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## SPECIALTY CHOICE

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The choice of specialty in medical education is, in itself, a major issue for students. Students' perspectives are based on their personal interests and motives. Especially, the role of gender in the choice of specialty is explored in studies which investigate the role of differences in motivation, the balance between life and work, and the reasons for changing the choice of specialty after entering medical education. Additionally, the perspective of the socio-cultural influence on specialty choice by role models and medical training is very important.

The earliest studies of specialty choice were focused on presenting an overview of the different types of medical specialties as an aid to medical students in planning a career. Since the early 1970s the topic of gender has entered the discussion on medical careers. At that time the aspects first emphasized were the suitability of the medical field for women and the doubts of female students about the combination of medical work and family duties.

Even today the question of gender segregation in the preference for one or the other specialty remains. Moreover, these gendered preferences have not changed very much over the years. Male students still have a greater preference for surgery and female students' preferences are mainly pediatrics, obstetrics & gynecology and general practice.

### PERSONAL INTEREST AND MOTIVES

The most common factor influencing the preference for a specialty is the personal interest in the field. Some factors relate to the career itself such as prestige and research; others to the job, including the amount of patient contacts, intellectual satisfaction and diversity of the work. But, what is increasingly important today, is achieving a satisfactory balance between one's life and work, especially with regard to the number of hours one works. The factors influencing medical students' preferences are, in general, similar for male and female students, but the weight placed upon these factors by men and women differs. With regard to the characteristics of the field or profession for example, male students would prefer a specialty with career opportunities and with a shortage in specialists. Female students

more often mention the working conditions, like the issue of the balance between one's family life and work and the flexibility of the working hours. Choosing a surgical specialty is considered as committing oneself to a heavy workload, which may have a negative impact on time spent with the family. Furthermore, female students lack the stimulus of role models, as there are few women working in surgery.

## **GENDER DIFFERENCES**

Gender differences in students' preference for one or other specialty are largely driven by the different motives for their choice (Heiligers, 2012).

Intrinsic motivation is mostly stressed by women and external motivation is more often found among men. The theory behind motivation in medical education has been related to the basic ideas of Self-Determination Theory (SDT). This states that SDT is focused on the quality of motivation and not just on the level of motivation (Kusurkar et.al., 2011). This approach 2

states that we all have a natural tendency to develop towards self-determination. On the one hand intrinsic motivation makes a person pursue an activity for personal interest. On the other hand extrinsic motivation makes one pursue an activity for a separate outcome, for example to obtain a reward or to avoid a loss (Deci & Ryan, 1988). In the context of education, motivation influences learning, and outcomes of learning, such as performance.

## **SOCIO-CULTURAL INFLUENCE AND CAREER COUNSELING IN MEDICAL TRAINING**

Another theoretical approach which has been explored is the French sociologist Pierre Bourdieu's theory on habitus, in which the unconscious and "embodied" mental structures are founded in early life. Shaping of habitus in childhood education and experiences may contribute to an explanation of the choice of specialty (Dehn & Eika, 2011). In this line the influence of parents working in medical care or other role models are important in choosing a specialty. Students are supported a lot in making that choice if they can seek advice from a relative or friend who already works as a medical specialist. In this line of theory we also can explain a shift recently found in preferred choices of young female students. They have begun to have fewer doubts about their abilities in the male-dominated specialties, since they have female role models now.

Next to relatives and other role models medical training is an important source for information about specialties. Students feel this information is too limited and would prefer more advice earlier in their undergraduate training. This perspective from students has implications for the medical education system (Bindal et al, 2011). Ultimately, this would involve offering information, career advice and insight into life experiences with specialties from the first year in undergraduate training. Implementing this change in medical education not only has consequences for the medical education system in most countries, but also for the admission policy. However several medical schools do provide career-counseling programs and medical career websites. One successful approach is learning in small groups with weekly specialty education sessions where students can be supported and encouraged

by more experienced colleagues. In these groups the roles of participants are not learner-led, but they work as trainees and consultants (Gleeson, 2010). Students found most career counseling resources as helpful (Harris & McKay, 2012).

#### **REASONS FOR CHANGING INITIAL CHOICES**

In addition to motives, gender, and socio-cultural aspects the stage of life has an influence upon the choice of specialty (Heiligers, et.al., 2000; Crocket, 2002). Changes and transitions between different stages of life, such as marriage, living with a partner, or becoming a parent, have an impact on social roles, relationships and choices for the future. In fact, a change in the stage of life is one of the most obvious reasons why students also change their choice of specialty in seeking a new balance between their family life and work. In this line of reasoning, junior students can choose more idealistic options, perhaps the most appealing specialties. Older students may choose more realistic options such as specialties which are a better match for their other roles such as partners or parents. These issues of balance between family life and work explain changes moving away from surgical specialties towards specialties more compatible with family life.

Another important reason for a change in the initial specialty choice is the increasing experience in medical practice. This type of change is more influenced by job content, which is closely related to work- and organization-related aspects. Some specialties are characterized by a lessflexible organization of care, such as surgery specialties. And indeed other specialties have shown they can organize their work in accordance with other duties, such as general practice. It is mostly women who face difficulties about the inflexible organization of care. 3

And since doctors in the future are likely to be mostly female it is important to improve job conditions and the attractiveness of the specialties in which a growing number of doctors is needed (Kiolbassa et al, 2011).

Further on, some minor reasons for changing initial choices were identified such as competition for posts, difficult examinations, stressful working conditions and poor training (Lambert, et al., 2012).

#### **CROSS-SECTIONAL, LONGITUDINAL OR COHORT STUDIES**

Most studies of specialty choice are cross-sectional and are rarely longitudinal or cohort studies. Cohort studies are largely focused on national issues such as changes in the educational system and admission, national trends over time in specialty choice and inventories of characteristics of students related to specific specialty choices.

Consequently, there is a lack of information about the causal relationships between the factors that influence change in specialty choice during medical training. What we do know about the reasons for a change is based on self-reported statements by students.

Cohort studies during, and even after, education could offer a more specific causal insight into moments and reasons for change during a medical career. Cohort studies would also be very helpful in evaluating changes in medical training, such as introducing earlier experiences and information about specialties. A comparison

between cohorts of students before and after the changes in medical training could be very informative about the effects of the changes implemented.

### REMAINING QUESTIONS

Several questions remain unanswered. Individual preferences are, initially, based on personal characteristics such as abilities and having an aptitude for the subject. But they are also based on working conditions and perceived career opportunities. The question is whether students receive enough and adequate information at the right moment in order to make their specialty choice. And is career counseling the only or most useful strategy to support students' specialty choice?

Secondly, we know that the stage of life and especially factors related to a student's family life are important reasons for a change in specialty preference. This means that students adjust their preferences, because several specialties are not organized in a family-friendly manner. The question is what are the conditions required to create more flexible working conditions, adjusted to different stages of life?

Thirdly, it is recommended to develop recruitment and admission criteria for medical education to match students with underserved specialties? We need, on the one hand, to provide an educational climate which is open to the preferences, capacities and abilities of individuals and their circumstances, but on the other to support a better match between individual preferences and the demands at work and healthcare needs.

SEE ALSO: career preferences in medicine, work life balance

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