

■ *Original Articles*

## Future doctors of Nepal: a study of the attributes

DR Shakya<sup>1</sup>, R Maskey<sup>2</sup>

<sup>1</sup>Department of Psychiatry, <sup>2</sup>Department of Medicine  
B. P. Koirala Institute of Health Sciences, Nepal

### Abstract

**Background:** Despite increasing number of medical schools, there is a limited data about medical students from Nepal. Information about their characteristics and profile will help devise necessary policies and strategies. **Objective:** To study social, demographic, economic, geographic, educational and psychological attributes of MBBS students. **Methodology:** From the list of MBBS students of all years/semesters of BPKIHS (2009), every 5<sup>th</sup> students were enrolled to include 20% of all. After informed written consent, relevant information was collected from the subject by direct interview and recorded in a priory-prepared semi-structured proforma. The investigator MD-psychiatrist clinically assessed their personality-traits. **Results:** A total of 104 MBBS students were enrolled. Majority were male (76, 69%) and single (102, 98%). Average age was 23 years. Most (79, 76%) came from nuclear family, with family's better education and employment status. Only fewer (18, 17%) were from rural set-ups. Average distance from the institute was 17 hours of road travel. Though many had local supports of relatives and friends, some expressed lack of support. A variety of creative and extracurricular activities were reported. Besides major clinical subjects, other specialties are also the choice for many future Nepali doctors. Among the personality clusters, many had anxious and anancastic (OC) traits. **Conclusion:** Majority of MBBS students are male, from urban areas, nuclear family with good economic and educational background. They have a range of recreational extracurricular activities and specialties for future career. Many reported anxious and anancastic traits.

**Keywords:** attributes, BPKIHS, future doctor, MBBS student, Nepal

### Introduction

In recent years, many medical institutes are opening<sup>1</sup> and many people joined medical education in Nepal. Medical field and education have some particular attributes.<sup>2</sup> There are reports of clustering of attributes and characteristics in different professions.<sup>2</sup> Medical students have also been studied from different perspectives such as personality traits.<sup>2,3</sup> Their strengths, tendencies, aspirations and qualities might have, in varying proportions contributed to

joining medical education. Understanding about the attributes and traits of these future doctors might throw lights on some facts with implications.

There is, however a dearth of information about this aspect from Nepalese setting. This study was conducted in B. P. Koirala Institute of health sciences, Dharan, Nepal in 2009 to scan into various socio-demographic, economic, educational background, their attributes, interests, aspirations and personality traits of MBBS students.

### Methods

It is an institute based-cross sectional descriptive study looking into various attributes, characteristics, interests, aspirations and personality traits of MBBS students of BPKIHS, Dharan, Nepal.

---

Address for correspondence  
Dr. Dhana Ratna Shakya  
Associate professor  
Department of Psychiatry  
BPKIHS, Dharan, Nepal  
Email: drdhanashakya@yahoo.com

A list of MBBS students of all years/ semesters of BPKIHS (2009) was collected from the institute authority. Systematic random sampling was adopted by ascertaining a reference number by lottery method to select the students with every 5th chronological number (to enroll 20%). In case of inability to enroll so selected candidate, first subsequent and then preceding roll number students were approached. After informed written consent, necessary information was collected from the subject by direct interview. The investigator MD-psychiatrist clinically assessed their personality-traits. Data were entered into a computer and analyzed using 'Statistical Package for Social Studies' (SPSS 17)- software.

### Results

A total of 104 students were included, with 28 females and M:F = 2.71:1

Average age of the students was 22.93 (age range 18-27) years. Majority of them 80 (76.92%) were of age group (20-25) years. Eight (7.69%) were less than 20 and 16 (15.39%) of ages (26-30) years.

All students were single except 2 who were married. One married student had one child and other had no issue till study time.

The most common caste/ethnicities among the medical students were: Upper hill caste, Indians/ foreign, Disadvantaged nondalit Terai and Upper Terai castes (Table 1).

**Table 1: Personal demographic profiles- Gender, Age, Marital status and Ethnicity**

Gender	No. (%)
Male	76 (73.08)
Female	28 (26.92)
Age (years)	
< 20	8 (7.69)
20-25	80 (76.92)
26-30	16 (15.39)
Marital status	
Single	102(98.08)
Married	2 (1.92)
Ethnicity group	
Upper hill	39 (37.50)
Upper Terai	12 (11.54)
Relatively advantaged janajati	6 (5.77)
Religiously minority/Muslim	0 (0.00)
Disadvantaged nondalit Terai	20 (19.23)

Disadvantaged hill janajati	4 (18.18)
Disadvantaged Terai janajati/dalit	1 (0.96)
Hill dalit	0 (0.00)
Indian/foreign	22 (21.15)

Most 98 (95.19%) were Hindus; and 3 (2.89%) Buddhists.

Majority (79, 75.96%) came from nuclear, (23, 22.12%) joint/compound and 1 (0.96%) each from broken and extended family.

Monthly family income of 5 students was reported less than Rs. 5000, 16 Rs. 5000-10000 and 82 more than Rs. 10000 and 1 declined from answering (Table 2).

**Table 2: Socio-demographic profiles- Religion, Family type and Monthly family income**

Religion	No. (%)
Hindu/Kirat	99(95.19)
Buddhist	3(2.89)
Muslim	1 (0.96)
Christian	1 (0.96)
Family type	No. (%)
Nuclear	79(75.96)
Joint/ compound	23(22.12)
Extended	1 (0.96)
Broken	1 (0.96)
Monthly Family income	No. (%)
< 5000	5(4.81)
5000-10000	16(15.39)
> 10000	82 (78.85)
No reply	1 (0.96)

Average distance of their residence from the institute was 17.15 (around institute to 96) hours of road travel. Ten (9.62%) were from nearby, 73 (70.19%) from within 1 day road travel distance, 17 (16.35%) farther and 4 did not answer. Fifty four (51.92%) students were from cities, 32 (30.77%) semi-urban and rest 18 (17.31%) from villages.

Only 25 (24.04%) students had local guardians, 12 (11.54%) family members and 35 (33.65%) had other relatives in the institute city.

Fourteen (13.46%) students had few friends, 79 (75.96%) adequate/ average numbers and rest 11 (10.58%) many more. Thirty (28.85%) students were active or involved in various social/ student group/ organization, one declined from answering and 73 (70.19%) were not involved.

Father was decision maker for 82 (78.85%), mother for 4 (3.85%), both for 14 (13.46%), self 3 (2.89%) and other/brother for 1 student.

One student perceived family financial support poor, 18 (17.31%) fair and 85 (81.73%) good. Emotional/psychological support was fair for 7 (6.73%) and good for rest 97 (93.27%) students.

Only father of 5 students were illiterate, rest educated to various levels: under SLC- 8, SLC- 16, PCL- 8, bachelor- 31 and higher- 36. Among the mothers, illiterate were more, 20; rest educated to different levels: under SLC- 16, SLC- 26, PCL- 8, bachelor- 19 and higher- 21 (Table 3).

**Table 3: Parents' Educational status [No. (%)]**

Education	Father	Mother
Illiterate	5 (4.81)	20(19.23)
< SLC	8 (7.69)	16(15.69)
SLC	16(15.39)	26(25.00)
PCL	8 (7.69)	8 (7.69)
Bachelor	31(29.81)	19(18.27)
Higher	36(34.62)	21(20.19)

Common occupations of father were: teaching/professional- 31, business/shop- 24, service/clerical- 17, farming- 16, other- 13, engineer- 2; 11 of them were either retired or deceased. Common occupations of mother were: home maker- 78, teaching/professional- 13, farming- 9, business/shop- 1, other- 3, engineer- 2, and 4 of them were either retired or deceased.

Common Extracurricular activities among them were- Social activity, Game/sports, Movie watching, Travel and reading\* (Table 4).

**Table 4: Common Extracurricular activities\* [No. (%)]**

Extracurricular activities	No. (%)
Game/sports	59 (56.73)
Literature	5 (4.81)
Music	36 (34.62)
Social activity	76 (73.08)
Movie watching	59 (56.73)
Travel	47 (45.19)
Reading/study	38 (36.54)
Internet/computer	16 (15.39)
Home chores	13 (12.50)
Religious	5 (4.81)

Common hobbies among MBBS students were- Music- 27, Dance- 11, Painting/art- 15, Traveling- 14, Ticket/other collection- 6, Political activity- 1, Literature- 22, Sports- 30, Social activity- 5, Photography- 2, Cooking/Gardening/home chores- 6, Movie watching- 4, Religious activity- 2.\*

Eighty seven (83.65%) students chose medical education by their own choice, 17 by chance, 9 by other's force, 12 with counseling and motivation, and 7 for other's wish. Thirty students had more than one reason for joining MBBS course\* (Table 5).

**Table 5: Reason of choosing medical education\* [No. (%)]**

Reasons	No. (%)
Other's wish	7 (6.73)
Counseling/motivation	12 (11.54)
Others' force	9 (8.65)
Chance	17 (16.35)
Choice of self	87 (83.65)

Specialties of their interest were: Internal medical, Surgery, Pediatrics, Psychiatry, non-health, Gynecology and Basic sciences (Table 6).

**Table 6: Specialty of choice for future career (number)\***

Specialty	Total Choice	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
Internal medicine	64	37	17	7	3
Surgery	49	22	18	7	2
Pediatrics	42	13	15	9	5
Psychiatry	27	3	6	11	7
Non-health	20	5	4	7	4
Gynecology	19	5	6	5	3
Basic science	17	4	5	6	2
Radiology	16	5	3	3	5
Orthopedics	15	4	4	6	1
Dermatology	12	4	1	3	4
Anesthesiology	10	0	4	2	4
Ophthalmology	10	1	4	3	2
General practice	8	1	3	1	3
ENT	6	1	1	1	3
Community medicine	5	1	0	3	1
Dental/oral	1	0	0	1	0
Pathology	1	0	1	0	0

Many students expressed that they had traits suggestive of cluster C (anxious and anancastic nature) (Table 7).

**Table 7: Personality traits/ disorder revealed by the students\* [No. (%)]**

Personality traits/disorder	No. (%)
No prominent trait/well adjusted	48 (46.15)
At least one prominent trait	56 (53.85)
Schizoid	9 (8.65)
Paranoid	1 (0.96)
Borderline	3 (2.89)
Narcissistic	1 (0.96)
Anxious/avoidant	28 (26.92)
Anancastic	24 (23.08)
More than one trait	10 (9.62)

\*Multiple response question- Respondent may have one or more responses.

### Discussion

Though history of Modern medicine and its education in Nepal is relatively short, it has witnessed some remarkable developments.<sup>4</sup> Medical schools have been established within and outside Kathmandu valley<sup>1</sup> and have drastically reduced the compulsion to leave the country for medical education alone. Many people have joined medical education and Nepalese doctors have proved their contribution not only within the country but also shown their presence outside Nepal. Due to certain inherent characteristics of the medical field, it has been one of the attractive career choices despite of some changes in people's perspective towards this profession. Current study is, to the author's knowledge, first of this kind from Nepal to look into some prominent attributes of the future Nepalese doctors, the product of B. P. Koirala Institute of Health Sciences (BPKIHS). Here, the attributes mean the profiles of characteristics, features, interests, aspirations and personality traits of MBBS students including: socio-demographic, environmental, economic, educational background. BPKIHS is one of the large health institutes of Nepal and is situated in Dharan, eastern Nepal. It started the MBBS program in 1994 AD<sup>5</sup> and since then it produced a number of doctors who has been claimed to be 'star' doctors.<sup>6</sup> This quest is expected to through light on some major modifiable attributes so that our future doctors can be guided in better ways and also to some features which might inspire and show others the ways to this noble profession. It is welcome sign that every forth of the future doctors will be female; the finding consistent with

other study of the same and some other Nepalese studies among medical students.<sup>2,9-11</sup> However, there is no space of satisfaction with this state and we will have to encourage and promote female education further. Most of the students were in the ages of 20-25 years and were single; understandable for the group of the subjects. This finding is similar to the other country reports too.<sup>12</sup> The age profiles (average, maximum and minimum) probably indicate that Nepalese medical students of current days are younger than their seniors though it needs separate intensive investigation.

Nepal-India cooperation and collaboration has been reflected in this study in the finding that nearly one fifth of the students (22%) were Indians. This institute not only serves Indian patients<sup>13</sup> but also produces medical doctors for India in return to its close neighbor country India's great assistance in establishing and sustaining this institute. BPKIHS has been home to medical students of multi-ethnic, multi-cultural and multi-geographic backgrounds and this study has replicated this fact. Despite of its policy to emphasize supporting deprived and disadvantaged groups; there is, however preponderance of certain caste-ethnicity groups, i.e. Upper hill (e.g. Brahmin, Chhetri, Thakuri) and Disadvantaged nondalit Terai (e.g. Yadav, Mahato etc); and more so of the Hindus here. Negligible representation of deprived and Dalit groups is similar to other studies among medical students of this institute.<sup>2,7,8,14</sup> Less students were from village setting though Nepal is mainly village in its composition. However, average distance of their home from the institute is about one-day. It is clear that educated city people strive for better education of their children and BPKIHS, being a leading institute of this region of the country has been choice for people from far.

Majority of MBBS students were from nuclear family, keeping with the trend of family structure among people educating, urbanizing and getting busier in modern Nepal.<sup>15</sup> The decision maker of majority of their family was father, consistent with the patriarchal tradition of majority of Nepalese societies. The parents of these students were better educated and employed. Teaching, service, business are major occupations of father and home-making and teaching among the mothers. Most of them had some near and dear person in the institute city and fair number of friends to support in need, and perceived good

emotional and financial support from their family. Though few, some had poor financial support. They expressed the need for some strategy to support them financially.

Though some of the unhealthy, socially unacceptable and embarrassing activities might have been unreported in this study due their inherent nature, e.g. indulgence in substance, the finding about their extracurricular activities and hobbies are likely realistic considering the profile of the subjects of this study. Common Extracurricular activities reported among them were: social activity, game/sports, movie watching, travelling and reading. Common hobbies were: sports, music, dance, literature, painting/art, traveling, ticket/other collection, social/ political activity, photography, cooking/gardening/home chores, movie watching, religious activity, etc. Repertoire of these extracurricular activities and hobbies reflect the richness of their interest, intellect and aspiration. Regarding the career option also, they have a range of choices including main stream specialties like medicine, surgery and pediatrics and other specialties like psychiatry, gynecology, basic sciences and radiology. Some had inclination to non-medical fields. This is similar to the study among intern doctors of the same institute.<sup>8</sup> Joining medical field was the decision of their own for majority of these students though some were influenced by others' counseling, motivation, pressure or wish. It was a chance for some students.

The tendency to meticulous and perfect performance and concern for that is the trait mostly associated with a profession where high level of achievement is expected. This has been replicated in this study with the preponderance of cluster C traits, i.e. anancastic and anxious traits among these future doctors. High competition in Entrance examination for admission in medical school has been speculated to be a factor for selecting the students with obsessive and narcissistic traits or an irrational fear of failure.<sup>16-17</sup>

This study is a descriptive cross-sectional study with some semi-qualitative nature in some variables, e.g. extracurricular activities, support, etc and with systematic random sampling method. Since this was carried out in a single institute, the findings may not be generalized to whole country. Since the subjects were aware about the interest/intention of the investigator, their responses might have been

influenced, especially on the career choices. By including other institutes, inter-school comparison and more comprehensive findings can be generated and by devising longitudinal design, changes in the attributes can be studied. Despite of some of these limitations, this has come up with some strikingly observed but yet undocumented facts which might have a great implication. The modifiable attributes should be intensively investigated and strategies should be devised to make them more favorable. For example, the anxious and anancastic traits of some of these students should be used positively in their performance by counseling about the coping strategies. Students with poor financial support from family need to be assessed objectively and assisted. The richness of their repertoire of extracurricular activities and hobbies despite huge study burden can be exemplary to other students.

### Conclusion

Male dominance is clear in medical education in Nepal. Medical students had relatively better family background in terms of economy, social status, education and distance from institute though some came from deprived society like- village, far and low economic status. Many Indian students showed the presence in this Nepali institute.

Their common extracurricular activities were- social activity, sports, movie watching, travel and reading. They had various hobbies. Majority joined medical education by their own choice. Top specialties of their choice for future career were: medical, surgery, pediatrics, psychiatry and non-health subjects. Many students had anxious and anancastic traits.

### References

1. Shakya DR. Psychiatric emergencies in Nepal. *Developing Mental Health, International Journal for Mental health care.* UK. 2008; 6(8): 5-7.
2. Shakya DR, Shyangwa PM, Shakya R, Agrawal CS. Mental and behavioral problems in medical students of a health institute in eastern Nepal. *Asian Journal of Psychiatry.* July 2011; 4(1):s61.
3. Musson DM, Sandal GM, Helmreich RL. Personality Characteristics and Trait Clusters in Final Stage Astronaut Selection. *Aviation, Space, and Environmental Medicine.* April 2004; 75(4): 342-9.

4. Dixit H. Quest for Health in Nepal. In: Shakya DR and Shyangwa PM. Letter to editor. Nepal Med Coll J, Jun 2008; 10(2):146.
5. BPKIHS. History in the making. 2000. Pp. 15.
6. Jha N, Premarajan KC, Nagesh S, Kharal S and Thapa LB. Five-star Doctors for the 21st Century- A BPKIHS Endeavour for Nepal. Journal of Health Management, October 2005; 7(2):237-247.
7. Shakya DR et al. 'Ragging': in the eyes of medical students of a health institute in eastern Nepal. Scientific program Abstract book, BPKIHS, 2010. (paper presented)
8. Shakya DR. How intern doctors view 'Mental health and Psychiatry'? Scientific program Abstract book, BPKIHS, 2009.
9. Shyangwa PM, Joshi D, Lal R. Alcohol and other substance use/abuse among junior doctors and medical students in teaching institutes. JNMA J Nepal Med Assoc, 2007 Jul-Sep; 46(167):126-9.
10. Budhathoki N, Shrestha MK, Acharya N, Manandhar A. Substance Use among Third year medical students of Nepal. J Nepal Health Res Counc, Apr 2010; 8(16):15-8.
11. Chadda RK, Singh MM. Awareness about Psychiatry in undergraduate medical students in Nepal. Indian Journal of Psychiatry, 1999; 41 (3):211-216.
12. Issa BA, Adegunloye OA, Yussuf AD, Oyewole OA, Fatoye FO. Attitudes of Medical Students to Psychiatry at a Nigerian Medical School. Hong Kong J Psychiatry 2009; 19:72-7.
13. Shakya DR, Pandey AK, Shyangwa PM, Shakya R. Psychiatric morbidity profiles of referred Psychiatry OPD patients in a general hospital. Indian Medical Journal, 2009 Dec; 103(12): 407-411.
14. Shakya DR, Lama S. Electro-convulsive therapy (ECT)- In the eyes of nurses of a tertiary care hospital. Health Renaissance, 2010; 8(2):4-8.
15. Central Bureau of Statistics, Nepal. Population Trend and Selected Indicators of Nepal, 1971-2006. Nepal Demographic and Health Survey, 2006 MOES 2006. In: Nepalinfo 2007. Available at: [http://www.cbs.gov.np/population\\_profile.php](http://www.cbs.gov.np/population_profile.php).
16. Essex-Sorlie D. The Americans with Disabilities Act: I. History, summary and key components. Acad Med, 1994; 69:519-524.
17. Essex-Sorlie D. The Americans with Disabilities Act: II. Implications and suggestions for compliance for medical schools. Acad Med, 1994; 69:525-535.