INTRODUCTION

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The pain of childbirth is one of the most severe pain most women will expirence in their lifetimes. The pain of the early first stage of labour arises from dilation of the lower uterine segment and cervix. Pain from the late first stage and second stage of labour arises from descent of the fetus in the birth canal, resulting in distension and tearing of tissues in the vagina and perineum. Pharmacological and non pharmacological methods used for labour analgesia **But** ,in recent years, there has been increase demand for non -pharmacological analgesia during childbirth as many women would like to avoid pharmacological or invasive methods of pain management in labour and this may contribute towards the popularity of complementary methods of pain management. One of the complementary methods is acupuncture which was found by many researches to provide an effective non pharmacologic pain relief **(Ramnero et al 2002).**

Acupuncture is an ancient Chinese practice that dates back more than 2,000 years. It's based on the theory that energy flows through the body in channels known as meridians. Stimulating specific areas close to the skin known as acupuncture points with hair-thin needles is thought to correct imbalances or disruptions in this energy flow **(Budd.2000)** .The name Acupuncture is derived from the Latin words i.e. Acus meaning needles and Punctura - To Penetrate. Today, the needles are twirled, heated, or even

stimulated with weak electrical current, ultrasound, or certain wavelengths of light.

Endorphins, Endo-means endogenous, phin -morphine like action, are endogenous opioid polypeptide compounds. They are produced by the pituitary gland and the hypothalamus during strenuous exercise excitement, and orgasm, and they resemble the opiates in their abilities to produce analgesia and a sense of well-being **(Bergal et al 1993).**

Chemically, endorphins are classified as opioid-peptides which have 16-31 amino acids in their polypeptide chain. There are three main families of opioid-peptides including the endorphins, the enkephalins and the dynorphins. To date, four groups of endorphins (alpha, beta, gamma and sigma) have been identified. Beta-endorphins are the most potent endogenous opioid that affects both physiological and mental processes. The effects range from central nervous system and peripheral nervous system analgesia and pain modulation to effects on neuro-endocrine control of reproduction, stress, spontaneous behaviour and motivation **(Bergal et al 1993).**

Acupuncture and electroacupuncture (EA) as complementary and alternative medicine have been accepted worldwide mainly for the treatment of acute and chronic pain. Studies on the mechanisms of action have revealed that endogenous opioid peptides in the central nervous system play an essential role in mediating the analgesic effect of EA. Further studies have shown that different kinds of neuropeptides are released by EA with different frequencies. For example, EA of 2 Hz accelerates the release of enkephalin, beta-endorphin and endomorphin, while that of 100 Hz selectively increases the release of dynorphin.

A combination of the two frequencies produces a simultaneous release of all four opioid peptides, resulting in a maximal therapeutic effect **(Lett 2004).**