

ABSTRACT

The pelvis plays an important role in childbirth. By measuring pelvic dimensions we can infer the possible problems that could occur during childbirth. The main aim of our study was to investigate the length of labour and length of each stage of birth and determine whether pelvic dimensions affect the length of labour.

The basis of our study is anthropometric data of 140 mothers and their newborns (71 boys, 69 girls) born from April 2012 to March 2013 at the Institute for the Care of Mother and Child in Prague Podolí. Mothers were measured 4 pelvic dimensions, newborns 3 neonatal peripheral dimensions. Somatic characteristics of mothers were determined using questionnaires.

Maternal age has neither effect on pelvic dimensions and size of the pelvis or correlates with parity. We were able to demonstrate the most distinctive reliance of labour length on parity. The increasing number of births reduces the total length of labour. Parity affects all three stages of birth. We were able to determine that the length of stages of birth is partly influenced by pelvic width (is-is, ic-ic), contraception, birth-length of newborn. We were also able to demonstrate the effect of abortion.

From the results of our analysis it's quite obvious that maternal parity plays the most important role in influencing the duration of the three stages of birth.

Key words: pelvis, pregnancy, childbirth, length of labour, parity, newborn, pelvic dimensions