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Review article

### Complementary and alternative approaches to pain relief during labor

\*Angel Rajakumari.G<sup>1</sup>, Sriram N<sup>2</sup>, Soli.T.K<sup>2</sup>

<sup>1</sup>Vice Principal, Department of Obstrectics and Gynecology, Chandana College of Nursing, Suryapet, Andharapradesh, India.

<sup>2</sup>Smt.Sarojini Ramulamma College of Pharmacy, Mahabub Nagar, Andhra Pradesh, India-509001.

<sup>2</sup>Staff Nurse, Paras Hospital, Gurgaon, India.

#### **ABSTRACT**

Complementary and alternative medicine (CAM) practitioners believe in the involvement of body, mind, and spirit to stay healthy and to heal and to reduce pain. They also firmly believe that pregnancy and delivery are not medical conditions, and shouldn't be treated as though they were. But CAM practitioners are not alone in their philosophy more and more traditional physicians are hopping on board the CAM bandwagon, too. Many recommend CAM techniques to their patients — either as an alternative to pain medication, or as a relaxing supplement to it. Even if you're sure that there's an epidural with your name on it waiting at the hospital or birthing center, you'd be wise to explore the world of CAM, too. (And to explore it well before your due date, since many of the techniques take practice or even classes to perfect.) But remember to go only to CAM practitioners who are licensed and certified, not to mention have plenty of experience with pregnancy, labor, and delivery.

**Key words:** Music therapy, Hydro therapy, Relaxation, Meditation, Acupuncture.

#### INTRODUCTION

Pregnancy is a special event. The labour and birth process is an exciting, anxiety provoking situation for the women and her family. The time of labour and birth, though short, in comparison with the length of pregnancy, is the most dramatic and significant period of pregnancy for the expectant women.

Most pain during childbirth results from normal physiologic events. If nurses understand the nature and effects of pain during the labour process they will be better prepared to provide supportive care. Physical comfort includes offering a variety of non-pharmacologic and pharmacologic intervention. Even.though delivery is a natural phenomenon, it has

been demonstrated that the accompanying pain is considered severe or extreme in more than half of cases. Besides conventional approaches, such as epidural analgesia, many complementary alternative methods have been reported to reduce pain during labor and delivery. Not every woman wants traditional pain medication. Many moms-to-be want their labor and delivery to be as natural as possible (and for women who are recovering from drug and alcohol abuse, analgesics are usually a nono), but still as comfortable as possible.1 Complementary alternative medicine (CAM) practitioners believe in the involvement of body, mind, and spirit to stay healthy and to heal and

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<sup>\*</sup> Corresponding author: Angel Rajakumari.G

to reduce pain. They also firmly believe that pregnancy and delivery are not medical conditions, and shouldn't be treated as though they were. But CAM practitioners are not alone in their philosophy more and more traditional physicians are hopping on board the CAM bandwagon, too. Many recommend CAM techniques to their patients — either as an alternative to pain medication, or as a relaxing supplement to it. Even if you're sure that there's an epidural with your name on it waiting at the hospital or birthing center, you'd be wise to explore the world of CAM, too. (And to explore it well before your due date, since many of the techniques take practice or even classes to perfect.) But remember to go only to CAM practitioners who are licensed and certified, not to mention have plenty of experience with pregnancy, labor, and delivery.2

### ALTERNATIVE SYSTEMS OF MEDICAL PRACTICE

#### ACUPUNCTURE AND ACUPRESSURE

The Chinese have known for thousands of years that acupuncture is an effective form of pain relief but it's only recently that the rest of the world, as well as the traditional medical community, has started to catch on. Scientific studies now back up the ancient wisdom; researchers have found that, among other not-well-understood effects, acupuncture triggers the release of several brain chemicals, including endorphins, which block pain signals. acupuncturist inserts dozens of thin needles at prescribed points along invisible paths (or meridians) on the body. According to ancient tradition, the paths are the channels through which chi, the body's life force, flows. Researchers have found that the points correspond to deep-seated nerves, so that when the needles are twirled (or electrically stimulated, in a procedure known as electropuncture), the nerves are activated, leading to the release of endorphins and painrelief.<sup>3</sup>

#### **EXERCISE**

Exercise includes active-passive movements, bed movements and ambulation. Exercise increases the movement and provides continuity thus increasing the blood flow, preventing spasm and contractures of the muscles and relieving the pain (Musclow et al., 2002). Positioning It is applied to help or support the

patient. This application can be supported by pillows, special beds and weight lifting. Position changes, which prevent the subsequent development of pain and reducing the acute pain, also increase the blood flow and prevent muscle contraction and spasms. Positioning has been determined as the most common post-operative non-pharmacological method.<sup>4</sup>

#### MASSAGE

Massage is a manipulation applied on the soft tissue with various techniques (such as friction, percussion, vibration and tapotement) for recovery and supporting health. It is thought that the massage relieves the mind and muscles and increase the pain threshold (Karagöz 2006). Peripheral receptors on the body are stimulated with massage and stimulants reach the brain by means of spinal cord. In addition to pleasant feeling, a general relief is provided here. It is underlined that especially therapeutic massage is effective on chronic lumbago and that effect is stated to be a short term effect.<sup>5</sup>

#### **HYDROTHERAPY**

Using water for treatment by means of thermal springs, potable water resources and other methods is defined as "hydrotherapy" while using the water for therapy by means of temperature effect is defined as "hydrothermal treatment". Effect of hydrotherapy is related to its mechanical or thermal effect. Hot application stimulates the immune system, provides hormones that are suppressing the stress to be released, stimulates the circulation and digestion systems, increases the blood flow and provides muscle relaxation thus reducing the sensitivity developed against the pain.<sup>6</sup>

#### COGNITIVE-BEHAVIORAL THERAPIES

Cognitive-behavioral therapies are a part of multimodal approach in pain management. These attempts affect not only the pain level but also helps the patients to establish a management feeling of their selves while dealing with pain and develop management behaviors and improved self-esteem. Cognitive-behavioral therapies can generally be applied by all members of the pain team. Most of the special techniques can be learned and applied by doctors, nurses, social service specialists and psychologists.<sup>7</sup>

#### RELAXATION

Relaxation techniques cause an increase in slow brain waves in EEG by decreasing oxygen consumption, blood pressure, respiration amount and the number of pulse. Therefore, it is stated that the sensitivity developed against the pain should be prevented by means of these techniques.<sup>8</sup>

#### DISTRACTION

Getting the attention away from the pain reduces its severity. The aim in using that technique is to increases the tolerance for pain and decrease the sensitivity for pain. This method includes listening to music, watching television, reading books and dreaming. There are some sources which supports that distraction is a method used in decreasing the pain.<sup>9</sup>

#### NON-PHARMACOLOGICAL THERAPIES IN PAIN MANAGEMENT PRAYING

Most of the individuals with chronic pains use the praying method. It is indicated that praying has positive results for decreasing the body pain in old people and relieving their physical functional disorders and it is suggested to use the praying method in order to reduce the depression and anxiety that is caused by chronic pain. <sup>10</sup>

#### MEDITATION

In the traditional meaning, meditation is generally focusing on the moment. Meditation; can also be defined as focusing on the present. This act is realized with an individual focusing on his own respiration, a word or picture. Duration of the meditation can last from a few minutes to 30 minutes or take more considering the fact that meditation helps relaxation, it is thought to be effective in relieving the pain. <sup>11</sup>

#### **YOGA**

Yoga is providing relaxation by using respiration exercises and meditation with slow movements. It is considered that it can be useful against musculoskeletal pain in terms of using physical stretching moves and increasing strength (Dillard & Knapp, 2005). Individuals that use yoga have stated that they believe in the benefit of this method and it is

a cost-effective method. It is stated in a study that applying yoga for 16 weeks has cured the chronic lumbago. <sup>12</sup>

#### **HYPNOSIS**

Hypnosis; it is the state of conscious change similar to sleep. Hypnosis requires the body to relax and the patient to focus on an object, a stimulant or memory. Hypnosis is "the deep physical relaxation state during which subconscious can be reached and important abilities are suspended". In this state, ability of people to be dominated increases hypnosis application has decreased pain and anxiety level in patients. <sup>13</sup>

#### **BIO-FEEDBACK**

Biological feedback is based informing the patient in order to help relaxation or control a physiological function. For example, in cases of tension type headache, it is provided for the electrical activity received by means of head muscles and facial muscles to be perceived as colors or sounds by the patient. Thus, observing the color changes or decreases in the sound, Pain Management – Current Issues and Opinions the patient understands whether the relaxation occurred or not.

#### **BEHAVIORAL THERAPY**

Aim of this therapy is to increase the functional level of the patient decrease the maladaptive behaviors and firstly reduce and then completely stop painkiller usage. The family is trained by the treatment team; description of pain (grimacing, moaning, and remaining motionless) is avoided and well-adaptive behaviors such as physical activities are reinforced.<sup>14</sup>

# OTHER NON-PHARMACOLOGICAL THERAPIES REFLEXOLOGY

Reflexology is a technique that is based on the principle that suggests there are reflex points on our feet corresponding to all parts of our bodies, all organs and systems and these points are the mirrors of the body anatomy. Pressure applied to these reflex points by special hand and finger techniques provides the stress to be relieved and cause physiological changes and a reduction in pain perception.

#### HERBAL TREATMENTS

Herbal medicine is using the chemical materials obtained from inside, root, leave, seed and flower parts of the herbs for treatment (Karagöz 2006). Today, most individuals use herbal Non-Pharmacological Therapies in Pain Management. Products in addition to their medical treatments with drugs without consulting to any professional. <sup>15</sup>

#### **AROMATHERAPY**

Aromatherapy is using the essential oils that are obtained from flowers, herbs and trees to improve health and well-being. These oils are applied by being respired through oily gauze that is placed under the nostrils of the patient or as massage oils being applied on skin. It has been evidenced that the aroma oils reached the lymph system by means of blood circulation and provided recovery by means of intercellular fluids. <sup>16</sup>

#### **CHIROPRACTICS**

Chiropractics is the neck-pulling movement used in treatment of the disorders in connective tissues and musculoskeletal system which consists of muscles, joints, bones, tendon, cartilage and ligaments. The main principle of this approach is the fact that to relieve the pain and to improve health with the

applications made on spine and joints which have had a positive effect on neural system and natural defense mechanisms.

#### **MUSICAL THERAPY**

Many studies that have been conducted have sown that the music had positive effects on pain and anxiety and increased the living quality of the patient or healthy individuals. Music reduces heart rate, blood pressure, body temperature and respiration rate and it distraction the attention of the patient to another point thus reducing the pain perception and reducing especially the nausea due to chemotherapy so that increasing living quality of patients in terminal period of cancer

#### **CONCLUSION**

Complementary and alternative medicine can be defined as methods that are not currently part of the dominant or conventional medical system. CAM exists because conventional medicine can be limited in its ability to provide relief and to meet patients' needs. CAM and conventional medicine share the responsibility for applying evidence-based practice and for seeking scientific proof to justify a planned intervention, as well as the obligation to avoid harmful or useless practices.

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