

Best Practices: OMT For Stress and Fatigue Management

Brendan S. Kelly, DO, FACOI

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‘When you have passion and commitment, you don’t need a complex plan’



Hypothesis

- Stress and fatigue management is a paramount issue within the ACGME for its residents. Could Atlanticare improve its wellness measures with the addition of OMT to the standard methods used prior?

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Osteopathic Manipulative Treatment as a Quality Improvement Process for Resident Physician Stress and Fatigue Management

Peter Ucciferro, DO, John Oghene, MD, Casey Balkema, DO,
Pavan Ganapathiraju DO, MPH, Dominick Zampino, DO, Brendan Kelly, DO

AtlantiCare Regional Medical Center, Atlantic City, NJ

Introduction

- Stress and fatigue management in medical students, residents, and attending physicians is one of the most polarizing topics in graduate medical education
- In 2014, the ACGME and the American Osteopathic Association (AOA) began the process of merging into one governing body and single accreditation system.
- With stress and fatigue management in mind and a goal of introducing osteopathic manipulation to allopathic residents, we instituted the following study that incorporated topics that are the forefront of graduate medical education: **single accreditation and fatigue management**

Purpose

To evaluate the effectiveness of osteopathic manipulative treatment (OMT) in reducing stress and fatigue in resident physicians

Methods

- Osteopathic manipulation was performed on the treatment wing of the current PGY-1 class of allopathic residents
- Total of 11 allopathic resident were split into a treatment group and control group
- Goal of treatment group was to perform treatment sessions 1-2x every 2-3 weeks, with each treatment session lasting 20 minutes
- The physicians providing treatment were the current osteopathic residents, ranging from PGY 1-3
- Participants in both the control and treatment group were provided a pre- and post-survey in order to assess the efficacy of OMT in alleviating stress and fatigue in residents

Osteopathic Treatment Modalities

- Modalities agreed upon for the treatment sessions
 - Soft Tissue and Myofascial Techniques
 - Muscle Energy
 - Counterstrain
 - Thrust Techniques including HVLA were NOT included as a treatment modality

Results

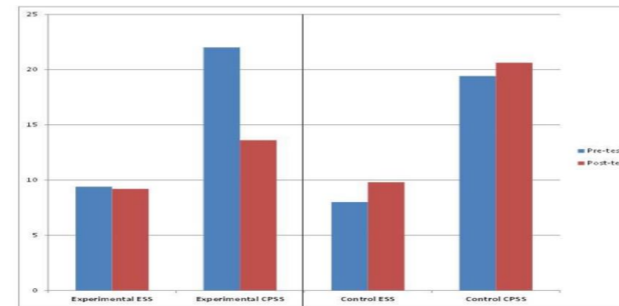


Table 1. Descriptive analysis of the ESS and PSS outcome scores (N=10).

Group	Pretest		Post-test		P Value (0.05)
	Mean	Standard Deviation	Mean	Standard Deviation	
Epworth Sleepiness Scale					
Experimental (n=5)	9.4	3.78	9.2	3.96	P=0.94
Control (N=5)	8.0	2.45	9.8	5.93	P=0.65
Cohen Perceive Stress Scale					
Experimental (n=5)	22	4.00	13.6	3.78	P=0.0062*
Control (N=5)	19.4	5.03	20.6	6.35	P=0.81

- The Epworth Sleepiness Scale consisted of 8 questions scored from 0 to 3; a score of 10 or greater indicates fatigue.
- The Cohen Perceived Stress scale contains 10 questions scored from 0 to 4; a score of 13 is considered average, while a score of 20 or greater indicates high stress.

Discussion

- Effects of OMT on Epworth Sleepiness Scale (ESS)
 - Mean Score of 9.4 in the pretest compared to the post-test mean score of 9.2 in the experimental group (P=0.94)
 - The control group had an increase in ESS scores from the pretest to the posttest, however was not statistically significant (P=0.65)
- Effects of OMT on the Perceived Stress Scale (PSS)
 - Mean score of 22 in pretest compared to posttest mean score of 13.6
 - Of the participants in the experimental group, all reported PSS scores less than 20, indicating less perceived stress (P=0.0062)**
 - Control group had a slight increase in PSS scores (P=0/81)
- Limitations:
 - Small Sample size
 - Of the 11 participants, 1 was lost due to poor follow-up, and failure to attend treatment session. Their data was excluded from the analysis.
 - Irregularity with treatment schedule
 - ESS and PSS are both subjective scales

Conclusions

- Our data demonstrates that OMT can significantly reduce the stress and improve resident physician wellness
- While more data is needed, our study supports the importance and benefit of utilizing OMT in **stress and fatigue management in residency programs as we move forward with a single accreditation system and unified graduate medical education**
- Importantly, our study supports the effort to introduce osteopathic theory and principles to allopathic physicians

Protocol

- 4 minutes rib raising
- 2 minutes thoracic myofascial release
- 2 minutes trapezius myofascial release
- 2 minutes anterior cervical myofascial release
- 3 minutes SCM Inhibition
- 3 minutes elevator scapulae inhibition
- 3 minutes occipitatlantal release

Conclusions

- Cohen Perceived Stress score improvement in OMT with p Score 0.0062
- Functional outcomes:
 1. Introduce osteopathic principles and practice to our allopathic residents. Nice bridge in the SAS
 2. Scholarly activity involving OMT and bringing spotlight to OMT
 3. Quality improvement initiative