Stress Management in Mothers of Students Appearing for Competitive Examinations through Yoga – A Comparative Study

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Sir,

Yoga is an ancient science. In modern times, there is a renewed search to tap its potential for managing issues like stress. Science has contributed immensely to the understanding of the biological underpinnings of stress and psychological problems. Here is an attempt to understand the same process, and possibly modify it, with the help of the philosophy and techniques of Yoga. The emphasis on Bhavas in the application of Yogic techniques was most important for stress management. The objective of this study was to assess changes in psychological parameters related to stress, endocrine and autonomic nervous system.

A total of 108 mothers of children appearing for competitive examinations (62 in study and 46 in Control group) completed the study. The parameters assessed in the study group included psychological factors endocrine and autonomic nervous system. A comprehensive 6 month Yoga program based on the concept of Bhavas was given to the study group population. The investigators assessed all data at baseline, 3 and 6 month follow-ups.

There was reduction in Hamilton Anxiety Rating Scale scores (71.5% in the study group, 10.8% in control). Improvement on Proactive Coping Inventory scores (25.7% in the study group, 7.9% in control), Self Esteem scores (0.3% reduction in the study group, 7.8 % in control) and WHO Well Being Index scores (49.2% increase in the study group, 19% in control) was also seen at the end of the study period.

Salivary Cortisol levels also reduced markedly (29.1% in study group, 4.8% in control) over the period of study. A reduction in the levels of cortisol would mean that the effects of stress are minimised. Yogic techniques reduced the sympathetic tone in the body as evidenced by reduction in the Mean heart rate which had significantly decreased in the Study group (by 9.7%) and as compared to a 2.0% reduction in the control, Low Frequency (LF) component of Heart Rate Variability (35.8% reduction in study group, 22.8% in control), LF / HF ratio (65.9% reduction in study group, 52.1% in control), Respiratory rate and pulse volume (19.7% reduction in study group, 3.5% in control, pulse volume changes were statistically insignificant); and increase in High Frequency (HF) component of Heart Rate Variability (88% in study group, 60.6% in control) and Galvanic skin response (0.076 unit increase in study group, 0.38 unit in control).

Yoga not only helps in physical relaxation, but also in mental relaxation. Improvement in coping methods and strategies is also seen over a period of time. Along with positive coping there is also the development of positive self-esteem and complete well being. In view of the above findings, Yoga techniques based on ‘Bhavas’ as applied by us are effective stress management techniques in mothers of children appearing for competitive public examinations. These techniques also lead to an improvement in quality of life.

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References