Professional Impact of the DMU pre-doctoral Osteopathic Manipulative Medicine Fellowship

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OBJECTIVE
To investigate the impact of the Des Moines University (DMU) pre-doctoral Osteopathic Manipulative Medicine Fellowship (pOMMF) on the medical and professional careers of graduates.

INTRODUCTION
Physicians who complete post-doctoral fellowship programs have been found to acquire the skills necessary to be physician-faculty including educating residents and medical students, providing clinical primary care, and conducting research. Medical education fellowship programs designed to provide enhanced training for teaching adult learners, such as medical students and residents, have increased in number over the last 20 years as medical standards and practice have changed. Medical education fellowships have shown to impact a graduate's confidence, personal identity, and self-efficacy while teaching—ultimately allowing them to better meet the needs of Junior learners. The presence of educational fellowships benefits medical education and institutions because graduates become innovative leaders in teaching excellence.

Unlike the effects of post-doctoral and medical education fellowships, little research has been done on the outcome of pre-doctoral fellowships. In the United States, pOMMFs are offered in 24 of the 34 colleges of osteopathic medicine. pOMMFs are an additional year of medical training that frequently involves direct patient care and educating medical students on the utilization of Osteopathic Manipulative Medicine (OMM). Based on the research surrounding post-doctoral and educational fellowships, we hypothesized that completing the DMU pOMMF positively impacts the medical careers of graduates by enhancing teaching skills, leadership skills, research skills and the use of osteopathic manipulative treatment (OMT).

METHODS
This was a cross-sectional, descriptive study conducted among DMU pOMMF graduates from 1979 – 2020. An alumni contact list was referenced to send DMU pOMMF graduates (N = 88) a 26-question survey to be completed online. Graduates were invited to participate in the study through an email using the study protocol with an attached survey link.

The survey contained a combination of Likert scale, yes-no, free text response questions. Responses were grouped with all personal identifiers removed upon collection of survey results. Descriptive statistics, including frequency, were used to detail results. The Chi-square test of goodness-of-fit was used to assess the equal distributions of different response categories. Simultaneous 95% confidence intervals (CI) for multinomial proportions were created using the R function MultinomCI.

RESULTS
- Out of 88, 61 (69.32%) of the past DMU pOMMF graduates responded to the survey.

DEMOGRAPHICS

- Field of Medicine
- IN-Patient vs OUT-Patient Practice

TEACHING

To what extent did the OMM Fellowship Impact the following teaching skills?

LEADERSHIP

- Do you think completing the OMM Fellowship increased the likelihood you sought leadership roles?

RESIDENCY

- OMT Impact on Residency

UTILIZATION OF OMT

- To what extent did the OMM Fellowship Improve your ability to incorporate OMT into your practice?

CONCLUSIONS

- The study supports that the DMU pOMMF may create positive downstream effects in the medical careers of graduates by providing abundant teaching opportunities, encouraging leadership roles, and promoting the utilization of OMT within residency and future practice.

DISCUSSION

TEACHING

- An emphasis on teaching is central to pOMMF. Our research supports that the DMU pOMMF significantly improved the graduates’ perception of their teaching skills.

- Free-text analysis of responses provides numerous examples of how the abundance of teaching opportunities benefited graduates by providing them the confidence and competence to accept teaching/leadership roles later in their careers.

- The act of teaching and doctoring are interrelated—both endeavors require meeting a learner/patient’s needs, stating an agenda, use of appropriate diagnostic approaches, engaging feedback or communication, and evaluation of outcomes.

LEADERSHIP

- The results of this survey provide support for graduates’ belief that the pOMMF increased the likelihood of graduates taking on leadership roles in their medical careers, with 57.38% answering “yes” to the associated yes-no question.

- It is remarkable that 52.08% of those that completed the pOMMF at DMU held the role of Chief Resident, with 79.17% holding at least one of the aforementioned roles. Future research could aim to make a comparison with a different population set.

RESIDENCY

- The results suggest that the graduates attribute the benefits of the pOMMF to having some influence over matching into their desired residency, but it is difficult to assign the magnitude of influence.

- The majority of graduates perceived that the pOMMF was a major contributing factor and topic of discussion during residency interviews and later acceptance to residency programs. The fellowship may have bolstered their success during interviews by providing them multiple examples of teaching and leadership experiences to discuss with program directors.

- A significant percent of graduates report that the pOMMF increased their confidence in teaching during residency, with many graduates teaching OMM to residents and attendings during their residency training.

RESEARCH

- Based on the graduates’ perceptions, the DMU pOMMF does not appear to have improved their research skills significantly.

- Beginning in 2017, the DMU pOMMF curriculum began emphasizing research. The data suggests that there is room to further strengthen fellow research involvement and skillsets at DMU.

- In the United States, on average only 6% of pOMMF fellows’ time was dedicated to research in a 2017 study.

UTILIZATION OF OMT

- Finding ways to improve OMT skills and preparedness for OMT incorporation into clinical practice is of particular interest to the osteopathic profession.

- A recent study showed that 77.74% of osteopathic physicians reported using OMT on less than 5% of patients, while 56.95% did not provide OMT to their patients.

- The majority (83.61%) of pOMMF graduates provide OMT to their patients, and 80.70% of graduates attribute the pOMMF to significantly improving their ability to incorporate OMT into their medical practice. The results suggest that the DMU pOMMF is successfully preparing graduates to utilize OMT.

REFERENCES


