General Surgery as a future career, survey of medical students of Jinnah Medical & Dental College Hospital

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Abstract
Objective: The study was conducted to identify the level of interest in surgical career and factors that influence the interest in pursuing a surgical career in future.
Methods: The study was conducted at Jinnah Medical & Dental College Hospital, Karachi. Approval for the study was given by the Department of Community Medicine and hospital administration. During the academic year of 2010-11 Students from third year to final year MBBS were included in the study. BDS students were excluded from the study. Students were asked to list their career choices; the most desirable on the top. Series of variables influencing their choices were identified and recorded. Demographic data sheet was used to fill up by the students of the study group. Factor analysis was performed on variables.
Results: We accomplished a response rate of 92% from 300 students of 1st year MBBS to final year MBBS. We excluded 18 surveys because they did not show a specific career preference. On the remaining 282 candidates, 72 answerers (24.0%) answered a surgical specialty as their farthest forward career interest. A further 210 participants (70%) indicated that they would consider a professional progress in surgery. Collectively, almost 94% of students considered a surgical specialty as a possible career option. Total, valid survey respondents ranged in age from 18 to 24 years, with a mean age of 21 years. The greater number of respondents were female (74%), single (90.0%) and had entered medical school from a science background (100%), and a minority of respondents had close family members or friends who were practicing medicine (32.0%) or in particular, a surgical specialty (14.0%).
Conclusion: Surgery is a popular career choice among the students of Jinnah Medical and dental college. The survey indicates that choice is made freely; without concerns about compatibility with future life style.

Keywords: Surgical career, future surgeon, choice of speciality

Introduction:
Worldwide the popularity of general surgery and some surgical subspecialties among graduating medical students is declining. Therefore medical students and physicians often face the challenge of deciding on a specialty, if they decide to specialize. They consider the factors that motivate or drive them and factors relating to available specialties, including their prospective rewards and costs. The number of Canadian medical students identifying a surgical specialty as their first choice when applying for residency positions has decreased from 24.7% in 1998 to 21.7% in 2006. The repercussions of this deficit will become more critical in the coming years as the population ages and the demand for surgeons increases.

A study in Lagos, Nigeria, showed that in house officer’s major reasons for specialty preferences were interest in the specialty (72.4%) and job satisfaction (67.6%). In a study in Ibadan, Nigeria, over 81% of students in their clinical years who intended to specialize opted for surgery,
internal medicine, pediatrics, obstetrics and gynaecology and general practice, while only 5.5% chose radiology, psychiatry, community medicine, anaesthesia and pathology. It is conceded that numbers of women entering surgery are rising, but this is at a rate far lower than one would expect. A recent study found that while the percentage of female medical students has risen by over 40% since 1970, the proportion of female orthopedic surgeons has risen by only 8%. Women, it appears, are still opting for general practice and pediatrics.

This study aims to determine surgery as the career intentions of the third year to final year medical students at Jinnah Medical & Dental College Hospital specifically whether would they like to be general surgeons, or they prefer other specialties from the outset.

Method and Material:
The study was conducted in Jinnah Medical & Dental College Hospital, Karachi. Approval for the study was given by the Department of Community medicine and hospital administration. During the academic year of 2010-11 Students from 3rd year to final year MBBS were included in the study in order to exceed the calculated minimum sample size. It was required that they completed their surgical clerkship as the entire clerkship affords an extensive clinical exposure of medical students. All the students were asked to complete a structured questionnaire. The questionnaire sought their opinions regarding their interest in a surgical career, how they considered surgery before and after their clerkship and whether they could identify a role model or mentor.

The purpose and nature of the study was explained to the eligible participants, assurances of confidentiality given and voluntary informed consent obtained. All those who expressed intention to specialize by mentioning likely areas of specialization and factors considered important in specialty choice were enlisted for the study without further selection. The study design was a questionnaire-based descriptive cross-sectional survey. A minimum sample size of 300 was computed. The questionnaire, which covered participants’ demographics and the study objectives, was self-administered. The data was analyzed using SPSS version 11.0. The critical level was set at 0.05 for all statistical tests. Significance was determined using chi-squared testing.

Results:
We accomplished a response rate of 92% from 300 students from 1st year MBBS to final year students. We excluded 18 surveys because they did not show a specific career preference. Of the remaining 282 candidates, 72 (24.0%) answered a surgical specialty as their farthest forward career interest. A further 210 participants (70%) indicated that they would consider a professional progress in surgery. Collectively, frequency is 94% of students considered a surgical specialty as a possible career option. Total, valid survey respondents ranged in age from 18 to 24 years, with a mean age of 21 years. The greater number of respondents were female (74%), single (90.0%) and had entered medical school from a science background (100%), while a minority of respondents had close family members or friends who were practicing medicine (32.0%) or in particular, a surgical specialty (14.0%).

The defining features of the respondents interested in surgical specialties varied significantly between male and female students. Compared with male students, female students interested in surgical specialties were younger, less likely to have friends or family members who were practicing general and surgical specialties. Compared with students who reported an interest in medical specialties, we found that more of those interested in surgical specialties were male than female, and that they were less likely to have close family members or friends practicing medicine. Compared with students who reported an interest in family medicine, we found that students interested in surgical specialties were younger, more likely to be single.

Discussion:
Declining enrolment into general surgery residency has generated much concern in recent
Reasons behind are likely numerous and complex. We aimed to identify factors influencing the medical students who stated surgery and surgical subspecialties as their top career interests at the time of entry into medical college. Male students were more likely to express an interest in surgical specialties than female.

In addition, students who expressed interest in careers in surgery were younger, more likely to be single.11 Medical students rotate through their surgery clerkship, interacting significantly with consultant surgeons and surgical residents. They are put through clinical activities in the wards, clinics, operating theatre sessions, and accident and emergency units. The interactions occupy most of the student’s day; hence this offers an opportunity for clinical exposure. This may make it easier for medical students to make a well-informed decision or surgical opinion.12 Erzurum and colleagues13 reported that students interested in surgical careers were much more likely to be influenced by role models than students with little or no interest in surgery.

Students interested in surgical careers reported that social orientation and varied scope of practice were less important to them, whereas hospital orientation was more important to them than to students choosing other careers.

Contrary to findings reported by Wendel and colleagues14 and by Gargiulo and colleagues15, we found that statistically significant differences did exist between male and female students with respect to the factors influencing their interest in surgical careers. In addition, we found that female students interested in surgery were younger than male students interested in surgery. In total, 72 (24%) respondents in our study identified surgical specialties as their primary career choices at the time of entry into medical college.

The fact that more than three-quarters (74.0%) of students in this study indicated that they would consider careers in surgery does provide hope to those concerned about the number of students interested in the surgical subspecialties.16

Conclusion:
From our study we draw the conclusion that majority of students of Jinnah Medical and Dental College Hospital showed their interest in being a surgeon of future. Most of the students are female and they don’t think that practicing surgery would might be incompatible with the style of our society.

References: