Not able to inform	–	0.0	2	4.7	
Routine episiotomy					
Yes	23	53.5	6	14.0	$< 0.001^*$
No	18	41.9	35	81.4	
Not able to inform	2	4.7	2	4.7	
Early amniotomy routine					
Yes	12	27.9	7	16.3	0.283#
No	23	53.5	30	69.8	
Not able to inform	8	18.6	6	14.0	
Epidural analgesia					
Yes	5	11.6	42	97.7	$< 0.001^*$
No	25	58.1	–	0.0	
Not able to inform	13	30.2	1	2.3	

Note: *Chi-square test; #Fisher's exact test; $p < 0.05$.

hospitals and clinics had a higher proportion of use of analgesia. For socioeconomically disadvantaged women, a greater use of painful procedures and lower use of analgesia was observed.[4] In a study conducted with 40 patients divided into 2 groups to compare the effect of epidural analgesia and combined analgesia, it was observed that the combined technique provides rapid pain relief, and both of them are safe and effective for labor. Moreover, the increase in the use of the forceps in the expulsion stage is not related.[15]

Many professionals believe that trichotomy is necessary due to hygiene issues and to avoid possible infections; besides, it facilitates the suture in cases of laceration or epsiotomy.[14] However, a meta-analysis performed by Porto et al[16] involving three clinical trials with 1,039 women concluded that there is no evidence to recommend its routine use.[14] In the present study, it was observed that most professionals reported it being a routine in maternity 1 (65.1%); however, in maternity 2, the majority (76.7%) reported not performing this type of procedure.

The routine use of oxytocin was reported by most professionals in maternity 1, whereas in maternity 2, most of the professionals said they did not perform it. This type of procedure is used to induce or accelerate labor, but it may cause adverse effects, such as uterine hyperstimulation and, consequently, it presents a risk to the fetus.[17] Nevertheless, the indiscriminate use of oxytocin, mainly in the beginning of the labor, leads to the fact that the pain does not follow the dilation, and, with this, the women get exhausted mainly when they perceive that the pain has increased and there is no evolution of this process, often resulting in them choosing a cesarean section.[11] In the "Being Born in Brazil" survey, it was observed that the infusion of oxytocin and amniotomy were techniques widely used to accelerate labor, and were performed in 40% of women at normal risk.[4] In the present study, 65.1% of the professionals reported that this type of procedure is routine in maternity 1, while in maternity 2, 62.8% said they did not perform it.

Amniotomy prior to full dilatation (early amniotomy) is often used to accelerate labor. In the present study, this practice did not prevail in the maternities studied. In a study performed at a delivery center in the district of Sapopemba, in the city of São Paulo, Brazil, involving 1,079 deliveries, it was observed that amniotomy was performed in 53.4% of the deliveries.[18] A systematic review involving 14 randomized clinical trials evaluating 4,893 women to verify whether amniotomy decreases labor time concluded that there was no evidence of its impact in the duration of the delivery, but amniotomy was associated with an increased risk of progression to cesarean section.[19] In the present study, the majority of professionals in both maternities reported it not being part of the routine (53.5% in maternity 1, and 69.8% in maternity 2).

The WHO[2] recommends that the rate of episiotomy stays between 10% and 30% of all deliveries. In a study by Monte and Rodrigues,[17] it was observed that the interviewed professionals have often perform episiotomy because they feel insecure and fear lacerations, even if the scientific evidence proves otherwise.[2] However, scientific evidence demonstrates that grade 1 and 2 lacerations present better results regarding pain, blood loss and dyspareunia than episiotomy.[14]

Finally, in the present study, when comparing the two maternities, the routines of maternity 2, which was created as a model of humanization, follow more the recommendations of the WHO, such as the presence of a companion, of an obstetric nurse, the stimulation of movements and non-supine positions, and the use of the partograph. In maternity 1, a series of interventions considered by the WHO to be ineffective or inappropriately used, such as the routine use of oxytocin, episiotomy, trichotomy and the lack of permission of the presence of a companion were observed.

Therefore, in this study, many professionals admit they do not follow some recommendations made by the WHO due to lack of structure and adequate health professionals in the maternity wards.

References

1 Carvalho EMP, Göttems LBD, Pires MRGM. Adherence to best care practices in normal birth: construction and validation of an instrument. Rev Esc Enferm USP 2015;49(06):890–898

2 Organização Mundial de Saúde. Assistência ao parto normal: um guia prático. Genebra: Organização Mundial da Saúde; 1996

3 Brasil. Ministério da Saúde. Secretaria de Políticas de Saúde. Área Técnica da Mulher. Programa de Humanização do Pré-natal e Nascimento. Brasília (DF): Ministério da Saúde; 2000

4 Leal MC, Pereira APE, Domingues RMSM, et al. Obstetric interventions during labor and childbirth in Brazilian low-risk women. Cad Saude Publica 2014;30(Suppl 1):S17–S32

5 Boaretto MC. Avaliação da política de humanização ao parto e nascimento no município do Rio de Janeiro [dissertation]. Rio de Janeiro: Escola Nacional de Saúde Pública; 2003

6 Vogt SE, Silva KS, Dias MA. Comparison of childbirth care models in public hospitals, Brazil. Rev Saude Publica 2014;48(02): 304–313

7 Canesin KF, Amaral WN. Atuação fisioterapêutica para diminuição do tempo do trabalho de parto: revisão de literatura. Femina 2010;38(08):429–433

8 Gonçalves AdeC, Rocha CM, Gouveia HG, Armellini CJ, Moretto VL, Moraes BA. The companion in the obstetrics centre of a university hospital in southern Brazil. Rev Gaucha Enferm 2015;36(Spec No):159–167

9 Brüggemann OM, Osis MJD, Parpinelli MA. Support during childbirth: perception of health care providers and companions chosen by women. Rev Saude Publica 2007;41(01):44–52

10 Rocha IMS, de Oliveira SM, Schneck CA, Riesco MLG, da Costa AS. [The partogram as an instrument to analyze care during labor and delivery]. Rev Esc Enferm USP 2009;43(04):880–888

11 Barros LA, Veríssimo RCSS. Uso do partograma em maternidades escola de Alagoas. Rev Rene 2011;12(03):555–560

12 Lavender T, Hart A, Smyth RMD. Effect of partogram use on outcomes for women in spontaneous labour at term. Cochrane Database Syst Rev 2013;(07):CD005461

13 Lawrence A, Lewis L, Hofmeyr GJ, Styles C. Maternal positions and mobility during first stage labour. Cochrane Database Syst Rev 2013;(08):CD003934

14 Brasil. Ministério da Saúde. Humanização do parto e do nascimento. Brasília (DF): Ministério da Saúde; 2014

15 Côrtes CA, Sanchez CA, Oliveira AS, Sanchez FM. Labor analgesia: a comparative study between combined spinal-epidural anesthesia versus continuous epidural anesthesia. Rev Bras Anestesiol 2007; 57(01):39–51

16 Porto AMF, Amorim MMR, Souza ASR. Assistência ao primeiro período do trabalho de parto baseado em evidências. Femina 2010;38(10):527–537

17 Monte AS, Rodrigues DP. Percepção de profissionais de saúde e mulheres sobre a assistência humanizada no ciclo gravídico-puerperal. Rev Baiana Enferm 2013;27(03):265–276

18 Barbosa da Silva FM, Rego da Paixão TC, de Oliveira SM, Leite JS, Riesco MLG, Osava RH. [Care in a birth center according to the recommendations of the World Health Organization]. Rev Esc Enferm USP 2013;47(05):1031–1038

19 Smyth RMD, Markham C, Dowswell T. Amniotomy for shortening spontaneous labour. Cochrane Database Syst Rev 2013;(06): CD006167