

# Regular Physical Activity during Pregnancy Improves Maternal Depressive Symptoms

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Dear Editor,

Depressive symptoms, such as extended feeling of sadness, decreased self-esteem, suicidal propensities, unconcern in activities, feelings of hopelessness and helplessness, low energy, difficulty in making decisions, sleep disorders, anxiety, petulance, and changes in eating patterns are related with an increased risk of health conditions such as osteoporosis, cardiovascular diseases, and dementia.<sup>[1]</sup> Women of childbearing age of about 22% have been estimated to have experienced depression at some point in their lives and pregnancy is a vulnerable time for depression compared with other periods of life.<sup>[2]</sup>

Depression is found to be higher during pregnancy than that in the postpartum period of childbearing women which was shown to be 10% - 30% prevalent in several studies.<sup>[3]</sup> Progesterone and oestrogens are found to be in large quantity during pregnancy period and are likely the cause of depression during pregnancy, it influences the neural structures that are known to be important in regulating mood by raising the sensitivity to changes in levels of b-endorphins and dopamine.<sup>[4]</sup>

Depressive symptoms that occur during pregnancy period have a negative impact on the child which include behavioural problems at the early few months of life, impaired development of child's cerebrum, risk of preterm deliveries, difficulties in mother-infant bonding, difficulties in feeding by infants and problems with childhood overweight, decreased birth weight, and lengthier hospital stays.<sup>[5]</sup>

Probable antidepressant side effects on mother and the foetus as a result of pharmacological treatment at the time of pregnancy is not suggestive<sup>[6]</sup> therefore, Former studies have supported the antidepressant effects of exercise in the general population including pregnant women<sup>[7]</sup> and scientific evidence has proved that exercise at the time pregnancy does not lead to adverse effects on mother and her foetus, though significant improvements on psychological factors was seen.<sup>[8]</sup>

In a recent randomised control trial, a well controlled 3 months aerobic exercise improves depressive symptoms during pregnancy period.<sup>[9]</sup> Pregnant women on their own have acknowledged that exercise is a paramount aspect of postnatal well-being but despite the beneficial effect of Physical activity

in the improvement of health, pregnant women have stated difficulties continuing with exercise in the postnatal period.<sup>[10]</sup>

In conclusion, engagement in Physical activity at the time of pregnancy does not lead to any adverse effects on mother and her foetus during pregnancy but improves maternal depressive symptoms. Pregnant women are encouraged to participate in at least three months supervised and prescribed moderate aerobic exercises.

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