Insomnia in Indian Cancer Patients

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Background: The pain or physical discomfort associated with cancer as well as with the treatment procedure can cause significant reduction of sleep in patients. Sleep is a dynamic process and physiologic circadian forces cause humans to sleep every night. Sleep has been identified to correlate positively with levels of hypochondrial concerns in patients with various health problems (Watt & Stewart, 2000). Sleep induced as to the learning theory posits at least two mechanisms in the etiology and maintenance of illness behaviour. With instrumental learning and vicarious conditioning, behaviour can be positively reinforced. This type of learning can be sensitive to somatization as complaints of pains associated with disease. Sleep can be perceived by the cancer patients this way.

An association between high neuroticism scores and anxiety disorders and found that patients with panic disorder (PD), agarophobia, social phobia and obsessive – compulsive disorder (OCD) scored about one standard deviation above the mean (Andrews, Pollock & Stewart, 1989). Such patients also appeared to have an external locus of control. It is argued that this perceived lack of control of events leads to the employment of inappropriate defences and coping strategies, and Andrews has found that the scores of patients with anxiety disorders on the Defence Style Questionnaire (Andrews et al., 1989) suggested a less mature defence style than normals. The patients with disease are no exceptions notwithstanding the sufferings from the disease itself. These factors combine to give a general vulnerability to anxiety related to lesser sleep which may manifest at times of stress or worry due to disease. Several studies show that onset of disorder is frequently preceded by stressful life – events as disease (e.g. last, Barlow & O'Brein, 1984).

An inadequate quantity or quality of sleep results in cancer patients. Sleeplessness remains as one of the major complains stated by these patients.

Present study addresses the illness behaviour, related personality attributes and insomnia in cancer patients of eastern India.

Materials & Methods:

Total 240 patients between 18 to 60 years of age who attained a hospital in city of Kolkata having cancer diagnosed within the last 3 years had been studied. The test batteries used were Sleep Status Index, Illness Behaviour Questionnaire, Duke Health Profile, Locus of Control, Bells Adjustment Inventory and Parental Sensitization Index.

The DUKE developed by G. Parkinson is derived from a 63-item measure designed to measure outcome in primary care settings. This has been modified to 17-item generic health status profile intended to be used as a practical instrument in a hospital/ primary care set up. It includes all the elements recommended by WHO as physical, mental and social health and issues related to self-esteem, pain and disability. This is a self-scoring instrument. Locus of Control measures the external and internal loci of the subjects depending on their attribution to the control of events happening. Adjustment Inventory measures the adjustment levels at home, health and social and work related areas. This a modified form of Bell's Adjustment Inventory.

Results:

The main difference in the cognitive anxiety variable was between this group of patient, indicating that the individuals reported similar levels of cognitive anxiety. In the other comparisons, there were significant differences between other disease groups, with the control group's scores falling between those of the other subject's of cancer.

The results of the comparisons where the disease and control groups were expected to score similarly and the main difference was expected to be between these two groups.

Significant differences were obtained in this group of patient on the somatic anxiety and maternal care variables, with the group's scores falling between those of the other two Majority (75%) of the similar groups reported negative parental communication at home. Locus of control (LOC) in these children seemed to correlate with anxiety and depression.

The home, health adjustment measures were lower in these children with higher hostility, trait anxiety and depressive scores. Higher parental sensitization was evident in these children compared to others. Lower selfesteem was another finding in these subjects. Patients who had a positive family history of insomnia and a previous depressive episode are more vulnerable to symptoms of sleeplessness. Higher parental sensitization was noted in these patients. The disease conviction and irritability measures of illness behaviour scale were significantly higher in these patients compared to other patients. Low quality of social health and self-esteem were reflected also in these patients. They also found to have external locus of control.

Conclusion:

Researchers have suggested that certain individuals may be predisposed to be vulnerable to anxiety disorders and that when this vulnerability is combined with certain other factors, the onset of an anxiety disorder may occur (e.g. Andrew, 1991; Barlow, 1991). Sleeplessness in diseased condition can cause enough stress itself to manifest psychological disturbance. This vulnerability may be physiological and present from birth, or it may develop in childhood as a result of certain environmental factors. Insomnia can be a major form of such factor along with interpersonal relations for the cancer patients.

In a recent study by Andrews (1991), a two-factor model of anxiety was presented based on the predisposing influences of trait anxiety, locus of control and defence style.

Depression may develop as a result of childhood learning experiences, and that elevated anxiety sensitivity may be mediated or has an intervening role in explaining cancer related psychology. It can be proposed that exposure to reinforcement and modeling of non-reactive somatic symptoms as sleep would lead to heightened tendency to catastrophize concern (body related symptoms) which in turn predispose the child toward development of general illness related problems and hypochondriasis. The learning experience involved in the origins of elevated hypochondrial concerns do not appear to be specific to non-reactive somatic response.

Retreating to relaxation is indicative of betterment of symptomology and improved mental health which are essential for cancer patients. It may be imperative to look at the psychological profile as psychological dimensions may as well have an influence on sleep pattern of these patients.

References:

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