## RESEARCH ARTICLE

# Allopathic Supervision of Osteopathic Education: What Support is Needed?

Sarah J. James, DO1; Larissa Zakletskaia, MA1

<sup>1</sup>University of Wisconsin School of Medicine and Public Health, Department of Family Medicine and Community Health, Madison, WI

## **KEYWORDS:**

Graduate Medical Education

Osteopathic Manipulative Medicine

Single Accreditation System

#### Abstract

Background: With the Accreditation Council for Graduate Medical Education implementation of a Single Accreditation System through which allopathic programs can obtain osteopathic recognition, it is vital to continue to support the development of resident osteopathic skills, which could be a challenge without properly trained faculty. The ability and confidence of allopathic and osteopathic faculty in providing Osteopathic Manipulation Treatment (OMT) supervision is unknown, but there is likely a need for faculty development in this area.

**Methods:** A 18-item survey to assess allopathic faculty confidence and concerns about faculty development in precepting OMT was completed by program directors and clinical coordinators of programs registered with the American College of Osteopathic Family Physicians.

Results: When comparing AOA (n=93) and AOA/ACGME accredited programs (n=80), significantly fewer respondents from AOA programs perceived their allopathic faculty as confident in their ability to precept OMT (36% vs. 50%, respectively, p<0.001). Despite concerns about allopathic faculty's ability to precept OMT, reported by 64% of AOA programs and 50% of AOA/ACGME programs, only a minority of programs had educational programs in place for allopathic faculty (26% and 41%, respectively). Respondents listed the four most important topics to include as part of faculty development in osteopathic skills as somatic function diagnosis, osteopathic treatment plan theory, muscle energy and myofascial techniques.

**Conclusion:** There was documented concern by respondents regarding their allopathic faculty's ability to precept OMT, suggesting the need for standardized education on OPP and OMT to better equip allopathic faculty to support osteopathic residents in OPP and maintain OMT skills.

## INTRODUCTION

The use of osteopathic principles and practice (OPP) and osteopathic manipulation treatment (OMT) are factors that distinguish osteopathic physicians from their allopathic colleagues. OMT has been reported to be effective in a variety of conditions including back pain<sup>1,2</sup>, headaches,³ pregnancy related back and pelvic pain,⁴ and pneumonia.⁵ Many osteopathic medical school graduates have indicated that they would utilize OMT in their future practice.⁶ Attainment of OMT and OPP knowledge is part of primary care osteopathic residency training in osteopathic(AOA) and dual(AOA/ACGME)-accredited residency programs. In these programs, residents indicated that having osteopathic mentors and support for OMT would influence them to continue its use in their future practice.⁶ Therefore, it is important to have trained teaching faculty to provide education and supervision of OPP and OMT for these residents.

# CORRESPONDENCE:

Sarah J. James, DO | Sarah.james@fammed.wisc.edu

The American Osteopathic Association was added as a member of the American Council of Graduate Medical Education (ACGME) in 2014, creating a Single Accreditation System (SAS). The SAS allows ACGME-accredited residency programs to seek Osteopathic Recognition (OR), a desired designation for recruitment of osteopathic medical graduates. Through OR, osteopathic competencies have been added to ACGME accreditation standards for physician training. This added level of competency-based training will increase the need for faculty who can conduct such training. One criterion for attaining OR is to designate at least two osteopathically-educated faculty in these programs. While the need for faculty competent to continue the training of Doctor of Osteopathic Medicine (DO) residents is clear, the precise number needed is not.

Training additional clinicians to teach OMT is challenging. The competence of OMT precepting and preceptors is not clear. While standards exist for OMT-based knowledge acquisition and transfer of OMT skills at the medical-student level<sup>8</sup>, no such criteria exist for residents. While DO residents are supervised by both board-certified DO and Doctor of Medicine (MD) faculty, there

is no formal accreditation certifying OMT skills for supervising physicians; skills may be less than they should be. Anecdotally, many DO faculty do not regularly use their OMT skills in practice, and many MD faculty are unfamiliar with OMT.<sup>9</sup>

The perceived need to train additional physicians to teach OMT, and concern about the quality of current residency-based OMT supervision is unknown. Residency leadership personnel are intimately involved in the day-to-day teaching and assessment of OMT and are in a unique position to offer input in OMT training and supervision; their views may serve as a proxy for direct assessment and inform future OMT-related training activities.

Therefore, we surveyed residency program directors and clinical coordinators of programs registered with the American College of Osteopathic Family Physicians. The purpose of this survey was threefold:

- 1) To determine the participants' confidence in the ability of their allopathic faculty to provide OMT supervision of osteopathic residents;
- 2) To determine whether participants are concerned about the quality of residency-based OMT supervision by allopathic faculty;
- **3)** To assess current faculty development efforts for teaching and precepting OMT and their preferred content of a hypothetical standardized allopathic preceptor curriculum on OPP and OMT.

#### **METHODS**

## Subjects and setting

We distributed a cross-sectional survey via paper and electronic format to residency program directors and clinical coordinators of programs registered with the American College of Osteopathic Family Physicians. One hundred and seventy AOA and 113 AOA/ ACGME-accredited programs were surveyed. Programs ranged from two to thirty residents, with one to thirteen core faculty. The IRB determined this project exempt.

## Instrument

We created an 18-item survey assessing program characteristics including AOA-accredited or AOA/ACGME-accredited status, numbers of faculty and residents, numbers of faculty who performed OMT, the perception of their allopathic faculty's confidence in their ability to precept OMT and their level of concern regarding allopathic faculty precepting OMT. Respondents were also asked about training provided to allopathic faculty in osteopathic education. Finally, respondents were asked to indicate the most important topics to introduce to allopathic faculty preceptors for faculty development in osteopathic skills to enable more effective supervision. Comments were solicited for methods of providing OPP/OMT education to allopathic faculty.

#### **Procedures**

Paper and online versions of this survey were distributed to the program directors and program coordinators for all programs registered with American College of Osteopathic Family Physicians

Program (ACOFP). Paper versions were distributed to participants of the March 2014 ACOFP Program Director's workshop. A survey link was emailed twice to all 283 programs registered with ACOFP. If both the program coordinator and program director from an individual program completed surveys, one of the entries was randomly chosen. The same procedure was done for duplicate entries for participants completing both the paper and online versions. Respondents from four program surveys indicated that their program had not started taking residents yet; therefore they were removed from the data set. Also, the outliers of the highest and lowest number of residents were removed.

#### Data analysis

The analysis calculated summary statistics and compared responses between respondents from AOA only and AOA/ACGME-accredited programs using a chi-square test.

## **RESULTS**

There was a 61% survey completion rate (173 of 283 surveys). Ninety-three (54%) were AOA programs and eighty (46%) were AOA/ACGME-accredited. There were about the same number of osteopathic residents in AOA and AOA/ACGME programs, as well as MD faculty. Both DO and MD faculty were more likely to perform OMT in AOA/ACGME programs compared to AOA-accredited programs. Additional characteristics of the responding programs are shown in *Table 1*.

When assessing respondents' perception of their allopathic faculty's confidence in the ability to precept OMT, 34% of AOA programs (n=93) and 53% of AOA/ACGME programs (n=80) answered positively (p<0.001). Most respondents (64%) from AOA programs reported concern regarding their allopathic faculty's ability to precept OMT and 50% of respondents from AOA/ACGME-accredited programs reported concern (P=.112).

As shown in *Table 1*, only 37% of AOA programs and 47% of AOA/ ACGME programs had education in precepting OMT for their allopathic faculty. Also, 26% of AOA programs and 41% of AOA/ ACGME-accredited programs reported providing education on OPP for MD faculty. Unfortunately, more respondents from AOA programs failed to respond to these questions.

The 17 most common topics suggested in training faculty supervisors are shown in *Table 2* - this table illustrates, in the order of importance, the topics that respondents thought would be adequate/necessary to improve an allopathic physician's ability to supervise/precept osteopathic residents/students. The top four, similar across program type, were somatic dysfunction diagnosis, osteopathic treatment plan theory, muscle energy and myofascial techniques. Participants were also asked to comment about possible forms of education delivery of this information. The common themes were: OMT clinic experience through mentoring by osteopathic faculty, regularly scheduled OMT didactic sessions with hands-on opportunities, and access to osteopathic literature through library access as well as journal club activities.

TABLE 1:

Program characteristics: Summary of educational environment characteristics of AOA and AOA/ACGME-accredited programs.

\*\*p<0.01-indicates significance

CHARACTERISTIC	AOA ACCREDITED PROGRAMS (N=93)	AOA/ACGME ACCREDITED PROGRAMS (N=80)	P-VALUE
Mean No. of residents DO residents:	11.5 +9.7	9.0+5.7	N/A
MD residents:	0	13.5+8.9	
Total:	11.5 +9.7	22.4+9.8	
Mean No. core faculty DO faculty:	5.1 +5.2	2.3 + 1.3	NA
MD Faculty:	2.3 +1.5	2.7 + 0.8	
Total	7.4 +6.1	5.0 +1.7	
Mean No. of outside faculty preceptors	3.7 + 1.7	3.2 + 1.6	NA
% of programs that faculty perform OMT All DO faculty:	63% (53 out 84 respondents, missing=9)	83% (64 out of 77 respondents, missing=3)	0.005**
Any MD faculty:	9% (5 out of 56 respondents, missing=37)	28% (21 out of 74 respondents, missing=6)	0.006**
Education program on precepting OMT for MD faculty (%Yes)	37% (20 out of 54 respondents, missing=39)	47% (35 out of 74 respondents, missing=6)	0.247
Education program on OPP for MD faculty (%Yes):	26% (14 out of 54 respondents, missing=39)	41% (30 out of 74 respondents, missing=6)	p=0.094
If yes, mean number of hours:	49.8 + 110.6, range: 1-300	6.7 + 9.8, range: 1-45	

## TABLE 2:

 $17\ topics\ to\ improve\ allopathic\ physicians\ ability\ to\ supervise\ osteopathic\ residents/students\ (percent\ of\ responses).\ (N=173)$ 

1.	Somatic dysfunction diagnosis (69%)	7.	Anatomic landmarks (46%)	13.	Still Techniques (24%)
2.	Osteopathic treatment plan theory (61%)	8.	Lymphatic techniques (45%)	14.	Chapman's points (22%)
3.	Muscle energy (59%)	9.	HVLA (36%)	15.	Visceral techniques (25%)
4.	Myofascial release (55%)	10.	Articulatory techniques (32%)	16.	Facilitation (17%)
5.	Osteopathic Medicine History (47%)	11.	Facilitated positional release (31%)	17.	Craniosacral motion (12%)
6.	Spinal motion (45%)	12.	Fryette's Principles (28%)		

## **DISCUSSION**

In this study, we document concern of residency program directors and coordinators perception of their MD faculty's confidence and ability to precept residents in OMT. We found that a minority of programs provided faculty development in osteopathic skills although respondents provided many suggestions for topics and format for teaching this content to MD faculty. Interestingly, although AOA programs had more DO faculty on average when compared to AOA/ACGME-accredited programs, a lower number of DO faculty perform OMT when compared to DO faculty in AOA/ ACGME-accredited programs. This difference is likely because the DO faculty in AOA/ACGME programs are generally responsible for the resident osteopathic education and instruction. Additionally, there were approximately the same number of MD faculty on average across program type, but those in AOA/ACGMEaccredited programs were more likely to perform some OMT. These data suggest a need for additional support for both MD and DO residency faculty development in OPP and OMT.

The transition of graduate osteopathic training to the Single Accreditation System within ACGME will require better documentation of educational support of resident teaching in OPP and OMT. Use of the OSCE<sup>10</sup> and standards in trauma care<sup>11</sup> are good assessment tools of clinical and procedural competency, but there must be adequately trained faculty to supervise these assessments. Standardized faculty development in OPP and OMT would likely better equip allopathic faculty to support osteopathic residents in OPP and maintain OMT skills. Currently, there are no known studies on the effectiveness of training allopathic faculty on supervising OMT. Therefore, we need standard preceptor courses and subsequent studies to determine what is needed and how best to teach allopathic faculty to be adequate preceptors in a skill they may not perform themselves. Preceptor training courses to satisfy these needs could be modeled after courses based at osteopathic medical schools geared toward their local medical student preceptors, those done at the Society of Teachers of Family Medicine, or the one sponsored by the American Academy of Family Physicians.

Limitations of this study include indirect measurement of allopathic supervisor confidence in OMT precepting skills and only surveying AOA or AOA/ACGME accredited programs. We did not survey ACGME-only accredited programs. Future studies are needed as it is not known how ACGME-only programs view the need for osteopathic education and faculty development within their residencies. Future studies could be useful to address allopathic faculty directly regarding their concerns about precepting OMT as well as current exposure to OPP/OMT. Additional studies should also be directed toward osteopathic residents to assess their perceived needs to support their use of OPP/OMT.

## **CONCLUSION**

During the transition to the ACGME Single Accreditation System, there is a need to continue to properly support graduate training in OPP and OMT. Currently, this study documented perceived

concern by respondents regarding their allopathic faculty's ability to precept OMT. Also, education for allopathic faculty to enable more effective osteopathic resident supervision is currently limited and would likely better equip allopathic faculty to support osteopathic residents in continued development of OMT skills.

#### **AUTHOR DISCLOSURES:**

No relevant financial affiliations

#### **REFERENCES:**

- Licciardone JC, Gatchel RJ, Aryal S. Recovery From Chronic Low Back Pain After Osteopathic Manipulative Treatment: A Randomized Controlled Trial. JAOA, March 2016: 116(3):144-55
- Bigos S, Bowyer O, Braen G. Acute Low Back Problems in Adults. Rockville (MD): Agency for Health Care Policy and Research (AHCPR); 1994 Dec. (AHCPR Clinical Practice Guidelines, No. 14.) 3, Clinical Care Methods. Available from: https://www.ncbi.nlm.nih.gov/books/NBK52405/
- Espi-Lopez GV, et.al. Do manual therapy techniques have a positive effect on quality of life in people with tension-type headache? A randomized controlled trial. European journal of physical & rehabilitation medicine. Aug 2016: 52(4):447-56
- Hensel KL. Pregnancy Research on Osteopathic Manipulation Optimizing Treatment Effects: the PROMOTE study. American Journal of Obstetrics & Gynecology. Jan 2015: 212(1): 108.e1-9
- Noll DR, et.al. Efficacy of osteopathic manipulation as an adjunctive treatment for hospitalized patients with pneumonia: a randomized controlled trial. Osteopathic Medicine and Primary Care. Mar 2010: 19:4:2
- Baker HH, et.al. Osteopathic Medical Students Entering Family Medicine and Attitudes Regarding Osteopathic Manipulative Treatment: Preliminary Findings of Difference by Sex. Family Medicine. May 2017;49(5):374-377
- Hempstead LK. Et.al. Resident and Faculty Attitudes Toward Osteopathic-Focused Education. JAOA, June 2017; 117(6):387-392
- 8. http://www.aacom.org/ome/councils/aacom-councils/ecop
- Rubeor A, Nothnagle M, Taylor JS. Introducing osteopathic medical education in an allopathic residency. JAOA 2008; 108:404-408.
- Dwyer T, et.al. How to set the bar in competency-based medical education standard setting after an Objective Structured Clinical Examination(OSCE). BMC Medical Education. Jan 2004; 16:1
- Nousiainen MT, et.al. Resident education in orthopaedic trauma: the future role of competency-based medical education. Bone & Joint Journal, Oct 2016; 98-B(10): 1320-1324.