Original article

Effect of vipassana meditation on state and trait anxiety scores

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Date of submission: 12 June 2014; Date of Publication: 15 September 2014

Abstract:

Introduction: Our aim was to assess the effect of vipassana meditation on anxiety levels in individuals who are regular practitioners of vipassana meditation.

Materials and Methods: The study was carried out in 15 apparently healthy persons aged 30-45 years who regularly practiced vipassana since six months for one hour daily. Spielberger’s state and trait anxiety scale was used to evaluate anxiety levels before starting vipassana training and after continuous practice for more than six months.

Results: Our study showed a statistically significant decrease in state, trait and total anxiety scores before vipassana training and after regular practice of vipassana (p<0.05) which was assessed by applying paired ‘t’ test.

Conclusion: We concluded that regular practice of vipassana meditation in day to day life reduces anxiety levels and improves subjective feeling of wellbeing.

Keywords: Stress, vipassana, meditation, anxiety scale

Introduction:

In this Modern Era of high technology and fast lifestyle people are indulging in different kinds of stress which disturb the harmony of mind and consequently the body. Stress is a silent killer which need to be handled. It is vital that stress is kept under control and normal functioning is not hampered due to excessive stress. If the level of stress is extreme, the homeostatic mechanisms become deficit and the survival of the organism is threatened.

Vipassana is an ancient meditation technique discovered by Gautama Buddha, about 2500 years ago. It promotes conscious lifestyle changes, enhances concentration of mind and facilitates deeper psychological introspection to bring about lasting behavioural changes[3].

One formulation for the Buddhist practice of Vipassana meditation (VM) is as a mental process that takes ordinary experience plus mindfulness plus equanimity and yields insight and purification[2]. Vipassana, which means to see things as they really are, is an ancient technique to improve concentration and self-awareness through meditation[1]. It is a genuine non-sectarian methodology for mind control and purification[3]. The technique of Vipassana is basically a path leading to freedom from all sufferings: it uproots craving, aversion and ignorance, which are the basic cause for all our miseries. Those who practise it remove, little by little, the root causes of their sufferings and steadily emerge from the darkness of former tensions to lead happy, healthy, productive lives[3].
Spielberger (1966) has placed anxiety into two categories, i.e state anxiety and trait anxiety. State anxiety is situational, which develops on account of severe demanding situation and this does not last long, whereas trait anxiety has deeper roots and it refers to inherent anxiety proneness developed due to defective socialization. Hence, the present study was undertaken to see effect of regular vipassana meditation on anxiety levels.

**Methodology:**
The study was carried out in 15 apparently healthy male individuals aged between 30-45 years engaged in different professions like Doctors, Engineers, Teachers, Workers, etc; who regularly practiced vipassana since six months for one hour daily in morning hours. Institutional ethical committee clearance was obtained. The informed consent was obtained from all the participants.

Spielberger’s state and trait anxiety scale was used to evaluate anxiety levels before starting vipassana training and after continous practice for more than six months. Spielberger state-trait anxiety inventory (STAI). The STAI is a forty-item Likert-type questionnaire designed to assess individual differences in the experience of anxiety. The trait form of the inventory assesses an individual’s general anxiety level, and the state form of the inventory assesses the individual’s anxiety specific to the time of completion of the survey. Each form consists of twenty items with total scores that range from a minimum of twenty to a maximum of eighty.

**Results:**
Our study showed a statistically significant decrease in state (Table 1&Fig.1), trait (Table 2&Fig.2), and total (Table 3&Fig.3), anxiety scores before vipassana training and after regular practice of vipassana(p<0.05) by applying paired ‘t’ test.

### Table 1: Change in state anxiety score:

<table>
<thead>
<tr>
<th>State Anxiety score Before vipassana training (Mean±S.D)</th>
<th>State Anxiety score After vipassana training (Mean±S.D)</th>
<th>‘t’ value</th>
<th>‘p’ value</th>
<th>S Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.47 ±4.454</td>
<td>30.27 ±3.494</td>
<td>t=24.15</td>
<td>&lt;0.0001</td>
<td>Significant</td>
</tr>
</tbody>
</table>

**Figure 1:**

![Comparison of State Anxiety Score](image)
Table 2: Change in trait anxiety score:

<table>
<thead>
<tr>
<th>Trait Anxiety score Before vipassana training (Mean±S.D)</th>
<th>Trait Anxiety score After vipassana training (Mean±S.D)</th>
<th>‘t’ value</th>
<th>‘p’ value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>61.27 ± 4.464</td>
<td>31.73±3.035</td>
<td>t= 32.85</td>
<td>&lt; 0.0001</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Figure 2:

Table 3: Change in total anxiety score:

<table>
<thead>
<tr>
<th>Total Anxiety score Before vipassana training (Mean±S.D)</th>
<th>Total Anxiety score After vipassana training (Mean±S.D)</th>
<th>‘t’ value</th>
<th>‘p’ value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>121.7±6.135</td>
<td>62.00±5.657</td>
<td>t= 38.37</td>
<td>&lt; 0.0001</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Figure 3:
Discussion:
Our study showed statistically significant decrease in the state, trait and total anxiety scores in regular practitioners of vipassana before starting the training and after six months of training. Both traditional and clinical literature suggest that Vipassana practice increases awareness, promotes integration of subjective experience and facilitates acceptance and tolerance to sufficiently reduce physical and psychological distress\(^1\).

Vipassana means "insight" - seeing things as they really are\(^3\).

The second component of this training is called Anapana, i.e., awareness of respiration. This involves continuous "observation" of the natural flow of incoming and outgoing breath. Gradually the mind gets concentrated on this natural activity and the person can exercise greater control over his mind. It promotes awareness of the present moment, equanimity and tranquillity of mind, since the act of breathing is free from any craving or aversion\(^3\).

The third step called development of panna or wisdom - involves purification of mind through enhanced awareness. The individual engages himself in choiceless and effortless observation of body sensations and tries to develop and attitude of non-judgement and non-reaction. This practice has a corrective influence on deep-rooted habits. Whatever arises in the mind, be it anger, fear, insecurity, passion or sadness, is associated with certain internal body sensations. Observing these sensations in a detached/impersonal manner helps the individual handle these emotions\(^3\). It appears that practice of Vipassana brings mental balance, calm, proper self-analysis, positive thinking and responsibility to the Vipassana practitioners\(^3\).

MRI also shows that practice of meditation activates neural structures involved in attention and control of the autonomic nervous system, including significant signal increases in the dorsolateral prefrontal and parietal cortices, hippocampus/parahippocampus, temporal lobe, pregenual anterior cingulate cortex, striatum, and pre- and post-central gyri during meditation\(^7\). Our findings matched with Jin (1992)\(^8\) and Shapiro et al., (1998)\(^9\). Jin reported that levels of anxiety and aggression decrease by Vipassana course while Shapiro et al., found decrease in state and trait anxiety in premedical and medical students.

Conclusion:
Our study concludes that vipassana technique is helpful in management of stress and psychological problems. Thus, our study helps to popularise vipassana among the population.

References:


