# Short Reports

Career preferences of medical students who joined Grant Medical College, Bombay in 1957 and 1982

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#### **ABSTRACT**

**Background.** Scant data are available on the career paths of Indian medical students. I wished to determine the career destinations of students who joined Grant Medical College, Bombay in 1982 and 1957, at 25 and 50 years, respectively, after having joined the medical school.

**Methods.** Questionnaire, telephone interview, e-mail response and personal interview were used to collect the data. I also collated emigration data for the students of the 1982 batch and sought to learn whether they were happy with their choice of career.

**Results.** Forty-nine of 156 students of the 1982 batch and 49 of 84 students of the 1957 batch were abroad, at the 25- and 50-year stage, respectively. Most students (125 of 129) from the 1982 batch had no regrets about their choice of career. Most of those in India (94 of 106) worked entirely in the private health sector. Only 1 student from each batch was in basic research.

**Conclusion.** At least one-fourth of students from the batch of 1982 and over half the students from the batch of 1957 were abroad. Over 90% of those in India were in the private health sector and were happy with their choice of career.

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# INTRODUCTION

Several studies have been done on the career outcomes of medical students and graduates from the developed world, <sup>1-3</sup> but scant data are available from the developing world. <sup>4-6</sup> Papers from the developing world have dealt with rates of emigration, career preferences and death rates from AIDS among medical graduates. <sup>4-6</sup>

I present data on the career paths and destinations of medical students who joined Grant Medical College (GMC), Bombay (now called Mumbai) in 1982 (GMC1982). Further, there is some information on the career choices of students who joined the same college in 1957 (GMC1957).

## **METHODS**

The students who joined GMC in 1982 had a meeting in December 2007. I collected information from them by circulating questionnaires (n=92) and collected further information via email (n=26) or over telephone (n=11) from those who could not

attend or could not respond at the meeting. More information was collected by discussions with those who had arranged the meeting.

While gathering data from students of GMC1982, I learnt that the batch of GMC1957 had just had a reunion. One of them (Sunil K. Pandya) was gracious enough to share his data with me.

#### **RESULTS**

One hundred and eighty-eight students joined GMC in 1982, but 2 of them left in the first 2 months. Of the remaining 186, I have data on 156 graduates, 25 years after they joined medical school: 106 were in India, 30 in the USA, 14 in the UK, 1 in the Middle East and 1 each in Pakistan, New Zealand, Africa and Australia. One had died in a road traffic accident. Four others had returned to India, after spending 5 years in the UK. One had returned to India after 1 year of training in the USA. There were 26 general practitioners (or in equivalent practice), 12 each in obstetrics, internal medicine and surgery, 9 anaesthesiologists, 8 each in pathology, orthopaedics and paediatrics, 7 ophthalmologists, 6 each were radiologists, dermatologists and psychiatrists, 5 cardiologists, 4 ENT surgeons, 3 each were medical oncologists and plastic surgeons, 2 each were pharmacologists, gastroenterologists and occupational medicine physicians, and 1 each were in the field of cardiac surgery, haematology, nuclear medicine, rehabilitation medicine, hospitalist (physicians who specialize in the care of hospitalized patients and refer the patients back to their primary physician at the time of discharge from hospital), microbiology. There were 6 medical truants (1 each was doing film direction, working in a contract research organization, business, politics, medical writing and software); 1 was in basic research and 1 had retired from medical practice. One respondent mixed medicine with a career in politics. Only 8 of the 106 in India were in public sector/university hospitals while 4 worked in the private sector and also had public sector attachments. The remaining 94 were in the private sector. One graduate had opted for a full-time career in basic research while 6 others published actively and had research interests, as assessed by a PubMed search. Most respondents (125 of 129) were happy with the choice of their career.

# Class of 1957

One hundred and twenty students joined GMC in 1957. Fifty years after admission, 14 had died and there was no information on 22. Of the remaining 84, 34 were in India, 26 in the USA, 11 in the UK, 2 in Malaysia and 1 each in Singapore, South Africa, Dubai, Australia, West Indies, Kenya, Pakistan, Nigeria, Canada and Fiji (data not known for 1 person). Of those alive in 2007, there were 23 general practitioners, 8 obstetricians, 5 each were internists and paediatricians. There were 3 radiologists, and 2 each in the fields of cardiology, pathology, urology, anatomy, and 1 each in infectious diseases, psychiatry, surgery, endocrinology, public health, basic research, nuclear medicine, dermatology, neurology, neurosurgery, cardiac surgery, ENT, emergency medicine and pharmacology. The areas of specialization of 23 were not known. There was no information on medical truants or of hospital attachments (whether private or public sector) in this group.

## DISCUSSION

Grant Medical College, Mumbai is the third oldest medical school

(established in 1845) in India and is aided by the government. Most students hail from the city of Mumbai, while a small, though significant, percentage are from other parts of Maharashtra. A small number of students are from different parts of India; also, 2 students in the 1982 batch were from Africa. As in all government-aided schools, approximately one-third of seats are reserved for the socioeconomically challenged in an affirmative action. Two seats in 1982 were reserved for foreign students.

Scant data are available from India on the career paths and choices of medical students. It would probably be difficult for most medical colleges in India to provide adequate and correct information about their students after 25 years.

While I was gathering data, Kaushik *et al.* published a paper on physician migration from India and showed that about 54% of students from 1989 to 2000 at the All India Institute of Medical Sciences, the most prestigious medical school in India, had emigrated after graduation.<sup>4</sup> This was in contrast to the accepted figure that 11% of Indian medical graduates emigrate, as determined by Mullan.<sup>7</sup> Kaushik *et al.* suggested that better students and better institutions account for a disproportionately larger share of emigrating physicians.<sup>4</sup>

I was able to get first-hand data from 129 and secondary, though reliable, data about 27 others from my colleagues. Though there is no information on 30 colleagues of GMC1982 and limited information on students of GMC1957, some inferences can be drawn.

Of the 156 students of GMC1982, 47 had emigrated and 2 returned to their native countries, in Africa. (One of these two is lost to follow up currently.) Even if all of the remaining 30 are still in India (and it is likely that most are in India), the emigration percentage would be about 25%. As GMC is consistently ranked among the best 10 medical schools in India—and like AIIMS, is based in a metropolis, this finding would be consistent with the thesis put forward by Kaushik et al.4 The exact data for GMC1957 cannot be calculated with the limited information available. Besides, many of the students were of Indian origin and came from abroad to learn in India and returned to their native lands. On the other hand, several who came from East Africa are now settled in the UK. Nevertheless, it is a telling comment that of the 84 graduates of GMC1957 on whom there is information, only 34 are in India. Only one of the 31 physicians of GMC1982 who went to the USA returned to India, while 3 of the UK-trained physicians returned to India.

The practice of medicine in India, as all over the world, has changed over the past 25 years. It is not uncommon to hear physicians in India complain about their long working hours, possible litigation and, of late, relatively lower incomes, particularly when compared with software professionals. I was surprised, but delighted, to learn that as many as 125 of 129 respondents enjoyed the practice of medicine and had no regrets about their choice of career. This is interesting because in an earlier study among medical students in India, as many as 23% stated that they felt like changing their profession for various reasons.<sup>8</sup>

Medical research is not accorded high priority by Indian medical students and physicians. That only 1 of 120 students in GMC1957 and only 1 of 187 in GMC1982 have opted to do basic research rather than practise clinical medicine only confirms this fact. Although 5 more graduates of GMC1982 are actively involved in clinical and basic research, the numbers are still too low.

About 80% of Indians get their medical services from the private sector. <sup>10</sup> The public sector and universities are not popular among physicians for various reasons, financial reasons being

among them. This trend is likely to continue in the future. Lal *et al.* have shown that only 14.3% of first year medical students in a college in New Delhi considered joining government service after graduation.<sup>11</sup>

From informal discussions with others, I was aware that about 1% of students of every batch died within 25 years of joining medical school. There has been 1 death (of a road traffic accident) in the GMC 1982 group, at 25 years. Because road traffic accidents take a high toll of lives in India,12 I wondered if there was any importance in the finding of an accident-related death among my classmates and enquired of the group who joined GMC in 1983 about their data at the 25-year mark. I learnt that of the 2 who had died, from a batch of 187, 1 had died in a road traffic accident and the other had committed suicide (personal communication, A. Gajendragadkar). Further, of the approximately 190 who joined GMC in 1984, 5 had died by May 2009-1 in a road traffic accident, 2 had committed suicide, 1 of unknown causes and 1 of leukaemia (personal communication, Swati Pai). However, of the 125 students who joined Armed Forces Medical College in 1982, 4 had died by December 2007 of various medical causes; none of them died in a road traffic accident (personal communication, S. Joshi). Further, all 104 students who joined another medical school in Mumbai (Lokmanya Tilak Municipal Medical College) in 1982 are alive (personal communication, B. Jankharia). Thus, the data are too inconsistent for a firm conclusion.

This is a study of one class in one medical school in a metropolis and it may be incorrect to generalize from these results, given that about 20 000 students graduate annually from about 250 medical colleges in India. However, it would be difficult to get accurate data from all the medical schools. Further, Rao *et al.* have recently shown that 59% of students from two medical schools from another city expressed a desire to train abroad; those intending to study in the USA intended remaining there unlike most of those who desired to study in the UK and then return to India. In an earlier study about a decade ago, 22% of students had definite plans to immigrate. Our data, in consideration with the AIIMS data and the findings of Rao *et al.*, suggest that students from the metropolises are more likely to emigrate than those from smaller cities. A13,14

I am unaware of the mechanisms that the Government of India uses to determine factors such as emigration data, percentage of students who undertake postgraduate specialization, type of employment, nature of work, etc. Such data are essential for governments to plan the medical workforce in future. That research is not being considered a career option also needs to be addressed by the government and universities. The creation of an MD, PhD programme, which exists in the West, may be a solution. Medicine may not now be a first choice of students, unlike in the past; there has been a steady decline in the number of students appearing for entrance examinations to medical colleges since 2006. Thus, it is heartening to know, even in the age of litigation, that most physicians in this group had no regrets about their choice of career. Perhaps these data can be used to continue attracting the best students into the field of medicine.

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#### **COMPETING INTERESTS**

SAP is a graduate of the class of GMC1982.

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# Hazardous alcohol use in rural southern India: Nature, prevalence and risk factors

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# **ABSTRACT**

**Background.** There is a dearth of data on the hazardous use of alcohol in rural India.

**Methods.** We examined the nature, prevalence and factors associated with hazardous use of alcohol among men in a rural community in southern India. We used stratified sampling to select subjects from the Kaniyambadi block and employed 'AUDIT', a standard instrument, to assess the use of alcohol.

**Results.** The prevalence of life-time use, use in the past year and hazardous use of alcohol was 46.7%, 34.8% and 14.2%, respectively. Using Indian made foreign liquor (OR 20.51; 95% CI 8.81–47.75) and living in a village which brewed illicit alcohol (OR 2.82; 95% CI 1.39–5.72) were risk factors for hazardous use while education (OR 0.39; 95% CI 0.21–0.72) was protective. These factors remained significantly associated with hazardous use after adjusting for age and education using logistic regression.

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**Conclusion.** The relationship between the availability of illicit and commercial alcohol and its hazardous use suggests the need for an alcohol policy which takes into account health and economic issues and also implements the law to prevent the negative impact of problem drinking.

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#### INTRODUCTION

While alcohol is consumed in many societies, recent years have seen changes in drinking patterns worldwide with high rates of consumption, drinking to excess among the general population and heavy episodic drinking among young people. The use of alcohol in India, both commercial and non-commercial (illicit), and its impact on health and society have been discussed in the literature. Hazardous drinking is associated with increased morbidity and mortality in addition to having a major impact on the family, marriage and children. It also leads to financial problems and poverty, loss of productivity and absenteeism at work, domestic violence, road traffic injuries, mental disorders, unsafe sexual behaviour, and nutritional and health problems.

Hazardous drinking is a pattern of alcohol consumption that increases the risk of harmful consequences for the user or others.<sup>4</sup> Such problem drinking with its negative impact on the person and on society is of public health importance despite the absence of a full dependence syndrome which has a much higher threshold and occurs later in the course of the illness. Harmful use, on the other hand, refers to alcohol consumption which results in harm to physical and mental health. The social consequences are often included among the harms caused by alcohol.4,5 Alcohol dependence is a cluster of behavioural, cognitive and physiological symptoms that may develop after repeated alcohol use. 5 Typically, these include a strong desire to consume alcohol, impaired control over its use, persistent drinking despite harmful consequences, a higher priority given to drinking than to other activities and obligations, increased alcohol tolerance, and a physical withdrawal reaction when alcohol use is discontinued.

We aimed to determine the nature, prevalence and factors