Career Preferences and Some Related Factors in Medical Interns of a Tertiary Care Institute

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Abstract
Medical profession is frequently opted by able students from different family backgrounds as it offers a noble, revered and financially stable career. The choice made by medical students regarding their career specialty is not only an important decision for their future but it also affects the availability and the quality of services the country’s health system is able to provide. The aim of this study was to know the career preferences of medical interns and study some related factors. Present descriptive cross sectional study was carried out on 236 medical interns of a tertiary care institute in Nagpur. All the study subjects wanted to pursue post-graduation. However, only 49(20.76%) study subjects wanted to pursue specialization in pre and paraclinical subjects. Medicine, Paediatrics, Surgery and Obstetrics & Gynaecology were the four clinical specialties most opted by the medical interns. Higher proportion of females as compared to males opted for specialisation in Pediatrics and Obstetrics & Gynaecology and this difference was found to be statistically significant (p<0.05). Also significantly higher proportion of males had inclination towards specialisation in Surgery and Orthopedics as compared to their female counterparts (p<0.05). Important reasons for opting clinical specialties were high income potential, reputation of specialties, individual interest and intellectual content of specialties. Factors influencing choice of pre/paraclinical specialities were fixed working hours, job security, more time for family & friends & lesser work pressure.

Keywords: Career preferences, medical interns, related factors.

Introduction
Medical profession is frequently opted by able students from different family backgrounds as it offers a noble, revered and financially stable career. In India the Bachelor of Medicine and Bachelor of Surgery (MBBS) degree is a four and half year
course involving rigorous teaching and training, followed by one year compulsory rotatory internship after which one can opt for specialization as per his/her career preference. Students’ attitude and perception play a vital role in their learning process.\(^{(1)}\) Career preferences of medical students has remained an area of interest for medical educators as well as state departments concerned with health manpower planning. The choices made by medical students regarding their career specialty is not only an important decision for their future but it also affects the availability and the quality of services the country’s health system is able to provide.\(^{(2,3)}\) In resource-poor settings with low doctor-population ratio, there is need for equitable distribution of healthcare workforce. The specialty preferences of medical students determine the future composition of physician workforce hence its relevance in career guidance, healthcare planning and policy formulation.\(^{(4)}\) Research so far done has identified several factors that affect students’ career selection ; intrinsic factors such as demographics, academic performance, social status and personality attributes and extrinsic factors like those related to work environment such as duty hour requirement and expected income from practicing the selected specialty. The impact of these factors varies from setting to setting. With this background the present study was carried out to know the career preferences of medical interns and to study some related factors.

**Material and Methods**

Present descriptive cross sectional study was carried out on 236 medical interns of a tertiary care institute in Nagpur. Data was collected using a pre-designed and pre-tested questionnaire (including both open & close ended questions) which was self-administered. The response rate was 100%.

Information regarding socio-demographic characteristics, factors influencing choice of medical career, intention to pursue postgraduation, speciality of choice and reasons for preferring the speciality was obtained. Data was compiled and analysed using Epi Info version 7.2.

**Results**

There were 236 study subjects, of which 111(47.03%) were male and 125(52.97%) were female. The mean age of the study subjects was 23±2.78 years with range being 21 to 26. The major factors that influenced the selection of medical profession (Table 1) were service to humanity (52.97%), personal interest/ childhood dream (36.86%) and influence of family (28.81%).

All the study subjects wanted to pursue post-graduation. However, very few 49(20.76%) study subjects wanted to pursue specialisation in pre and paraclinical subjects. Speciality preferences of interns were centered on four broad clinical specialities mainly Medicine 58(24.57%), Paediatrics 37(15.67%), Obstetrics & Gynaecology 30 (12.71%), Surgery 28(11.36%) as reflected in table 2.

Medicine was the most opted subject for specialisation with no gender difference in preference. Higher proportion of females as compared to males opted for specialisation in Paediatrics and Obstetrics & Gynaecology and this difference was found to be statistically significant (p=0.034 and0.00 respectively). Also significantly higher proportion of males had inclination towards specialisation in Surgery and Orthopaedics as compared to their female counterparts (p=0.00 and 0.00 respectively).

Reasons for opting clinical specialities are seen in fig.1. High income potential 149(79.68%), reputation of specialities 114(60.96%), individual interest 106(56.68%) and intellectual content of specialities 68(36.36%) were the most influential factors for preferring clinical specialities. Other persuasive factors were influence of family members, friends, seniors, family background, diversity of exposure, etc.

Factors influencing choice of pre/ paraclinical specialities are detailed in fig.2. Fixed working hours 39 (79.59%), job security 35(71.43%), more time for family and friends 31(63.26%) and lesser work pressure 29 (59.18%) were the main determining factors for the choice of pre/ paraclinical specialities.
Table 1: Factors influencing selection of medical profession

| Sr.No | Factor                          | Number (N=236) | Percentage (%) |
|-------|---------------------------------|----------------|----------------|
| 1     | Service to humanity             | 125            | 52.97          |
| 2     | Personal interest / childhood dream | 87            | 36.86          |
| 3     | Influence of family             | 68             | 28.81          |
| 4     | Job security as always in demand | 63             | 26.69          |
| 5     | Status and respect in society   | 61             | 25.85          |
| 6     | Lucrative career                | 47             | 19.91          |
| 7     | Glamour                         | 42             | 17.80          |
| 8     | Challenging profession          | 37             | 15.68          |
| 9     | Critical childhood experiences  | 18             | 07.63          |
| 10    | Lifelong learning experience    | 09             | 3.81           |

Table 2: Speciality preferences of medical interns

| S.no | Subjects                          | Total | %   | Males | %   | Females | %   | p-value |
|------|-----------------------------------|-------|-----|-------|-----|---------|-----|---------|
| 1    | Medicine                          | 58    | 24.57 | 26    | 23.42 | 32    | 25.6 | 0.8132 |
| 2    | Pediatrics                        | 37    | 15.67 | 11    | 9.9  | 26    | 20.8 | 0.0342 |
| 3    | Obstetrics & Gynaecology          | 30    | 12.71 | 6     | 5.4  | 24    | 19.2 | 0.0028 |
| 4    | Surgery                           | 28    | 11.36 | 22    | 19.81 | 6     | 4.8  | 0.0007 |
| 5    | Radiodiagnosis                    | 9     | 3.81  | 6     | 5.4  | 3     | 2.4  | 0.3124 |
| 6    | Ophthalmology                     | 8     | 3.38  | 3     | 2.7  | 5     | 4    | 0.7258 |
| 7    | Orthopedics                       | 7     | 2.96  | 7     | 6.3  | 0     | 0    | 0.0045 |
| 8    | Dermatology                       | 5     | 2.11  | 2     | 1.8  | 3     | 2.4  | 1     |
| 9    | Psychiatry                        | 5     | 2.11  | 3     | 2.7  | 2     | 1.6  | 0.6681 |
| 10   | Other preclinical & paraclinical subjects | 49 | 20.76 | 25 | 22.52 | 24 | 19.2 | 0.6402 |

Figure 1: Reasons for opting clinical speciality
Discussion

A career in medicine is one of the oldest and most respected one. It imparts an individual the potential to impact human life in a way that is truly unique and the job satisfaction one gets is unparalleled. In our study, some important factors influencing the choice of medical profession were service to humanity, personal interest/childhood dream, influence of family, job security. Service to humanity was the most influential factor cited by interns for selecting medical profession. Similar results were reported by other studies also.\(^{(5,6,7)}\)

Present study focused on career preferences as well as on the factors that lead to such preferences in medical interns. Career preferences of medical students is an important determinant for the future distribution of medical workforce and plays an important role in planning country’s healthcare services.\(^{(8)}\) Post graduate medical education is increasingly being recognized as a necessary qualification needed to practice speciality medicine in India.\(^{(9)}\) In the present study also all 236 (100%), medical interns wanted to pursue postgraduation. This may be due to various reasons driving the interns to aspire for postgraduation like better career opportunities, the perception that MBBS only doctors have lower status in society and the belief that an MBBS degree does not sufficiently qualify them to have roaring practice.\(^{(10)}\) Increased competitiveness in medical practice and increased awareness of general public across the country leading to increasing demand of specialist professionals has led to this scenario.\(^{(9,11)}\)

After graduation choosing a medical specialty is an important decision making process involving complex interplay of multiple factors. Only 20.76%, study subjects wanted to pursue specialisation in pre and paraclinical subjects. This trend probably points towards an attitudinal shift seen among today’s generation of doctors to be. This also suggested that the students were not fully aware of the scope and opportunities of pre and paraclinical subjects.\(^{(12,13,14)}\) Moreover in our country, before joining the medical school, dream of most of the students is to be a famous clinician rather than an academician in the future as they are more respected and have greater opportunities to earn.\(^{(13)}\)

Medicine, Paediatrics, Obstetrics & Gynaecology and Surgery were the four broad clinical specialities opted by the medical interns. This finding was consistent with the findings of other studies.\(^{(11,12,15)}\)

Medicine was the most opted subject for specialisation with no gender wise difference in preference. Paediatrics and Obstetrics &
Gynaecology were opted more by females as compared to males. The preference for Surgery and Orthopaedics was more in males compared to their female counterparts. \(^\text{(11,12,14)}\)

Important reasons for opting clinical specialities were high income potential, reputation of specialities, individual interest and intellectual content of specialities. Other determining factors cited were influence of family members, friends, seniors, family background, diversity of exposure, etc. Factors influencing choice of pre/paraclinical specialities were fixed working hours, job security, more time for family & friends and lesser work pressure. Similar findings were also reported in other studies.\(^\text{(16,17,18)}\)

**Conclusion**

Our study reveals that the most preferred specialities are Medicine, Paediatrics, Obstetrics & Gynaecology, and Surgery with gender variations; males preferring surgical specialities and females opting for Paediatrics and Obstetrics & Gynaecology. Very few study subjects want to pursue specialization in pre and paraclinical subjects. This suggests that the students are not fully aware of the scope and opportunities of pre and paraclinical subjects. High income potential, reputation of specialities, individual interest & intellectual content of specialities are major motivating factors for preferring a particular specialty. Orientation and career counseling in medical education may go a long way in helping future doctors to make correct choices. Instead of just concentrating on career aspirations and personal fulfilment students should also consider work life balance while making specialty choices. Health planners should take appropriate steps to make less preferred specialities like basic medical sciences more attractive, so that system becomes homogenous. Present study has limitations inherent to a cross-sectional study. Further studies with different designs and larger sample size are required to get in depth perspective of the interns choice of medical speciality and influencing factors.

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