Effects of Integrative Restoration (iRest®) on Sleep, Perceived Stress and Resilience in Military Medical Center Healthcare Providers: A Pilot Study

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INTRODUCTION AND BACKGROUND

As a result of the increased demand for acute care for Service Members who have sustained injuries in Operations Iraqi and Enduring Freedom, the level of perceived stress and other associated variables among military healthcare providers is even more pronounced. Effective techniques are needed for caregivers to promote healthy work environments, increase productive sleep, and relieve individual stress.

PURPOSE

- To assess the effects of a six-week Integrative Restoration (iRest®) intervention on participating healthcare providers at one military medical center.
- To determine the acceptability and feasibility of this intervention for this military population.

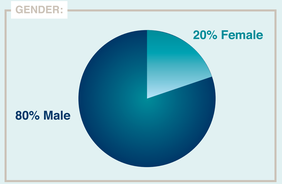
METHODOLOGY

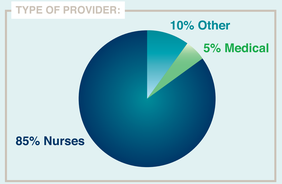
- Prospective observational intervention study.
- Mixed method utilized—quantitative and qualitative measures.
- Baseline and Post intervention measurements:
  - Sleep (Epworth Sleepiness Scale and 72-hour wrist actigraph)
  - Stress (Perceived Stress Scale)
  - Resilience (Connor-Davidson Resilience Scale)
  - Compassion fatigue/burnout (Professional Quality of Life Scale)
  - Intervention acceptability/feasibility (home practice diary)
- 6 week iRest Intervention:
  - iRest developed by Richard Miller, PhD
  - based on ancient practice of yoga nidra
  - tailored specifically for military healthcare providers
  - self-care program incorporated into an military facility organizational care plan
  - Group iRest class once a week augmented with home practice
  - CD developed and provided for use with home practice

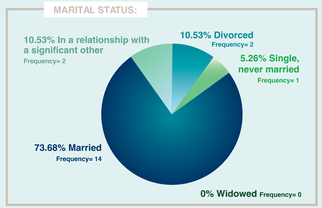
RESULTS*

*These are preliminary results, analysis is still underway

Provider Characteristics (n=19)







All participants requested the intervention be continued and verbalized that they would continue to attend, which suggests that the intervention was acceptable.

Epworth Sleepiness Scale

Time point	% considered sleepy (score>10)	Group mean ESS
Pre-intervention	50%	9.89
Post-intervention	**14%**	**8.86**

DISCUSSION

- This pilot study was conducted to determine the acceptability and feasibility of conducting a 6-week iRest intervention in a group of healthcare workers, the large majority of whom were female, married, and nurses.
- The 74% completion rate is comparable to that of clinical studies of similar interventions and therefore suggests feasibility. However, intervention acceptability/feasibility will be formally assessed following qualitative review and analysis of home practice diary data.
- This poster only includes findings on the Epworth Sleepiness Scale (ESS), which measures daytime sleepiness (Johns, M.W. Reliability and Factor Analysis of the Epworth Sleepiness Scale, *Sleep*, 1992; 15:376-381) and used as a marker for sleep disturbance.
- Preliminary findings from the ESS show a trend toward improving daytime sleepiness utilizing this iRest intervention program.
- 71% of participants with abnormal ESS scores at baseline normalized after the 6-week intervention period.
- Group mean for the ESS decreased, although sample is too small to show significance.

CONCLUSIONS

- These preliminary findings indicate that the iRest program is likely to be a feasible and acceptable intervention for military medical center healthcare providers and that iRest may be effective in reducing daytime sleepiness.
- Further analyses will evaluate individual sleep patterns utilizing the Actigraph findings, as well as self-reported compassion fatigue, stress and resilience.
- Results of this study, combined with other completed studies of the iRest intervention, warrant research in a larger healthcare provider group.
- Funding has been obtained to deliver iRest as a couples-focused intervention for military Service Members and their spouses, and to evaluate effects on sleep disturbance, stress, and marital adjustment.

ACKNOWLEDGMENTS

The authors wish to acknowledge Alice W. Inman, PsyD, Richard Miller, PhD, Mary Ellen Rose, Swapna Thati, MS, Maria Zolezzi, BA, Marzia Motta and the Living Room Recording Studio.

The writing of this manuscript was supported by Award Number W81XWH-08-1-0615 (United States Army Medical Research Acquisition Activity).