# COMMUNICATIONS

## Difficulties Experienced by Medical Students in Choosing a Specialty

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Some medical students choose a specialty early and perhaps easily, but a majority have difficulty (1). Longitudinal studies indicate that 60 to 75 percent of medical students change their specialty choice during medical school (2), 20 percent of residents in training switch to unrelated specialties (3), and 16 percent of physicians in practice change their specialty identification (4). Most of the research examining students' problems in choosing a specialty dealt with what choices students make rather than with how they make choices (5). Typically these studies match the specialties that students choose to the students' personality traits or background characteristics and these studies had inconsistent and unreplicated results (5, 6). Understanding student problems regarding specialty choice may better be served by studying the decision-making process that produces a specialty choice. Accordingly, in the present study the authors investigated the difficulties that impede students' choices of a specialty and reduce their certainty about choices they have made.

## Methods

A mail survey patterned after Dillman's (7) total design method was used to collect the data. A specialty indecision scale (SIS) developed by Osipow (8) and some of the present authors (9) and a questionnaire designed by the authors were placed in the campus mail-

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boxes of all 835 students enrolled at the Ohio State University College of Medicine in January 1982. The specialty indecision scale has 16 items, each measuring a distinct difficulty in choosing a medical specialty. Each SIS item was rated on a 4-point Likert-type scale that ranged from 1 ("not at all like me") to 4 ("exactly like me"). The questionnaire asked students to indicate their year in school and to respond to a standard item assessing students' certainty about their choice of specialty at the time on the same response scale used in the SIS. The data were collected in January in order to obtain responses from fourth-year students after they had submitted their choices to the National Residency Matching Program but before they had received the match results. Completed materials were returned by 617 students; the four classes had return rates of 78, 77, 55, and 52 percent, from freshman to senior classes.

To identify the prevalence of each difficulty the students used as explanations of their indecision about specialty choice, the percentage of students who responded either "exactly like me" or "very much like me" was calculated for each of the 16 SIS items. The authors anticipated that the types of difficulties that impeded specialty choice would change with the student's training and experience. Therefore, a stepwise multiple regression was computed to determine which difficulties predicted the students' certainty about their specialty choices at each of the four levels of training. The 16 SIS items were entered separately for each of the four classes as independent predictors of the students' certainty about their choices, which served as the dependent variable. Also, the mean score on the item assessing the students' certainty about their choices was calculated for each class.

#### **Results and Discussions**

Certainty of specialty choice increased across levels of training, as anticipated. The mean scores on the certainty item for the four classes were 1.88, 1.92, 2.38, and 3.31, from freshman to senior classes. The response percentages on SIS items indicated that the most prevalent difficulties that medical students encountered in choosing a specialty were the lack of information about the specialties (65 percent), equal appeal of several specialties (54 percent), and diverse interests (52 percent). Three other impediments to decision-making that students frequently reported were: lack of support in making a decision (40 percent), "not knowing one's interests" (25 percent), and "not knowing one's abilities" (24 percent). Responses for the four classes indicated that the rank order of the difficulties was virtually identical across the first three years. For fourth-year students, the rank order of difficulties was similar; however, diverse interests was first rather than third, and not knowing one's interests was second rather than fifth.

In spite of the similarity among classes in the rank order of difficulties, the regression analyses on data from each class showed that distinct sets of difficulties predicted the degree of the students' certainty about their choices at each level of training. For first-year medical students, the signficant (p < .05) difficulties were the lack of information about the specialties, lack of support in making a decision, not being interested in the specialties that one knows about, learning that getting a desired specialty was not possible, and feeling lost when thinking about how to choose a specialty. As a group, these difficulties suggested that exploration of self and specialties had not begun. The difficulties of first-year students reflected a lack of readiness to choose, which is probably appropriate.

For second-year students, the significant (p < .05) difficulties were the lack of information about the specialties, not knowing one's interests, not knowing one's abilities, and lack of support in making a decision. This group of difficulties suggested that exploration had begun but was far from completed.

For third-year students, the significant (p <

.05) difficultes were not knowing one's interests, feeling discouraged because choosing a specialty seemed so complicated, and lack of information about the specialties. These students were trying to find a specialty that fit their interests but were feeling anxious about having to make a choice. Not knowing one's abilities was not a significant difficulty for third-year students as it was for second-year students. Awareness of one's abilities likely increased during the third (clerkship) year.

For fourth-year students, the significant (p < .05) difficulties were equal appeal of several specialties, lack of information about specialties, not knowing whether a specialty would be satisfying, diverse interests, and the desire to be absolutely certain that the choice would be the right one. These students had declared their specialty choices during the match process; any lingering uncertainty seemed related to whether they had chosen the right specialty or at least one that would satisfy them.

The results of the present study suggest that faculty members who want to help students deal with choosing a specialty should facilitate different developmental tasks in each of the four years of training. First-year students need to be oriented to the decision-making process and what to do about it. Second-year students need to explore the specialties and their own abilities and interests. Third-year students need to relate their interest to the specialties and identify a few specialties to explore thoroughly. Before the residency match, fourthyear students need to differentiate among equally appealing specialties and make fitting and realistic choices. After receiving the match results, they need to reassure themselves that they have made the best choices for them.

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