

## WCDA 2019: Effect of raja yoga meditation on psychological and functional outcomes in spinal cord injury patients - Ekta Chalageri - Spiritual Applications Research Centre (SpARC wing) of RERF of PBKIVV

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**Introduction & Objective:** The people injured with spinal cord are suffering at many aspects physically, mentally, emotionally, socially & financially & their care givers too. Raja-Yoga Meditation is a powerful tool for holistic healing. This therapy is rare because it heals a person from within. Raja-yoga transforms the biochemistry of the brain in turn having a harmonizing effect on the whole organism. The study is to explore new dimensions for healing through Raja Yoga Meditation in Spinal Cord Injury (SCI) patients along with their caregivers to increase quality of life with inner strength. The primary objective of this study was to find out effect of Raja Yoga Meditation on spinal cord injury patients.

**Method:** This is pre-post observational study with two groups First is Patients with conventional rehabilitation with Raja Yoga Meditation. Second is Patients with only conventional rehabilitation in SCI patients. Caregivers also assessed pre-post intervention to find effect of Raja Yoga Meditation. A total of 100 SCI patients & 100 caregivers were enrolled based on eligibility criteria & ready to give consent for the study. The age of SCI patients ranged from 16 years to 60 years. 50 subjects were assigned in each group. The duration of study was four weeks. The sessions were conducted for 45 minutes each at premises of ISIC for six days per week. Meditation practice was done for 20 minutes through a guided commentary & motivation was given through Brahma Kumaris spiritual knowledge for 25 minutes. Pre & post assessment was done using standard tools namely Perceived Stress Scale, Hospital Anxiety & Depression Score, Scale, Spinal Cord Independence Measure, WHO Quality of Life BREF, Numeric Pain Rating. We conducted a study among 100 practitioners of Brahma Kumaris Raja Yoga meditation of either sex (33 men & 67 women) aged 30 years & above (mean age  $52.06 \pm 12.76$  years). The subjects were divided into short term meditators (meditating for 6 months to 5 years with mean duration  $3.37 \pm$

1.67 years) & long-term meditators (meditating for more than 5 years with mean duration  $11.19 \pm 5.13$  years). Physiological variables like heart rate, respiratory rate per minute, systolic blood pressure & diastolic blood pressure were recorded before meditation practice & twice during the practice of meditation after every fifteen minutes. Also, detailed history regarding negative attributes, addictions & spiritual practices before & after practicing meditation was inquired as per the predesigned questionnaire. Fasting blood sugar was also estimated by glucometer.

**Results:** Out of all parameters studied, PSS ( $p < 0.001$ ), HADS ( $p = 0.001$ ), QOL-BREF ( $p < 0.001$ ), showed statistically significant changes for patients measured before & after the intervention in both the arms. SCIM ( $p = 0.513$ ) & NPR ( $p = 0.055$ ), significant changes were observed within the arm measured pre-post assessment; however, they did not show the significant difference between intervention & control arm. Caregivers parameter studied PSS ( $p < 0.001$ ), HADS ( $p = 0.004$ ) & observed significant changes in both the arms. Both short term as well as long term meditators showed a significant declining trend in HR, RR, SBP & DBP 15 minutes as well as 30 minutes after meditation ( $P < 0.05$ ). The study subjects particularly long-term meditators got rid of addictions (tobacco chewing, smoking, alcohol, non-vegetarian diet) & negative attributes (anger, mental stress, negative/waste thoughts & irritability) after learning & practicing meditation. Subjects also experienced various benefits in the form of mental peace & happiness.

**Conclusion:** Significant differences were observed in psychological scales before & after raja yoga meditation. It suggests the use of Raja Yoga Meditation might help spinal cord injury patients for better & early recovery.