



The effect of anxiety and depression levels on low birth weight and prematurity

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Objective

Pregnancy and childbirth seems to be a normal life event, but they can be a major source of stress for a woman. Every pregnant may experience mild or severe anxiety during this period. This emotional change, may affect one's activities, social life and personal relationships negatively and in some cases one can develop severe psychiatric disorders requiring hospitalization. We aimed to investigate whether maternal depression or anxiety levels have an effect on premature birth or low birth weight.

Methods

This study was carried out at a university hospital pregnancy outpatient clinic. The study was conducted with 233 pregnant women having a normal pregnancy in the third trimester, who did not have any physical disabilities, no psychiatric diagnosis and treatment, and no problems during the pregnancy and delivery. A 16-item personal information form, Hospital Anxiety Depression Scale (HAD) and a Temperament Evaluation of Memphis, Pisa, Paris, San Diego Autoquestionnaire (TEMPS-A) scale were used to identify participants. SPSS 15 Statistical Software (USA) program was used for statistical analysis. Descriptive statistical methods (mean, standard deviation, frequency), as well as Mann Whitney-U test for quantitative data were used to evaluate the data. A p value of <0.05 considered as significant. Spearman's correlation test (non-parametric correlation) was used to determine if there was a correlation between the two sample groups.

Results

According to the hospital anxiety and depression scale; the anxiety rate in the study was 20.86%, and the depression rate was found to be 17.39%. There was a significant positive correlation between the gestational week at birth and birth weight (correlation coefficient 0.649). Significant positive low-order correlations were found between anxious temperament and birth week and birth weight (correlation coefficient 0,217 and 0,189). Statistically significant correlation was found between low birth weight and anxious temperament score ($p=0.021$). Also, there was a statistically significant correlation between preterm delivery and anxious temperament ($p < 0.001$).

Conclusion

Mother with higher anxiety levels have an increased risk of premature delivery and fetuses with lower birth weights.

Table 1. The relationship between temperament scores and birth week

	Anxious	Cyclothymic	Hyperthymic	Irritable	Depressive
Correlation coefficient	0,217	-, 051	-,048	-,042	-,076
P value	0,001	0,443	0,468	0,523	0,248

Table 2. The relationship between temperament scores and birth weight

	Anxious	Cyclothymic	Hyperthymic	Irritable	Depressive
Correlation coefficient	0,189	-,017	-,034	-,059	-,078
P value	0,004	0,796	0,610	0,367	0,236