Original article

Selection of Specialty and its satisfaction in Medical graduates

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Abstract:

Background: Selection of specialty in medical graduates is a challenging job. Consultants and residents are suffering from some unknown discomfort. The aim of this study was to survey the resident's selection and their wish to change it and analyze the factors responsible for this wish. **Methods:** Cross sectional survey was done on residents of different specialty working in different hospitals of Rawalpindi and Islamabad (Pakistan) with the help of self-made questionnaire from 2012 to 2014. SPSS 21 was used to analyze the result.

Results: We gave a total of 1200 questionnaires out of which 946 questionnaires were completely filled. Out of 946 residents, 48.5% (459) were male residents whereas 51.5% (487) were female residents. Majority of residents 75.4% (713) did not want to change their specialty whereas 24.6% (233) wanted to change their specialty if they would have been provided with such opportunity. Patient Contact, Interesting Diseases and Hospital based careers were the 3 main reasons for selecting a particular specialty. Night duties, Clinical Work and heavy work load were the 3 main causes for having the desire to leave their current specialty. **Conclusion:** Awareness should be given to medical students during their MBBS program about the challenges they would face in different specialty. Proper sessions should be arranged to help students realize their actual interest and identify field which would suit their temperament.

Key Words: Personal satisfaction, Quality of Life, After-hours care

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Background:

Medical Profession is comprised of many specialties. Some specialties are very hectic like gynecology/obstetrics, surgery, anesthesia, pediatrics and medicine. Specialties like ophthalmology and ENT are moderately hectic. Specialties like dermatology and radiology are very light while some specialties like neurosurgery and emergency become hectic during disaster.

Medical profession is continuously loosing prestige not only in Asian countries but also in Western countries. Consultants, residents and under graduates are all suffering from some unknown discomfort. Doctors are complaining of high demands, low rewards and difficult structural working conditions. Residents or the post graduate trainees are the main key who can play an important role in maintaining its prestige and thus their satisfaction should be

ensured.

Individual's characteristics, Person's style of working, temperament, work-life balance, job content, person's own interest, competition for post, difficult examination, stressful working condition, aptitude, Benefits and enticement of a particular specialty, quality of life and decision not to pursue other alternative specialties are the few factors that play a pivotal role in deciding which specialty a person opts for ¹⁻⁹. Nowadays Quality of life has become the major factor in deciding which specialty a person should opt for. ¹⁰⁻¹¹.

Astudy done on senior UK doctors found out that 23.2% of all doctor were not satisfied with the "adequacy of juniors training" ¹². In their opinion decreasing the training hours of the juniors have led to junior doctors having lesser confidence in their diagnostic or therapeutic judgments, having a

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reverse sense of work/life balance, less competent, lacking experience and being far less responsible 12

Objective:

Extensive work on this subject has been done in different countries all over the world; but very limited work has been done on this topic in Asia; especially Pakistan. The aim of this study was to survey the resident's career choice and their wish to change it and analyze the factors responsible for this wish.

Materials and Methods:

Study Design, Sampling Technique and Sample size:-

We carried out analytical Cross Sectional Study on residents of different specialties working in different hospitals in Rawalpindi and Islamabad by distributing a self-made Questionnaire with 12 items. The study was carried out from 2012 to 2014. We gave a total of 1200 questionnaires out of which 946 questionnaires were completely filled. Residents of different specialties with training greater than 6 months were included in this study. Residents with less than 6 months of training were not included in this study. The sampling method was based on proportionate stratified random sampling approach. We considered Surgery and Allied specialties as one stratum and Medicine and Allied specialties as one stratum.

Data Filling Procedure:-

The questionnaire used in the study consisted of several sections concerning the demographic data

Table 1: Cross Tabulation between "reason for selecting the particular specialty" and Gender

Reason for selection		Gender		P-Value
		Male	Female	
Patient Contact	Yes	291	255	0.001
	No	168	232	
Hospital Based Career	Yes	174	150	0.021
	No	285	337	
Knowledge	Yes	141	88	0.000
	No	318	399	
Opportunity for research	Yes	129	83	0.000
	No	330	404	
Good private practice	Yes	111	36	0.000
	No	348	451	
Good Quality of Life	Yes	0	27	0.005
	No	459	460	

Table 2: Cross Tabulation between "reason for having desire to leave the current specialty" and Gender

Causes for having desire to leave the current specialty		Gender		P-Value
		Male	Female	
Loss of Patient Contact	Yes	159	48	0.000
	No	300	439	
Excessive workload	Yes	249	134	0.000
	No	210	353	
No private practice	Yes	156	18	0.000
	No	303	469	

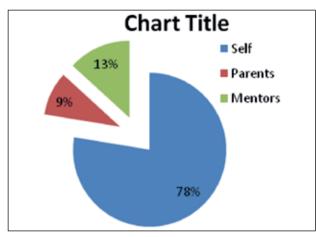


Figure 1 Current Specialty Chosen By? of the residents, reason of selecting the particular specialty and reason for the desire to change the specialty. The participants were selected randomly from existing resident list in each hospital. Informed consent was obtained from the resident and they were assured that their identity would be kept confidential. Each resident was given 20 minutes to fill the questionnaire. They were then interviewed for 10-15 minutes for the reason of their responses to the questions.

Data analysis

Only completed questionnaires were included in the analysis. SPSS version 21 was used to analyze the data. Descriptive statistics were calculated for all variables mentioned in questionnaire. Data was presented by the help of table, bar and pie charts. Chi square test was used to compare "reason of selection the specialty" and the "reason for having desire to leave the current specialty" among residents in relation to demographic variables. A p value of less than 0.05 was considered significant

Results:

Out of 1200 questionnaires distributed among residents of surgery and allied specialties and medicine and allied specialties a total of 946residents agreed to answer the questionnaire. Out of 946 residents, 48.5% (459) were male residents whereas 51.5 % (487) were female residents. Around 50.6%(479) had selected their specialty when they were in medical school, 24.4 %(231) during the house job and 25 %(236) selected their specialty after house job. Out of 946 residents46.8 %(443) were in surgery and allied specialties and 53.2% (503) were in medicine and allied specialties. Women were found to be more energetic and interested in their specialty as compared to men during the interview. Majority of residents 75.4% (713) did not want to change their specialty whereas 24.6% (233) wanted to change their specialty if they would have been provided with such opportunity.

Figure 1 shows the choice of current speciality by the individual/under-influence of parents and mentors.

Patient Contact, Interesting Diseases, Hospital based careers, Knowledge, Intellectual Challenge, Opportunity for Research, Status/Reputation, Provision of Good Private Practice, Good Income and Better Quality of Life were the reason for selecting a particular Specialty. Patient Contact, Interesting Diseases and Hospital based careers were the 3 main reasons for selecting a particular specialty. This has been shown in Figure 2

Loss of patient contact, excess of clinical work, night duties, hospital based career, competition, lack of recognition, lack of clinicalactivity, poor quality of life and excessive work load were the causes for having the desire to leave their current specialty training. Out of these night duties, Clinical Work and excessive work load were the 3 main causes for having the desire to leave their current specialty. This has been shown in Figure 3.

Chi-square test was done to determine the association of Gender, Specialty, timing of selecting the specialty and who selected the specialty with "reason for selecting the particular specialty" and the "reason for having desire to leave the current specialty". P-values less than 0.05 were considered significant.

Association of Specialty, timing of selecting the specialty and who selected the specialty with "reason for selection the specialty" and the "reason for having desire to leave the current specialty "was found to be insignificant.

In "reason for selecting the particular specialty" male gender was found to be significantly (p < 0.05) associated with patient contact, hospital based career, knowledge, opportunity for research and good private practice as the reason for selecting a particular specialty. Female gender was significantly (p < 0.05) associated with good quality of life as the reason for selecting a particular specialty. This has been shown in Table 1. Association of Gender with other "reasons for selecting the particular specialty" was found to be insignificant

In "reason for having desire to leave the current specialty" male gender was found to be significantly (p < 0.05) associated with loss of patient contact, excessive work load and no private practice as the reason for having desire to leave the

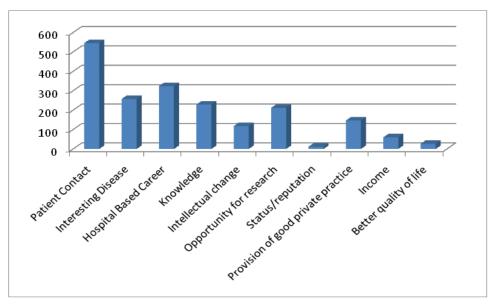


Figure 2: Reason for selecting a particular Specialty

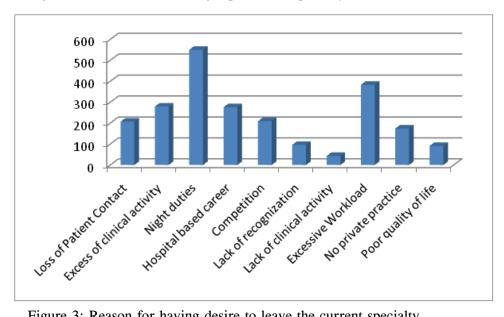


Figure 3: Reason for having desire to leave the current specialty

current specialty. This has been shown in Table 2. Association of Gender with other "reason for having desire to leave the current specialty" was found to be insignificant.

Discussion:

Career related aspect was found more in men in helping them decide a specialty as compared to the women. This was found to be consistent with previous studies published on this topic 14. A study done in United Kingdom on 15,759 doctors showed that about a quarter of doctors were working in a specialty that was different from the one chosen in their third year after graduation 13. Another study found out that a disproportionately higher percentage of women considered but rejected a career in surgery. Poor work-life balance, prolong working hours, competition and attitude of the surgeon were the few reasons given by the female doctors for eventually deciding not to pursue a career in surgery 1. Experience of a subject as a student and Influence of mentor/parents can have a significant impact on long term career choices. In our study 22% opted for a particular specialty based on advice by their mentors/parents. A study done in United Kingdom found out that influence of teacher/department and student's own experience of the subject affected long term career choices more for Obstetrics and Gynecology than any other subject. 15. No significant difference between mentor/teacher influence and choice of specialty

was found in our study.

A cohort study done on 15,759 doctors found out that final career specialty of doctors were more likely to match with specialty they chose three years after graduation as compared to specialty chosen by them one year after graduation. The highest match rate found in this study was for specialty choice they made five yearsafter graduation. The greatest increase in match rate occurred between one year after graduation and three years after graduation indicating that this period was the key period in which the final choice of specialty is made ¹⁶. Training duration and gender differences in reason for choosing a specialty may become more pronounced with passage of time and can lead to change in preferred specialty ¹⁴.

Night duties were the most common cause amongst resident to leave their current specialty training. Night duties apart from being hectic and tiring; have a huge impact on work-life balance. Odd hours in the long run can have a significant impact on Quality of life because of continuous disturbances in the circadian rhythm. In our study residents who had been night owls during their student life found it hard to cope with circadian rhythm disturbances. This factor was found to be equally important in women and men in this study. This finding was different as compared to result other studies done earlier on this topic. Other studies have shown that women preferred a more flexible working style in certain stages of their career 17. Our study had similar result. These can be because of women has additional household and family responsibilities to take care of as compared to their male counterparts. Increasingwork makes it more difficult for women to fulfill these roles and can eventually lead to stress, depression and burnout. A study conducted in UK showed that work-life balance was the most common reason cited by women for rejecting the medical hospital specialties, pediatrics, emergency medicine, the surgical specialties, and obstetrics and gynecology 1. Another study found out that male post-call residents felt more challenged, demoralized and busier while female post-call resident felt less competent, less productive and less energetic ¹⁸.

Clinical work was the second most common cause of having desire to leave their current specialty. Some of the residents despite having chosen the specialty by will found the training "too boring" or find it too tough for them to continue in it. Medical Education is quite expensive and therefore medical

students have a practical reason for opting for high paying specialty choice. But money alone can't make a person happy. In our research some of the residents who had chosen a specialty because of status, good income and provision of good private practice later realized that they had no inherent interest in their current specialty. Because of lack of interest it was getting harder for them to work in the current specialty as compared to their colleagues who had opted for that particular specialty because of their interest in it. 30% Attrition rate was found out in general surgery residents in a study done by Longo et al over a 20- year period. Life style and passion for another specialty were found to be the two most common reasons for leaving a particular specialty 19.

Excessive work load was the third most common cause having desire to leave the particular specialty. Heavy work load like night duties and long working hours made it difficult to strike a balance between work life and family life. Along with that many residents reported that because of heavy work load they were subjected to a great deal of stress and found it increasing hard to cope with tremendous amount of stress on them. Many residents also reported that because of this their performance and productivity had decrease with time. A study done on Pediatrics residents found out that residents who stayed late were found to be less patient-centered and reported feeling less fulfilled and more fatigue as compared to their colleagues who left on time ²⁰. A study done in

Switzerland concluded that to reduce burnout on surgical residents new strategies should be devised to decrease work intensity and work load rather than restricting work hours alone 21. Despite the new 80 hours per week restriction 22-23; resident'sburnout, depression, and suicidal ideation is on the rise ²⁴⁻²⁶. A study done on obstetrics and gynecology residents concluded that resident with a greater level of emotional exhaustion were more likely to be less satisfied with their career, having feeling of regret for choosing obstetrics and gynecology and higher rate of depression as compared to resident who had a lower level of emotional exhaustion ²⁵. A longitudinal study done on surgical resident found out that approximately 1/3 residents were experiencing emotional exhaustion, depersonalization and poor personal life balance. One in every seven resident considered giving up career as a surgeon ²⁶. Another Study done in Pakistan concluded that long hours of work caused a significant deterioration in cognitive and behavioral status of the residents ²⁷.

Implications:

- 1. Medical students should be properly informed about challenges in the different specialties before opting for it.
- 2. Medical Students should be encouraged to choose the specialty they want to do on their own. They should be motivated to choose specialty of their interest
- 3. Institutions should make efforts to make sure the Doctors are not over-loaded with work burden.

Conclusion:

Awareness should be given to medical students during their MBBS program about the challenges

they would face in different specialties. Proper sessions should be arranged to help students realize their actual interest and identify the field which would suit their temperament. Self-assessment questionnaire and time with physician of different specialty may help in understanding the clinical challenges a student will face after entering that particular specialty.

Conflict of Interest: None

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391