Factors Influencing Career Choices among Graduating Ophthalmology Residents

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Objective: To identify factors influencing graduating ophthalmology residents to pursue subspecialty training or a career in comprehensive ophthalmology.

Design: Cross-sectional study.

Participants: Residents graduating from U.S. ophthalmology residency programs who participated in the ophthalmology match program.

Methods: An anonymous survey was sent to each graduating ophthalmology resident in the United States between February 1, 2003, and February 28, 2003. Demographic data and information relating to medical school and residency training, career goals, and factors influencing career choices were collected from the surveys.

Main Outcome Measure: The decision to pursue or not to pursue fellowship training.

Results: The individual response rate was 50.8% (222/437), and 74.1% (86/116) of residency training programs responded to the survey. After completion of residency training, 64% (142/222) were pursuing subspecialty training and 36% (80/222) planned to practice comprehensive ophthalmology. In a multivariate analysis, factors that predicted subspecialty training included a desire to acquire special skills (odds ratio [OR], 13.81) and a perceived more favorable job market (OR, 3.23) and prestige (OR, 3.20). Anticipated work hours (OR, 0.37) and preferred geographic location (OR, 0.47) were predictors of a career in comprehensive ophthalmology. Residents choosing comprehensive ophthalmology careers were more likely to plan to practice in a group private practice, and those seeking subspecialty training were more likely to intend to practice in a university setting or were undecided in their future practice type (OR, 2.04).

Conclusions: Several factors influenced career choices among graduating ophthalmology residents. A desire to acquire special skills and perceived prestige and job market were major factors influencing ophthalmology residents to seek subspecialty training. Lifestyle considerations were more important to residents choosing a comprehensive ophthalmology career. There were significant differences in practice preferences among residents pursuing or not pursuing subspecialty training. *Ophthalmology 2005;112:1247–1254 © 2005 by the American Academy of Ophthalmology.*

Specialty training in medicine has become an important issue in recent years. A consensus has developed that specialist physicians will be in serious oversupply and that many more primary care physicians will be needed to meet future health care needs in the United States.[1–8] Several organizations, including the Council on Graduate Medical Education,[9] the Physician Payment Review Commission,[10] the Association of American Medical Colleges,[11] and the American Medical Association,[12] have noted the surplus of specialists and have supported policies that encourage an increase in the number generalists trained. An interest in workforce planning prompted the American Academy of Ophthalmology to commission the RAND Corporation to study the supply of eye care providers and the requirements for eye care in the United States.

The Eye Care Workforce Study by RAND[13] found that there is an excess of eye care providers relative to current market demand and health care need. Moreover, the study also concluded that there will be a substantial excess in subspecialist ophthalmologists in all subspecialty areas by the year 2010 if the rate of subspecialty training continues at the same rate as in the mid-1990s.[14] There has actually been a steady increase in the proportion of ophthalmology residents seeking subspecialty fellowship training during the past decade (Fig 1), based on data from the National Residency Matching Program for oculoplastics fellowships and the Ophthalmology Fellowship Match Program for all other subspecialty fellowships.

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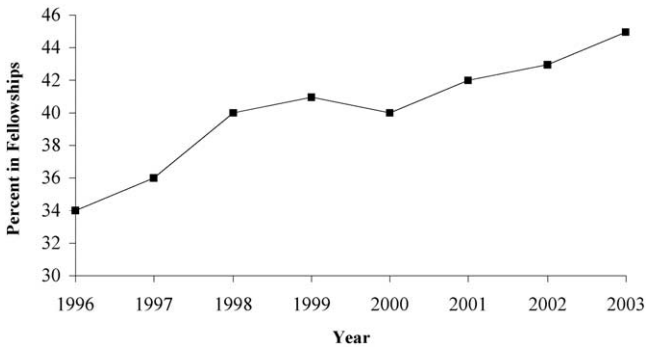

Figure 1. Proportion of ophthalmology residents seeking fellowship training.

Any workforce planning analysis requires not only knowledge of the overall supply and demand for ophthalmology, but also an understanding of the factors influencing ophthalmologists-in-training to pursue various career pathways. Previous studies have evaluated factors influencing the decision to pursue fellowship training in internal medicine and pediatrics.[15,16] Factors such as gender, marital status, presence of children, level of educational debt, breadth of knowledge used in practice, breadth of clinical problems in practice, and opportunity for continuity of care were important determinants of subspecialty training. The purpose of the present study is to investigate factors that influence graduating ophthalmology residents to pursue subspecialty fellowship training or a career in comprehensive ophthalmology.

Materials and Methods

Anonymous surveys were sent to every ophthalmology residency program in the United States that participated in the ophthalmology match program. Military programs were excluded from the study because graduating residents may not have complete freedom to pursue fellowship training. Surveys were mailed to residency program directors between February 1, 2003, and February 28, 2003, with instructions to distribute them to each graduating ophthalmology resident. Residents were asked to complete the survey, to place it in a sealed envelope, and to return it to their program director. No compensation was provided to residents for completing the survey. Program directors were given a self-addressed stamped envelope to mail the completed surveys by April 30, 2003. If a response was not received by the deadline, program directors were contacted individually by telephone or e-mail and were sent new surveys to be completed by June 30, 2003. Surveys were distributed shortly after the fellowship match, a period when graduating residents are actively considering future career plans.

The survey contained questions regarding demographic information, medical education and residency training, career goals, and factor influencing their career choice. A 5-point Likert scale[17] was used for rating the importance of various factors in decision making. The reliability of the survey was tested by administering it to 21 subjects a second time within 6 months of the original survey. Test–retest intraclass correlation coefficients ranged from 0.60 to 1.00 for yes-or-no questions and 0.61 to 1.00 for multiple choice questions. Intraclass correlation coefficients for Likert scale scores ranged from 0.50 to 0.84 and from 0.46 to 0.99, respectively, for questions requiring a numerical answer.

The principle outcome variable in this study was the dichotomous choice of whether a resident chose to pursue subspecialty training. Explanatory variables examined for their influence on this

Table 1. Demographic Characteristics

	Total Group (n = 222)	Comprehensive (n = 80)	Fellowship (n = 142)	*P* Value
Gender, n (%)				
Female	83 (37.2)	38 (47.5)	45 (31.7)	0.019*
Male	139 (62.8)	42 (52.5)	97 (68.3)	
Age (yrs)				
Mean ± SD	31.5±4.3	31.6±4.3	31.4±3.2	0.38†
Range	25–55	25–55	26–45	
Ethnicity, n (%)				
African American	5 (2.3)	3 (3.9)	2 (1.5)	0.24*
Asian American	65 (30.4)	20 (25.6)	45 (33.3)	
Non-Hispanic white	136 (64.0)	54 (69.2)	82 (60.7)	
Hispanic white	7 (3.3)	1 (1.3)	6 (4.4)	
Marital status, n (%)				
Married	133 (59.9)	50 (63.3)	82 (57.8)	0.42*
Not married	89 (40.1)	29 (36.7)	60 (42.2)	
Children, n (%)				
No	153 (68.9)	53 (66.3)	100 (70.4)	0.52*
Yes	69 (31.1)	27 (33.8)	42 (29.6)	
Educational debt, n (%)				
<$50,000	110 (50.2)	41 (51.9)	69 (49.3)	0.76‡
$50,00–$100,000	38 (17.4)	10 (12.7)	28 (20.0)	
>$100,000	71 (32.4)	28 (35.4)	43 (30.7)	

SD = standard deviation.
*Chi-square test.
†Nonpaired Student's *t* test.
‡Mann–Whitney *U* test.