

Use of a SOAP Note Assignment to Evaluate Osteopathic Medical Students Understanding of the Somatic Dysfunction Diagnostic Process

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Introduction

Osteopathic Manipulative Medicine Treatment (OMT) has become the visible manifestation of Osteopathic Medicine's uniqueness in our current medical practice environment¹. As such, the Osteopathic profession strives to encourage osteopathic medical students to use OMT in their developing practices. As with all areas of medical education, assessment of both technical skill and medical decision making must be undertaken to include OMT. Prior studies in osteopathic medical education have looked at student interest in OMT and SOAP note writing in general, but none have specifically evaluated student integration of somatic dysfunction assessment from screening to full segmental diagnosis. Seo et al³ used the SOAP note to evaluate student documentation completeness. The Alabama College of Osteopathic Medicine (ACOM) instituted an OMT SOAP note assignment to assess documentation completeness in OMS3s.

Purpose/Study design: This study is a retrospective review of the completed and previously graded OMM SOAP note assignment to determine rates of students making treatment decisions from initial osteopathic screening exam (OSE) findings only vs OSE and segmental examination. We hypothesize that OMS3s fail to complete a segmental examination prior to making a SD diagnosis and performing OMT. Additionally, the study will associate consistency of SOAP note findings from Objective to Assessment to Plan and for completeness of OMT procedural documentation.

Methods

A retrospective review of graded OMT SOAP notes from the ACOM-Ashford Rural Health third year core rotation. These SOAP notes are of actual patient encounters, not standardized patient scenarios.

Procedure:

- 1) Evaluation of the data to determine rate of OSE, SD, OMT vs OSE, Segmental Exam, SD, OMT
- 2) Each SOAP note was reviewed, and we analyzed the following:
 - a. Presence or absence of OSE, by body region
 - b. Presence or absence of segmental exam, by body region examined
 - c. Presence or absence of SD diagnosis, by region and type of OMT applied
 - d. Presence of a differential diagnosis or problem list
 - e. Congruency of OSE findings, segmental exam findings, SD diagnosis and OMT provided
 - f. Completeness of OMT procedural documentation (consent, technique description, reassessment)

Results

55 SOAP notes demonstrated:

31 (56.3%) used OMT based solely on OSE findings

9 (16.3%) completed a segmental exam SD diagnosis prior to OMT

13 (23.6%) used OMT without OSE or segmental Exam

Results

COMPLETENESS OF ENCOUNTER

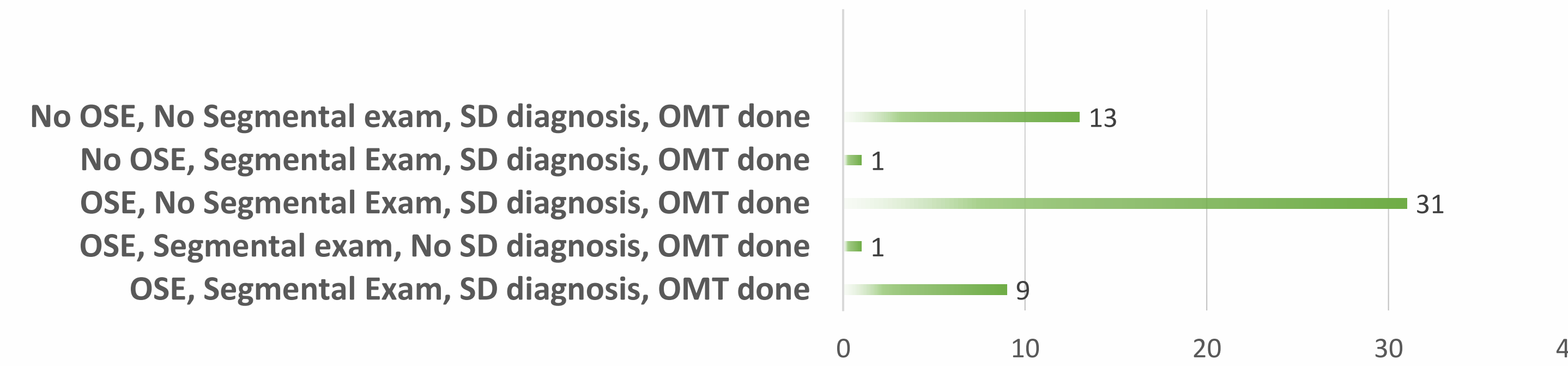


Figure 1 OSE aggregate

Primary Aim:

- 9 SOAP notes were complete & congruent, that is, the OMS3 completed an OSE, a segmental exam, made a SD diagnosis & completed OMT for the SD diagnosed.
- 41 did an OSE but forgot the segmental exam or the SD Dx.
- 14 did no OSE but did a segmental exam and/or made a SD diagnosis.
- All OMS3's did OMT because this was an OMT SOAP note assignment.

Secondary Aims:

Figures 2,3,4,5 display the regions where the OSE was done, where the segmental exam was done, where the SD diagnosis was made and the treatment types by region.

The students screened and examined the thoracic and lumbar spine the most, but the SD diagnosis made was also of the cervical spine and upper extremity.

These diagnosis came from the patient's chief complaint, not the OSE.

S. O. A. P. Congruency

Only 5 of 55 notes had significant discrepancies between the Objective findings to the Assessment to the Treatment (Plan). Of these the chief complaint was an extremity complaint; the screening and segmental exam (if done) were axial, and the diagnosis was general, but the OMT was for the extremity, for example Carpal Tunnel Release technique.

Differential Diagnosis vs Problem List

- 22 developed a differential diagnosis
- 23 developed a problem list
- 3 had a combined list

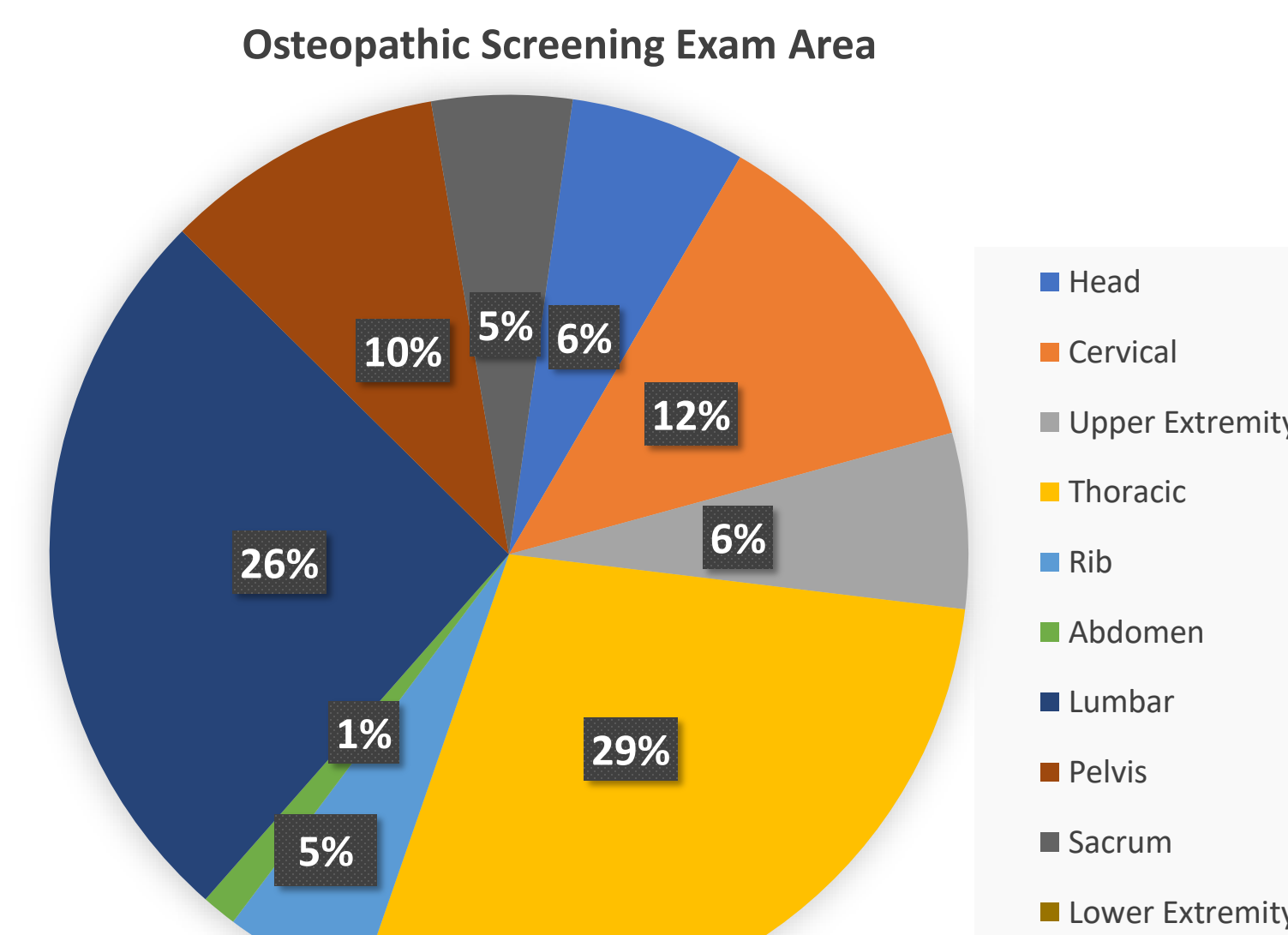


Figure 2 OSE Regions

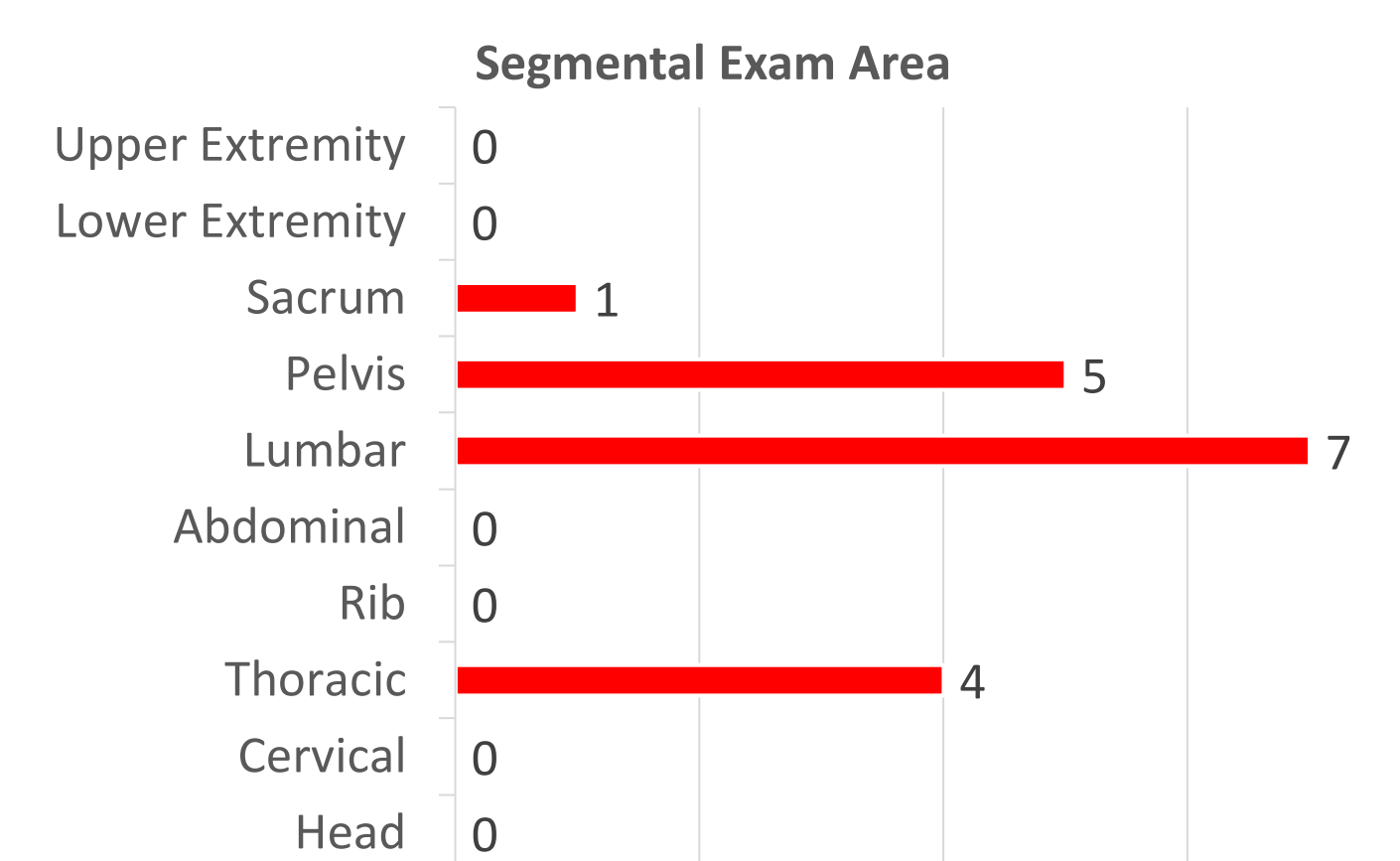


Figure 3 Segmental Exam Regions

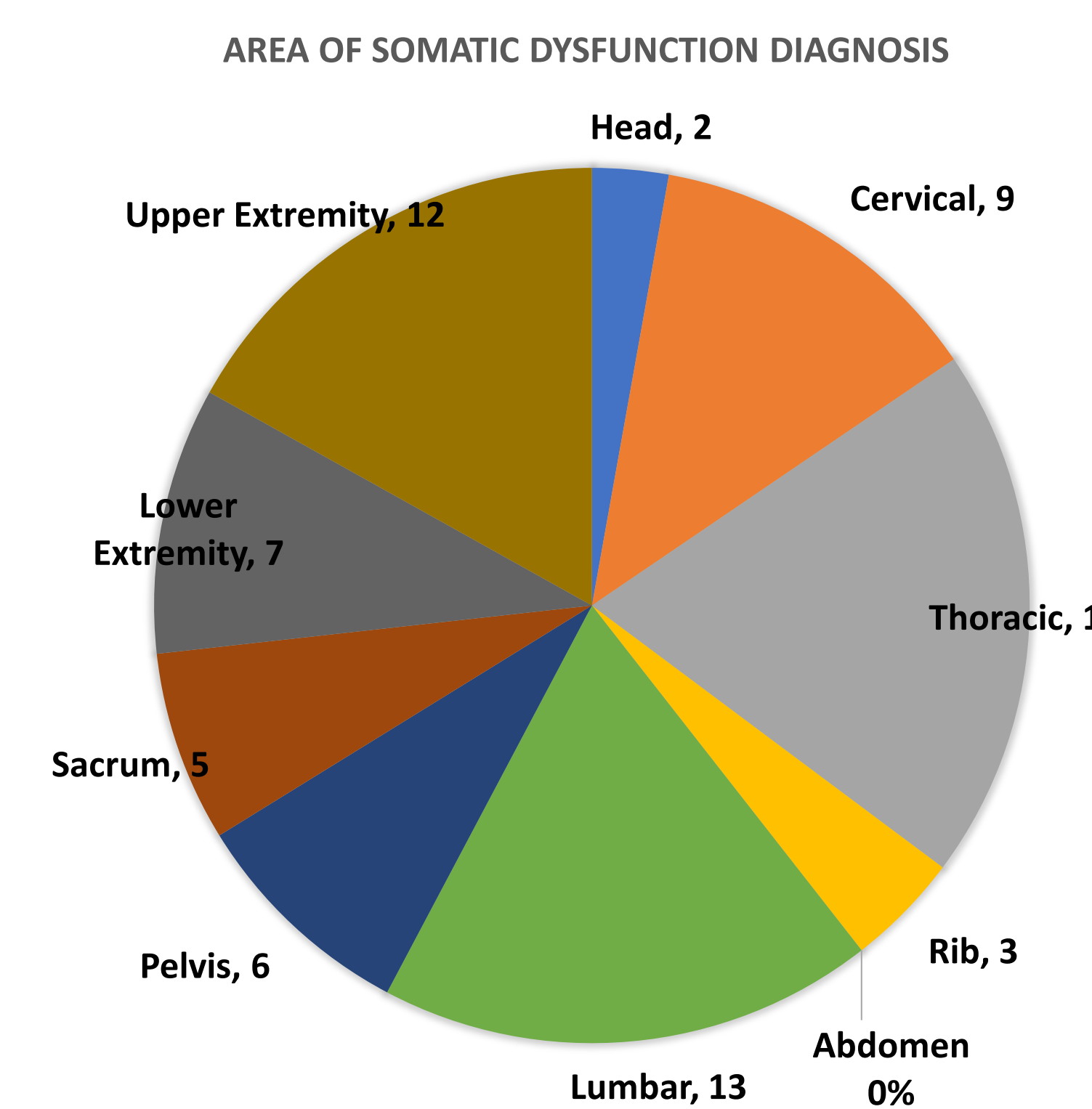


Figure 4 Area of Somatic Dysfunction Diagnosis

Results

Region	Number	A	BLT	CS	DI	E	FPR	L	MET	MFR	R	ST	Other
Head	8			x		x							OA release
Cervical	8			x									x
Upper Ext.	16	x		x	x		x		x	x			Carpal Tunnel Release
Thoracic	18			x	x				x	x			Trap, Thoracic inlet
Ribs	3			x									Rib Raising
Abdomen	0												
Lumbar	12		x				x		x	x			
Pelvis	8		x	x			x		x	x			
Sacrum	3	x	x						x				
Lower Ext.	8			x	x				x	x			
Lymphatic	2							x					

A-articular, BLT-balanced ligamentous tension, CS-counterstrain, DI-direct inhibition, E-effleurage, FPR-facilitated positional release, L-lymphatic pump, MET-muscle energy technique, MFR-myofascial release, R-rib raising, ST-soft tissue

Figure 5 OMT by Region and Technique

OMT Procedural Documentation

- Required components of documentation for this assignment include obtaining patient consent, describing the procedure, and reassessing.
- 46 documented these appropriately
- Of the 9 who did not, 1 did not document consent, 1 did not document the technique used and 7 failed to document the reassessment.

Conclusions

Our analysis confirms the observation that OMS3s diagnose and treat SD based on the OSE, not a segmental exam, therefore they do not document completely. Additionally, they often diagnosed and treated without documenting appropriate physical findings.

This analysis provides a reference point for focused OMS3 and faculty instruction on the OSE and the segmental exam prior to assigning a SD diagnosis. We intend to make curricular modifications and use this methodology to reassess the above data after a teaching intervention has been instituted.

Limitations: This study only assessed students on a known OMT documentation assignment, everyone did OMT, thus limiting its generalizability to all patient care. This rate of OMT use is not consistent with published data¹. Additionally, SOAP note documentation may not fully represent what was performed during examination.

Future use of the SOAP note assessment tool on randomly selected patient encounters would allow us to assess the OMS3s understanding and use of OMT in actual daily practice and will be a focus of future study.

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