

The relationship between anterior pelvic tilt and pregnancy-related low back pain among pregnant women during their third trimester attending selected government maternity hospitals in the Colombo District

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Pregnancy-related low back pain (LBP) is a common musculoskeletal complaint, especially during the third trimester, often attributed to hormonal, biomechanical, and postural changes such as anterior pelvic tilt (APT). This study aimed to investigate the relationship between APT and pregnancy-related LBP among third-trimester pregnant women attending selected government maternity hospitals in Colombo District, Sri Lanka. A descriptive cross-sectional study was conducted at De Zoysa and Castle Street maternity hospitals, involving 138 pregnant women aged 18–35 years, selected using a convenient sampling method. Data were collected using an interviewer-administered questionnaire to obtain demographic details. Pain severity was assessed using the Visual Analog Scale (VAS), and APT was measured using a pelvic inclinometer. Data analysis was performed using SPSS version 25.0, with Spearman's correlation test applied due to the non-normal distribution of data. Results showed a mean age of 26.41 ± 4.29 years, mean pain severity of 47.9 ± 25.2 mm, and mean APT angle of $13.42^\circ \pm 4.21$. A statistically significant moderate positive correlation ($r = 0.53$, $p < 0.01$) was found between APT and pregnancy-related LBP. The findings suggest that as APT increases, LBP severity also tends to rise.

Keywords: *Pregnancy-related low back pain, Visual Analog Scale, Anterior pelvic tilt, Pelvic inclinometer*