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[Intervention Review]

# Yoga versus non-standard care for schizophrenia

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## ABSTRACT

### Background

Yoga is an ancient spiritual practice that originated in India and is currently accepted in the Western world as a form of relaxation and exercise. It has been of interest for people with schizophrenia as an alternative or adjunctive treatment.

### Objectives

To systematically assess the effects of yoga versus non-standard care for people with schizophrenia.

### Search methods

The Information Specialist of the Cochrane Schizophrenia Group searched their specialised Trials Register (latest 30 March 2017), which is based on regular searches of MEDLINE, PubMed, Embase, CINAHL, BIOSIS, AMED, PsycINFO, and registries of clinical trials. We searched the references of all included studies. There are no language, date, document type, or publication status limitations for inclusion of records in the register.

### Selection criteria

All randomised controlled trials (RCTs) including people with schizophrenia and comparing yoga with non-standard care. We included trials that met our selection criteria and reported useable data.

### Data collection and analysis

The review team independently selected studies, assessed quality, and extracted data. For binary outcomes, we calculated risk ratio (RR) and its 95% confidence interval (CI), on an intention-to-treat basis. For continuous data, we estimated the mean difference (MD) between groups and its 95% CI. We employed a fixed-effect models for analyses. We examined data for heterogeneity ( $I^2$  technique), assessed risk of bias for included studies, and created a 'Summary of findings' table for seven main outcomes of interest using GRADE (Grading of Recommendations Assessment, Development and Evaluation).

### Main results

We were able to include six studies (586 participants). Non-standard care consisted solely of another type of exercise programme. All outcomes were short term (less than six months). There was a clear difference in the outcome leaving the study early (6 RCTs, n=586, RR 0.64 CI 0.49 to 0.83, *medium quality evidence*) in favour of the yoga group. There were no clear differences between groups for the remaining outcomes. These included mental state (improvement in Positive and Negative Syndrome Scale, 1 RCT, n=84, RR 0.81 CI 0.62 to 1.07, *low quality evidence*), social functioning (improvement in Social Occupational Functioning Scale, 1 RCT, n=84, RR 0.90 CI 0.78 to 1.04, *low quality evidence*), quality of life (mental health) (average change 36-Item Short Form Survey (SF-36) quality-of-life sub-scale, 1

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RCT, n=69, MD -5.30 CI -17.78 to 7.18, *low quality evidence*), physical health, (average change WHOQOL-BREF physical-health sub-scale, 1 RCT, n=69, MD 9.22 CI -0.42 to 18.86, *low quality evidence*). Only one study reported adverse effects, finding no incidence of adverse events in either treatment group. There were a considerable number of missing outcomes, which included relapse, change in cognition, costs of care, effect on standard care, service intervention, disability, and activities of daily living.

### Authors' conclusions

We found minimal differences between yoga and non-standard care, the latter consisting of another exercise comparator, which could be broadly considered aerobic exercise. Outcomes were largely based on single studies with limited sample sizes and short-term follow-up. Overall, many outcomes were not reported and evidence presented in this review is of low to moderate quality - too weak to indicate that yoga is superior or inferior to non-standard care control for management of people with schizophrenia.

## PLAIN LANGUAGE SUMMARY

### Yoga versus non-standard care for schizophrenia

#### Review question

Is yoga an effective add-on treatment compared to other add-on treatments for people with schizophrenia?

#### Background

Yoga comes from ancient India and involves physical postures and breathing exercises to promote balance between mind and body. Yoga has now been widely adopted as a method of relaxation and exercise, improving strength, flexibility, co-ordination, endurance, and breathing control and concentration. Yoga has also been shown to reduce stress and promote health and feelings of well-being. Yoga has been used as a complementary therapy for many health conditions, including improving blood pressure control as well as mental health conditions such as depression and anxiety disorders.

Some research suggests that yoga could also be of benefit as an add-on treatment to reduce the complex symptoms of the serious mental illness schizophrenia (such as hearing voices, seeing things, lack of interest in people and activities, tiredness, loss of emotions and withdrawal), and improve the quality of life of people with schizophrenia. The effectiveness of yoga versus other available (non-drug and non-talking therapy) add-on treatments is under-researched.

#### Searching for evidence

We ran electronic searches for trials (latest search was in March 2017) for trials that randomised people with schizophrenia to receive yoga or another add-on treatment. One thousand and thirty four records were found and checked by the review authors.

#### Evidence found

Six trials with 586 participants met the review requirements and provided useable data. Other add-on treatments consisted of other forms of exercise only. There is little evidence currently available, is low quality, and suggests that yoga is no more effective than other add-on treatments for schizophrenia.

#### Conclusions

Current evidence from randomised controlled trials shows yoga is no more effective than other add on treatments for schizophrenia, but the only available comparators to yoga were other forms of exercise. The evidence is weak as the number of studies available was small, and only short-term follow-up was reported. More, larger, and long-term trials that compare yoga with other alternatives to exercise are therefore necessary.