

81 - SHOWER BATH: AN EFFECTIVE STRATEGY TO PAIN RELIEF IN LABOR

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INTRODUCTION

Pain is characterized by an unpleasant experience, it can be sensory or emotional, related to real or potential tissue damages, and it is one of the most feared human suffering and common in medical practice also in nursing. (ELLER and JAQUES 2006 apud PORTO, 2001; OLIVEIRA; MORAES, 2002; SMELTZER; BARE, 2002).

To women at the most the labor pain is the worst experience in their lives. The pain caused by uterine contractions is a complex progress that involves an interaction of central and peripheral mechanisms and a continuous exchange of information through ascending and descending way of nociceptors. As it is, it's understood that labor pain involves emotional, sensory, environmental and existential factors (LOWE, 2002).

In obstetrical practice, is noticed that anxiety and labor pain seem to be minimized by use of methods for preparation for childbirth. Several non-invasive and non-pharmacological methods have been listed to humanization of childbirth and birth, for example: massage, baths, continued presence of companion, an advanced explanation and guidance of procedures and freedom to take the desired birthing position (O'HARA and SIMKIN, 2002).

According to Silva and Oliveira (2006) is essential to World Health Organization that non-pharmacological methods for pain relief be exploited, because they are safer and produce fewer interventions. It includes massage, free movement, breathing exercises and use of water in immersion and shower baths.

Scientific studies have shown that pain relief of women in labor is effective with the use of a non-pharmacological approach. Among those studies, Ochiai and Gualda (2000) conducted one with a 40 parturients sample, at active phase of first stage, participated in the study and was carried out with the objective of verifying the effect of shower on labor pain and the sensations which it brings to parturients. For this, the authors studied four dimensions of pain were evaluated: intensity, behavior, location and characterization, using the McGill Pain Questionnaire. It was verified that showers did have not effect in active phase of labor pain, but was observed that it brings sensations of well being and comfort, like relief, relaxation and refreshing.

Medina (2000) in his study with a qualitative approach, aimed to analyze the warm bath impact to reduce the labor time during its active phase. As a result, was identified that the warm bath allowed parturients be conscious of their power for labor development, with pain relief, relaxation and welfare. However, there isn't a right time to the parturient get in the shower, provided that water temperature is bearable, since there are no hot showers in Health Unic System (SUS) maternity hospitals.

Balaskas (1993) says that relaxation effect of water reduces the pain caused by uterine contractions, relaxing the muscles of perineum. A positive factor to convey confidence to a parturient is when water falls on your body, especially in the lumbar region; it's like a painkiller, bringing a pain relief and discomfort caused by strong labor contractions.

Against these considerations, this article aims to evaluate the shower bath effectiveness, as a non-pharmacological strategy to reduce the labor-related pain in parturients during active phase of labor.

METHODOLOGY

It is a therapeutic intervention type quantitative trial. The intervention trials describe a treatment in a unique group of individuals, where all of them receive the intervention under study, often be called "before-after studies", because all individuals receive the same treatment and their conditions are checked before and many times during treatment (MEDRONHO, 2005). Therefore, each involved parturient controlled herself in a real study situation in active phase of labor dilation period.

This study was conducted in the Intensive Labor unit (UPH) of Januário Cicco Maternity School (MEJC), in the city of Natal, Rio Grande do Norte, northeast Brazil.

Before start the investigation, this study was previously authorized by MEJC administration and submitted, for considerations, to Research Ethics Committee (CEP) of Federal University Rio Grande do Norte (UFRN) and was approved by CEP Record UFRN 045-2005, given the National Health Council (CNS) Resolution 196/96 that includes the code of conduct for research involving humans.

The study population was composed of parturients with a low-risk pregnancy when they were accepted for labor assistance. To build the sample a previous survey was conducted through MEJC 2004 archives, totaling 2040 vaginal childbirth with an average monthly of 170. As intended to collect data in 10% of population in a six-month period, (1020 childbirth), this sample comprised 100 parturients.

To built the sample, the following eligibility criteria for inclusion were used: parturients who previously had a childbirth, be in labor and with a low-risk pregnancy, be in active phase of labor up to 6cm size of cervical dilation, voluntarily accept to participate in this study, sign Free an Informed Consent Term TCLE. The exclusion criteria were: teenager parturients, parturients who previously had delivered by cesarean section, parturients who asked to leave the study in any phase.

The instrument used to collect dados was consisted of three parts: characterization of the parturients, the partograma was an important tool for monitoring the labor, so, from active phase of dilation period and evaluation of the labor pain "before-after" to strategy implement.

To evaluate the intensity of pain a Visual Analogue Scale (VAS) developed by the Pain Control Team Clinical Hospital of Faculty of Medicine of São Paulo, which consists in a horizontal line, 10 cm in length, where the patient marks on the line the point that they feel represents their perception of their current state in two dimensions: intensity and on a scale of 0 to 10. This line is anchored by word descriptors none, mild, moderate, severe, horrible and excruciating (DRUMMOND, 2000; MYLES and URQUHART, 2005).

The data collection period was developed in 6 months, from September 2005 to February 2006 and the thesis researcher was the responsible for data collect in this study.

The descriptive statistical treatment was conducted with absolute and relative frequencies, average, standard deviation, inferential analysis with Fisher's Exact Test and one sample Paired t-Test. In all tests the statistical significance level used was $\alpha < 0,05$.

RESULTS

The results on socio-demographic data of the 100 parturients demonstrated that 76 parturients (76%) are between 20 and 30 years old and 24% are between 31 and 42 years old. On schooling, 85% didn't complete the elementary school and 15% have completed high school/high education. As the origin, 64% came from the capital (Natal) and 36% from cities of Rio Grande do Norte interior. The most of them (90%) are Catholic and 10% Protestants. 85% earn up to 02 national minimum wages by family income and 15% earn above.

About obstetric variables of characterization, related with parity, 76% of parturients had up to 2 children, and 24% had up to 3 children. All of parturients involved (100%) attended the prenatal during pregnancy according their consultation card. In reference to diagnosis at gestation weeks, was identified that 85% of these woman were between 37 to 40 weeks of gestation and 15% were between 41 to 42 weeks.

As the place where the research were conducted is an institution encourage and stimulate a companion of her choice during childbirth, 78% asked for a companion, and just 22% didn't ask for any companion. From those who had companion, 44% were accompanied by their partner and 34% by their relatives or friends.

In this study 85% of the parturients used some medication during the active phase of labor, the most used was Ocitocin (81%), followed by Buscopam (5%) and only 15% didn't use any medication during this investigation period.

Comparing the pain intensity averages "before-after" of the isolated non-pharmacological (shower bath) implementation during a 8cm and 9cm size of cervical dilation with one sample Paired t-Test, a significant difference was found ($\bar{n}=0,000$) on two occasions in the active phase of labor, confirming the effectiveness of this strategy to reduce the labor-related pain in parturients involved in the study, as it can be seen in Figure 1.

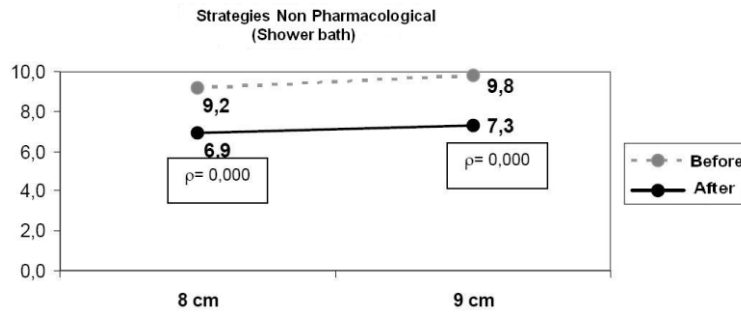


Figure 1. Pain intensity averages "before-after" of the isolated non-pharmacological (shower bath) implementation during an 8cm and 9cm size of cervical dilation in parturients involved in the study.

Comparing the pain relief percentage on "before-after" of the isolated non-pharmacological (shower bath) implementation, Figure 2, it was clear the similarities between the occasions that it was implemented, 26, 6% for 8cm dilation and 26, 3% for 9cm dilation.

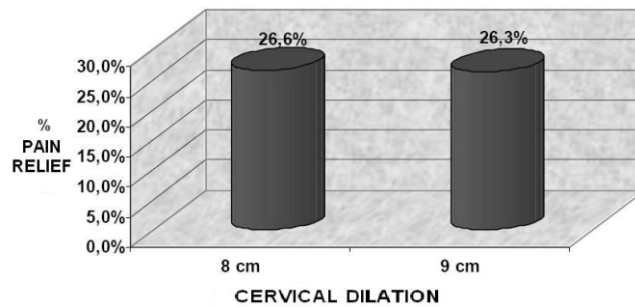


Figure 2. Pain relief percentage comparison on "before-after" of the isolated non-pharmacological (shower bath) implementation in parturients involved in the study.

About qualitative aspects evaluated by VAS (none, mild, moderate, severe, horrible and excruciating), "before-after" the isolated non-pharmacological strategy implementation, a tendency to pain relief was observed with implementation of this strategy during the 8cm and 9cm of cervical dilation, as shown on Figure 3 and 4.

On figure 3, during 8cm of cervical dilation in parturients the pain before implementation of this isolated strategy was rated as excruciating (86,8%) and horrible (13,2%), after intervention of this strategy the pain was rated as horrible (80,3%), moderate (10,5%) and severe (9,2%).

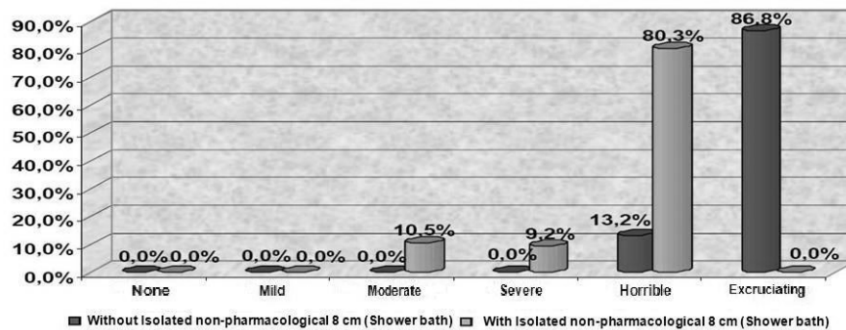


Figure 3. "Before-after" non-pharmacological isolated strategy on its qualitative aspects during 8cm of cervical dilation in parturients involved.

In Figure 4, during 9cm of cervical dilation in parturients the pain before implementation of this isolated strategy was rated as excruciating (100%), after intervention of this strategy the pain was rated as horrible (91,2%), and severe (8,8%).

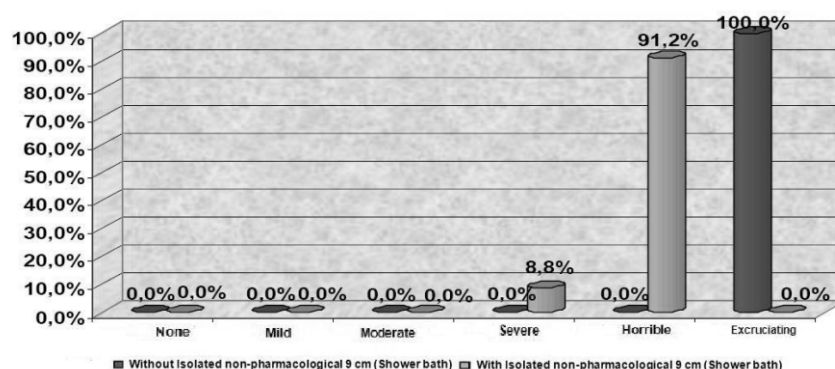


Figure 4. "Before-after" non-pharmacological isolated strategy on its qualitative aspects during 9cm of cervical dilation in parturients involved.

Therefore, is correct to affirm that the implementation of this non-pharmacological isolated strategy during the 8cm and 9cm of cervical dilation in parturients contributed to pain relief in its qualitative aspect, after the implementation of this non-pharmacological isolated strategy.

CONCLUSIONS

With these results, a significant difference was found ($\bar{n}=0,000$) related to the isolated non-pharmacological (shower bath) implementation during the 8cm and 9cm of cervical dilation, which validates the effectiveness of this strategy.

It has been observed that the percentage of pain relief "before-after" non-pharmacological isolated strategy demonstrated a similarity to the extent that the cervical dilation was increased from 8cm to 9cm. These results point to a better effectiveness of this isolated strategy (bath shower) during the final phase of the dilation period (maximum inclination and slowdown).

A relief also had observed on characterization of predominant pain in qualitative aspect at two occasions (8cm and 9cm) when compared on "before-after" shower bath implementation.

Facing the facts is correct to affirm that shower bath is an effectiveness technique to relief and comfort the pain in parturients during active phase of labor.

The findings of this study emphasize the need for clinical research to evidence the use of these and other effective non-pharmacological strategies for labor pain relief, focusing on humanization assistance actions to parturients.

The humanization of labor assistance also implies that the role of health professional respects the aspects of its physiology, does not intervene unnecessarily, recognize the social and cultural aspects of labor and childbirth, and offer the necessary emotional support to the women and her family, facilitating the development of family affective ties and the link mother-baby.

In the way of these conclusions data found in this investigation can contribute to improve the obstetrical practice oriented to labor, especially in its active phase, in order to relief the pain of these women in labor

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SHOWER BATH: AN EFFECTIVE STRATEGY TO PAIN RELIEF IN LABOR**ABSTRACT**

It is a therapeutic intervention type quantitative trial "before-after" used to evaluate the effectiveness of shower bath as a non-pharmacological strategy to minimize the labor-related pain in parturients during the active phase of labor. The study was conducted the Intensive Labor unit (UPH) of Januário Cicco Maternity School (MEJC), in the city of Natal, Northeast Region, Brazil. The study population was composed of parturients with a low-risk pregnancy when they were accepted for labor assistance. The sample comprised 100 women. To evaluate the intensity of pain a Visual Analogue Scale (VAS) was used. The data collection period was developed in 6 months, from September 2005 to February 2006. Observing the implementation of the non-pharmacological "shower bath" during a 8cm and 9cm size of cervical dilation, a significant difference was found ($\bar{n}=0,000$) on two occasions in the active phase of labor, confirming the effectiveness of this strategy. Face the qualitative aspect of pain at two moments (8cm and 9cm) when compared at "before-after" of the isolated non-pharmacological (shower bath) implementation. Is conclusive that shower bath is an effective technique for pain relief and comfort of parturients at maximum acceleration and inclination of labor's active phase. The results of this study indicate the need for clinical research to evidence the use of these and other effective non-pharmacological strategies for labor pain relief, focusing on humanization assistance actions to parturients.

Keywords: Labor, Pain, Women Health.

DOUCHE: STRATÉGIE EFFECTIVE DANS LA RÉDUCTION DE DE LA DOULEUR DE L'ACCOUCHEMENT**RESUMÉ**

C'est un essai clinique, quantitatif, du typ intervention thérapeutique « avant et après », dans lequel s'est objectivé évaluer l'effectivité de la douche comme stratégie non pharmacologique (SNP) dans la réduction de la douleur des parturientes appliqué dans la phase active de l'accouchement. L'étude a été développé dans la Maternidade Escola Januário Cicco (MEJC) de l' Universidade Federal do Rio Grande do Norte (UFRN), dans la ville de Natal, Région Nord-Est du Brésil. La population a été composée pas des parturientes considérés comme des gestations de bas risque quand admises pour l'assistance à l'accouchement, ayant été recherchées 100 femmes. Pour évaluer l'intensité de la douleur, il y a été utilisée l'échelle analogique visuel (EAV). La période de la cueillette des données a été developpé en 6 mois, du septembre 2005 jusqu'au février 2006. Devant l'application de la stratégie non pharmacologique de la douche, une diferece significative a été vérifiée ($\bar{n}=0,000$) quant à l'application de la stratégie non pharmacologique de la douche dans les 8 et 9 cm de dilatation du col utérin, ce que montre l'effectivité de cette stratégie. Il y a été aussi observé soulagement dans l'aspect quantitatif des douleurs dans les deux moments (8 et 9 cm) quand comparés dans le « avant et après » à l'application de la SNP isolée. Il est conclu que la douche est une technique effective dans le soulagement et confort de la douleur des parturientes dans les phases d'accélération et inclination maximum de la phase active de l'accouchement. Les trouvés de cette étude signalent la nécessité d'autres recherches cliniques que focalisent l'usage de cettés et d'autres stratégies non pharmacologiques effectives pour le soulagement de la douleur de l'accouchement, visant des action humanisées dans l'assistace à la parturiente.

Mots-clés: Accouchement, Douleur, Santé de la Femme.

DUCHA: ESTRATEGIA EFICAZ PARA REDUCIR EL DOLOR DEL PARTO**RESUMEN**

Se refiere a un ensayo clínico cuantitativo del tipo intervención terapéutica "antes y después" que tuvo por objetivo evaluar la eficacia de la ducha como estrategia no farmacológica en la reducción del dolor de las mujeres parturientas aplicadas en la fase activa del trabajo de parto. El estudio se llevó a cabo en la Maternidad Escuela Januário Cicco (MEJC) de la Universidad Federal de Rio Grande do Norte (UFRN), en Natal, Región Nordeste del Brasil. La población estuvo integrada por parturientas consideradas de bajo riesgo de gestación cuando permitidas para asistencia al parto, siendo investigados una muestra de 100 mujeres. Para evaluar la intensidad del dolor se utilizó la escala analógica visual (EAV). El período de recogida de datos se desarrolló en 6 meses, a partir de septiembre de 2005 a febrero de 2006. Debido a la aplicación de la estrategia no-farmacológica de ducha, hubo una diferencia significativa ($\bar{n} = 0000$) con respecto a la aplicación de la estrategia no farmacológica de ducha en 8 y 9 cm de dilatación cervical, lo que demuestra la eficacia de esta estrategia. También se observó alivio en el aspecto cualitativo del dolor en dos ocasiones (8 y 9 cm) cuando comparadas con el "antes y después de" la aplicación de la ENF por sí solo. Se deduce, entonces, que la ducha es una técnica eficaz para el alivio del dolor y la comodidad de la parturienta en las fases de aceleración y máxima inclinación de la fase activa del trabajo de parto. Las conclusiones de este estudio apuntan a la necesidad de una mayor investigación clínica para centrar el uso de estas y otras estrategias no farmacológicas eficaces para el alivio del dolor en el parto, objetivando acciones humanizadas en la asistencia a mujer en trabajo de parto.

Palabras clave: Trabajo de parto, Dolor, Salud de la Mujer.

BANHO DE CHUVEIRO: ESTRATÉGIA EFETIVA NA REDUÇÃO DA DOR DE PARTO**RESUMO**

Trata-se de um ensaio clínico quantitativo do tipo intervenção terapêutica "antes e após" no qual se objetivou avaliar a efetividade do banho de chuveiro como estratégia não farmacológica na redução da dor de parturientes aplicadas na fase ativa do trabalho de parto. O estudo foi desenvolvido na Maternidade Escola Januário Cicco (MEJC) da Universidade Federal do Rio Grande do Norte (UFRN), na cidade de Natal, Região Nordeste do Brasil. A população foi composta por parturientes consideradas de baixo risco gestacional quando admitidas para assistência ao parto, sendo pesquisada uma amostra de 100 mulheres. Para avaliar a intensidade da dor utilizou-se a escala analógica visual (EAV). O período de coleta de dados foi desenvolvido em 6 meses, de setembro de 2005 a fevereiro de 2006. Diante da aplicação da estratégia não farmacológica banho de chuveiro, verificou-se diferença significativa ($\bar{n}=0,000$) quanto à aplicação da estratégia não farmacológica banho de chuveiro nos 8 e 9 cm de dilatação do colo uterino, o que mostra a efetividade dessa estratégia. Observou-se também, alívio no aspecto qualitativo da dor nos dois momentos (8 e 9 cm) quando comparadas no "antes e após" à aplicação da ENF isolada. Conclui-se que o banho de chuveiro é uma técnica efetiva no alívio e conforto da dor de parturientes nos estágios de aceleração e inclinação máxima da fase ativa do trabalho de parto. 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.

Palavras-chave: Trabalho de parto, Dor, Saúde da Mulher.