Professional Satisfaction Among New Osteopathic Family Physicians: A Survey-Based Investigation of Residency-Trained Graduates

Christopher Simpson, DO, PhD; Marc Cutright, EdD; Victor Heh, PhD; and Martha A. Simpson, DO, MBA

Context: Progressively more osteopathic graduates are seeking training opportunities in programs accredited by the Accreditation Council on Graduate Medical Education (ACGME).

Objective: To determine if family medicine residency training program choice (ie, allopathic [ACGME], osteopathic, or dually accredited) has an impact on professional satisfaction levels among recent osteopathic medical school graduates.

Methods: The authors designed a survey instrument to gather data on professional satisfaction levels. Osteopathic family physicians who completed residency training from 1999-2003 were asked to participate in the study.

Results: The survey was sent to 2284 individuals with an adjusted response rate of 37%. One hundred and one (15.8%) of the osteopathic family physicians who responded reported completing residency training programs approved by the American Osteopathic Association (AOA); 335 (52.3%), ACGME-accredited programs; 198 (30.9%), dually accredited programs. One hundred forty-three surveyed osteopathic physicians (22.3%) were less than happy with their career choice. In addition, 219 (34.2%) reported that they were “thinking of changing specialty,” and 30 (4.7%) reported that they were not “currently practicing family medicine.” Individuals trained in ACGME programs reported slightly higher levels of professional satisfaction than individuals trained in AOA-approved or dually accredited programs—though these differences were deemed trivial (ie, low effect size, 0.01; P>0.05).

Conclusion: The authors found no statistically significant differences in professional satisfaction levels among osteopathic family physicians who were recent medical school graduates regardless of residency training program choice.

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This research was supported by the College of Education as well as the College of Osteopathic Medicine at Ohio University.

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Submitted April 9, 2007; revision received April 23, 2008; accepted August 11, 2008.

Among medical school students, interest in practicing family medicine is waning.¹ This lack of interest has been attributed to multiple causes,² in spite of increased training opportunities—especially for graduates of osteopathic medical schools.³⁻⁵

Although osteopathic medical graduates have traditionally pursued opportunities for postgraduate training in programs approved by the American Osteopathic Association (AOA), for nearly 25 years,⁴ they have also had full access to programs that are accredited by the Accreditation Council on Graduate Medical Education (ACGME)—as well as those that are “dually accredited” by both oversight bodies. The passage of Resolution 42 (A/2000), the Approval of ACGME (Accreditation Council on Graduate Medical Education) Training as an AOA-Approved Internship, has further increased postgraduate training options for osteopathic medical students.⁶

However, there is no clear consensus within the osteopathic medical profession regarding these developments. The potential adverse effects of these changes have been vigorously debated.⁷⁻¹² Chief among them is reduced exposure to osteopathic principles and practice through role models and mentors.¹³

One commentator¹⁴ believed that a lack of “osteopathic experience” would have long range implications for the viability of osteopathic training programs—and, ultimately, for the profession as a unique holistic training and clinical model.

The reasons why osteopathic physicians choose to receive residency training in allopathic programs are not entirely clear. Anecdotal reports suggest that allopathic programs provide higher quality training,¹⁵ but that assumption is disputed within the profession.¹⁶

Teitelbaum¹⁷ reported that 26% of responding osteopathic medical students in the Class of 2004 (n=1882) indicated that they believed they would receive better training in an ACGME-accredited program instead of one approved by the AOA. In addition, 20% of these graduating students reported that they felt allopathic training would provide better opportunities in the future.¹⁷

During the 1980s, the number of osteopathic graduates enrolled in ACGME-accredited residency training programs increased 39%, from 1543 to 2150 between 1986 and 1988.¹⁶,¹⁷ By 2002, that number had risen to 4175.¹⁸ Between 1981 and 2004, the total percentage of osteopathic medical graduates...
enrolled in ACGME-accredited residency training programs rose from 2% to 20%. In fact, 46% of all osteopathic physicians who completed family medicine residency training between 1989 and 1995 did so in ACGME-accredited programs. Currently, the profession fills approximately 50% of its traditional osteopathic family medicine training positions.

While these numbers demonstrate the variety of allopathic opportunities now open to osteopathic medical school graduates, they may also highlight a decline in the relative attractiveness—and ultimate survivability—of strictly osteopathic training programs.

**Methods**

Graduates from osteopathic medical schools who completed family medicine residency training from 1999-2003 were identified using the Physician Masterfile from the American Medical Association (AMA) (Chicago, Ill).

This 5-year cohort was chosen because we felt it represented the most stable data source available, given limitations intrinsic to data-compilation methods used for the AMA Physician Masterfile. Based on self-report of residency training type (ie, ACGME, AOA, or dual), these individuals were divided into three study groups.

Although care was taken to select appropriate study subjects from the AMA Physician Masterfile, the following inclusion criteria were used for the survey responses received: completed family practice residency training from 1999 to 2003 after having graduated with a DO degree from 1996 to 2000. All nonphysicians were excluded from study, as were physicians holding an MD degree and those who did not complete a family practice residency—or who did not do so or graduate with a DO degree in the time parameters specified.

A retrospective, 43-item survey was constructed for this cohort. Participants were queried about basic demographic information, residency training choice, and the factors that affected their decision in the first 17 survey items using fill-in-the-blank, yes/no, and Likert-scale survey items (1, strongly disagree; 2, disagree; 3, undecided or neutral; 4, agree; 5, strongly agree).

Seven Likert-scale survey items were devoted to determining satisfaction with the postgraduate medical training received during residency. Finally, participants were asked to respond to 19 Likert-scale survey items in three subscales intended to represent global professional satisfaction levels:

- **Job satisfaction** refers to an individual’s satisfaction in his or her current job situation.

### Table 1

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Self-Reported Professional Satisfaction Ratings</th>
<th>Among New Osteopathic Family Physicians: Mean (SD) Survey Responses (n=641)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction Level</strong></td>
<td><strong>Mean (SD)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Job</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am seriously thinking of changing</td>
<td>2.7 (1.4)</td>
<td></td>
</tr>
<tr>
<td>I cannot imagine myself practicing</td>
<td>3.0 (1.2)</td>
<td></td>
</tr>
<tr>
<td>I would recommend my specialty</td>
<td>3.4 (1.1)</td>
<td></td>
</tr>
<tr>
<td>If I were to start my career over again, I would still choose to work where I do now.</td>
<td>3.8 (1.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Career</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I remain in medicine mainly because there is no easy way for me to move to another type of work.</td>
<td>2.9 (1.4)</td>
<td></td>
</tr>
<tr>
<td>I am seriously thinking about leaving clinical practice.</td>
<td>2.7 (1.4)</td>
<td></td>
</tr>
<tr>
<td>My career in medicine is as appealing to me now as when I started.</td>
<td>3.3 (1.2)</td>
<td></td>
</tr>
<tr>
<td>If I were to choose over again, I would still become a physician.</td>
<td>3.8 (1.1)</td>
<td></td>
</tr>
<tr>
<td>All things considered, I am satisfied with my career as a physician.</td>
<td>3.9 (0.9)</td>
<td></td>
</tr>
<tr>
<td>In general, my medical career has measured up to my expectations.</td>
<td>3.6 (1.0)</td>
<td></td>
</tr>
<tr>
<td>I would recommend medicine to others as a career.</td>
<td>3.3 (1.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Specialty</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My specialty does NOT provide the job security it once did.</td>
<td>2.9 (1.2)</td>
<td></td>
</tr>
<tr>
<td>Practice in my specialty no longer has the appeal to me it used to have.</td>
<td>2.8 (1.2)</td>
<td></td>
</tr>
<tr>
<td>In general, family medicine has measured up to my expectations.</td>
<td>2.8 (1.1)</td>
<td></td>
</tr>
<tr>
<td>If I were to start my career over again, I would choose my current specialty.</td>
<td>3.3 (1.2)</td>
<td></td>
</tr>
<tr>
<td>I would recommend my specialty to a physician student seeking career advice.</td>
<td>3.4 (1.1)</td>
<td></td>
</tr>
<tr>
<td>I cannot imagine myself practicing in a different clinical specialty.</td>
<td>3.0 (1.2)</td>
<td></td>
</tr>
<tr>
<td>I am seriously thinking of changing my specialty.</td>
<td>3.3 (1.4)</td>
<td></td>
</tr>
</tbody>
</table>

*Survey participants were asked to respond to Likert-scale items (1, strongly disagree; 2, disagree; 3, undecided or neutral; 4, agree; 5, strongly agree).

To maintain scale integrity, negatively phrased questions were recoded, in accord with standard survey methodology.

Career satisfaction requested an overall evaluation of satisfaction with career progression.

Specialty satisfaction sought an assessment of respondent’s satisfaction with choice of family medicine as area of practice.

It was expected that this self-administered survey would take no more than 5 minutes to complete.

The three subscales used for this survey instrument were originally developed for the Physician Worklife Study (PWS).22,23 The PWS was designed by the Career Satisfaction Study Group of the Society of General Internal Medicine under contract from the Robert Wood Johnson Foundation (Princeton, NJ) and has been used extensively in the medical literature,24-27 having undergone broad validity and reliability testing. To our knowledge, at publication, the present article reports on the first study of its kind to apply this survey instrument within the osteopathic medical profession.

One-way multivariate analysis of variance was used to determine the effect of residency training program. Statistical analysis was conducted using SPSS 16.0 (SPSS Inc, Chicago, Ill) with the α level set at .05.

This research project was reviewed by the institutional review board at Ohio University College of Osteopathic Medicine in Athens and found to be in compliance.

Results

The AMA Masterfile identified 2284 osteopathic family physicians who completed family medicine residency training from 1999-2003.

The survey instrument was sent to all 2284 physicians. Three separate mailings were sent during the 12 weeks from May 15, 2006, to August 7, 2006. Completed surveys were returned by 689 physicians for an overall response rate of 30%.

Inclusion and exclusion criteria were applied to the survey responses received. In addition, some surveys were returned because of invalid address information from the AMA Physician Masterfile or, in some cases, because of death.

Therefore, after accounting for undelivered mail and ineligible survey respondents, the adjusted sample size was 1757, with an adjusted total of 641 completed and returned surveys for an adjusted response rate of 37%.

Of these 641 respondents, 101 (15.8%) completed residency training in AOA-approved programs; 335 (52.3%), ACGME-accredited programs; and 198 (30.9%), dually accredited programs.

Four hundred seventy-three respondents (73.8%) agreed or strongly agreed that they “picked this residency because it offered the best training available.” Five hundred fifty-eight (87.1%) agreed or strongly agreed that geographical location “was very important in my choice of residency program.”

Mean (SD) ratings for each of the 19 global subscale items in the survey instrument are reported in Table 1. As noted elsewhere, ratings have been recoded because some statements were negatively worded.20

A notable number of surveyed osteopathic physicians reported being less than happy with their career choice. When asked to respond to the statement “All things considered, I am satisfied with my career as a physician,” 143 respondents (22.3%) strongly disagreed, disagreed, or provided a neutral response. Two hundred nineteen individuals (34.2%) reported that they were “thinking of changing...specialty.” Thirty (4.7%) reported that they were not “currently practicing family medicine.” However, the majority of respondents (495 [77.2%]) agreed or strongly agreed with the statement that “all things considered, I am satisfied with my career as a physician.” Likewise, a notable number of respondents (293 [45.7%]) agreed that family medicine “does NOT provide the job security it once did.”

Summary data for professional satisfaction levels in each subscale by residency training type is provided in Table 2.

Overall professional satisfaction levels among surveyed osteopathic family physicians who completed residency training from 1999-2003 are reported in the Figure.

As noted, we used one-way multivariate analysis of variance to determine the effect of residency training type on the three satisfaction subscales. No statistically significant differences were found among the three kinds of residency training program on the three satisfaction measures (Wilks Λ=0.98, F[3,1258]=2.04, P>.05). The multivariate η² based on Wilks Λ was weak (ie, .01). A post hoc power of .75 based on the multivariate test was achieved. Post hoc analysis for each satisfaction subscale was not done because the multivariate omnibus test was not statistically significant.

Although the differences shown are not statistically significant, physicians trained in AOA-approved programs gen-

| Table 2 | Self-Reported Professional Satisfaction Ratings Among New Osteopathic Family Physicians: Mean Subscale Satisfaction Scores by Residency Training Type* |
| --- | --- | --- | --- |
| Residency Training Program | Satisfaction | |
| | Job | Career | Specialty |
| ACGME accredited | 17.9 | 25.0 | 21.6 |
| AOA approved | 16.9 | 24.1 | 21.3 |
| ACGME accredited and AOA approved | 17.8 | 24.4 | 21.6 |

* A higher score reflects a relatively higher degree of satisfaction.

Abbreviations: ACGME, Accreditation Council on Graduate Medical Education; AOA, American Osteopathic Association.
Professional Satisfaction Levels Among New Osteopathic Family Physicians

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Physician Worklife Study</th>
<th>New Osteopathic Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job</td>
<td>3.77</td>
<td>3.55</td>
</tr>
<tr>
<td>Career</td>
<td>3.79</td>
<td>3.52</td>
</tr>
<tr>
<td>Specialty</td>
<td>3.69</td>
<td>3.08</td>
</tr>
</tbody>
</table>

Figure. Satisfaction Report Card. The percentage of new osteopathic family physicians who reported agreement or strong agreement with statements crafted to evaluate levels of professional satisfaction. The 2006 survey conducted by Christopher Simpson, DO, PhD, et al, was based on the Physician Worklife Study designed by the Career Satisfaction Study Group of the Society of General Internal Medicine in 1999. The 2006 study, the results of which are presented here, was designed to assist in evaluating satisfaction levels of recent osteopathic medical graduates who completed residency training in family medicine from 1999-2003 (n=641).

Generally had the lowest global satisfaction scores for each subscale. Individuals who participated in ACGME-accredited residency programs reported the highest satisfaction levels.

Comment
Estimates of professional dissatisfaction among family physicians have ranged from 5% to 19%. However, the results of such studies are of limited value because of methodologic complications. Previous researchers have not surveyed new graduates or osteopathic physicians, nor did they make use of survey items that underwent validity and reliability testing.

When results of the current investigation are compared with those of the PWS, similar responses are observed for job and career satisfaction among family physicians, but considerably lower scores are seen in specialty satisfaction (Table 3).

When levels of dissatisfaction among the current cohort are compared with results observed in various medical specialties, family medicine compares relatively favorably. The present investigation found that 143 recent osteopathic graduates (22.3%) were dissatisfied with their career choice. Results of a national survey investigating physician dissatisfaction rates observed an 18% to 26% rate among surgeons and obstetricians. Another study, though somewhat geographically restricted, revealed dissatisfaction rates nearing 50% for some specialties.

Conclusion
Although we found no statistically significant differences in professional satisfaction levels among new osteopathic family physicians regardless of residency training choice, 101 (15.8%) of respondents indicated that they attended traditional AOA-approved programs, while 198 (30.9%) completed programs with dual accreditation. Fully 335 (52.3%) survey respondents trained in ACGME-accredited family medicine residency programs that do not have an osteopathic component. These data appear to show that traditional AOA-approved programs have failed to attract residents in a highly competitive postgraduate training market. Progressively more osteopathic graduates are seeking ACGME-accredited residency training opportunities.

Regardless of the reason for this shift in training preferences among recent graduates, the osteopathic medical profession can no longer take for granted a steady stream of graduates to fill slots in AOA-approved residency training programs. Because graduates now have more options as they plan their careers, the profession must reassure itself and its graduates that our programming is academically sound, provides high quality education, and meets the needs of prospective residents. Therefore, we recommend further investigation as to the reasons for this shift in preferences, especially with regard to factors related to the quality of clinical training along the continuum of osteopathic medical education.

Acknowledgments
We thank Mark Linzer, MD, and the Society of General Internal Medicine (Washington, DC) Career Satisfaction Study Group for permission to use portions of the Physician Worklife Survey. We also thank Rengarajan Balaji of the Office of Research and Grants at Ohio University College of Osteopathic Medicine in Athens for editorial support.

References

(continued)
MEDICAL EDUCATION


