EFFECTIVENESS OF WARM COMPRESS ON REDUCTION OF LABOUR PAIN IN PREGNANT WOMAN – A REVIEW
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ABSTRACT
The therapeutic power of water has been used in hot springs and spa’s used for comfort, healing and relaxation purposes without any clear theoretical basis. Water has healing properties is a view, which remains widely, held by many people. During childbirth a woman is more vulnerable than at any other time in her life. Labour pain has always been a concern of humankind and the subject of efforts to control it. Taking a bath during pregnancy and labour is an old practice. For generations women have been advised to lie in a warm bath during the early stages to help ease the pain. Using warm water provides support for tense muscles, several immediate benefits like relief from discomfort general body relaxation reduces anxiety and decreases adrenaline production. The researcher has reviewed various studies on effectiveness of warm compress on reduction of labour pain in Pregnant Woman in the present article.

Key word: Pregnant woman, Hot water, Therapy, Labour pain, warm compress.

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INTRODUCTION:

Review of literature is a systematic identification, location, selection and summary of written material that contains information on research problems. Literature review is based on the extensive survey of books, Journals, audio visual aids, and international nursing indices. It provides books for future investigations, justifies the need for study of scientific knowledge in a profession discipline from which valid and pertinent theories may be developed.

Mallen, Laura & Rull, C.T. & Riera, M.P. (2015). Research into alternative methods of pain relief during labour is a field in which many advances are been made. Including hydrotherapy during labour is a controversial topic among professional associations. It seems proven its safety during labour, but its use during delivery is a hot topic today. There has been a literature review in order to know the available scientific evidence on the benefits and possible complications in both obstetric and neonatal factors. In the use of hydrotherapy during labour were not detected harmful effects on maternal obstetric parameters studied, instead decreases pain perception and use of analgesia, fewer episiotomies are performed and increases satisfaction birth. The neonatal repercussions, in terms of morbidity for making a water birth, are the most controversial aspect, especially complications aspiration of water or cord breakage.

Afefy, Nagwa. (2015). Effect of Ice Cold Massage and Acupressure on Labour Pain and Labour Duration: A Randomized Controlled Trial. Background: Labour is one of the most painful experiences to women throughout life. This study aimed to compare the effect of ice cold massage and acupressure on reducing labour pain intensity and labour duration in primigravida women. Methods: Design: Randomized controlled trial. Setting: This study was conducted at labour and delivery unit, maternity university hospital, Cairo University, Egypt. Sample: Three hundred labouring women were recruited randomly and allocated to the study and the control groups (ice massage group; acupressure group: and control group. Each group consisted of 100 women. Intervention was exerted in cervical dilatation of 3-4 cm on LI-4 acupoint and intervention period lasted for 20 minutes. Labour pain in the three groups was assessed by VAS and partograph. Labour pain intensity and labour duration were compared in the three groups. Results: There was a significant decrease in pain intensity immediately and 30 minutes after intervention in ice massage and acupressure groups in comparison to the control group (P≤0/003; p<0/002). Moreover the length of first and second stage of labour was significantly reduced (P≤0/003; P≤0/04) in comparison with the control group. Conclusion: Both ice massage and acupressure reduced labour pain intensity and duration of labour in primigravida women, and the ice massage appeared to be more effective in pain reduction.

Ganj, Zhila & Shirvani, Marjan & Rezaei-Abhari, Farideh & Danesh, Mahmonier. (2013) Labour pain is one of the severest pains that cause many women request cesarean section for fear of pain. Thus, controlling labour pain is a major concern of maternity care. Nowadays, interest in non-pharmacological pain relief methods has been increased because of their lower side effects. The effects of discrete heat and cold on decreasing labour pain have been reported but there was no evaluation of the effects of simultaneous heat and cold. The aim of this study was to investigate the effect of intermittent heat and cold on pain severity and childbirth outcomes. This study was a randomized controlled trial. Sixty-four nulliparous women with term, one fetus, and low-risk pregnancy were divided
into the intervention (32 participants) and the control group (32 participants) by random allocation. Excluding criteria were: administration of pain relief drugs, skin disease in the field of intervention, fetal distress, bleeding, fever, and disagreement with participation in the study. Warm and cold packs were used intermittently on low back and lower abdomen during the first phase and on perineum during the second phase of labour. Pain intensity was assessed with Visual Analogue Scale. There were no significant differences in type of delivery, perineal laceration, oxytocin uptake, fetal heart rate, and APGAR between two groups. Local warming with intermittent cold pack can reduce labour pain without adverse effects on maternal and fetal outcomes. It is an inexpensive and simple method. Intermittent local heat and cold therapy is a no pharmalogical, safe and effective method to relief labour pain.

**Taavoni, Simin & Abdolahian, Somayeh & Haghani, Hamid. (2013)** Reduction of labour pain is one of the most important aspects of obstetric care. Heat therapy, typically applied to the woman's back, lower abdomen, groin, and/or perineum during last stage of labour, is an easy pain relief method that does not require highly skilled care. The effectiveness of heat therapy applied to the perineum during the first stage of labour has not been evaluated. This study aimed to evaluate the effectiveness of heat therapy for pain and woman's satisfaction during physiological labour. Heat therapy, an inexpensive complementary treatment with low risk, can reduce the intensity of pain and increase mothers' satisfaction with care during the active phase of labour.

**Fahami, Fariba & Behmanesh, Fereshteh & Valiani, Mahboubeh & Ashouri, Elaheh. (2011)** Labour pain relief has been considered since many years ago. Heat as a non-pharmacological method of pain relief helps reducing the pain intensity and increases the pain consistency. The aim of the study was to determine the effect of the heat therapy on the labour pain in primigravida women. Results of research showed a significant decrease in the pain intensity in the heat therapy group at the first stage and the second stage of labour and comparing two groups showed significant difference (p < 0.001). According to the results of this study, it seems that heat therapy in addition to its beneficial effects, causes the mother to sense the labour pain in a lower pain severity.

**Milanlioglu, Aysel & Tombul, Temel & Sayin, Refah. (2010).** Hot water epilepsy is a unique form of reflex epilepsy precipitated by the stimulus of bathing with hot water poured over the head. It is mostly seen in infants and children, with predominance in males. Unlike, we present a 32-year-old pregnancy woman with the incipient of reflex seizures triggered by pouring hot water over the head while having a bath during the gestation period and treated successfully with carbamazepine 400 mg/day therapy. Hot water epilepsy is known as benign and self-limited reflex epilepsy, by firstly avoiding hot water or long showers and secondly using intermittent benzodiazepines or conventional antiepileptic drugs, may be sufficient to be seizure-free.

**Behmanesh, Fereshteh & Pasha, Hajar & Zeinalzadeh, Mahtab. (2009).** Pain relief for labour, as an acute and severe pain, has been considered for many years. The aim of this study was to determine the effect of heat therapy on labour pain and the time of labour in primigravida women referring to the affiliated hospitals of Babol University of Medical Sciences during 2006-2007. Methods: In this study, 64 nulliparous women were randomly divided into two groups (heat therapy and routine care group). The control group received routine care in the obstetrics ward but the heat therapy group used warm bag for the low back since the cervix dilated about 3-4 cm to the end of the first stage.
of labour and for perinea at the second stage as well as the routine cares. Comparison of the two groups showed a significant decrease in the intensity (severity) of pain in the heat therapy group in the first stage, and on dilatation of 6-7 cm and 9-10 cm, and in the second stage of labour. Also, in the heat therapy group duration of the first and third stages of labour decreased but that of the second stage of labour showed no significant difference between the two groups. Conclusion: According to the results of this study, it seems that heat affects the intensity of pain in the first and second stages of labour and shortens the first and third stages of labour.

Flora Maria Barbosa da Silva et al., (2009) a randomised controlled trial comparing the pain scores of bathing and non-bathing nulliparous women during birth was employed. The study was conducted at the Normal Birth Center of Amparo Maternal, São Paulo, Brazil. When the birthing women presented at 6–7cm of cervical dilation, they were placed in an immersion bath for 60mins. Mean labour pain scores in the control group were significantly higher than those in the experimental group. The present findings suggest that use of an immersion bath is a suitable alternative form of pain relief for women during labour.

Dahlen HG et al., (2007) warm packs are widely used during childbirth in the belief that they reduce perineal trauma and increase comfort during late second stage of labour. The aim of this study was to determine the effects of applying warm packs to the perineum on perineal trauma and maternal comfort during the late second stage of labour. A randomized controlled trial was undertaken. In the late second stage of labour, nulliparous women (n = 717) giving birth were randomly allocated to have warm packs (n = 360) applied to their perineum or to receive standard care (n = 357). Standard care was defined as any second-stage practice carried out by midwives that did not include the application of warm packs to the perineum. Analysis was on an intention-to-treat basis, and the primary outcome measures were requirement for perineal suturing and maternal comfort. The difference in the number of women who required suturing after birth was not significant. Women in the warm pack group had significantly fewer third- and fourth-degree tears and they had significantly lower perineal pain scores when giving birth and on "day 1" and "day 2" after the birth compared with the standard care group. At 3 months, they were significantly less likely to have urinary incontinence compared with women in the standard care group. The application of perineal warm packs in late second stage does not reduce the likelihood of nulliparous women requiring perineal suturing but significantly reduces third- and fourth-degree lacerations, pain during the birth and on days 1 and 2, and urinary incontinence. This simple, inexpensive practice should be incorporated into second stage labour care.

Cluett, Elizabeth & Pickering, Ruth & Getliffe, Kathryn & Saunders, Nigel. (2004). Labouring in water under midwifery care may be an option for slow progress in labour, reducing the need for obstetric intervention, and offering an alternative pain management strategy.

Dutta DC (2004) the first stage of labour has been divided in to three main phases. The latent phase, active and transition phases. The first stage of labour begins with regular uterine contractions and ends with complete cervical dilatation at 10 cm. Friedman say that the latent phase begins with mild, irregular uterine contractions that soften the cervix. The contractions become progressively more rhythmic and stronger. This is followed by the active phase of labour, Acceleration phase with cervical dilatation of 2.5-4cm Phase of maximum slope of 4-9cm dilatation. Phase
of deceleration of 9-10 cm dilatation. A multicentre prospective cohort study was performed between September 2014 and April 2016. A total of 200 pregnant women were selected and assigned to the hydrotherapy group (HG) or the control group (CG) according to desire and availability of use, data collection started at 5 cm dilatation. The instruments used were the numerical rating scale (NRS), use of analgesia, Apgar Test, umbilical cord pH and NICU admission. The use of hydrotherapy reduces pain during labour, and during second stage in women who undergo a water birth and the demand for analgesia decreases in multiparous pregnant women. No adverse effects were seen in infants born under water.

Cammu H, et al. (1994) stated that during the sixteenth century, Amboise Pare discouraged bathing during pregnancy for fear that labour might start prematurely. In 1863 in France it was documented that after 48 hours of labour, an exhausted patient climbed into a hot tub to relax and delivered her infant shortly afterwards in the water. Fraser MD (2003) described labour purely is physical sense; it is the process by which the foetus, placenta and membranes are expelled through the birth canal. Whatever happens during the labour can affect the relationship between mother and baby can influence on future pregnancies. The length of labour varies widely, and it is influenced by parity, birth interval, psychological state, presentation, position of foetus, maternal pelvic shape, size and the character of uterine contractions. Labour is normal, when the mother is at near to term, no complications exist, a single foetus presents by vertex, and labour is completed within twenty-four hours.

CONCLUSION

The pain influences the quality of life during birthing process. So, the hot application on lumbosacral region will help in the reduction of pain. Application of pain reduction technique will help her to tolerate and reduce the intensity of pain. Using warm water provides support for tense muscles, several immediate benefits like relief from discomfort general body relaxation reduces anxiety and decreases adrenaline production. The study of hot application concluded that warm application is one of the simple, effective, non-invasive and cost-effective methods having no side effects on mother and infant. Heat as a non-pharmacological method of pain relief helps reducing the pain intensity.

REFERENCES:
ARTICLES


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