A comparative study to show the improvement in quality of life by short-term and long-term meditation by raj yoga meditation to reduce stress

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Abstract---Background: Meditation brings certain biochemical and physical changes in the body namely changes in metabolism, heart rate, respiration, blood pressure and brain chemistry, collectively referred to as the ‘relaxation response. The present study was carried out to compare the improvement in quality of life by short term and long-term meditation by raj yoga meditation to reduce stress. Materials & Methods: 120 patients suffering from stress aged 18–50 years were included in the study. The patients suffering from stress were randomized to divide into two groups: Group I i.e. short term meditation by raj yoga meditation and Group II i.e. long term meditation by raj yoga meditation. Complete clinical examination, including general and systemic examination was done. Health-related quality of life (HRQOL) questions were rated. Data was collected and analysed by SPSS 22. P values of less than 0.05 was concerned significant. Results: Males were 33.33% and females were 66.66% in the study. In the present study, the participants who practiced long term meditation by raj yoga meditation reported a statistically
significantly higher positive impact on all domains of HRQOL as compared to participants who were practicing short term meditation by raj yoga meditation ($P<.001$). Conclusion: The present study concluded that the long-term practice of Raja Yoga meditation had higher positive impact on quality of life than short term meditation by raj yoga meditation.

\textit{Keywords---}Raj Yoga Meditation, Quality of Life, Stress.

\textbf{Introduction}

Joel M. Evans defines, Meditation involves trying to train your thoughts to stay in the present moment, because in the present moment there is true peace. Thoughts of the future (what can/might/will happen, leading to fear or anxiety) or of the past (what did or might have happened, leading to sadness, depression, anger, or jealousy) prevent us from feeling the peace that is in the present moment.\(^1\) Rajyoga is one of the oldest meditation techniques, it does not involve any physical postures or exercises – rather it concern with re-orientating thought patterns and feelings so one can live with greater harmony and contentment. Raj-Yoga Meditation is awareness of the metaphysical self and absorption of one’s mind in loveful and purposeful consciousness of God and his divine attributes. The word ‘Yoga’ means ‘to unite’; Yoga is, therefore, the practice or art of uniting or linking the mind with God by focusing attention on him as an incorporeal being-of- light and thinking of nothing but his divine qualities. This takes one into a state of absorption in bliss and peace through positive thinking. It recharges one’s self or soul with light and might and fills one with creative energy.\(^2\) In the name ‘Raj-Yoga’ the word ‘Raja’ means the king, the sovereign or the supreme. This yoga is called Raj-Yoga because it is the supreme or the highest yoga, being true and most effective. Another reason for calling it ‘Raj-Yoga’ is that it is related mainly to mind, and mind is considered as the ‘King that rules the sense-organs and the body. The word ‘Meditation’ means ‘to think’. As we all know, man’s mind is, ordinary, occupied with hundreds of thoughts of the world; in Raj-Yoga meditation, one withdraws one’s mind from all the worldly thoughts. In this sense, this meditation is withdrawal or reversal of one’s consciousness, from the body and its world to the soul and its silent world, or from the dark lanes of negative thoughts on the bright path of contemplation on God. Raj- Yoga meditation may, therefore, be defined as a disciplined exercise of awareness, utilizing such processes as creatively thinking, intuitively perceiving and silently reflecting and concentrating on the metaphysical truths of self and God which lead to comprehension and realization of the subject. This practice involves the turning of one’s mind and the flow of his love in the direction of God, giving him the hot link to communicate with him.\(^2\) The present study was conducted to compare the improvement in quality of life by short term and long-term meditation by raj yoga meditation to reduce stress.

\textbf{Materials & Methods}

The present randomized prospective interventional study trial study was carried out to compare the improvement in quality of life by short term and long-term
meditation by raj yoga meditation to reduce stress. The study was conducted at National Capital Region Institute of Medical Sciences, Meerut, Uttar Pradesh, over a period of 6 months i.e. Jan 2022 to June 2022. The study was approved by the ethical committee of the institute and a written informed consent was taken from the participants. 120 patients suffering from stress aged 18–50 years were included in the study. The patients suffering from stress were randomised to divide into two groups: Group I i.e. short term meditation by raj yoga meditation and Group II i.e. long term meditation by raj yoga meditation. Participants with a lifetime history of schizophrenia or any other psychosis, mental retardation, organic medical disorders, bipolar disorder, posttraumatic stress disorder, or obsessive-compulsive disorder, alcohol or substance abuse or dependence within the past 6 months, if on medication, serious medical illness, pregnancy or lactation, significant personality disorder likely to interfere with study participation were excluded from the study. All study subjects were interviewed in the morning hours (between 7 am and 8.30 am) and detailed history regarding demographic profile, socio-economic status, presenting complaints, if any, past history, personal history as well as information regarding Raj Yoga meditation practice was obtained. Those subjects practicing Raj Yoga meditation from six months up to five years were classified as short-term meditators (STM) and those practicing Raj Yoga meditation for more than five years were classified as long-term meditators (LTM). During meditation, subjects sit in a comfortable posture with their eyes open, and with gaze fixed on a meaningful symbol (a light). At the same time, they actively think positive thoughts about a universal force pervading all over, as light and peace. The meditators were practicing Raj Yoga meditation for one hour every morning (6-7 am) at the centre. Complete clinical examination, including general and systemic examination was done. Health-related quality of life (HRQOL) questions were rated. Data was collected and analysed by SPSS 22. P values of less than 0.05 was concerned significant.

Results

In the present study, 120 patients suffering from stress aged 18–50 years were included in the study. The patients suffering from stress were randomized to divide into two groups: Group I i.e. short term meditation by raj yoga meditation and Group II i.e. long term meditation by raj yoga meditation. In both groups 60 patients each were included.

Males were 33.33% and females were 66.66% in the study. In the present study, the participants who practiced long term meditation by raj yoga meditation reported a statistically significantly higher positive impact on all domains of Health-related quality of life (HRQOL) as compared to participants who were practicing short term meditation by raj yoga meditation ($P < .001$).

<table>
<thead>
<tr>
<th>Gender</th>
<th>N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40(33.33%)</td>
</tr>
<tr>
<td>Female</td>
<td>80(66.66%)</td>
</tr>
<tr>
<td>Total</td>
<td>120(100%)</td>
</tr>
</tbody>
</table>
Table 2
Effect of short-term and long-term meditation by raj yoga meditation to reduce stress

<table>
<thead>
<tr>
<th>HRQOL</th>
<th>Group I Mann-Whitney U test</th>
<th>Group II Mann-Whitney U test</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of life</td>
<td>924104.500</td>
<td>924254.500</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Adopting healthy lifestyle</td>
<td>915604.500</td>
<td>915758.500</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Coping with day-to-day stress</td>
<td>898708.000</td>
<td>898978.000</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Discussion

Rajyoga meditation is a behavioural intervention with scientific, psychological, intellectual and spiritual process. It aims at establishing balance in head, heart and hand. It is the science and art of harmonising spiritual, mental and physical energy through the connection with the ultimate source of spiritual energy, the Supreme Soul for enjoying ever healthy, ever-wealthy and ever-happy life.³

Males were 33.33% and females were 66.66% in the study. In the present study, the participants who practiced long term meditation by raj yoga meditation reported a statistically significantly higher positive impact on all domains of Health-related quality of life (HRQOL) as compared to participants who were practicing short term meditation by raj yoga meditation (P<.001).

Sukhsohale ND et al suggests that the long-term practice of Raj Yoga meditation improves basic cardio-respiratory functions due to shifting of the autonomic balance in favor of parasympathetic instead of sympathetic system.⁴

In another study, 1500 people practicing Raj Yoga for variable duration were surveyed. It was found that, out of 1500, 824 people were suffering from sleep disturbances before learning meditation. 82% experienced over 50% benefit just within a period of one month. Among the 1500, 183 persons were smokers. 75% got rid of the unhealthy habit within one month, 93% stopped smoking within 1 year, out of 80 alcoholics, 98% were alcohol free after one month. It is interesting to note that 80% got more than 50% improvement in their general health.⁵

Thimmapuram J et al explored Health-related quality of life (HRQOL) outcomes among participants of a 100-day virtual yoga and meditation program. Overall, a yoga and meditation practice was found to be an effective tool for promoting Health-related quality of life (HRQOL). Regular yoga and meditation practice was associated with factors promoting health and well-being, with long-term meditation practice associated with increased benefits.⁶

Arora AK et al concluded that short-term, yoga-based lifestyle intervention may significantly reduce anxiety and depression and improve subjective well-being and personality.⁷
Activities of sympathetic and parasympathetic system are regulated by the respective centers located in hypothalamus. Mental tension creates an imbalance in these two components of autonomic nervous system. Anger, mental stress, hatred, irritability etc stimulate sympathetic nervous system, leading to high blood pressure, angina pectoris and heart attack whereas negative emotion like fear stimulate parasympathetic nervous system leading to acidity, peptic ulcer and diarrhea. It is caused due to the over activity of parasympathetic nervous system. Thus the balance between sympathetic and parasympathetic nervous system, which is essential for health, is disturbed due to various negative feelings.

This imbalance leads to many physical diseases, ranging from diarrhea to heart attack. This balance has, therefore, to be maintained in the interest of health.\textsuperscript{5}

**Conclusion**

The present study concluded that the long-term practice of Raj Yoga meditation had higher positive impact on quality of life than short term meditation by raj yoga meditation

**References**

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