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

COL (Ret.) Mona O. Bingham, PhD, RN*, Wendy P. Peacock, JD*, Matthew J. Fritts, MPH, E-RYT* and Joan A.G. Walter, JD, PA*
*Samueli Institute, Alexandria, VA

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 the 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 (Pereced Stress Scale)
• Resilience (Connor-Davidson Resilience Scale)
• Compassion fatigue/burnout (Professional-Quality of Life Scale)
• Intervention acceptability/feasibility (home practice diary)
• 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.
  • iRest® classes 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)

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<th>Gender</th>
<th>% Male</th>
<th>% Female</th>
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<td>83%</td>
<td>30%</td>
<td>70%</td>
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Epworth Sleepiness Scale

Time point | % considered sleepy (score>10) | Group Mean (ESS)
Pre-intervention | 50% | 8.89
Post-intervention | 14% | 8.85

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 reviews and analysis of home practice diary data.
• This paper only includes findings on the Epworth Sleepiness Scale (ESS), which measures daytime sleepiness (Armit, M.R. 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 Actigraphy 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.

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