Effect of Yoga Therapy on Psychological well – being and Quality of life in Anxiety Disorder

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Abstract

Anxiety disorders are the most common psychiatric disorders across human cultures, require ongoing medical or psychosocial and alternative therapies. Yoga therapy is assuming importance in improving mental health and quality of life in the treatment of a number of psychiatric and psychosomatic disorders. There has been a paucity of research on the role of yoga on anxiety disorders.

The present study was undertaken on 50 subjects (20 males, 30 females) to evaluate effectiveness of Yoga therapy on Psychological well being and Quality of life in Anxiety disorders (mild to moderate categories) diagnosed according to ICD-10, aged 20 to 50 years, under medication, who were willing to participate in the program were recruited. Those suffering from medical and other psychiatric disorders were excluded.

Measures were assessed by - Psychological General Well-Being Schedule having 6 subscales and 22 items, Satisfaction with Life Scale having 5 items. They were trained in Yoga therapy. Pre assessment and post assessment was conducted before therapy and after three months of follow up.

Analysis showed significant results, as mean scores of Anxiety - 10.64 ± 3.54 and 14.66 ± 3.27 (0.001), Depression - 9.24 ±1.96 and 12.08 ± 2.35, (0.001), Psychological well being - 9.40 ± 1.98 and 10.93 ±1.92 (0.003), Self control - 8.70 ± 2.40 and 10.4 ± 2.25 (0.001), General health - 8.48 ±1.54 and 9.94 ± 2.44 (0.016), Vitality - 10.24 ± 2.67 and 12.04 ± 2.70 (0.001) and Satisfaction with Life Scale - 21.54 ± 3.55 and 24.42 ± 3.31 (0.001). Thus yoga therapy is significantly effective on Anxiety disorders in Quality of life and Psychological well being.

Key words: yoga therapy, anxiety disorders, quality of life, psychological well being

Introduction

Yoga therapy is emerging as a clinical discipline within the broad category of mind-body medicine, whose growth is consistent with the burgeoning popularity of yoga in the West and increasing worldwide use as an alternative medicine. As a holistic science yoga also provides us with a holistic tool of measurement of the growth of a personality from an instinctual level to
higher states of freedom, bliss, and mastery. (1)

Anxiety disorders are among the most prevalent psychiatric conditions in most populations studied. Studies have persistently shown that they produce inordinate morbidity, utilization of health care services, and functional impairment. Anxiety disorders are a group of disorders, which affect behavior, thoughts, emotions and physical health. Research into their origins continues, but it is believed they are caused by a combination of biological factors and individuals personal circumstances, much like other health problems, such as heart disease or diabetes. It is common for people to suffer from more than one anxiety disorder, and for an anxiety disorder to be accompanied by depression, eating disorders or substance abuse. Anxiety disorders can also coexist with physical disorders, in which case the physical condition should also be treated.

Thus anxiety is pathological when excessive and persistent, when it no longer serves to signal danger. It is often considered to be a major component of unhealthy lifestyles and contributes significantly to the pathogenesis of not only psychiatric but also systemic disorders. The psychological factors, including anxiety, contribute significantly not only to the pathogenesis of medical illness, but also affect their course and may be a target for effective intervention. So it becomes important to reduce the level of anxiety as a part of prevention and management of diseases. Among the various approaches to reduce the level of anxiety, yoga is the one that combines the physical elements of a healthy lifestyle with prescriptions for abiding mental peace. (2)

Although quality of life (QOL) and Psychological well being issues have long been recognized in severe psychiatric disorders, they have recently come to be considered for the anxiety disorders. Conceptual and methodological developments in the study of quality of life are briefly outlined, and the overlap among measures of quality of life, functional impairment, and disability is discussed. Existing empirical studies on subjective and objective quality of life dimensions in anxiety disorders are then reviewed. Despite substantial evidence showing that the anxiety disorders are associated with impaired quality of life, data are scarce concerning the impact of treatments on quality of life in anxiety disorders. Future research would benefit from greater conceptual clarity and methodological consistency, the use of prospective research designs, greater attention to quality of life as a treatment outcome, and consideration of quality of life in the caregiver and the family as well as the patient. (3)

Quality of life (QOL) is a concept that has become increasingly used in mental health care. Recent studies have compared the impact of different anxiety disorders on different domains of quality of life. However, instruments generally used to assess quality of life in this population have varying specificity, considerable redundancy, and occasionally inappropriate content.

In a study three hundred sixty consecutive admissions to an anxiety disorders clinic were assessed. Participants and clinicians completed a number of quality of life measures. Results indicated that impairment measures designed for use with anxiety disordered samples assess only occupational functioning, relationships and activities outside of occupation, and those individuals with Social phobia were more impaired on the latter than those with Panic disorder. Furthermore, only Social phobia accounted for unique variance in the three
medical outcome study health survey subscales relevant to quality of life. Of the medical outcome study subscales relevant to symptoms, mood regulation, physical functioning, and pain were associated with compromised overall quality of life. (4)

A randomized comparative trial was undertaken (5) to compare yoga and relaxation as treatment modalities at ten and sixteen weeks from study baseline to determine if either of modality reduces subject stress, anxiety, blood pressure and improve quality of life. One hundred thirty one subjects with mild to moderate levels of anxiety were recruited and trained in ten weekly sessions of relaxation. Changes assessed in the State trait personality inventory sub-scale anxiety, General health questionnaire and the Short form-36. Following the ten week intervention stress, anxiety and quality of life scores improved over time. Yoga was found to be as effective as relaxation in reducing stress, anxiety and improving health status.

A prospective controlled study (6) was conducted to explore the short term impact of a comprehensive but brief lifestyle intervention, based on yoga, on subjective well being levels in normal and diseased subjects. Seventy seven normal healthy individuals and subjects having hypertension, coronary artery disease, diabetes mellitus or a variety of other illnesses were included in the study. There was significant improvement in the subjective well being scores within a period of ten days as compared to controls. These observations suggest that a short lifestyle modification and stress management educational program, based on yoga leads to remarkable improvement in the subjective well being scores of the subjects and can therefore make an appreciable contribution to primary prevention as well as management of lifestyle diseases also.

A study (7) was conducted to assess the impact of yoga nidra a relaxation technique on psychiatry problems in patients with irregularity menstrual disorder. A total 150 female subjects were randomly divided in to two groups, 75 subjects with yoga intervention and 75 subjects without yoga intervention. Results found that after six months anxiety, depression had decreased significantly in yoga group. Wellbeing, general health, vitality also improved in yoga group compared with control group. The current findings suggest that patients with menstrual irregularities having psychiatric problems, improved significantly in the areas of their wellbeing, anxiety, depression by learning and applying a program based on yogenic intervention.

A study (8) was conducted to find out whether yoga intervention has any effect on State and Trait anxiety and also on the subjective well-being. Fifty students were selected, 25 boys and 25 girls, 19-20 years. Spielberger’s State Trait Anxiety Inventory, Nagpal and Sell’s Subjective well-being Inventory were administered in the beginning, and after one year. Results reveal a significant decrease in both state and trait anxiety levels and positive change in the subjective wellbeing of the students. It implies that yoga practice is useful in the enhancement of subjective well-being of the practitioner.

A study was undertaken to observe beneficial effects of yogic practices on mental health during training period on 54 young trainees of 20-25 years age group were divided randomly in to yoga group and control group. Yoga group had relatively lower sympathetic activity than the control group. There was improvement in performance at sub maximal level of exercise and in anaerobic threshold in the yoga group. There was improvement in various psychological parameters like
reduction in anxiety and depression and a better mental function after yogic practices. (9)

Also these studies demonstrate that a simple and inexpensive essentially educational intervention based on yoga improves subjective well being in anxiety disorders.

**Aim and Objectives**

Thus the aim of this study was to evaluate effect of yoga therapy on Psychological well being and Quality of life in Anxiety disorders (mild to moderate categories). The practice of yoga in this study intends --

- To increase psychological well being
- To improve quality of life

**Materials and methods**

The present study was undertaken on 50 subjects (20 males and 30 females) to evaluate effectiveness of Yoga therapy on Psychological well being and Quality of life in Anxiety disorders (Generalized Anxiety disorder and Panic disorder) mild to moderate categories, diagnosed according to ICD-10, aged between 20 to 50 years, under medication, referred from psychiatry department to yoga department, KMC Hospital-Manipal and Dr. AV Baliga Hospital-Udupi who were willing to participate in the program were recruited. Those suffering from medical and other psychiatric disorders were excluded. Written consents were taken and they were trained in Yoga therapy. Measures were assessed by following parameters -

1: Psychological General Well-Being Schedule scale (10) having 6 sub scales and 22 items.

2: Satisfaction with Life Scale (11) having 5 items.

**Yoga Therapy**

All subjects underwent sessions of asana, pranayama, dhyana, relaxation training for 45 minutes which were suitable for anxiety patients. The subjects were instructed to practice once a day for 3 months. The strict balanced dietary intake is also advised.

The yoga therapy training included the following practices.

- Swastikasana, Parivrtta tadasana, Katipurivartanasana, Ardhachandrasana, Trikonasana, Pavanamuktasana, Bhujangasana, Nadishodhana pranayama, Bhramari pranayama, Soham dhyana, Makarasana, Shavasana

At the end of three months practice all parameters were measured and recorded.

**Statistical analysis**

All data were analyzed using descriptive statistics. Baseline and final means was compared using Paired t test and underwent p-value analysis. P values < 0.05 were considered statistically significant. Pre assessment and post assessment was conducted before therapy and after three months of follow up.

**Result:**

**Table1**: Shows the distribution of Psychological General Well-Being Schedule scale and Satisfaction with Life Scale measures before and after the practice of Yoga

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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample size</th>
<th>Before yoga therapy</th>
<th>After yoga therapy</th>
<th>(95%) confidence interval</th>
<th>(t)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean ±SD</td>
<td>Mean ±SD</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AN</td>
<td>50</td>
<td>10.64 ± 3.54</td>
<td>14.66 ± 3.27</td>
<td>4.82</td>
<td>3.21</td>
<td>10.08</td>
</tr>
<tr>
<td>DM</td>
<td>50</td>
<td>9.24 ± 1.96</td>
<td>12.08 ± 2.35</td>
<td>3.31</td>
<td>2.36</td>
<td>12.02</td>
</tr>
<tr>
<td>PWB</td>
<td>50</td>
<td>9.40 ± 1.98</td>
<td>10.93 ± 1.92</td>
<td>2.12</td>
<td>0.91</td>
<td>5.04</td>
</tr>
<tr>
<td>SC</td>
<td>50</td>
<td>8.70 ± 2.40</td>
<td>10.4 ± 2.25</td>
<td>2.24</td>
<td>1.27</td>
<td>7.23</td>
</tr>
<tr>
<td>GH</td>
<td>50</td>
<td>8.48 ± 1.54</td>
<td>9.94 ± 2.44</td>
<td>2.14</td>
<td>0.77</td>
<td>4.28</td>
</tr>
<tr>
<td>VI</td>
<td>50</td>
<td>10.24 ± 2.67</td>
<td>12.04 ± 2.70</td>
<td>2.43</td>
<td>1.16</td>
<td>5.68</td>
</tr>
<tr>
<td>SLS</td>
<td>50</td>
<td>21.54 ± 3.55</td>
<td>24.42 ± 3.31</td>
<td>3.68</td>
<td>2.07</td>
<td>7.22</td>
</tr>
</tbody>
</table>

AN: Anxiety, DM: Depressed mood, PWB: Psychological well being, SC: Self control, GH: General health, VI: Vitality, SLS: Satisfaction with Life Scale

Analysis showed significant results, as mean scores of Anxiety - 10.64 ± 3.54 and 14.66 ± 3.27 (0.001), Depressive mood - 9.24 ± 1.96 and 12.08 ± 2.35, (0.001), As the scores are high then the signs of anxiety and depression are reduced.

Psychological well being - 9.40 ± 1.98 and 10.93 ± 1.92 (0.003), Self control - 8.70 ± 2.40 and 10.4 ± 2.25 (0.001), General health - 8.48 ± 1.54 and 9.94 ± 2.44 (0.016), Vitality - 10.24 ± 2.67 and 12.04 ± 2.70 (0.001) and Satisfaction with Life Scale - 21.54 ± 3.55 and 24.42 ± 3.31 (0.001). As the scores are high then the Psychological well being, quality of life is increased.

Thus yoga therapy with medication is significantly effective on anxiety disorders in Quality-of-life and Psychological well being.

**Discussion**

Yoga therapy is assuming importance in improving mental health and quality of life in the treatment of a number of psychiatric and psychosomatic disorders. The present study evaluates the positive changes seen in the subjective well being while completing yoga therapy for three months.

As result showed in the present study there is significant decrease in anxiety and depression symptoms, also significant
improvement in psychological well being, self control, general health, vitality and satisfaction with life in patients suffering from anxiety disorders with mild and moderate categories, indicating that yoga therapy with medication is significantly effective on Quality-of-life and Psychological well being in anxiety disorders.

All these results suggest that the integrated package of yoga therapy administered in this study has a favorable effect on psychological and subjective well being, and there is no additional anxiety resulting during the practice and course of yoga therapy. The intervention can therefore make an appreciable contribution to primary prevention as well as management of anxiety disorders.

Conclusion

Yoga, an ancient system of life style helps to achieve an overall harmonious state of being and is one such mind body medicine approach which is highly appreciated, researched and recommended as a holistic practice towards normal better health, adjuvant in various disease conditions and for life fulfillment. Studies have shown that life style modification through yoga practice along with conventional treatment has an added beneficial effect on the outcome of anxiety disorders.

Yoga therapy is known to bring down the oxidative stress and improving antioxidant status, yoga additionally is known to improve the psychological outcome that helps to manage stress, reduces anxiety, negative affect and enhances the positive affect and mental poise. Health benefits of yoga are thus curative as well as preventive. Though yoga can be practiced as a therapy, it is not a panacea for all diseases and can be used in conjunction with conventional medical treatment.

References

2. Nidhi gupta, Shiveta khera, R. P. Vempati, Ratna Sharma and R. L. Bijlani Effect of yoga based lifestyle intervention on state and trait anxiety, Indian j Physiol Pharmacol (2006); 50(1)
6. Ratna Sharma, Nidhi Gupta and R. L. Bijlani Effect of Yoga based lifestyle intervention on subjective well-being Indian j physiol pharmacol (2008); 52 (2) : 123–131