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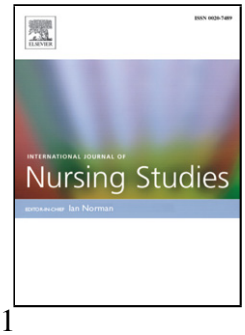

Title: Yoga for epilepsy: A Cochrane review summary

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Cochrane Nursing Care Field (CNCF) – Cochrane Review Summary

Yoga for epilepsy:A Cochrane review summary

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Background

Epilepsy is a relatively common disorder in which abnormal electrical activity in the brain can cause seizures and temporarily affect how it works. Antiepileptic drugs (AEDs) can control most seizures, but resistance to these drugs can occur, making seizures more frequent.

It is estimated that 25%-40% of individuals treated with AEDS can experience adverse drug reactions, uncontrolled seizures and a high level of psychiatric illnesses when compared with other chronic diseases, and affected individuals can feel marginalised from wider society. Relaxation has been shown to improve symptoms in individuals with epilepsy, with a substantial reduction in seizures experienced by individuals receiving a contingent relaxation intervention (Dahl et al. 1987).

Yoga is an ancient practice originating in India which incorporates breathing (pranayama), movement and meditation to bestow the practitioner with feelings of physical and mental wellbeing. Individuals who practised Sahaja yoga meditation experienced a 62% reduction in seizure frequency and beneficial electroencephalogram (EEG) changes (Panjwani et al. 1996). This was attributed to a reduction in stress levels amongst participants (Panjwani et al. 1995). A link between relaxation and yoga has been proposed, with the practice potentially resulting in a decreased heart rate (Tyagi and Cohen 2016), reduced stress levels (Chong et al. 2011), lower levels of anxiety and depression (Tekur et al. 2012), and an increased feeling of wellbeing (Woodyard 2011). Given the potential for relaxation to reduce seizures, it is feasible to suggest that there may be a positive impact from the practice of yoga on epilepsy symptoms.

Objectives/Aim

The objective of this review was to assess the use of yoga in enabling patients with epilepsy to become seizure free, experience a significantly lower number and/ or duration of seizures,

or experience improved quality of life (Panebianco et al. 2017). This is an update of previous reviews, most recently by Panebianco et al. (2015).

Intervention/Methods

The authors searched eight databases in January 2017 - Cochrane Epilepsy Group Specialized Register, Cochrane Central Register of Controlled Trials (CENTRAL), Medline, SCOPUS, ClinicalTrials.gov, World Health Organization (WHO) International Clinical Trials Registry Platform (ICTRP) and the Yoga Biomedical Trust and the Research Council for complementary medicine. All randomised controlled trials (RCTs) using yoga as an epilepsy treatment were included. In addition all references in the identified studies were searched.

The review included two unblinded randomised controlled trials (RCT's) incorporating individuals with refractory epilepsy and compared all types of yoga to the control groups receiving either no intervention or interventions incorporating exercises similar to yoga or Acceptance and Commitment therapy. The review incorporated a sample of 50 adults in which antiepileptic drugs were continued as per their usual therapeutic regimen.

Results

The results of the two identified studies could not be combined, due to the different designs. The number of individuals involved in each RCT was very small, and both studies had methodological flaws which means that it is difficult to draw clear conclusions.

Lundgren et al. (2008) found no significant difference between the number of seizures experienced by individuals undertaking yoga and those undergoing Acceptance and Commitment Therapy. The yoga group demonstrated significant improvements in their quality of life when using the Satisfaction with Life Scale. Panjwani et al. (1996) found conflicting results. Using ANOVA, they identified no statistically significant difference between individuals undertaking yoga, those performing exercises which mimic yoga, and those for whom there was no intervention. However, when a modified t-test was used, a significant difference was found between those undertaking yoga and the no intervention group, for number of seizures and length of seizure.

Conclusion

The review demonstrates that yoga may help to control seizures in individuals with epilepsy, when compared with those who received no interventions or alternatives. However, the small number of studies and of participants means that there is insufficient evidence to recommend yoga as a sole method of intervention for uncontrolled epilepsy. As with other complementary and alternative treatments, the benefit of yoga may lie in its use as an adjunct to medical interventions. Given the limited quality of the evidence available, there is a need for further trials to evaluate the efficacy of yoga for reducing seizure frequency and duration, and improving quality of life for individuals with epilepsy.

Implications for practice

Yoga may enhance health and wellbeing through relaxation and stress reduction. However, in the treatment of refractory epilepsy there is little evidence to show that yoga as a sole intervention may significantly improve symptoms. Other studies exploring the concomitant use of yoga in the treatment of chronic diseases such as heart disease, stroke and chronic obstructive pulmonary disease (Desveaux et al, 2015) show a potential reduction in rates of anxiety and depression. Increased levels of relaxation may have positive effects on seizures (Haut et al. 2018). Thus, yoga may be one of the tools selected by individuals to help manage their long-term conditions, potentially empowering people to adapt to living with their condition and enabling them to achieve optimal wellbeing (Roddis et al 2016).

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