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INTEGRATIVE LITERATURE REVIEW

PRACTICE OF THE OBSTETRIC NURSE IN RELATION TO THE RELIEF OF THE PARTURIENT'S PAIN

PRÁTICA DO ENFERMEIRO OBSTETRA QUANTO AO ALÍVIO DA DOR DE PARTURIENTES

PRÁCTICA DEL ENFERMERO OBSTETRA CUANTO AL ALIVIO DEL DOLOR DE PARTURIENTES

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ABSTRACT

Objective: to identify non-pharmacological strategies for the relief of parturient pain. **Method:** This is a descriptive bibliographical study of the type integrative review, from 2005 to 2010, with search of articles in the databases LILACS, MEDLINE and SciELO Virtual Library. The results are presented in figures, and then neglected with the literature. **Results:** seven articles regarding the non-pharmacological strategies seen by the parturients as beneficial, useful and stimulated in labor were selected, favoring safety, physical and emotional well-being, as the relief of contractions. **Conclusion:** the studies considered beneficial in non-pharmacological practices for the relief of parturient pain are considered. It is necessary to invest in more studies that explore the non-pharmacological strategies, considering the high relevance of investing in this topic, which help in influencing the pain relief of parturients by eliminating barriers, myths and that the specialists are prepared to execute them efficiently in the parturitive process. **Descriptors:** Parturients; Humanized Birth; Pain; Obstetric Nurses; Humanization; Nursing.

RESUMO

Objetivo: identificar estratégias não farmacológicas no alívio da dor de parturientes. **Método:** trata-se de um estudo bibliográfico, descritivo, do tipo revisão integrativa, de 2005 a 2010, com busca de artigos nas bases de dados LILACS, MEDLINE e Biblioteca Virtual SciELO. Apresentam-se os resultados em figuras, em seguida, discutidos com a literatura. **Resultados:** selecionaram-se sete artigos referentes às estratégias não farmacológicas vistas pelas parturientes como benéficas, úteis e estimuladas no trabalho de parto favorecendo segurança, bem-estar físico e emocional, como o alívio das contrações. **Conclusão:** consideram-se os estudos abordados benéficos nas práticas não farmacológicas para o alívio da dor de parturientes. Destaca-se a necessidade de se investir em mais estudos que explorem as estratégias não farmacológicas, tendo em vista a alta relevância de se investir nessa temática, que auxiliem na influência ao alívio da dor de parturientes eliminando barreiras, mitos e que os especialistas estejam preparados a executá-las de maneira eficiente no processo parturitivo. **Descritores:** Parturientes; Parto Humanizado; Dor; Enfermeiras Obstetras; Humanização; Enfermagem.

RESUMEN

Objetivos: designar las estrategias no farmacológicas en el alivio del dolor y en la práctica del enfermero obstetra. **Método:** se trata de un estudio bibliográfico, descriptivo, del tipo revisión integrativa, en una visión temporal de 2005 a 2010, con búsqueda en las bases de datos LILACS, MEDLINE y Biblioteca Virtual SciELO. Se presentan los resultados en figura. **Resultados:** se seleccionaron siete artículos referentes a las estrategias no farmacológicas vistas por las parturientes como benéficas, útiles y estimuladas en el trabajo de parto, favoreciendo seguridad, bienestar físico y emocional, como el alivio de las contracciones. **Conclusión:** se consideran los estudios abordados benéficos en las prácticas no farmacológicas para el alivio del dolor de parto. Se destaca la necesidad de invertir en más estudios que exploren las estrategias no farmacológicas, teniendo en vista una alta relevancia de se invertir en esa temática, que auxiliem en la influencia al alivio del dolor de las parturientes, eliminando barreras, mitos y que los especialistas puedan estar preparados a ejecutarlas de manera eficiente en el proceso de parto. **Descriptores:** Mujeres Embarazadas; Parto Humanizado; Dolor; Enfermeras Obstetricas; Enfermería.

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INTRODUCTION

It is clinically important that labor is associated with the development of painful and rhythmic contractions that condition the dilation of the uterine cervix. Its beginning is considered when the cervical dilatation reaches two centimeters, being the uterine activity between 80 and 120 UM (in average 100 Units Montevideo). It is said that there is no clear demarcation between prepartum and childbirth, on the contrary, the gradual, insensitive transition, which makes it difficult to characterize the activity of the beginning of the dilatation. It has been argued that contractions with less localized duration tend to disappear, being absent in normal deliveries, when the records exhibit strong and regular metrosstoles.¹

The meaning of being a mother driven by the decision to have the child is attributed. The value and importance of women to motherhood is influenced by the risks and benefits, obstacles and pleasures that occur in an unexpected or inopportune way, given the ability to decide to follow their natural course, conditioned by the value and importance assigned to this experience.²

It is estimated that the inclusion of the humanized model of attention to childbirth is due to the reception by the team, with respect and empathy, prevailing the preferences and needs of the parturient. It is known that obstetrical assistance is based on pre-established procedures and technical norms and individual valuation as beliefs, opinions, desires, values, feelings, among others. It is now understood that the humanization of labor is a significant qualification given the interest of the health professional in the development of humanized care in the hospital environment, especially in Obstetrics. Health care can be identified in two dimensions: administrative reception and referrals to specialized services. It is understood that these dimensions are important, but they should not be taken in isolated ways, culminating in punctual actions, uncompromising with the processes of responsibility and production of a bond.³

It has been observed that the majority of Western parturients in the hospitalization of labor gave birth in dorsal, semi-recumbent or lithotomic position. Obstetrical nurses are recommended for the maternal positions of Laboyer Ducan because these positions facilitate the evaluation of the health professional as well as the practices of interventions. A vertical effect of gravity of less compression of the aorta and vena cava,

greater efficiency of uterine contractility, alignment of the fetto-pelvis, non-supine positions (lateral and four supports) is provided by means of these verticalized maternal positions as a way to minimize relief of parturient pain.¹

It is understood that the nurse obstetrician should have knowledge and competence in the practice of non-pharmacological strategies for pain relief in labor such as lumbar massage, controlled breathing, muscle relaxation, ambulation, hydration, adequate position that can be squatting, decubitus lateral, standing, sitting, kneeling, squatting, Bobath ball use, damp bath, active horse, use of PPP beds (prepartum, childbirth, postpartum), stools, nursing of the obstetrician, among others. It is recommended that the lumbar massage should be practiced with the firm hand flat of the professional or companion so that it presses the lumbar region and that the tissues move on the bones. It is added that these non-invasive and safe strategies avoid the horizontal position of the users, which does not prevent the effects of difficulties in maternal-fetal exchanges. It is suggested that the vertical position or the lateral decubitus position on the horizontal position by offering less discomfort, less difficulty in the "maternal pulls", less sensitivity of the pain and less risk of vaginal or perineal traumas.⁴⁻⁵

It has been realized that non-pharmacological strategies for the relief of parturient pain, for example, the Bobath ball, favor numerous benefits to the woman patient, such as correction of posture, relaxation, stretching and strengthening of the pelvic muscles.⁶

By Decree MS / GM No. 1459, June 2011, within the scope of the Unified Health System (UHS), the Stork Network was defined. Among the guidelines of this network are the respect for cultural diversity, participation, health promotion and equity. It has as components: Prenatal; Birth and Birth; Puerperium and Integral Attention to Children's Health and Logistic System. It is a strategy of the Ministry of Health (MH) for the implementation of care for women. It guarantees the right to reproductive planning, to humanized care during pregnancy, childbirth and the puerperium. It is required, through the implementation of the Stork Network strategy in labor, that the obstetrician nurse sensitize the population in the obstetric center to the inclusion of this subject, containing components in the prepartum and delivery, including the practice of health care based on scientific evidence, with the humanized reception and risk classification in obstetric

and neonatal care services, guaranteeing the right of the companion during labor, delivery and postpartum.⁷

In the academic practice, during the stages of the Post-Graduation Course in Obstetrics and Gynecology of the University of Sao Paulo, it was highlighted the opportunity to work with the parturients with the use of non-pharmacological practices for pain relief, such as ambulation, bathing warm, the use of the Bobath ball, lumbosacral massage, respiration, stools, active horse, music therapy and the presence of the companion in the obstetric centers of maternities. Leide Moraes, Felipe Camarão and Divino Amor, in Natal (RN). The motivation for the development of this research was based on these opportunities, in order to identify the use of these practices in the literature for the relief of labor pain, considering that they are not performed by the obstetrician nurse.

The need for the study is justified considering the effectiveness of this theme in the diversity and efficiency of parturients. It is avoided by the inclusion of non-pharmacological strategies, such as PPP beds, parturient disorder in changing rooms and vertical positioning. It is explained that the PPP bed has footrest and contains fixed bar. It is verified that the stools and the delivery chairs are available in some maternity wards, being used successfully by the parturients and under the supervision of the nurse obstetrician, however, of non-obligatory use, respecting the will of the users, as well as the choice from another comfort position.

The study is relevant from the approach in the effectiveness of non-pharmacological strategies for the relief of parturient pain, being very useful to increase the quality of obstetric care to this target population.

OBJECTIVES

- To identify non-pharmacological strategies for the relief of parturient pain,
- Describe the non-pharmacological strategies for the relief of parturient pain in the practice of the nurse obstetrician.

METHOD

It is a bibliographic, descriptive, integrative review (IR) study. 8-9 Six steps were followed:

1. Identification of the theme and selection of the research question;
2. Establishment of inclusion and exclusion criteria;

3. Identification of pre-selected and selected studies;
4. Categorization of selected studies;
5. Analysis and interpretation of results;
6. Presentation of knowledge review/synthesis.¹⁰

The study's guiding question was: "What non-pharmacological strategies are present in the practice of the obstetrician nurse for the relief of parturient pain?" As inclusion criteria, full articles in Portuguese, English and Spanish were indexed and collected at the LILACS, MEDLINE and SciELO Virtual Library databases, in a temporal vision between 2005 and 2018, which addressed non-pharmacological strategies for the relief of parturient pain, obtaining a sample of 30 articles (Figure 1) and, after extensive reading, seven responded to the objectives and inclusion criteria of the study by Thematic Analysis. Dissertations, theses, abstracts, repeated articles and those that did not respond to the guiding question of the study were excluded. It is added that the search occurred in the period from September to October 2017.

An instrument for data analysis was then constructed considering the guiding question and analyzing aspects such as title, authors, publication periodicals, methodologies, objectives and results and, after careful reading of the 20 articles, seven met the criteria and, subsequently, the variables for the analysis and discussion of the data presented in figure 1 and the description of the non-pharmacological strategies, identified in the selected articles, in figure 2, were delimited.

In the research, authorship of concepts, discussions and ideas presented by authors in articles were respected.

This research was outlined in a Post-Graduation Program of the Potiguar University of Natal (UnP-RN): Nursing obstetrician in the practice of non-pharmacological strategies for the relief of parturient pain, 2018.

RESULTS

The description of the selected articles on the non-pharmacological strategies for the pain relief of parturients according to the databases and virtual library was organized with regard to the titles / authors, periodicals / years of publication, methods, objectives and results shown in figure 2.

Figure 1. Flowchart of the study selection adapted from PRISMA 2009. Natal (RN), Brazil, 2018.

Database / Virtual Library	Titles/Authors	Journals / Years of Publication		Methods	Objectives	Results
SciELO	Non-pharmacological strategies for pain relief in labor: effectiveness from the perspective of the parturient Hanum SP, Mattos DV, Mattão MEL, Martins CA. ¹¹	On-line Journal of Nursing. 2017	UFPE	A descriptive study, with a qualitative approach, developed in a public maternity hospital.	To identify the non-pharmacological strategies used for pain relief during labor, as well as the efficacy of puerperal vision.	103 studies were selected, using non-pharmacological strategies, with a total of 84 studies in the sample. The most used strategies were the warm shower bath, breathing exercises, lumbar massage, use of the Bobath ball and pelvic balance.
LILACS	Use of breathing and relaxation techniques for the relief of pain and anxiety in the parturition process. Almeida NAM, Sousa JT, Silveira NA ¹²	Latin Am. Journal of Nursing 2005		Experimental field research developed in the pre-delivery and postpartum wards at the obstetric center of a public maternity hospital in Goiânia.	To evaluate the relaxation technique on pain relief and anxiety of women in the parturients and puerperae.	Participants were 17 primiparous women in the control group who received routine care and were encouraged to practice adequate breathing / relaxation strategy. Pain and anxiety were assessed with the visual scale. The intensity of the pain increased with the evolution of labor. The results corroborated the physiological process of parturition pain associated with labor. The pain-scale visual-anxiety result by the authors was not correlated among the parturients. The correlation between psychological preparation for childbirth and anxiety at admission for pain assessment and duration of labor was observed.
SciELO	Effectiveness of non-pharmacological strategies in pain relief of laboring mothers Davim RMB, Torres GV, Dantas JC ¹³	Schol. Journal of Nursing. 2009		Descriptive study, with a quantitative approach	To demonstrate the effectiveness of pain reduction as a non-pharmacological strategy: the warm shower bath	Confirmed as a result of studies on the use of warm bath in the shower as a non-pharmacological method in parturients who reported more pain relief in labor.
LILACS	Humanization of labor and birth: application of effective non-pharmacological strategies in this processMedeiros MSMF, Carvalho JBL, Teixeira GA, et al. ¹⁴	On-line Journal of Nursing. 2015	UFPE	Descriptive research type integrative review	To provide the parturients attended to live the experience of giving birth as a physiological event and their companions as collaborators of this process.	The study provided confidence and adherence of mothers to non-pharmacological methods of pain relief and bonding with health professionals among parturients / families. Resistance was observed in some women to take an active role

							in labor. They shared knowledge exchanges among the professions on the use of integral obstetric care.
LILACS	Indicators of delivery assistance. Aguiar JC, Versiani CC, Dias CLO ¹⁵	On-line Journal of Nursing UFPE 2015	Descriptive research with quantitative approach	To identify the influence of the obstetrician nurse with pregnant women from the prenatal consultation to the choice of vaginal delivery with non-pharmacological strategies for the relief of pain.			The sharing of knowledge with parturients and caregivers about the use of non-pharmacological strategies to reduce pain.
LILACS	Representation of parturients about the pain of childbirthDavim RMB, Torres GV, Dantas JC ¹⁶	Electronic Journ. Of Nursing 2009	Descriptive research with a qualitative approach	Identify the effectiveness of the shower bath in relieving labor pain.			Parturients have demonstrated that the shower bath in labor alleviates labor pain.
LILACS	The relaxation environment for the humanization of hospital delivery careBarros NF, Lima GPV, Pereira ALF ¹⁷	Mineira Journ. Of Nurs. 2013	Descriptive research with a qualitative approach	To favor the choice of the parturient for the strategy that wishes to realize and to inform the procedures like the rights of the woman.			It was identified that the type of strategy most reported by parturients to promote comfort was the environment, considering the pre-delivery / relaxation room as interlocking comfort and indispensable to labor. The obstetrics nurses also mentioned the warm bath, the massage, the breathing exercises as the users' choices.

Figure 2. Distribution of scientific articles selected according to databases, titles / authors, periodicals / years of publication, methods, objectives and results. Natal (RN), Brazil, 2018.

The non-pharmacological strategies for the relief of parturient pain were selected according to the databases, with regard to the

description of these strategies, the position to be taken by the parturients and the dilation of the uterine cervix shown in figure 3.

Description of non-pharmacological strategies during labor	Postures of parturients / uterine dilatation
1) Breathing exercises: the parturient is oriented, when she initiates the uterine contraction, to inhale and exhale through the mouth, slowly, as if she were smelling a flower and extinguishing a candle. ⁸	Parturient with uterine dilatation in the active phase of labor in six, eight and nine centimeters.
2) Muscle relaxing: to guide the parturient with relaxed arms and legs until the moment of contraction. ⁹	As soon as the uterine contraction begins.
3) Lumbosacral massage: the parturient should be oriented which, at the beginning of the contraction, will be massaged in the lumbosacral region with the right hand flattened in circular movements until the uterine contraction ceases and with the left projected in the fundus of the uterus to feel beginning and the end of the contraction. ⁹	Positions in the bed in the supine or lateral position, standing or squatting.
4) Bath in shower: to guide the parturient in the shower, as often as necessary. ^{4,8}	Uterine dilatation between eight and nine centimeters in the active phase of labor, respecting the time of the parturient in the shower.
5) Pelvic swing: to guide the parturient who, during contractions, should make movements in a rotating direction to the right and left, thus facilitating the descent of the fetus. ⁹	Uterine dilatation from eight centimeters in the active phase of labor.
6) Active horse: Massage on the shoulders and neck of the parturient by the obstetrician nurse, when seated on the active horse, smoothly on the belly, arm and legs favoring the feeling of physical support / companionship. Associating the strategies, such as music therapy and proper breathing, promotes muscle relaxation aiming to supply tension and better uterine oxygenation, saving energy to the psychic / useful control between the contractions. ¹⁰⁻⁶	Position seated on the horse, preferably with dilation up to eight centimeters, with massage in the lumbar region; Backpressure strategy performed on the back and at the height of the upper edge of the pelvis and use of procedure glove with ice in the lumbar region provide comfort to the parturient.

Figure 3. Description of the non-pharmacological strategies identified in the selected articles. Natal (RN), 2018.

DISCUSSION

Studies that indicated the evidence that non-pharmacological strategies for pain relief are beneficial in the practice of the obstetrician nurse were sought. Childbirth is associated with the development of painful and rhythmic contractions and the dilation of the uterine cervix is conditional. It is added that in the study on the mechanism of delivery, on uterine contractions as well as on the transit through the pelvigenital gorge and movements of the fetal head, statistically, in 90 to 95% of the cases, the delivery with fetal presentation the vertex is less subject to mechanical.¹

It was evidenced, in a descriptive and quantitative study, that the non-pharmacological practices for the pain relief in labor most used, in the view of parturients, was the warm bath, being considered the most efficient. A total of 103 questionnaires with the non-pharmacological method use rate were applied in 81.6% (84 puerperae), and the warm bath was more accepted by the parturients during labor. In this way, it is considered the practice of warm bath in this efficient, comfortable process, reducing and

minimizing the sensation of pain and provoking relaxation in the parturients. Among other practices, breathing exercises, lumbosacral massage, use of the Bobath ball, as well as pelvic balance movement.¹³

It was observed that the use of Bobath ball, combined with the warm bath, besides minimizing the pain and stress of the laboring woman, helps to the evolution of the labor favoring the mechanism of the pelvic floor musculature. There is therefore evidence that the practice of combined non-pharmacological strategies such as breathing, relaxation and lumbar massage with 8 to 9 cm dilatation in the active phase of labor, under the supervision of the obstetrician, is favorable for the perfect evolution of birth.¹⁸

Results are shown where the mothers sitting on the active horse had, as a strategy, the massage in the lumbar region so that the back pressure and the height of the upper edge of the pelvis associated with the ice procedure sleeve are intended to provide comfort to the pelvic floor. parturient. It was evidenced that the use of non-pharmacological practices for the relief of pain promotes more calmness and tranquility

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to the women during the stages of labor, allowing the companion to participate at that moment collaborating with its execution.¹⁹

Relaxation is favored by the massage applied to the shoulders and neck with the parturient sitting on the active horse, as the effect of pain relief between uterine contractions occurs and, with the help of the obstetrician / nurse, may also be associated with the use of other strategies cited in the study, such as respiratory exercises and music therapy. It is also added that progressive muscle relaxation aims to supply the state of muscular tension and improve uterine oxygenation, consequently, contributing to save energy for psychic control and being useful between uterine contractions.¹¹

Similarly, a descriptive and quantitative study developed at the Assis Chateaubriand Maternity Hospital in Fortaleza (CE) revealed that 62 companions participated in the labor of their partners in a beneficial way, as they helped with lumbar massages, with the deambulation, in the warm bath and in the emotional support, being of great help in the physical and mental support to these users. These colleagues were informed about their rights and duties during the parish as well as about the responsibilities of health professionals in the parturition process.²⁰

In light of the results of this review, the authors confirm that Florence Nightingale considered that Nursing care should be able to build a favorable and balanced environment in order to conserve the vital energy of the woman patient. It is believed that, in obstetric practice, the comfortable and adequate environment and practices of strategies associated and mainly elaborated by the obstetrician nurse are provided with a good acceptance for the majority of the parturients, indicating pain relief as a primary goal. Obstetrical care, in a warm and pleasant place, allowing for privacy and a better relation between the obstetrician/parturient and the nurse, reduces the stress that causes pain during labor.²¹

It is possible to glimpse, from studies of this nature, in a more clear and rational way, the evidences for the professional practice of the nurse obstetrician in order to feel safe when illuminating the environment in which the woman is in the blue color light (chromotherapy), which, coupled with silence, exerts an effect of well-being and health on users favoring labor and making the environment comfortable. Parturients are allowed privacy so that they feel at ease to express their feelings caused by the stress of the pain.²²

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In several studies, excellent results were highlighted by authors in their researches, where the associated application of two or more of the non-pharmacological strategies is efficient for pain relief,²³⁻²⁴ corroborating the practices carried out in the Maternidades Prof. Leide Moraes and Felipe Camarão in Natal (RN), with obstetric nurse provided and reduced the pain of parturients.

The importance of professional support to the laboring woman during labor has also been highlighted in the literature; however, this moment should be pleasurable or traumatic, depending on the personal experiences that may be related to the assistance received during prenatal care and work of childbirth.²⁵

It has been revealed, before the literature, that the practice of non-pharmacological strategies for the relief of parturient pain, associating the Bobath ball with the massages and warm⁴ shower bath during labor, is comforting, however, there was little acceptance for ambulation.²⁴ It was identified in another investigation that the method most accepted by the parturients was also the warm shower bath standing out among other strategies and demonstrating effectiveness in reducing pain, relaxation and providing comfort to the parturients, which corroborates this study.^{8,26}

It is possible to affirm that the use of the Bobath ball with the warm bath, besides diminishing the pain, the anxiety and the stress of the parturient in the labor, it favors the relaxation of the musculature of the pelvic floor.²⁶ It is also argued that lumbosacral massage, associated with two or more strategies for the relief of labor pain, also offers excellent results in labor.¹⁴⁻²⁷

It is emphasized that authors recommend the practice of non-pharmacological strategies for pain relief because they demonstrate that, besides being easy to apply, it is also cost-effective in hospital institutions. The authors also point out that knowledge about non-pharmacological methods should be updated in graduate programs and added to the curricula of nursing undergraduate courses.²⁸

CONCLUSION

It is important to observe the articles cited in this research in reference to the practice of non-pharmacological strategies for the relief of labor pain with the association of two to three combined strategies, especially the warm bath associated with the Bobath ball with ambulation and banquettes in the shower, because they offer comfort, reduce the anxiety and fear of the parturients

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culminating in a normal delivery in a very physiological and humanized way.

One considers the theoretical and / or practical implications of the results, which revealed the detection of beneficial non-pharmacological strategies in the evolution of labor, such as warm shower, breathing, muscle relaxation and lumbosacral massage, as the more acceptable to parturients.

As a contribution of the study to the advancement of scientific knowledge in the field of Obstetrics, it is concluded that the identified challenges regarding parturients access to health services are minimized with the offer of options in non-pharmacological strategies. Priority is given to the importance of the obstetrician nurse present in these institutions, in an extended and comprehensible way, on the needs related to parturients during labor through guidelines and holistic care in health from a different perspective to this population in the centers obstetricians.

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