

Yoga relaxation techniques for sleep disturbances and activities of daily living for the elderly

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Objective:

To evaluate changes in the quality of sleep and activities of daily living for people over 55 following the practice of yoga relaxation techniques

Methods:

In this non-controlled trial, people over the age of 55 with sleep disturbance were recruited and randomly selected from the general public in the Dandenong Ranges region. At the commencement of the 6-week trial, participants (n =16) were asked to complete an Activities of Daily Living Questionnaire (ADL) and a modified Pittsburgh Sleep Quality Index (PSQI). Participants undertook a twice-weekly, 40-minute, chair-based Yoga relaxation program, consisting of gentle movements, breath awareness exercises and a guided relaxation. The participants were asked not to practice any of the techniques outside of the program and no participants were actively engaged in a yoga program outside of the research. At the completion of the 6-week trial participants were asked to complete another Activities of Daily Living Questionnaire (ADL) and Pittsburgh Sleep Quality Index (PSQI). Pre and post questionnaires were analysed using Microsoft Excel.

Results:

A majority of participants reported a meaningful improvement in enjoyment of life and the level of energy they started the day with. Improvement in energy levels supports the PSQI Global Score findings which reported an overall, modest improvement in the quality and quantity of sleep.

A number of other indicators showed a modest trend toward improvement.

ADL questionnaire (n=16)

Question	Number improved	Number worsened	Number remained the same
Enjoyment of life	10	2	4
Energy levels at the start of the day	12	2	2
Energy for everyday life	7	4	5
Appetite levels	5	-	11
Ability to concentrate	9	4	3
Ability to get around physically	6	4	6
Physical pain	4	3	9
Satisfaction with ability to perform ADLs	6	1	9
Satisfaction with personal relationships	3	6	7
Involvement in community	5	5	6
Necessity for daytime nap	3	2	11
Energy levels end of day	5	1	10

PSQI questionnaire (n=16)

Question	Number improved	Number worsened	Number remained the same
Subjective sleep quality	7	2	7
Sleep latency	4	2	10
Sleep duration	7	3	6
Habitual sleep efficiency	6	3	7
Sleep disturbances	5	1	10
Sleep promoting medications	4	1	11
Daytime dysfunctions	3	2	11
Overall improvement PSQI Global Score	12	1	3

Discussion

Enjoyment of life, energy at the start of the day and concentration levels improved for a majority of participants following the practice of the yoga relaxation techniques. Although other areas in the ADL questionnaire showed minimal changes, all changes, except satisfaction with personal relationships were positive.

Sleep latency, sleep efficiency, sleep disturbance, medication use and daytime dysfunction did not show meaningful changes with the majority of participants reporting no change, however, subjective sleep quality and sleep duration recorded improvement.

All participants commenced the program with a PSQI Global Score above 6 which indicated poor sleep quality. It was shown at the completion of the program that all participants still rated above 6 on the PSQI Global Score. Although sleep quality remains unsatisfactory, the majority of participants improved sufficiently in enough components to record an overall improvement in the PSQI Global Score.

Conclusion:

The study found small improvements in some areas of quality of sleep and activities of daily life for participants over 55 who presented with sleep disturbances, following participation in yoga relaxation techniques. While this research was a small, non-controlled study and an in-depth statistical analysis was not undertaken, the modestly positive nature of the findings may indicate that further, controlled studies with a larger sample are warranted. In particular, further studies would have more empiric value if conducted over a longer period of time, as sleep disturbance has an accumulative degenerative affect and six weeks is a relative short period to show significant changes.