

Effect of Back Massage and Relaxation Training on The Act of Labor: A Randomized Controlled Clinical Trial

Marwa A. Mohamed^{1*}, Adel F. El Bigawy²

¹**Women's Health Department, Faculty of Physical Therapy, Cairo University, Egypt**

²**Obstetrics and Gynecology Department, Faculty of Medicine, Cairo University, Egypt**

Abstract : Aim: This study was conducted to examine the effects of back massage and relaxation training on the act of labor.

Background: However, Labor pain is often described as the worst pain in a woman's life many women would like to avoid pharmacological or invasive methods of pain management in labor to stay clear from its adverse effects.

Methods: Fifty eligible full term primigravidae women with cephalic presented normal singleton fetus were participated in this study. They were all complaining from true labor pain and expected to deliver normally within few hours; women were divided randomly into two equal groups. The control group (A) received only traditional maternity ward care while females in the study group (B) received traditional maternity ward care as well as sets of massaging techniques and relaxation training at the active phase of 1st stage of labor. Evaluation was done by measuring labor pain precipitation intensity by using Present Pain intensity scale (Ppi), duration of the first stage of labor, mode of delivery and blood serotonin level. Initial evaluation was done when cervical dilatation became $\geq 3\text{cm} \leq 5\text{cm}$ then repeated at 7-8 cm of cervical dilatation for both groups.

Results: The two groups did not differ by age, body mass index, gestational age, cervical dilatation at the time of hospital admission. Compared with those in the control group (A), women in the study group (B) showed a statistical significant decrease $p<0.001$ in labor pain, duration of 1st stage of labor by about 12.35% and statistical significant reduction in incidence of caesarian section with great elevation of blood serotonin level by 96%.

Conclusion: It could be concluded that back massage and relaxation training considered as an alternative, safe, affordable and most inexpensive yet effective method of relieving pain in the 1st stage of labor, shorten its duration and reduce the rate of cesarean deliveries in addition to increasing blood serotonin level. Also, it can assist women to have empowered birth experiences, reduce the negative impact of labor on women leading to reduce the likelihood of a woman choosing an elective cesarean delivery in a subsequent pregnancy.

Key word : back massage, relaxation training, labor.