

Specialty Selection: Trends Over Time in One Medical School

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The medical student's choice of specialty has often been considered in the light of the student's personality type,¹ characteristics, and attitudes,^{2,3} or the characteristics of the specialty.⁴ Some research has looked at trends over time, although not from the point of view of the interactions between specialties.⁵

METHODS

Each year the University of Arizona publishes the list of graduating medical students and their residencies for the coming year. The number of students selecting family medicine, internal medicine, obstetrics-gynecology, and pediatrics was counted each year and expressed as a proportion of the number of students entering residencies in that year. As a result of the method of reporting for all but the final year, students planning on general internal medicine could not be distinguished from those who intended to enter a subspecialty of internal medicine.

Pearson correlation coefficients were computed between the proportion entering family medicine and the other primary care specialties.

RESULTS

The class size ranged from 30 in 1971 to a high of 100 in 1975, when two classes graduated together because the school changed from a 4-year to a 3-year school. The average class size over the 18 years from 1971 to 1988 was 76.7. Preliminary analysis indicated that the relationships between family practice and internal medicine and family

practice and pediatrics were similar; therefore, in Figure 1 internal medicine and pediatrics have been combined. It is apparent from Figure 1 that family medicine and internal medicine-pediatrics are competing for the same students; as family medicine peaks, internal medicine-pediatrics drops, although the two lines never cross. The correlation between them for the years since 1973 is $-.38$ ($P = .08$). The increases and declines for family medicine and obstetrics-gynecology roughly parallel each other (correlation $.39$, $P = .07$).

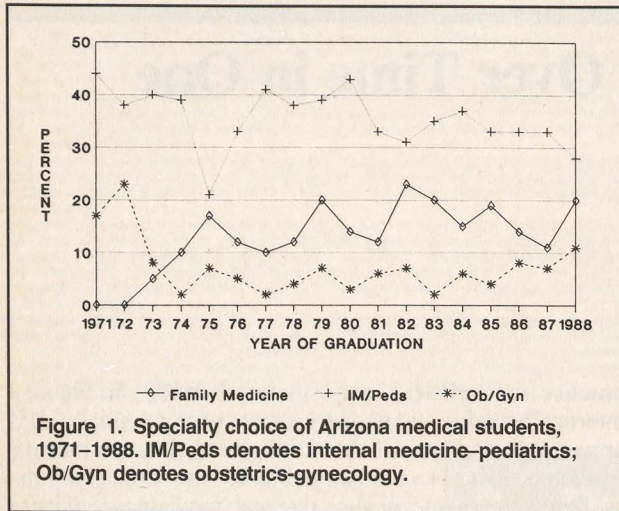
There have been structural changes in the curriculum at the University of Arizona that likely served to make the peaks for family medicine higher than for obstetrics-gynecology. In 1972 a family practice residency program was established. Before 1973, no student had entered family medicine. In the class of 1973, three students did, two of them in the University of Arizona residency program. In 1973, an elective clerkship in family medicine was offered for the first time. The impact of this elective is likely reflected in the doubling and then tripling of the proportion of students entering family medicine. The peak in 1979 parallels the peak seen for obstetrics-gynecology; however, in 1980 the family medicine clerkship became required for all students, and 2 years later, while obstetrics-gynecology increased slightly, the largest ever proportion of students entered family medicine. In 1988, both family medicine and obstetrics-gynecology again have increased proportions of students.

COMMENT

The positive relationship between the proportions of students entering family medicine and obstetrics-gynecology suggests that there is a common influence. One possibility is the perception among medical students of the risks and benefits of doing deliveries, which undoubtedly changes depending upon the prominence of malpractice issues in a given period. This finding is consistent with the recent emergence of the internal medicine-pediatric residencies,

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which have been seen as a threat to family medicine residencies.

The negative relationship between family medicine and internal medicine-pediatrics suggests that when students do choose family medicine, it is instead of one of those two specialties.

References

1. Friedman CP, Slatt LM: New results relating the Myers-Briggs Type Indicator and medical specialty choice. *J Med Educ* 1988; 63:325-327
2. Nieman LZ, Holbert D, Bremer CC: Career preferences, career decision-making, and orientation toward medicine among third-year students. *J Med Educ* 1988; 63:474-476
3. Burkett GL, Gelula MH: Characteristics of students preferring family practice/primary care careers. *J Fam Pract* 1982; 15:505-512
4. Tardiff K, Cella D, Seiferth C, Perry S: Selection and change of specialties by medical school graduates. *J Med Educ* 1986; 61:790-796
5. Tudor C: Career plans and debt levels of graduating US medical students, 1981-1986. *J Med Educ* 1988; 63:271-275