Exercise for depression: Some benefits but better trials are needed

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Exercise may benefit people suffering from depression, according to an updated systematic review published in *The Cochrane Library*. The authors of the review found evidence to suggest that exercise reduces symptoms of depression, although they say more high quality trials are needed.

Worldwide, more than 120 million people suffer from depression. Antidepressants and psychological therapies are recommended as effective treatments for depression. However, antidepressants have side-effects and some people prefer not to receive, or may not have access to, psychological therapies. Physical exercise is also used as a treatment for depression. There are a number of reasons why it might work such as changing hormone levels that affect mood or providing a distraction from negative thoughts.

The previous version of the Cochrane review found only limited evidence of benefit for exercise in depression. However, more trials have now been completed, leading researchers to carry out a further update. Altogether, they reviewed the results of 39 trials involving 2,326 people diagnosed with depression. The severity of patients' symptoms was assessed using standard scales of depression.

In 35 trials comparing exercise with control treatments or no treatment, the researchers saw moderate benefits of exercise for treating depression. Exercise was as effective as psychological therapy or taking antidepressants, although these findings were based on only a few, small,
low quality trials.

"Our review suggested that exercise might have a moderate effect on depression," said one of the authors of the review, Gillian Mead of the Centre for Clinical Brain Sciences at the University of Edinburgh in Edinburgh, UK. "We can't tell from currently available evidence which kinds of exercise regimes are most effective or whether the benefits continue after a patient stops their exercise programme."

Conducting high quality trials involving exercise can be problematic. For example, it is difficult to conceal which patients have been allocated to treatment groups, and which have been allocated to control or no treatment groups. Therefore, the researchers carried out a separate analysis focusing on the high quality trials. In these six trials, the effect of exercise was weaker.

"When we looked only at those trials that we considered to be high quality, the effect of exercise on depression was small and not statistically significant," said Mead. "The evidence base would be strengthened by further large-scale, high quality studies."


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