

SUMMARY

The nurse plays an important role in providing pharmacological and non-pharmacological pain relief measures for laboring woman such as breathing and relaxation techniques, also play a more important role in providing non-pharmacological management, which needs no medical order (*Corrie, 1998; Bennet and Brown, 1999*). There are several advantages to non-pharmacological methods. As they do not harm mother or fetus, they do not affect progress of labor, they provide adequate pain control and they carry no risk for allergy or adverse drug effects (*Thompson, 1997*).

Clinical trial study was conducted at the labor and delivery rooms of Benha University Hospital during the period from April 2003 February 2004 in order to assess the effect of using breathing and relaxation techniques during labor.

The sample size consists of 200 mothers who were randomized into either the intervention who used breathing and comfortable position during labor and delivery and listening quiet music until the end of first stage (100 parturient mothers), and the other group called non intervention group (100 mothers)

Inclusion criteria for selection were primigravidas, 18-35 years of age, normal full term pregnancy without any medical and obstetric complications, single fetus, inactive phase of labor, cervical dilatation (3-4 cm), no indication for C.Ss.

Study tools included an interviewing questionnaire, follow up sheet (partogram) and the visual analogue scale for reporting the scores of labor pain. In addition, the apgar scores were evaluated for the baby

at 1 and 5 minutes after labor and an opinionnaire was designed and applied to assess mother's satisfaction for natural measures relief used.

The majority of women in the control and intervention groups had fears from labor on admission (92% . 95% respectively). Reasons of that fear included mainly labor pain and unknown out comes after 4 hours of practicing breathing and relaxation techniques all women in the non intervention group had fears from labor (100%) while (34%). Of intervention group had fear from labor pain. High percent of reasons fears among concern group included labor and un-known out-comes (43%). 33% (respectively) while high percent among intervention group included concern about the baby and unknown out comes (13%, 11%respectivel) there was statistically significant difference among groups.

- Mean score level of labor pain for women of intervention group was 7.01 at admission, 5.49 after 2 hours and become 5.03 after 4 hours while it increased in the non intervention group.
- After intervention vital signs among groups (blood pressure, pulse, respiration except temperature) were significantly different.
- The present study concluded the use of breathing and relaxation techniques during labor impact in improve progress of labor and shorting its duration.
- Almost women in the non intervention and intervention groups had normal vaginal delivery. Management was mainly by ventouse or caesarean section.
- Intrapartom complications among women in the non intervention and intervention groups were in the form of cervical laceration (3%, 1%, respectively), perineal tears (5%, 3% respectively) and one case of intrapatum hemorrhage occurred in the non

intervention group. Differences between among groups as regard occurrence of intrapartum complications were not significant ($P > 0.05$).

- Fetal heart rates were not significantly different between groups on admission while after 4 hours of practicing breathing and relaxation techniques, the difference between two groups were statistically significant.
- Apgar scores at one and five minutes for newborns of women among groups were significantly different ($p < 0.001$).
- Women in the intervention group were mostly satisfied with the used method and they stated that they prefer to use it in their future pregnancies.
- Almost relationships between sociodemographic data, maternal, fetal and labor outcomes were not statistically significant different.
- The present study recommended that all pregnant women, especially primigravidas, should be psychologically prepared for the experience of labor; use of pharmacological measures for pain relief during labor should be strictly limited and replaced by natural measures; breathing and relaxation techniques, nurses and birth attendants should learn about natural methods for pain relief.