Study of Personality Factors in Postgraduate Medical Students

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Abstract

The medical specialities chosen by doctors for their careers play an important part in the planning of health-care services. However, there is little theoretical understanding of how different medical specialities are perceived or how choices are made. So it is possible to hypothesize that the personality traits influence, in synergy with other factors, the choice of medical specialization. So, we decided to conduct the study with the following aims :

1. To study personality factors in medical students pursuing post graduation.

2. To compare personality factors of postgraduate students pursuing medicine and allied branches with those doing surgery and allied.

3. To analyze qualitatively various factors which may play a role in choosing the post graduation speciality.

Medical students pursuing postgraduation interviewed using semistructured proforma and 16 PF administered to assess personality profile.

Data thus collected, pooled and subjected to statistical analysis. Results obtained discussed with available literature.

Introduction

The question of the ideal personality characteristics for entering the medical profession is an age-old concern. Hippocrates discussed this subject in his texts, calling attention to the characteristics necessary to become a doctor. The Father of Medicine proposed that doctors should have natural skills, culture, disposition for studying, a strong background, and perseverance.

Post-graduate trainee doctors are receiving increasing attention, as it is perceived that their personality will have a significant effect on their ability to handle the high levels of stress and other demands made on them during their residency period. Research has indicated that over one-third of medical students and postgraduate trainees have minor psychiatric morbidity, which also is the case with more than half of the doctors who have become physicians and consultants.[1] Empathy is regarded as an essential characteristic in good doctors, but it has been found that postgraduate training could be doing more to stifle it than to foster it.[2] Differences in personality factors have been found among postgraduate medical students belonging to different faculties. Medicine is a heterogeneous profession in which a variety of clinical specialities are associated with differences in clinical environment, physician responsibility, and patient exposure. Various studies found that personality traits of

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students pursuing post graduation in medicine and allied differ from those pursuing surgery and allied specialities.[3-7] However there are also studies that do not show any specific personality differences in post-graduate medical students choosing certain specialities.[8,11]

Most studies on personality profile of medical post-graduate students have been conducted in the west and there is paucity of Indian studies in this area. It is of potential value to systematically examine the personality profiles of postgraduate medical students and to make a comparative assessment between students of medicine and allied, and surgery and allied fields. This may help medical students make a postgraduate career decision depending on their personality profile so that they may adapt better to the demands of their chosen speciality.

Aims and Objectives

1. To study personality factors in medical students pursuing post graduation.
2. To compare personality factors of post graduate students pursuing medicine and allied branches with those doing surgery and allied.

Inclusion criteria

1. All medical students pursuing post graduation in medicine and allied subjects and surgery and allied subjects.
2. Both sexes included.

Exclusion criteria

1. Students pursuing post graduation in nonclinical fields.

Material

1. Semistructured proforma:

   This specifically designed proforma was used to obtain various sociodemographic details.

2. 16 Personality Factor Questionnaire (16 PF)

   The student version of the 16 PF Questionnaire, a self-administered questionnaire was used to assess personality traits of the study participants. It assesses primary personality traits, which are constructed into essentially normal "factors" or clusters.[9,10] They are Warmth, Reasoning, Emotional Stability, Dominance, Liveliness, Rule Consciousness, Social Boldness, Sensitivity, Vigilance, Abstractness, Shrewdness, Apprehension, Openness to Change, Self Reliance, Self-concept control, and Tension.

Methods

1. Prior to the study ethics committee approval taken.
2. The participants were informed of the research objectives and assured of the confidentiality of their responses. Informed consent was taken.
3. Demographic and qualitative data was collected from the participants using the semistructured proforma.
4. The personality factors of the participants were then assessed using the 16 PF.
5. Data was pooled and subjected to statistical analyses using the SPSS 11 software. Frequency distribution and t – test was applied to the data.

Results

A total of 51 post graduate medical students were studied, of which 25 were pursuing postgraduation in medicine and allied branches, and 26 were pursuing post graduation in surgery and allied branches.

The sociodemographic profile of the postgraduate students is as shown in Table 1 to 4. Comparison of the personality factors of

Table 1 : Sex and Marital status of postgraduate medical students

Sociodemographic variables	Medicine and allied branches	Surgery and allied branches
Sex		
Male	13 (52%)	20 (76.9%)
Female	12 (48%)	06 (23.1%)
Marital status		
Unmarried	18 (72%)	14 (53.85%)
Married	07 (28%)	12 (46.2%)

postgraduate students is as shown in Table 5.

Discussion

A total of 51 post graduate medical students were studied, of which 25 were pursuing postgraduation in medicine and allied branches, and 26 were pursuing post graduation in surgery and allied branches.

Table 1 shows sex and marital status of postgraduate students. Male to female ratio was 3:1 in surgery and allied whereas it was equal in medicine and allied. Most of the surgery and allied residents were married whereas most of the medicine and allied students were unmarried.

Educational status of parents of postgraduate medical students as shown in Table 2 reveals no difference in both groups and majority of them were graduate or postgraduate.

Table 3 shows Occupational status of parents of postgraduate medical students, which reveals that majority of the students in surgery had parents who were doctors. However, a similar trend was not observed among medicine students.

There were equal no of doctors per family in both the groups as shown in Table 4.

As shown in Table 5, scoring of 16 PF revealed that majority of the students fall within the average range of all the 16 factors

Table 2 : Education status of postgraduate medical students' parents

Education	Medicine and allied branches		Surgery and allied branches	
	Mother	Father	Mother	Father
Less than SSC	02 (08%)	02 (08%)	00 (00.0%)	00 (00.0%)
SSC	05 (20%)	01 (04%)	09 (34.6%)	04 (15.4%)
HSC	03 (12%)	01 (04%)	01 (03.8%)	00 (00.0%)
Graduate	10 (40%)	16 (64%)	12 (46.2%)	14 (53.8%)
Post graduate	05 (20%)	05 (20%)	04 (15.4%)	08 (30.8%)

Table 3 : Occupation of postgraduate medical students' parents

	Medicine and allied branches		Surgery and allied branches	
	Mother	Father	Mother	Father
Housewife	21 (84%)	—	20 (76.9%)	—
Service	01 (04%)	11 (44%)	02 (07.7%)	10 (38.5%)
Business	—	06 (24%)	—	06 (23.1%)
Doctor	01 (04%)	03 (12%)	03 (11.5%)	07 (26.9%)
Retired	02 (08%)	02 (08%)	01 (03.8%)	01 (03.8%)
Farmer	—	03 (12%)	—	02 (07.7%)

Table 4 : Number of doctors per family of post graduate medical students

	Medicine and allied branches Mean ± (SD)	Surgery and allied branches Mean ± (SD)
Number of doctors per family	2 ± (3)	2 ± (2)

of personality. This pattern shows that most postgraduate medical students of this sample have a healthy personality, which may allow them to adapt and adjust to the various demands of their field.

However it was observed that most of these students have scored on the higher side in the factor that measures "shrewdness" (traits-shrewd, calculating, worldly, penetrating).

In keeping with studies done by Bradley *et al*[8] and Patricia,[11] this study also did not observe any significant difference in personality traits between medicine and allied, and surgery and allied postgraduate medical students but a diffuse scatter of personality traits among postgraduate medicine and surgery students.

Conclusion

Personality assessment of the postgraduate students showed that majority of students fell within the average range on all the 16 factors.

No significant difference was found between the personality profiles of medicine and allied and surgery and allied postgraduate students.

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Table 5 : Comparison of the personality factors of postgraduate students

	Factors	Medicine Mean (SD)	Surgery Mean (SD)	t value
Warmth	A	4.1 (1.6)	3.6 (1.4)	1.9
Reasoning	B	4.9 (1.9)	5.1 (2.4)	-0.4
Emotional stability	C	5.0 (2.3)	4.19 (1.9)	1.4
Dominance	E	5.6 (2.1)	5.4 (2.2)	0.2
Liveliness	F	4.6 (1.6)	3.7 (1.7)	1.9
Rule consciousness	G	6.2 (2.0)	5.6 (2.0)	1.0
Social boldness	H	5.0 (1.8)	4.6 (1.9)	0.7
Sensitivity	I	5.8 (2.2)	5.6 (1.9)	0.3
Vigilance	L	7.1 (1.9)	7.3 (2.0)	-0.4
Abstractness	M	4.9 (2.0)	4.0 (2.1)	1.5
Shrewdness	N	8.2 (1.9)	7.3 (2.4)	1.3
Apprehension	O	6.2 (2.2)	7.3 (2.0)	-1.9
Openness to change	Q1	6.3 (2.0)	5.8 (2.0)	0.9
Self reliance	Q2	6.4 (2.2)	6.1 (1.8)	0.5
Self concept control	Q3	5.4 (2.0)	5.2 (1.7)	-0.4
Tension	Q4	5.2 (2.4)	6.5 (1.9)	-2.1

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NEW THERAPIES FOR TREATMENT OF RHEUMATOID ARTHRITIS

Rheumatoid arthritis is characterized by pain, swelling and destruction of joints, with resultant disability. Only disease-modifying antirheumatic drugs can interfere with the disease process. In the past few years, biological agents, especially inhibitors of tumour necrosis factor, have allowed for hitherto unseen therapeutic benefit, although even with these drugs the frequency and degree of responses are restricted. Therefore, new agents are needed, and three novel biological compounds for treatment of rheumatoid arthritis have already been used in practice or are on the horizon: rituximab (anti-CD20), abatacept (cytotoxic T-lymphocyte antigen 4 immunoglobulin), and tocilizumab (anti-interleukin 6 receptor).

The Lancet, 2007; 370 : 1861-62.