

## Effects of Abdominal and Pelvic Floor Muscles Training and Breathing Exercise During the Third Trimester of Pregnancy

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**Objective:** This research was to study the effects of abdominal and pelvic floor muscles training and breathing exercise in the third trimester of pregnancy on delivery outcomes and low back pain in primigravidas.

**Methods:** Randomized controlled trial was designed in 101 primigravidas who attended the pre-natal clinic at King Chulalongkorn Memorial Hospital between May and October 2000 into 3 groups for the experimental 1 (Ex1), experimental 2 (Ex2) and control groups. The Ex1 received the breathing exercise program. The Ex2 received the pelvic tilt and breathing exercise program. All three groups received routine care .

**Results:** The rate of normal labor in the Ex2 was slightly higher than the Ex1 and the control but the difference were not significant (  $p > 0.05$ ). The mean delivery time in the second stage of labor in the Ex1 and Ex2 were statistically significant shorter than the control (  $p < 0.05$  ) but the Ex1 and Ex2 were not different (  $p > 0.05$  ). The mean score of low back pain in the Ex2 was statistically significant lower than the Ex1 and control (  $p < 0.05$  ).

**Conclusions:** These exercise programs in the third trimester can shorten the second stage of labor and reduce low back pain during pregnancy.