

4<sup>th</sup> World Congress on

# Patient Safety & Quality Healthcare

June 27-28, 2019 | Vienna, Austria

## The clinical and biochemical effects of massage therapy on fatigue and insomnia among women undergoing radiation treatment for breast cancer

**Judith G Myers**

Indiana University, USA

Women undergoing radiation therapy for breast cancer may experience debilitating fatigue and insomnia for which treatment options are limited. This two-armed, controlled and partially blinded pilot study enrolled 29 females age >18 years, with breast cancer and undergoing radiation therapy in a Midwest community cancer center. The insomnia severity index, Pittsburgh sleep quality index, fatigue symptom inventory were administered to measure clinical effects of massage and plasma levels of cytokine levels, IL-6 and CRP were collected to measure inflammatory response. We have three-time point measurements to study the difference from baseline to midterm treatment and end of study. During each week of radiation therapy, the 17 women randomly selected for massage therapy group (MTG) had weekly study visit with 60 minute massage. Those in had study visits only. Outcomes trended as projected with fatigue and insomnia levels lower in study group. None of the demographic, life style, disease burden was significantly different between MTG and at significance level of 5%. The baseline insomnia score was marginally significant ( $p=0.07$ ) between MTG and (75% in and 41% in MTG). CRP-Treatment group had greater positive net change i.e. lower levels of IL6 and CRP. There were no adverse events associated with massage therapy offered concurrent with radiation treatment. Findings support the efficacy of massage therapy for management of cancer related fatigue and insomnia. Collaborative, interdisciplinary research is a viable means to fund and conduct small intervention studies in a community based cancer center. Larger, multi-site studies with more diverse sample are needed to explain biochemical effects of massage therapy.