Maternal stress and circadian cycle of the fetus

This paper is an extension of a doctoral research work where it is found that administrative personnel and bureaucrats are having more occupational stress than other working conditions for women. Stress is recognized as one of the most harmful factors for pregnant women. Thus, this study is an attempt to describe the differential relationship between the maternal stress with the circadian rhythmic effects (the activity and arousal level) of the fetus, by choosing 50 pregnant women (25 stressful Ss and 25 non-stressful Ss) out of 350 total subjects who were previously tasted for their occupational stress. All the 50 women in their gestation age of 32-40 weeks were observed for four shifts in a day (morning, noon, evening and night) for two consecutive days. The Maternal Heart Rate (MHR), Fetal Heart Rate (FHR) and the locomotor activity of the fetus were recorded with proper care of the doctors in specially prepared medical conditions. It is found that there is a significant relationship between MHR and FHR with regard to their activity and arousal cycle. When the mother is in stress, there is a change in the locomotor activities of the fetus. The study implicates the analysis of human time structure from the pregnancy which can be predicted, controlled and modified in their future life schedules.

Biography

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