



Role of Spirituality in the Management of the Psychological and Biological Mechanisms of Fear in Neurotic Disorders

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Abstract

'Neurotic disorders' or simply 'Neuroses' is a term used to denote psychiatric conditions where the patient retains insight, i.e., they are psychiatric disorders without an organic basis, where the patient does not lose touch with reality. Excessive fear is fundamental to the development of most neuroses. Therefore, if a person suffering from any of these neuroses can successfully manage and control his irrational fears, it can hasten the recovery process.

Spirituality means the consciousness of being aware of and connected with the human spirit or soul, and not with the material or physical things. Spirituality involves the recognition of a sense or belief that there is something greater than the self. The spiritual journey involves inner healing so that positive states are experienced.

Research has revealed the biological mechanisms by which spiritual knowledge and practices (e.g., meditation) can help control fear to a great extent. There are three main areas in the brain (i.e., the lateral and central zones of the amygdala, the ventromedial hypothalamus, and the hippocampus) that handle the fear response and are targeted by spiritual practices, and they can help alleviate irrational fears in people suffering from neurotic disorders.

Keywords: Fear, Neurotic disorders, Spirituality

Background

'Neurotic disorders' or simply 'Neuroses' is a term used to denote psychiatric conditions, such as obsessive-compulsive disorder (OCD), phobia, generalized anxiety disorder, panic disorder, post-traumatic stress disorder (PTSD), depression, etc. They are psychiatric disorders without an organic basis, where the patient retains insight, which means the patient does not lose touch with reality. [1]

The inability to appropriately analyze and respond to external stimuli, which causes stress, is one of the main causes of neurotic disorders. One of the principal reasons for this inability could be a low tolerance to actual or potential stressful situations, as well as high susceptibility to even those situations that do not cause a pathological psychological response in people not suffering from neuroses. [1] Moreover, fear is the main driving force behind this behavioral pattern in the neuroses.

As we shall discuss further, the presence of excessive fear is fundamental to the development of most neuroses. Research has revealed the biological mechanisms by which spiritual knowledge and practices (e.g., meditation) can help control fear to a great extent. [2] Therefore, spirituality can certainly help in the healing process of neuroses.

As mentioned earlier, neuroses are of different

types. We will try to briefly understand the fundamental role of fear in each of them.

1. *Obsessive-compulsive disorder (OCD)*: Here, the person experiences frequent intrusive, repetitive, and unwelcome thoughts (obsessions), followed by repetitive behaviors or rituals (compulsions) in order to prevent a perceived harm and/or worry arising from obsessions. The OCD is driven by the fear of consequences if the compulsive behavior is not followed. [3]
2. *Generalized anxiety disorder*: It is a psychiatric disorder that produces fear, worries, and a constant feeling of being emotionally overwhelmed. It is characterized by persistent, unrealistic, and excessive worry about trivial things. [4]
3. *Panic disorder*: People with panic disorder have sudden and repeated attacks of fear of a certain disaster or fear of loss of control that last for several minutes, or at times longer, which may be associated with an intense physical reaction. [5]
4. *Phobia*: Phobias are persistent and extreme fears of certain objects, situations, activities, or people. People suffering from phobias try to avoid confrontation with phobia-inducing stimuli to prevent suffering from the resultant irrational

fear. [6]

5. *Post-traumatic stress disorder (PTSD)*: This disorder is the result of exposure to threatened death, serious injury, or a traumatic event. The person then develops intrusive symptoms associated with the trauma, such as fearful memories, distressful dreams, and flashbacks upon exposure to cues of the traumatic event. In PTSD, a traumatic event causes a fear reaction that is excessively expressed, and can be seen as alterations in physiological or psychological arousal and reactivity. [7]

It is clearly evident from the above discussion that fear is the fundamental driving force behind all these neurotic disorders. Therefore, if a person suffering from any of these neuroses can successfully manage and control their irrational fears, the recovery process can be hastened.

After discussing the role of fear in neuroses, we shall briefly define what spirituality actually means, and then analyze the psychological and biological mechanisms by which spirituality helps in coping with the fears associated with neurotic disorders.

What is Spirituality, and the psychological effects of Spirituality in the Management of Fear

When we talk about “spirituality,” it has different meanings for different people, based on their beliefs, views, and experiences. However, considering the core concept, spirituality (as per the definition by Oxford Languages) means “the quality of being concerned with the human spirit or soul as opposed to material or physical things.” Spirituality involves the recognition of a sense or belief that there is something greater than the self, something more than mere sensory experiences, and that the greater whole or the universe of which we are a part is divine and cosmic in nature. [8]

The spiritual journey involves inner healing so that a positive energetic inner state is experienced, with secure self-esteem and an increase in a sense of self-worth, leading to a person becoming less constrained by ego defenses.

The English word ‘spirit’ is derived from the Latin word ‘*spiritus*,’ meaning breath or *soul*. [2] The word ‘*soul*’ seems fundamental to efforts to understand spirituality. Indeed, the soul is often defined as the spiritual part of being human, while spirituality is often defined in terms of and connected with the soul, in contrast to the material and physical qualities of being human. [9] This knowledge helps us realize the limited purview or significance of the material world, or the events happening in the material world. This could help us detach from anxiety about the future.

The patients suffering from neuroses, such as anxiety or other related disorders, are under the

influence of a vicious circuit of distorted thoughts that are repeated endlessly in their minds. These thoughts are mistaken for facts. Spiritual development requires gradually attaining freedom from these faulty thought patterns, based on the realization that thoughts are not facts but simply transient mental phenomena. [8] Thus, spiritual knowledge creates the mental climate that can help relieve anxiety and unnecessary worry. This is in line with Erikson (1959), who has conveyed that gaining spiritual sense can help eliminate fear. [9]

Another dimension of spiritual awareness that can help a person overcome irrational fears is the experience of a connection with a higher power, an experience of not being alone, or of being in relationship with a higher self, higher beings, or God. [8] This belief gives the person strength and assurance that they are protected by a higher force, and helps them overcome irrational fears.

Biological Basis of Fear and the Way Spirituality Targets the Specific Neural Circuitry to Reduce this Fear

Fear is an emotional and biological response to a danger, threat, or motivational conflict. There are three main areas in the brain that handle the fear response: the lateral and central zones of the amygdala, the ventromedial hypothalamus, and the hippocampus. [10]

Spiritual practices, such as meditation, target these brain areas (Figure 1). They affect the right posterior superior parietal lobule (PSPL) in the brain, leading to stimulation of the right hippocampus. The right hippocampus, in turn, influences the right lateral amygdala. Stimulation of the right lateral amygdala activates the ventromedial hypothalamus. This results in stimulation of the peripheral parasympathetic nervous system (PNS). Activation of the PNS leads to both psychological and physiological responses. Psychologically, the person experiences a subjective sensation of relaxation, followed later by quiescence, which helps control the fear response. Physiologically, activation of the PNS results in decreased heart and respiratory rates. As we know, fear not only affects the mind but also other systems of the body, resulting in effects, such as increased heart and respiratory rates, increased blood pressure, etc. Therefore, spiritual practices help alleviate these responses through the mechanisms described above. [2]

Reduction in heart rate and respiratory rate leads to a decrease in innervation of the locus coeruleus (LC) by the paragigantocellular nucleus (PGN). This results in decreased levels of noradrenaline, thereby further helping to lower the heart rate and blood

pressure to normal levels. [2]

Cortisol is a stress hormone released more during periods of stress. The decreased innervation of the LC eventually leads to reduced production of

corticotropin-releasing hormone (CRH) and cortisol, further helping to control the physiological effects of fear. [2].

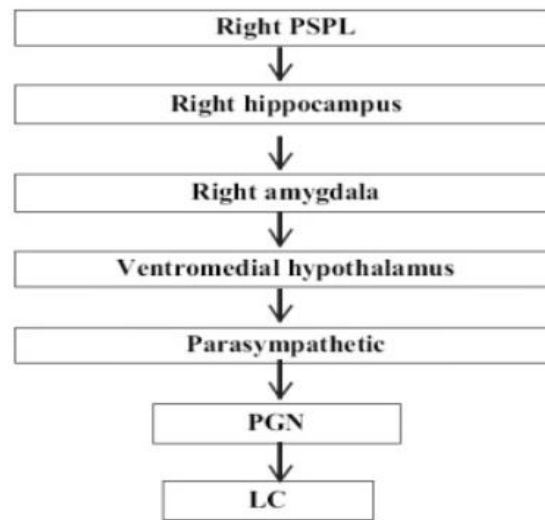


Figure 1. Neural circuitry of the effect of meditation [2]

The above discussion clarifies that spiritual practices can help alleviate irrational fears in people suffering from neurotic disorders by helping them cope with fear-related thoughts at a psychological level, as well as by affecting specific neuronal circuitries in the brain and inducing neurochemical changes. Since fear plays an important role in the pathophysiology of most of the neuroses, a combination of a spiritual practice, such as meditation, with behavioral and pharmacotherapy can certainly speed up the recovery process.

Future Perspectives

There is a need for further exploration to clearly elucidate the mechanisms by which spiritual development and spiritual practices affect physical and psychological health, and therefore, to utilize them in the management of various psychiatric disorders.

Pharmacotherapy and behavioral techniques are effective in managing the neuroses; however, in some patients, they are unable to fully produce and/or maintain the therapeutic response. Therefore, combining spiritual practices with these conventional modes of treatment will certainly help patients manage their symptoms at a deeper level and in a more effective and efficient way.

Conflicts of Interest

The author reports no conflict of interest.

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Ethical Considerations

This article is a theoretical article that utilizes exclusively pre-existing and publicly available data. It does not involve any human or animal subjects. Therefore, ethical committee review and informed consent were not required.

Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of the author's employer or any of its affiliates or officers.

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