# Financial status of medical students in Institute of Medicine

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**Background:** Underrepresentation of students from low-income families at the Institute of Medicine in Maharajgunj (IOM) has been generally assumed. This study aims to assess the financial status of medical students at IOM to test the accuracy of that assumption.

**Methods:** The study was conducted among 24<sup>th</sup> and 25<sup>th</sup> batch of students of IOM using pre-formed questionnaire.

**Results:** The majority of students studying in IOM thought they have average to strong financial status and they felt little to no financial stress.

Conclusion: Students from low income families are underrepresented in IOM.

Keywords: Financial status, medical students

#### Introduction

The Institute of Medicine of Tribhuvan University (IOM) was established in 1972 and was the pioneer institution for medical education in Nepal. Twenty-two students constituted the first class enrolled at IOM in 1978. Subsequently, the class size was increased to 60 students. Of these 60 students, approximately 43 attend under a scholarship program provided by the institute. The remaining students are from other countries and must provide their own educational funding. Forty-two of the 43 seats are selected by competitive entrance examination, and one student is selected from competition among children of staff employed at IOM. A total of 839 physicians have been graduated in 22 classes as of 2007.

Notwithstanding the scholarship program, students must pay approximately Nepalese Rupees (NPR) 24,900 each year for five years. This amount is more than the per capita income of approximately NPR19,000 (US\$290) based on the gross national income of Nepal. Additionally, the costs increase approximately 10% per annum. Medical education cannot be afforded by a significant segment of the population—low-income families, ethnic minorities, and students from rural areas—because of this prohibitively high cost.

## **Materials and Methods**

A questionnaire- pre-tested among 22 students from 23<sup>rd</sup> batch- was used to obtain information concerning demographic data along with determination of the occupation(s) and income(s) of parents, including their subjective opinions of their relative financial position. Questions concerning the students' opinions regarding the cost of medical education at IOM, their cost management strategies, and any financial stress they experienced were also included. These data were collected in June 2007 from students comprising the 24<sup>th</sup> and 25<sup>th</sup> batches (chosen by lottery method). Only Nepali students on the scholarship program were included.

The major limitation of the study is that it does not consider other factors that influence representation of students in medical education, for example, the quality of education a student has obtained in school and in college. Also, the study does not consider factors like social norms that influence families 'perception towards education of girls and hence representation of girls in medical education. Lastly, because of the nature of the study, it does not include the opinions of under-represented group(s) about the reason(s) for their low representation.

#### **Results**

Seventy-one of 86 students (83%) queried participated in the study. Their ages ranged from 21 to 25 years with a mean of 22.4 years. Sixty-three (89%) were male; 8 (11%) female. Forty-eight (67%) were Brahmin, seven (10%) were Chhetri, four (6%) were Newar, three (4%) were Vaishya, and nine (13%) were from other ethnic groups, including Tamang, Gurung, Rai, Chaudhary, and Kalwar. Sixty-nine students (97%) designated Hinduism as their religion, and one student each (1%) was Buddhist and Kirat, respectively.

Twenty-one students (30%) had fathers involved in government service, fathers of 14 (20%) were teachers, and fathers of six (9%) were farmers. Five (7%) fathers were businessmen, and five (7%) were involved in other work, including 1 physician. Twenty students (28%) did not respond to the question. Mothers of 31 students (44%) were housewives. Seven mothers (10%) were teachers, six (9%) were farmers, five (7%) were in government service, three (4%) were businesswomen, and three (4%) were involved in other work, including one physician. Sixteen students (23%) did not answer this question.

Only 36 students (51%) responded to the question concerning total family income. Most who responded indicated a total annual family income between NPR60,000 and NPR240,000 (Table 1).

The majority of students considered their financial position strong or average (Table 2)

Regarding the cost of Medical Education at IOM, a majority considered it to be nominal to expensive (Table 3).

Further, a majority of the students found the cost of medical education nominal to higher than the expense they expected (Table 4).

Near 100% of students (70 of 71) indicated that the sources of family income were employment (including business), house rent, and/or agriculture. Only one student indicated that the scholarship was the most important source of money. Twelve students (17%) had taken educational loans, the majority either from their parents' office or from a bank or other financial institution (Table 5).

Of those students who secured loans, the majority consider their loan of a high amount (Table 6).

Fourteen (20%) students were receiving scholarship from Nepal Medical Association, Indian Embassy, and Salt Trading without any requirements necessary to obtain the scholarship. Not included in the figures in Table 7 is the annual scholarship of NPR1000–2000 given by IOM to about 25% of students on the basis of merit (based on

Interview with Authority, Maharajgunj Campus). The majority of students regard the scholarship amounts insufficient (Table 7).

One student is utilizing his parent's Provident Fund, and one has some income from a part-time job.

The majority of students felt little or no financial stress (Table 8).

Table: 1 Total Family Income

Total Annual Family Income (Nepalese Rupees)	Number Respondents (%)
<60,000.	2 (6)
60,000–120,000	14 (39)
120,000-180,000	8 (22)
180,000-240,000	8 (22)
>240,000	4 (11)
Total	36 (100)

**Table: 2** Financial Position

Status	Number Respondents (%)
Very Strong	0
Strong	30 (42)
Average	23 (33)
Weak	15 (21)
Very Weak	3 (4)
Total	71 (100)

Table: 3 Cost of Medical Education

Status	Number Respondents (%)
Extremely Expensive	1 (1)
Very Expensive	7 (10)
Expensive	33 (47)
Nominal	29 (41)
Cheap	1 (1)
Total	71 (100)

Table: 4 Actual Cost Compared to Expected Cost

Status	Number Respondents (%)
Extremely High	1 (1)
Very High	10 (14)
High	28 (40)
Nominal	31 (44)
Cheap	1 (1)
Total	71 (100)

Table: 5 Institution Providing Loan

Source	Number Respondents (%)
Bank/Financial Institution	6 (50)
Parent's Office	4 (33)
Relative	1 (8)
No response	1 (8)
Total	12 (100)

Table: 6 Amount of Loan

Amount	Number Respondents (%)
Extremely Huge	0
Very Huge	1 (8)
Huge	9 (75)
Small	1 (8)
Very Small	0
No response	1 (8)
Total	12 (100)

Table: 7 Amount of scholarship

<b>Amount of Scholarship</b>	Number Respondents (%)
Extremely Sufficient	0
Very Sufficient	0
Sufficient	2 (14)
Just Sufficient	3 (21)
Not Sufficient	9 (64)
Total	14 (100)

Table: 8 Financial Stress Felt

Status	Number Respondents (%)
Extremely Stressed	3 (4)
Very Stressed	8 (11)
Stressed	16 (23)
Little Stressed	36 (51)
Not Stressed	8 (11)
Total	71 (100)

### Discussion

Of the 71 students from the 24th and 25th batches,63 were male, 8 were female The sex ratio is 787, a figure nearly 9 times the national ratio of 89.3 The majority of the medical students are either Brahmin (67%) or Chhetri (10%). Other ethnic groups are under-represented when compared to national figures where Brahmin and Chhetri contribute to only about 12% and 17% respectively and Tharu, Tamang, Magar and Rai contribute to about 12%, 6%, 6% and 4%,

respectively. <sup>3</sup> The majority of medical students are children of government service holders or teachers. While 55% of males and 86% of females in Nepal are involved in agriculture<sup>3</sup>, only 9% of the parents of medical students are farmers. The majority of households of medical students have an annual income between NPR60,000 and 240,000. Per capita income, however, could not be calculated because of high rate of no response (87%) to the questions regarding the number of dependent family members. The majority of medical students think they have strong to average financial position, and the cost of medical education is nominal to expensive. They found the cost of medical education to be nominal to higher than what they expected. Almost all of the students were dependent on family income. Twelve (17%) students, however, had taken what they felt were "huge" loans from a bank or other financial institution. Scholarship is yet another important source of financial support for 14 (20%) students, but the amount is not regarded as sufficient. Contrary to common belief, the, majority of the students felt little or no stress.

These findings indicate that students from households with only an average income and students from ethnic minorities are not proportionally represented in the medical college. Students from economically disadvantaged backgrounds and ethnic minorities have been shown to be more likely to enter primary care fields, practice in rural and economically depressed areas and treat patients from ethnic minorities.<sup>4-</sup> <sup>8</sup> Thus, decreased access to medical education for students from low-income families often translates to lack of access to medical care for rural and economically disadvantaged populations. Further, this leads to increasingly large numbers of the population diverting from primary level health services to specialized health services. In a developing country like Nepal where people are deprived of even primary health care, diversion of a large population of medical healthcare work force to specialized health care services results in health care services to fewer people and at a higher cost. High cost of health services further limits their use by poor people. Thus health care would be out of the reach of common people with low budget allocation to health.

In comparison to doctors from low-income families, doctors from well-to-do families do not want to go to rural areas<sup>4</sup> and often migrate to urban areas and developed countries. An increase in the number of such doctors would mean a decrease in the number of doctors working in the rural areas and primary health centers. Albeit no researches have been done, this is a trend increasingly seen in Nepal.<sup>9,10</sup>

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