

## LETTER TO EDITOR

# Effect of Exercise on Anxiety and Depression

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To,  
The editor,

The phrase, sound mind in a sound body was at first used by Homer in ancient Greece<sup>1</sup>. Today anxiety and depression have become one of the most common disorders, not only in the developed world but also in Pakistan. They represent a significant component of the global burden of disease, and are proposed to become the second most common cause of disability by 2020<sup>2</sup>. Research on depression and anxiety has shown that physical exercise is a newer modality to improve mood and decrease anxiety. For mild to moderate depression, the effect of exercise parallels psychotherapy as well as pharmacotherapy. Even for severe depression, exercise appears to be a valued adjuvant therapy to the conventional medical treatment<sup>3</sup>.

At present the mechanisms by which regular exercise helps to relieve depression and anxiety are not completely understood. However, some biological pathways have been suggested; e.g., by releasing endorphins, increased central norepinephrine neurotransmission, changes in the hypothalamic adrenocortical system and increased secretion of atrial natriuretic peptide, as well as serotonin synthesis and metabolism, all of which make the person sure of ones' self. It also has a psychological aspect, as it diverts one's attention off worries so individual gets away from the cycle of negative thoughts which aggravate depression and anxiety<sup>4,5</sup>.

There are certain limitations which do not allow us to benefit fully from the fact that physical activity elates mood and inculcates the feeling of well being in people. In a study done on a large sample size including 19,288 participants, from 1991–2002, has shown that overall prevalence of exercise participation (with a minimum of 60 minutes weekly at 4 METs (Metabolic Energy

Expenditure Index) was 51.4%. Exercise participation strongly decreased with age from about 70% in young adolescents to 30% in older adults<sup>6</sup>. This shows that the age group which more often presents with mood disorders, needs to be motivated more.

In conclusion, physical exercise is a pleasant and enjoyable activity which improves the quality of life. There is no better 'drug' to help eliminate depression, and suppress anxiety than exercise. Even half hour a day will go a long way.

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Received: 04-09-2017

Revised: 15-09-2017

Accepted: 29-09-2017