

## Introduction

Labor is a hard work for the mother to perform, especially the primigravida mother for the longer period of labor and the various emotions the mother gets during labor. The mother admitted to the labor ward with a lot of fear, tension and pain, she feels in need for a person who can provide help, assistance and reassurance for her. The nurse role is to help the mother and assist her in order to reduce her fears and tension by offering all means of comfort and reassurance. The effect of breathing and relaxation techniques on labor pain was studied by many investigators, breathing and relaxation techniques were found to be the most helpful means for helping the mother during labor to reduce pain and discomfort.

Relaxation techniques is the non pharmacological method of pain control during labor (*Steer, 1997*). This technique consists of a series of instructions and movements which help the body to move away from the posture caused by tension and so achieve position of comfort, ease and relaxation. Following each individual instruction and movement any tension in that part of the body will disappear (*Ruth, 2001*).

Relaxation has been of the cornerstones of prepared childbirth which enhance comfort and decrease the number of pain impulses that are recognized by the brain (*Bobak, 1995; sloane, 1997*).

Promoting relaxation provides abase for all other methods both pharmacologic & non pharmacologic, because it does the following: (*Gorrie, 2000*).

- Promotes uterine blood flow, improving fetal oxygenation.
- Promotes efficient uterine contraction.
- Reduce tension that increases pain perception and decreases pain tolerance.

- Reduce tension that can inhibit fetal descent.

Different approaches to childbirth preparation present a variety of techniques for using breathing as a tool to help the woman maintain control through contractions (*Gorrien, 1994*). In the first stage, breathing techniques can promote relaxation of abdominal muscles and thereby increase the size of abdominal cavity, This lessens friction and discomfort between the uterus and the abdominal wall. The muscles of the genital area also become more relaxed, yet they don't interfere with descent (*Donna, 1998*). In the second stage, breathing is used to increase abdominal pressure and thereby assist in expelling (descent)of the fetus. It is also used to relax the pudendal muscles to prevent precipitate expulsion of the fetal head (*Phillips, 1994*).

Accordingly the four major breathing techniques commonly used in childbirth preparation are slow paced breathing, modified paced breathing, patterned paced breathing and physiologic breathing techniques for pushing (*Martin, 1998*). All techniques can be individualized to promote optimum relaxation, oxygenation and adequate respiratory function without tiring the woman unnecessarily. In addition, in determining the pace and depth suitable for each women, the birth attendant should consider body position, woman's usual respiratory rate, learned breathing techniques and the progress of labor (*Beck, 1993*).

A comfortable position is important for effective relaxation and efficient respiration. The supine position will interfere with the progress of labor and cause undesirable intra-abdominal pressure on the large blood vessels with consequent supine hypotention. the woman is encouraged to use sitting, side – lying, or more upright position are to be preferred (*Willians & wilkins, 2001*).

- Maternal positioning is the primary measure to promote placental function during normal labor. The woman can choose any position other

than the supine. the supine position allows her heavy uterus to compress her aorta and inferior vena cava (aorta caval compression). Reducing blood flow to the placenta thereby fetal oxygenation, and inhibits effective uterine action (***Ruth, 2001***).

Music offers an adjunct to other pain-reducing techniques it prompts positive associations aids rhythmic breathing, and distracts the client from environmental noises that might increase anxiety (***Martin, 1998***).

Common relaxation techniques include breathing techniques, proper positioning touch, gentle abdominal massage (effleurage), Other message, thermal stimulation (cold or warm compresses) and music (***Gorrie, 1998***).

The practices are experienced as useful by many women, they are harmless and be recommended (***Simkin, 1995***).

However, few researches (***Fahmy, 1985; Tosson, 1988; Ahmed, 2001 & Abd-El-Azeem, 2002***) they examined the effect of breathing and relaxation techniques and they found that techniques was helpful in reducing pain and improve labor & neonatal outcomes. Additionally (***Atteia, 2003***) Studied the effect of positioning & heat application, they found that it comfort laboring woman. At Benha university hospital all birth attendants (obstetricians, & nurses) have lacked to demonstrate / or discuss through researches the effect of different relaxation techniques including breathing patterns, positions & music on obstetrical outcomes. So, in the present study, the researcher will try to evaluate the effect (s) of breathing and relaxation techniques on: maternal, fetal and labor outcomes.