91 - EFFECTIVE NON-PHARMACOLOGICAL STRATEGIES FOR PAIN RELIEF IN CHILDBIRTH

REJANE MARIE BARBOSA DAVIM; ANDRÉA GLAUCY DAVIM RAULINO;
GILSON DE VASCONCELOS TORRES.
Rio Grande do Norte Federal University, Natal / RN, Brazil
rejanemb@uol.com.br

INTRODUCTION

Many health professionals working in maternity see in the pain during childbirth a "suffering" that, in most cases, have nothing to do for. For these professionals, staying on places like these, with women complaining of pain becomes very annoying and restrictive, once they don't know how to act (DIAS; DOMINGUES, 2005).

Actually, these professionals should play important roles in the childbirth labor experience and have the opportunity to put their knowledge in the most critical moments for mothers, through therapeutic interventions to minimize the pain of these women. However, it is not easy for those professionals who see the gestation and childbirth processes as predominantly organic events, most valued by their pathological side (BRASIL, 2003).

In these terms, the healthcare professional who assists women in childbirth labor must consider and understand the social, cultural, environmental and therapeutic factors and the physiology of childbirth labor process that may cause fear and insecurity for women, with the aim to promote a more humanized and holistic assistance (ORANGE et al., 2003).

According to Largura (1996), the factors that may increase the painful perception in childbirth are included on fear, stress, tension and fatigue, cold, hunger and loneliness, social affective helplessness, ignorance on what is happening in an unknown environment for this woman. The author points out that other factors such as relaxation, confidence, correct information, continuous contact with family and friends, comfortable environment and others, may reduce the painful perception in childbirth labor.

So, researchers do know that non-pharmacological strategies, which are viewed as non-invasive methods, can reduce the perception of pain in childbirth, giving relief to these women. There are several methods to be mentioned, like the shower or immersion bath, massage in lumbar region, standardized breathing, progressive muscle relaxation, verbal conditioning, walking, freedom of position, among others. These methods can be applied on both a combined and isolated way. Studies on these methods indicate that, in addition to providing pain relief in childbirth, they may reduce the need for using pharmacological methods, and it, therefore, improves the event experienced during childbirth labor (MEDINA, 2000, OCHIAI; GUALDA, 2000, ORANGE et al., 2003, ALMEIDA et al., 2004, ABUSHAIKHA; OWEIS, 2005, ALMEIDA et al., 2005, ALMEIDA; OLIVEIRA, 2006, SILVA; OLIVEIRA, 2006).

Given these considerations on labor, childbirth and non-pharmacological methods, led to the interest in studying the pain of women in childbirth labor. That motivation came from my experience as an obstetrical nurse and professor of the Graduate and Post-Graduate Courses in Obstetric Nursing area for more than twenty years, analyzing and experiencing along with women the feelings expressions as suffering, discomfort and lack of control, facing pain intensity during childbirth.

With the passage of time, in an almost daily coexistence as healthcare professor with these women at public obstetric centers, I have seen isolated mothers, separated from their companions or accompaniers, health professionals disregarding on pain complaint, probably because they consider the pain during childbirth a predominantly biological, physiological and temporary process, in which is often valued the pathological side, when it installs.

Thus, in considering the humanized approach as essential to help women experiencing the childbirth labor process in a less traumatic and uncomfortable way, it had motivated the completion of a doctoral thesis, having as the study subject the evaluation of non-pharmacological strategies effectiveness for women's pain relief in the active phase of childbirth labor. To be part of this article, was conducted a cut of this thesis, which aimed to assess the effectiveness of non-pharmacological strategies (breathing exercises, muscle relaxation and lumbar-sacral massage) in relieving the intensity of pain for mothers in the active phase of childbirth labor.

MATERIALS AND METHODS

It's a clinical quantitative trial of therapeutic intervention type, which can also be called, according to Medronho (2005), as "before and after" essays. The "before and after" essays are those where all individuals receive the same treatment and their conditions are checked before the start and after several moments of treatment (MEDRONHO, 2005). Therefore, each mother was her own controller in a real study situation during the active phase of labor.

The study took place in the Childbirth Humanized Unit (UPH) of Januário Cicco Maternity School (MEJC) of the Rio Grande do Norte Federal University (UFRN), located in the eastern district of the city of Natal, in the state of Rio Grande do Norte, in northeast region of Brazil. Before we started the research, the study had permission for its achievement in the institution and was also submitted to the Ethics in Research Committee of UFRN, receiving assent Registration with the code EPC-UFRN 045/2005.

The population was made up of low-risk women admitted for childbirth assistance and the sample was composed by 100 women, after preliminary survey of normal births performed at the institution in 2004, having for this total a percentage of 10%, totaling 100 women to be researched.

For composition of the sample, the inclusion criteria involved mothers from their second birth, being in labor and being low-risk mothers, in the active phase of childbirth labor, with a maximum of 6 centimeters of cervix dilation, who had accepted taking part of the study and sign the Free and Informed Consent Term (TCLE). Were excluded pregnant adolescents, women with earlier cesarean section and those who had not accepted to take part of the study.

The instrument for data-collecting consisted of three parts: women characterization, the partograma - to monitor the labor process evolution - and the evaluation of mothers pain intensity "before and after" the implementation of non-pharmacological strategies, taking as a measure method the visual analog scale.

The period of data-collection was six months, from September 2005 to February 2006. The data-collection of the 100 women was conducted by the thesis' author herself.

The statistical treatment had been developed through the program SPSS 14.0, with statistical advice, on a descriptive form, with absolute and relative frequencies, average values, standard deviation and inferential analysis, with application of Fisher's Exact Test and the Simple Paired T Test. In all tests were adopted statistical significance levels with ñ <0.05.

RESULTS

The results on the demographic data of the 100 women showed that 76% of them were in an age group between 20 to 30 years old and 24% were 31 to 42 years. As for education, 85% had incomplete basic education and 15% had high school/graduated. These women came, in large part (64%), from the capital (Natal) and 36% from other cities in the state of Rio Grande do Norte. The majority (90%) were Catholic, and only 10% evangelical. In relation to the family income, the majority (85%) received up to 02 minimum wages and just above 15% more than 02 minimum wages.

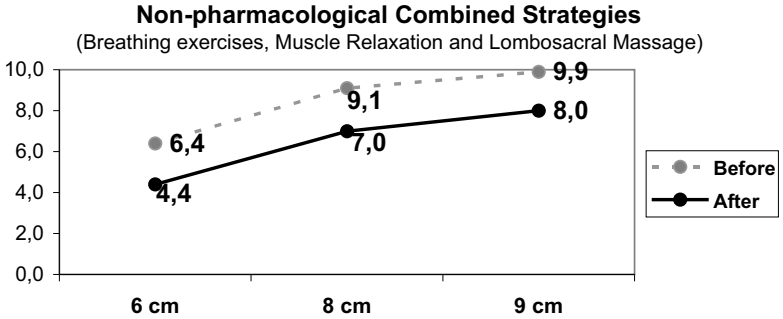
As for the characterization of obstetric variables, related to parity, 76% of women of the study were mothers of up to 2 children, and 24% had more than 3 children. They all (100%) had visited the prenatal consultation in the current gestation, according to the pregnant card. In reference to the diagnosis in weeks of gestation, there were identified that 85% of these women were between 37 to 40 weeks of gestation and 15% between 41 and 42 weeks.

Once the research site is an institution that preconizes and encourages the accompanist during childbirth labor, 78% women related that company, and only 22% did not mention any accompanist. Of the 78% who were accompanied, 44% were by the partner and 34% by the mother or other relative or friend.

It was found that 85% of women used some sort of medication during the active phase of labor, and the most used were oxytocin (81%), followed by buscopam (5%) and only 15% did not receive any medication during the development of this research.

By comparing the average intensity of pain "before and after" the application of non-pharmacological strategies (breathing exercises, muscle relaxation and lombosacral massage) in 6, 8 and 9 cm of cervix dilation, with Simple Paired T Test, there were significant difference (ñ = 0.000) for 3 moments of the active phase, denoting the effectiveness of these strategies to relieve pain during childbirth labor, as can be seen in Figure 1.

Figure 1. Average intensity of pain "*before and after*" the application of non-pharmacological strategies in the active phase of childbirth labor, between 6, 8 and 9 cm of cervix dilation, using the Simple Paired T Test.



By comparing the percentage of pain relief "before and after" the application of non-pharmacological strategies (Figure 2), it's seen a reduction of that percentage as the cervix dilation increases, being bigger (31.2%) at 6 cm and smaller (19.2%) at 9 cm. These results point to the improved effectiveness of these strategies (breathing exercises, muscle relaxation and lumbosacral massage) in the early stages of dilation period (acceleration and maximum inclination).

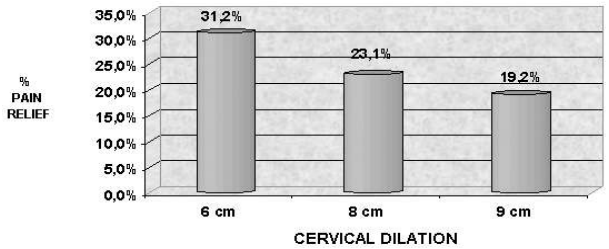


Figure 2. Percent for compared pain relief occurred "before and after" the application of non-pharmacological strategies in women's studies.

CONCLUSIONS

The results of this study have enabled us to conclude that:

·When comparing the average intensity of pain "*before and after*" the application of non-pharmacological strategies in 6, 8 and 9 cm of cervix dilation, there were significant difference (ñ = 0.000) and the percentage of pain relief after the application of these methods had demonstrated a reduction as the cervix dilation increases, being bigger at 6 cm and smaller at 9 cm.

·The application of non-pharmacological strategies (breathing exercises, muscle relaxation and lumbosacral massage) in 6, 8 and 9 cm of cervix dilation, showed significant difference (ñ = 0.000) in relieving the pain on mothers of the study.

·Given the foregoing, one can say that the application of non-pharmacological strategies is effective in the relief of pain intensity of women during the active phase of labor.

The findings of this study point out to the need for further clinical researches focusing the use of these and other effective non-pharmacological strategies for pain relief in childbirth, aiming humanized actions to mothers' assistance.

The humanization of assistance in childbirth also involves, primarily, that the performance of health professionals respects aspects of mother's physiology, not intervening unnecessarily, recognizing the social and cultural aspects of labor and childbirth, and provide the necessary emotional support to women and their family, contributing to the formation of affective familiar ties and the mother-baby bond.

Similarly, implies in women's opportunity and autonomy throughout the whole process, with the elaboration of a childbirth plan that is respected by the professionals that assist her; in having a accompanist of her choice; in being informed about all the procedures that will be submitted and in having respected their citizenship rights.

Knowing these conclusions, it is expected that the data found in this research would come to contribute in the improvement of obstetrical practice focused on childbirth labor, especially in its active phase, in a way to relief pain of women in the process of childbirth labor.

Other expected results must be directed to the prenatal assistance, by embracing the pregnant-companion-family in

health services, with specific information on the childbirth preparation to the couple and their family.

For nursing and to health assistance, it may help on their theoretical development, providing the knowledge expansion about the practice in obstetrical nursing, in addition of contributing to the awareness and consciousness of health professionals involved in the team and in the systematical practice directed to the actual conditions of woman during childbirth labor.

REFERENCES

ABUSHAIKHA, L.A; OWEIS, A. Labour pain experience and intensity: a Jordanian perspective. **International Journal of Nursing Practice**, v. 11, 2005, p.33-8.

ALMEIDA, N.A.M; BACHION, M.M., SILVEIRA, N.A.; SOUZA, J.T. Avaliação de uma proposta de abordagem psicoprofilática durante o processo da parturição. **Rev enfermagem UERJ**, v.12, n.3, 2004. p. 292-8.

ALMEIDA, N.A.M.; OLIVEIRA, V.C. Estresse no processo de parturição. **Revista Eletrônica de Enfermagem**. 2005. v.7, n.1. p. 87-94. Disponível em: http//:www.fen.ufg.br/revista.htm. Acesso em: 29 set. 2006.

BRASIL. Ministério da Saúde. **Parto aborto e puerpério**: assistência humanizada à mulher. Brasília (DF): Ministério da Saúde, 2003.

DIAS, M.A.B.; DOMINGUES, R.M.S.M. Desafios na implantação de uma política de humanização na assistência hospitalar ao parto. **Revista Ciência e Saúde Coletiva**, v. 10, n.3, 2005. p. 669-705.

LARGURA, M. **A assistência ao parto no Brasil**. São Paulo (SP): [s.n]; 1996.

MEDINA, E.T. Impacto do banho morno na redução do tempo de trabalho de parto. In: International Conference on the Humanization of Childbirth. **Resumos**... Fortaleza (CE); 2000. p. 76.

MEDRONHO, R.A. **Epidemiologia**. São Paulo (SP): Atheneu; 2005.

OCHIAI, A.M; GUALDA, D.M.S. O banho de chuveiro como medido de alívio da dor no trabalho de parto. In: International Conference on the Humanization of Childbirth. **Resumos**... Fortaleza (CE) 2000. p. 75.

ORANGE, F.A.; AMORIM, M.M.R.; LIMA L. Uso da eletroestimulação para o alívio da dor durante o trabalho de parto em uma maternidade-escola: ensaio clínico controlado. **Rev. Bras. Ginecol. Obstet.** [série on-line] v. 25, n. 1, 2003. p. 45-52. Disponível em: http://www.scielo.br/pdf/rbgo/v25n1/a07v25n1.pdf. Acesso em: 20 jan. 2005.

SILVA, F.M.B.; OLIVEIRA S.M.J.V. O efeito do banho de imersão na duração do trabalho de parto. **Rev. Esc Enferm USP**, v. 40, n. 1, 2006; p. 57-63.

Rui Barbosa Avenue, 1100, A Block, 402 Ap., Residencial Villaggio Di Firenze.
Lagoa Nova, Natal/RN - Brazil. Postcode: 59056-300,

EFFECTIVE NON-PHARMACOLOGICAL STRATEGIES FOR PAIN RELIEF IN CHILDBIRTH

ABSTRACT

Clinical quantitative trial of therapeutic intervention type that aimed to evaluate, "*before and after*", the effectiveness of non-pharmacological strategies for relieve the pain intensity of women in the active phase of childbirth labor. The study was developed in a public maternity in the city of Natal/RN, in Northeast region of Brazil, and had as a sample, 100 considered low-risk women. To evaluate the pain intensity during childbirth, used the visual analogue scale for measurement. After the application of non-pharmacological strategies (breathing exercises, muscle relaxation and lumbosacral massage), the women of the study felt significant relief (ñ <0.05) in the pain intensity. It follows that these strategies applied in the study's women were effective in relieving the childbirth pain, in the active phase of childbirth labor, which means in the phases of acceleration, deceleration and maximum slope, being more effective in maximum inclination and deceleration stages. The findings of this study point out to the need for further clinical researches focusing the use of these and other effective non-pharmacological strategies for pain relief in childbirth, aiming humanized actions to mothers' assistance. Knowing these conclusions, it is expected that the data found in this research would come to contribute in the improvement of obstetrical practice focused on childbirth labor, especially in its active phase, in a way to relief pain of women in the process of childbirth labor. For nursing and to health assistance, it may help on their theoretical development, providing the knowledge expansion about the practice in obstetrical nursing, in addition of contributing to the awareness and consciousness of health professionals involved in the team and in the systematical practice directed to the actual conditions of woman during childbirth labor.

KEYWORDS: Labor, pain relief, Women's Health.

STRATÉGIES NON PHARMACOLOGISTE EFFECTIVES DANS LA RÉDUCTION DE LA DOULEUR DE L'ACCOUCHEMENT

RESUMÉ

Essai clinique quantitatif du type intervention thérapeutique « avant et après », que a eu comme objectif évaluer l'effectivité des stratégies non pharmacologiques dans le soulagement de l'intensité de la douleur des parturientes dans la phase active du travail. L'étude a été développé dans une maternité publique dans la ville de Natal/RN, dans la Région Nordeste du Brésil, ayant comme panel 100 parturientes considérées de bas-risque. Pour évaluer l'intensité de la douleur de l'accouchement, il y a été utilisé l'escale analogique visuelle pour la mensuration. Devant l'application des stratégies non pharmacologiques exercices respiratoires, relaxation musculaire et massage lombo-sacrée, il y a été vérifié un soulagement significatif (ñ < 0,05) dans l'intensité de la douleur des parturientes dans l'étude. Ont conclut que ces stratégies appliquées dans les parturientes de l'étude ont été effectives dans le soulagement de la douleur de l'accouchement dans la phase active du travail, soit, dans les phases d'accélération, d'inclination maxime et de ralentissement, étant son effectivité plus grande dans les phases d'inclination maxime et de ralentissement. Les trouvailles de cet étude pointent vers la nécessitée d'autres recherches cliniques que focalisent l'usage de ces et d'autres stratégies non pharmacologiques effectives pour le soulagement de la douleur d'accouchement, en visant d'action humanisées dans l'assistance à la parturiente. À la lumière de ces conclusions, il est espéré que les donnés rencontrés dans cette investigation puissent contribuer dans l'amélioration de la pratique obstétrique tournée vers le travail, spécialement dans son phase active, ayant en regard le soulagement de la douleur de ces femmes dans son procès de l'accouchement. Pour l'infirmier et pour la santé il pourra contribuer pour le développement théorétique, donnant l'ampliation des connaissances sur la pratique de l'infirmier en obstétrique, au-delà de contribuer pour la sensibilisation et la donnée de conscience des professionnels de santé engagés dans l'équipe et dans la direction de pratiques systématisés ajustées aux conditions réelles de la femme en travail.

MOTS-CLES: Accouchement, réduction de la douleur, Santé de la femme.

ESTRATEGIAS NO FARMACOLÓGICAS EFICACES EN LA RELEVACIÓN DEL DOLOR DEL PARTO
RESUMO

Análisis clínico cuantitativo del tipo intervención terapéutica “antes y después” que tenía como objetivo evaluar la eficacia de las estrategias no farmacológicas en la relevación de la intensidad del dolor de mujeres en la fase activa del trabajo del parto. El estudio fue desarrollado en una maternidad pública en la ciudad de Natal/RN, en la región nordestal del Brasil, teniendo como muestra 100 mujeres en el trabajo del parto de poco riesgo. Para evaluar la intensidad del dolor del parto, fue usada la escala en el aspecto analógico visual para su mensuración. Delante del uso de las no farmacológicas estrategias, de los ejercicios respiratorios, la relajación muscular y el masaje lombossacral, habían verificado la relevación significativa (ñ < 0.05) en la intensidad del dolor de las mujeres en el trabajo del parto en el estudio. Se concluye que estas estrategias aplicadas en las mujeres en el trabajo del parto del estudio habían sido eficaces en la relevación del dolor del parto en la fase activa del trabajo del parto, es decir, en las fases de la aceleración, de la inclinación máxima y de la desaceleración, siendo más grande su eficacia en las fases de la inclinación y de la desaceleración máximas. Los resultados de esto estudio demuestran la necesidad de otras investigaciones clínicas que enfoquen el uso de éstas y otras estrategias no farmacológicas eficaces para la relevación de la dolor del parto, teniendo como objetivo humanizar las acciones en la ayuda a la mujer en trabajo del parto. Con estas conclusiones cuenta con que los datos encontrados en esta investigación puedan contribuir en la mejora de la práctica obstétrica dirigida hacia el trabajo del parto, en especial en su fase activa, debido a la relevación del dolor de estas mujeres en su proceso del trabajo del parto. Para el oficio de enfermera y la salud podrá contribuir en el desarrollo teórico, ayudando a magnificar el conocimiento en la práctica y en el oficio de enfermera obstétrica, más allá de contribuir para la sensibilización y el conocimiento de los profesionales implicados de la salud en el equipo y el apuntamiento de la práctica sistematizan ajustadas a las condiciones verdaderas de la mujer en trabajo del parto.

PALABRAS CLAVES: Trabajo del parto, relevación del dolor, salud de la mujer.

ESTRATÉGIAS NÃO FARMACOLÓGICAS EFETIVAS NO ALÍVIO DA DOR DE PARTO
RESUMO

Ensaio clínico quantitativo do tipo intervenção terapêutica “*antes e após”* que teve como objetivo avaliar a efetividade de estratégias não farmacológicas no alívio da intensidade da dor de parturientes na fase ativa do trabalho de parto. O estudo foi desenvolvido em uma maternidade pública na cidade de Natal/RN, na Região Nordeste do Brasil, tendo-se como amostra 100 parturientes consideradas de baixo risco. Para avaliar a intensidade da dor de parto, utilizou-se a escala analógica visual para sua mensuração. Diante da aplicação das estratégias não farmacológicas exercícios respiratórios, relaxamento muscular e massagem lombossacral, verificaram-se alívio significativo (ñ < 0,05) na intensidade da dor das parturientes do estudo. Conclui-se que essas estratégias aplicadas nas parturientes do estudo foram efetivas no alívio da dor de parto na fase ativa do trabalho de parto, ou seja, nas fases de aceleração, inclinação máxima e desaceleração, sendo maior sua efetividade nas fases de inclinação máxima e desaceleração. Os achados deste estudo apontam para a necessidade de outras pesquisas clínicas que focalizem o uso dessas e de outras estratégias não farmacológicas efetivas para o alívio da dor de parto, visando ações humanizadas na assistência à parturiente. A guisa dessas conclusões espera-se que os dados encontrados nesta investigação possam contribuir no aprimoramento da prática obstétrica voltada para o trabalho de parto, em especial na sua fase ativa, tendo em vista o alívio da dor dessas mulheres no seu processo do trabalho de parto. Para a enfermagem e para a saúde poderá contribuir no desenvolvimento teórico, propiciando a ampliação dos conhecimentos sobre a prática na enfermagem obstétrica, além de contribuir para a sensibilização e conscientização dos profissionais de saúde envolvidos na equipe e no direcionamento de práticas sistematizadas adequadas às reais condições da mulher em trabalho de parto.

PALAVRAS-CHAVE: Trabalho de parto, Alívio da dor, Saúde da mulher.