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Medical education

Training osteopathic geriatric academicians: Impact of a model geriatric residency program

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The need for osteopathic geriatric academic leaders who are educators and researchers is well recognized. The University of Medicine and Dentistry of New Jersey-School of Osteopathic Medicine's Geriatric Residency Program, a federally funded Faculty Training Project in Geriatric Medicine and Dentistry, has served as a model program in the osteopathic medical profession since its inception in 1989. Targeting internal medicine and family medicine physicians interested in academic careers in geriatrics, the program promotes interdisciplinary training, which develops clinical, research, and teaching/administrative skills.

A survey of program graduates assessed their perceptions about the field of geriatrics and the impact of training on career choice and level of satisfaction. Results indicated that 100% of the former trainees entered the field of geriatrics; 57% hold full-time faculty appointments at an osteopathic medical school, and 43% practice as clinical geriatricians. Of those in an academic setting, all taught medical students and housestaff and were involved in research. All the respondents were satisfied with their career choice, although 71% indicated that a higher salary and greater respect for the discipline would further enhance their satisfaction. Greater than half perceived a need for additional geriatricians and ranked complexity of care, lower salaries, inadequate reimbursement, and indebtedness after medical school as significant barriers to entering the field.

This program has been successful in training academic geriatricians, it has created role models for students, and it has responded to the shortage of osteopathic academic and clinical geriatricians. Financial incentives and reimbursement that is commensurate with complexity of care would serve to attract more trainees to this important primary care discipline.

(Key words: Geriatric fellowship training, geriatric education, academic geriatric medicine, faculty development in geriatrics)

Much has been written during the past two decades regarding the healthcare needs of the geriatric population in the United States. Several factors

have brought this issue to the attention of healthcare academicians, public policy makers, and the community at large. Among these factors are:

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The study was partially supported by the

Department of Health and Human Services, Health Resource Services Administration, and Bureau of Health Professions. (HRSA 5 D31 AH92003).

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Table 1
Osteopathic Geriatric Residency Programs

Institution	Program type	Date started
<input type="checkbox"/> University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine Kennedy Health System, Stratford, NJ	Geriatric family practice Geriatric internal medicine	7/01/89
<input type="checkbox"/> Ohio Univeristy College of Osteopathic Medicine Doctors Hospital, Columbus, Ohio	Geriatric family practice	3/23/92
<input type="checkbox"/> University of North Texas Health Science Center at Fort Worth Texas College of Osteopathic Medicine Osteopathic Medical Center Fort Worth, Tex	Geriatric family practice Geriatric internal medicine	7/21/95
<input type="checkbox"/> Philadelphia College of Osteopathic Medicine Philadelphia, Pa	Geriatric family practice	4/19/96
<input type="checkbox"/> Colorado Springs Osteopathic Foundation Colorado Springs, Colo	Geriatric family practice	4/04/97

- ☐ the rapidly growing elderly population;
- ☐ the disproportionate rise of the "old old" (older than 85 years);
- ☐ the need to respond to the unmet healthcare needs of the elderly;
- ☐ the economic impact of an aging society;
- ☐ the need for specially trained geriatricians skillful in providing for the healthcare needs of the elderly; and finally,
- ☐ the need for training adequate numbers of geriatric academicians to provide the necessary teaching and research in the field of geriatric medicine.¹

Several studies have attempted to address the issue of the manpower shortage for geriatricians.²⁻⁴ Although it is generally believed that the majority of primary care for the elderly will be delivered by the general internist or family physician, a cadre of geriatricians skilled in the care of complex elderly patients who can serve as teachers and role models to medical students and internal

medicine and family medicine residents is critically needed.⁵ If primary care physicians are to continue to be the principal providers of medical care to the aging population, they must be appropriately trained in the practice of geriatrics to adequately meet the healthcare needs of the elderly.

It is estimated that this nation will need approximately 20,000 geriatricians in order to prepare physicians to adequately care for the elderly in this country and to provide the clinical care that is needed.⁶ Currently, there are approximately 7000 physicians (both DOs and MDs) credentialed with a Certificate of Added Qualifications (CAQ) in Geriatrics. Yet, only a small percentage have completed a 2-year geriatric residency program that prepares them as academic geriatricians. Nationally, far too few physicians (both DOs and MDs) are seeking training in geriatric residency programs to respond to this need. Reasons cited for the failure of physicians to choose a career in geriatrics include the

perceived unattractiveness of the specialty; loan indebtedness; low reimbursement; and a lack of role models.⁷ Although there have been no projections of the need for osteopathic geriatricians to train osteopathic medical students, internal medicine, and family practice residents, one can safely assume that the need for academic osteopathic geriatricians is high, given there are 18 osteopathic medical schools, 101 family practice residencies, and 44 internal medicine residencies.⁸

In the osteopathic medical profession, a CAQ in Geriatrics is offered to family physicians by the American Board of Osteopathic Family Physicians (ABOFP) and to internists by the American Board of Osteopathic Internal Medicine (ABOIM). Physicians can qualify to take the examination by completing a geriatric residency approved by the American Osteopathic Association or through the clinical practice pathway that requires documentation of certain achievements in clinical care for the

elderly. Currently, only the ABOFP offers certification through the clinical practice pathway, whereas the AOBIM requires successful completion of a geriatric residency program. Although initially both boards offered the examination conjointly, currently the examination leading to a CAQ in Geriatrics is administered separately by the two boards. According to the AOBIM and AOBFP, there are 487 osteopathic physicians with a CAQ in geriatrics and only 14 with formal training in a geriatric residency program. Of those with a CAQ in geriatrics, 422 are family physicians and 65 are internists. Of the 14 with formal geriatric residency training, 8 are family physicians whereas 6 are internists. It is generally accepted that future geriatric academic leaders need to be residency trained in geriatrics. Currently, there are only five geriatric residency programs approved by the American Osteopathic Association (*Table 1*).

The first osteopathic geriatric residency program, the Faculty Training Project in Geriatric Medicine and Dentistry, was initiated at the University of Medicine and Dentistry of New Jersey—School of Osteopathic Medicine (UMDNJ-SOM) in 1989, through a federal grant from the US Department of Health and Human Services (DHSS) Bureau of Health Professions. This 2-year training program, which accepted trainees who had completed residencies in either family practice or internal medicine, was developed to respond to the need for osteopathic geriatric academicians. In this study, we examine the impact of this program.

Methods

The UMDNJ-SOM geriatric residency program is one of nine DHHS-funded programs whose principal goal is to train geriatric academicians (*Table 2*). This federal initiative was offered in response to the recognition of a critical need for geriatric academicians. This 2-year interdisciplinary program comprises three components with designated time commitments: clinical geriatrics (40%), teaching and administrative skills (20%), and research skills (40%) (*Figure 1*).

Table 2 Faculty Training Projects in Geriatric Medicine, Psychiatry, and Dentistry	
Institution	Project director
<input type="checkbox"/> Boston University Boston, Mass	Patricia P. Barry, MD, MPH
<input type="checkbox"/> Duke University Durham, NC	Harvey Jay Cohen, MD
<input type="checkbox"/> Harvard University Roslindale, Mass	Lewis A. Lipsitz, MD
<input type="checkbox"/> University of California at Los Angeles Los Angeles, Calif	David B. Reubin, MD
<input type="checkbox"/> University of Connecticut Farmington, Conn	Richard W. Besdine, MD
<input type="checkbox"/> University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine Stratford, NJ	Thomas A. Cavalieri, DO
<input type="checkbox"/> University of Michigan Ann Arbor, Mich	Margaret S. Terpenning, MD
<input type="checkbox"/> University of North Texas Health Science Center at Fort Worth Texas College of Osteopathic Medicine Fort Worth, Tex	Janice A. Knebl, DO
<input type="checkbox"/> University of Texas at San Antonio San Antonio, Tex	Michael S. Katz, MD

The clinical component enables geriatric residents to develop and refine his/her skills in acute care, sub-acute care, ambulatory care, home care, and long-term care. Residents provide both primary care and consultative services through clinical rotations in the UMDNJ-SOM Center for Aging and affiliated hospitals and long-term care facilities. Longitudinal experiences in ambulatory, home care, and nursing home settings offer residents the opportunity to manage medical and psychosocial problems of elderly patients over time. The acute care experience in geriatrics is offered at Kennedy Memorial Hospitals—University Medical Center, a 460-bed community hospital located in south-

ern New Jersey. Affiliation with several private and public nursing homes in southern New Jersey provides residents with a well-rounded long-term care experience. Acquisition of special skills needed for academia are attained during the teaching and administrative component. Geriatric residents learn computer skills, teaching methodology, and lesson planning and are required to deliver four presentations per year, which are evaluated by the faculty. The research component of the curriculum includes research methodology, statistical analysis, grant writing, and critical literature review. The resident applies these skills in the development of an independent research project suitable for publication (*Figure 2*).

Figure 1. *Components of a model geriatric residency program.* ►

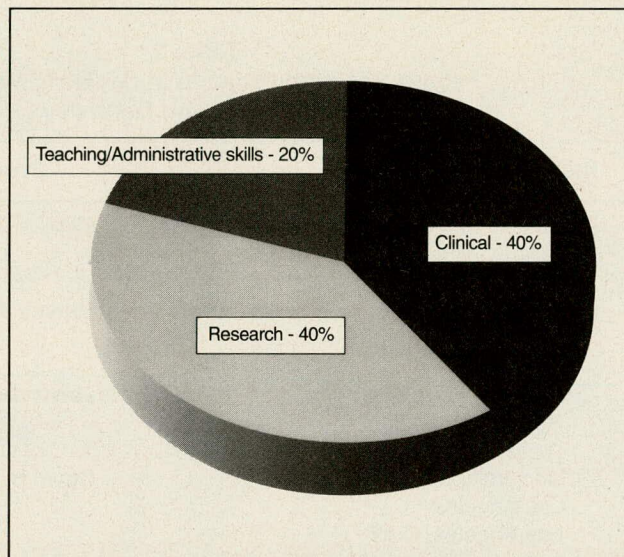


Table 3
Demographics of Geriatric Residents (N=7)

Characteristic	No.
Gender <input type="checkbox"/> Male <input type="checkbox"/> Female	 3 4
Ethnic background <input type="checkbox"/> Caucasian	7
Training before geriatric residency <input type="checkbox"/> Family practice <input type="checkbox"/> Internal medicine	 3 4
Positions after geriatric residency <input type="checkbox"/> Full-time faculty <input type="checkbox"/> Geriatric private practice	 4 3

A survey was conducted to assess the impact of this training on the graduates of the program. A 58-item questionnaire, which included both open- and closed-ended questions, was mailed to all trainees who completed the program since its inception in 1989. The goal of the study was to determine the impact of training on career choice; the level of satisfaction with the discipline of geriatrics; and perceptions about the field of geriatrics.

Responses to the survey were acquired through mail and telephone follow-up. Results were interpreted by frequency analysis.

Results

All former geriatric residents (n=7), trained between 1989 and 1994, responded to the survey. Demographic data revealed that four were male and three were female; all were Caucasian; and four entered their geriatric residency after internal medicine training, while three entered after family practice training. All seven, or 100% of the trainees have current positions as geriatricians; four (57%) were full-time faculty at osteopathic medical schools; and three (43.0%) were geriatricians in private practice (Table 3). Of those who were full-time academicians, all were primar-



Checklist

■ Clinical skills

- ☐ Acute care rotations at affiliated hospitals
- ☐ Longitudinal* experience in nursing homes
- ☐ Longitudinal experience in ambulatory clinic
- ☐ Consultative geriatrics in acute and ambulatory settings
- ☐ Longitudinal home care experience
- ☐ One-month rotations in Geriatric Psychiatry, Neurology, and Physical Medicine and Rehabilitation

■ Teaching and administrative skills

- ☐ Teaching and learning theories
- ☐ Lesson planning
- ☐ Computer skills development
- ☐ Academic presentations with faculty evaluations
- ☐ Six months' experience as acting medical director at a nursing home
- ☐ Student teaching responsibilities
- ☐ Service on committees and providing leadership for team meetings

■ Research skills

- ☐ Research methods and design
- ☐ Statistical analysis
- ☐ Grant writing skills
- ☐ Faculty research mentoring
- ☐ Completion of an original research project for publication
- ☐ Critical review of literature

▲ **Figure 2.** *Elements of the curriculum for a model geriatric residency program.*

*Longitudinal implies a primary care experience throughout the 2-year residency program.

ily involved in teaching medical students and less involved in teaching house officers. All were participating in research.

While all the osteopathic geriatricians indicated that they were satisfied with their career choice, five (71%) reported that a higher salary and enhanced respect of the discipline would further increase satisfaction. All agreed that there was a need for additional osteopathic geriatri-

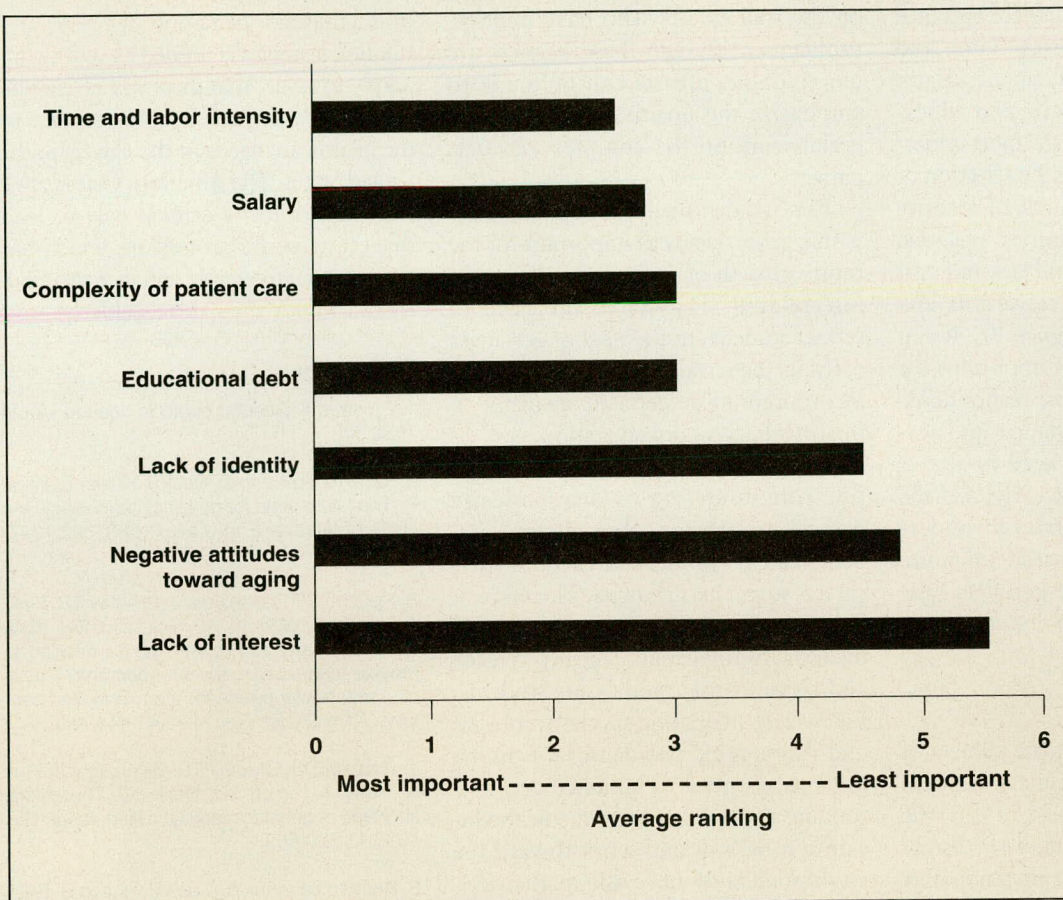


Figure 3. *Perceived barriers to entering field of geriatrics (N=7).*

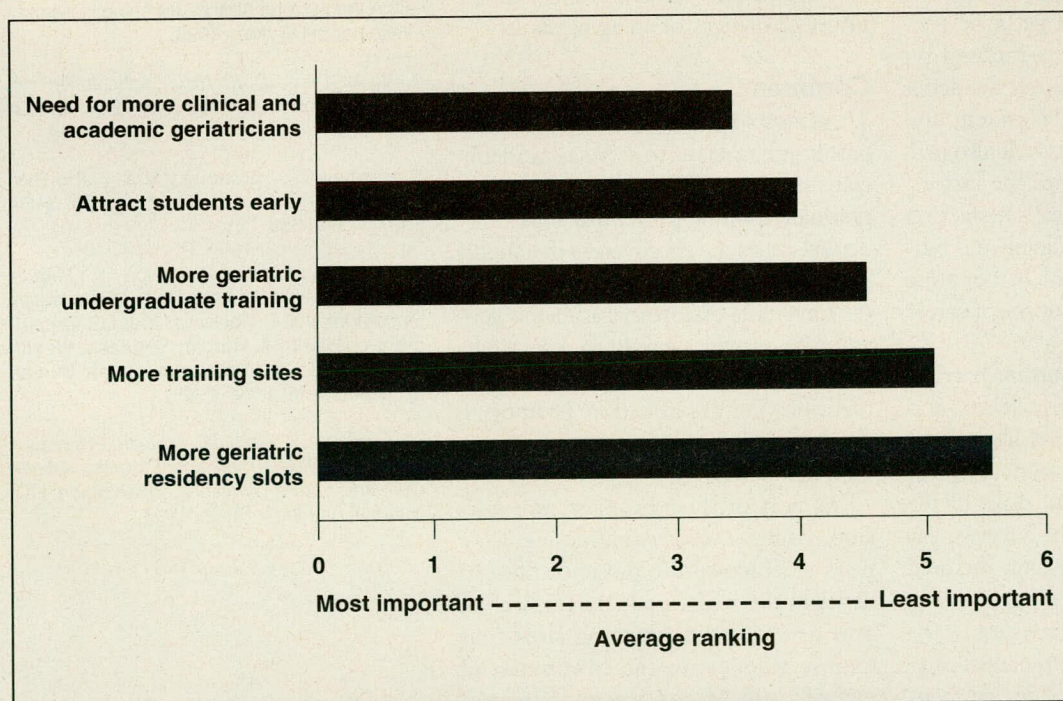


Figure 4. *Factors important for the future growth of geriatrics.*

cians and identified barriers for entrance into the field of geriatrics. Time and labor intensivity of the discipline, salary, complexity of patient care, and educational indebtedness were the most important barriers identified in the selection of a career in geriatrics. Lack of identity of the discipline of geriatrics, negative attitudes toward aging and lack of interest in geriatrics were viewed as less important barriers (Figure 3). When asked to identify factors important for the growth of geriatrics, respondents cited the need for more clinical and academic geriatricians; the need to attract students to the discipline early; and the need to enhance geriatrics in undergraduate training. The need for more training sites and more geriatric residency slots were viewed as less important (Figure 4).

Discussion

The need to train an adequate number of geriatricians to meet the clinical and academic demands in the field of geriatric medicine is well documented.^{9,10} Osteopathic geriatricians are in particular demand to meet the training needs of increasing numbers of osteopathic medical students and osteopathic physicians in internal medicine and family practice residencies. This study demonstrates the effectiveness of a model geriatric residency program, which is focused on training osteopathic geriatric academicians who have clinical, research, and teaching/administrative skills. It also provides valuable insights into the factors, which can enhance career satisfaction for those in geriatric medicine and barriers, which may prevent osteopathic medical students from choosing a career in geriatric medicine.

Of the four most important barriers to entering geriatrics, low salary and educational indebtedness should be addressed by appropriate reimbursement for the specialized clinical skills of the geriatrician and by loan forgiveness incentives for those who enter the field of geriatric medicine. The other two barriers, time and labor intensiveness of the discipline and complexity of patient care, are issues of geriatric medicine that focus

on the frail elderly who have multiple problems. Although these barriers are unavoidable, efforts can be made to emphasize the positive impact of the geriatrician on the complex geriatric patient.

Factors identified by the new osteopathic geriatricians as important for the future growth of geriatric medicine are interrelated. They cited the need to attract students to the field of geriatrics early in their training and the need to incorporate more geriatric medicine in their medical school education.

It is only through training and effective role-modeling by academically trained geriatricians that medical students can be influenced early in their careers to pursue geriatrics. Therefore, it is critical that colleges of osteopathic medicine recruit geriatric faculty to teach and serve as role models for students. Likewise, osteopathic specialty colleges and osteopathic postdoctoral training institutions need to enhance geriatric training in their graduate medical education programs and work toward the establishment of more osteopathic geriatric residency programs. Training more clinical and academic geriatricians is the principal means of influencing the future growth of geriatric medicine—it is the way the medical profession can meet the future challenges of an aging society.

Comment

There exists a critical shortage of osteopathic geriatricians to serve as academicians in osteopathic undergraduate and graduate training programs. This study demonstrates the effectiveness of a model geriatric residency program that targets the training of osteopathic academic geriatricians; provides insight to reduce barriers for entrance to this discipline; and identifies factors aimed at promoting the future growth of osteopathic geriatric medicine.

As part of their primary care mission, colleges of osteopathic medicine need to enhance the presence of geriatrics in the undergraduate curriculum and offer clinical training sites that expose students to the continuum of geriatric care. More effort on the part of

policymakers, academic leaders, and funding agencies is needed to work jointly to assure that there will be enough osteopathic geriatricians to respond to the healthcare needs of the elderly in the United States. The American Osteopathic Association has a critical role to lead this effort in the profession, which has the potential to greatly enhance the quality of care for the nation's elderly.

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