

## The Social Responsibilities of Medical Colleges in Pakistan

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The social missions and responsibilities of medical colleges/schools have received much comment, especially in the light of rapid expansions in medical schools and the number of students in the United Kingdom, Australia and the United States of America.<sup>1-3</sup> There has been rapid growth in medical colleges in Pakistan; in Punjab for example, the number has grown from 19 (10 public, 9 private) in 2001 to 37 (14 public, 23 private) in 2011, an increase of 95%. Concerns have been raised about infrastructure, staffing and especially about places for clinical learning in new schools,<sup>4</sup> along with other questions being asked. What are the priorities of these institutions. They are established to train doctors but what is their response to social expectations such as an equitable supply of health care countrywide and an equitable opportunity for training of different groups in the community.

These questions are not new, having arisen at least from 1991, when an international meeting agreed that "...all medical schools have an implicit social contract with the populations that they serve - local, regional, national, or global. Each faculty should debate the character and dimensions of its contract and then develop and publicize a mission statement that describes in detail, for the faculty, students, public and politicians, its collectively agreed goals and objectives."<sup>5</sup>

In 2001, Lewkonja gathered mission statements of medical schools from the Internet, finding historical perspectives, service for related communities and alignment to accreditation standards in many of them.<sup>6</sup> What nearly all lacked was outcome data or performance measures that matched the schools' missions or goals. He believed that medical schools should provide outcome or performance data that would make them accountable for their mission statements.

Woollard, in 2006, took social accountability much further, seeing "the concept...moving from the peripheral pre-occupation of a few to a more central concern of medical schools themselves."<sup>7</sup> He wrote, "While it is not difficult to make the case that all activities of a medical institution are in some way related to need, it is clear that many of the most intractable health problems

in any given society gain scant attention from the formal programmes of its medical schools." While, a school was intent on conveying knowledge, skills and attitudes to its students, Woollard saw the important influence a school had on its alumni and their impact on society.

The social missions of medical schools in Canada,<sup>8</sup> and Australia,<sup>9</sup> were described in 2010, drawing attention in each case to the impact of tradition and national social imperatives, and showing some evidence of outcomes that matched the schools' objectives. In the USA, a study by Mullan and colleagues opened a new field in social responsibilities of medical schools, scoring outcomes in three measurable social domains and ranking the schools accordingly.<sup>10</sup> The paper described the contributions of 141 medical and chiropractic schools to three aspects of social responsibility: their percentage of graduates who were practicing primary care; their percentage of doctors who were practicing in underserved areas; and their percentage of under-represented minority graduates. Much of the data was obtained from the American Medical Association (AMA) physician masterfile<sup>11</sup> that has recorded all medical students on admission and all overseas graduates on obtaining a medical licence since 1906. The data is constantly updated and kept even after death. The graduates in Mullan's paper were from 1999 to 2001, the passage of 9-11 years that allowed them to be settled into their practice careers.

Primary care encompassed those in family medicine, general internal medicine, general paediatrics and internal medicine paediatrics. Underserved areas were the Health Professional Shortage Areas (HPSAs), nationally defined on the basis of population-provider ratios, travel distance or time to the nearest source of health care, the poverty rate, low birth weight rates and the proportion of young and elderly people. Underserved minorities in this context were African-Americans, Hispanics and Native Americans, who together constitute 28% of the population, but only 8% of physicians in practice. With data on 60,043 graduates, a score was derived from the sum of the 3 percentages and the schools and colleges ranked.

The paper gave a list of 20 highest-ranked and 20 lowest-ranked schools, and showed that percentages of graduates who had become primary care physicians ranged from 53% at East Tennessee State School (No. 12 on the social score) to 19% at the University of Pennsylvania school (No. 128). The percentage of graduates practicing in underserved areas ranged

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from 62% at the University of Mississippi School (No. 13 on the social score) to 14% at the University of California at Irvine (No. 138). The percentage of under-represented minorities ranged from 83% at Morehouse School in Atlanta, Georgia, historically an African-American medical school (No. 1 on the social score) to 3.6% at Vanderbilt University, a private school in Nashville, Tennessee (No. 141, the very lowest). The study showed that physicians from under-represented minorities provided relatively more care to underserved populations than non-minority ones. It also suggested the expansion of schools that recruit higher percentages of such students, as this initiative would assist in overcoming the current maldistribution of health care in the USA. The authors also found that the level of research support from the National Institutes of Health, a major research funding body in the USA, was inversely proportional to the production by a school of doctors practicing primary care. Research prominence, while invaluable for the progress of medicine, appears to count against the basic health care of people.

This approach to social mission and responsibility points to standards that might be set by medical schools or colleges, or by a government responding to workforce shortage in a discipline by insisting on quotas for graduates entering training. A development of this concept is that each medical school or college should be accountable for the standards set. If accountable, a training institution should be rewarded for exceeding the standard and penalized for failure. This gives a new meaning to responsibility and standards.

Standards of any kind require firm data and this is an area that appears to be in need of work in Pakistan. A recommendation that all colleges should establish a record of their graduates seems not to have been pursued;<sup>12</sup> visits to colleges between 2006 and 2011 found few with sustained records of graduates. Other problems exist in Pakistan health care teaching, training and practicing system, and some that can be managed by standards and accountability are described. First, there is a serious shortage of doctors for public work. An inability to find 400 doctors and an equal number of specialists in Punjab is spoken about.<sup>13</sup> Second, a lack of encouragement and early exposure to primary care means this vocation is undervalued, and often denigrated in teaching hospitals where students first become aware of career options.<sup>14</sup> The virtual absence of training for primary care and family medicine is a factor and steps are being taken to rectify this anomaly, at least in Punjab.

Third, there is a great loss of medical workforce through female graduates ceasing to work beyond the house-officer or foundation year. Since, a majority of students entering medical courses are now female, the future shortage of doctors in practice is alarming. Colleges

have a role in promoting acceptable and productive pathways for female graduates; hospitals have a role in providing married quarters and nurseries and Universities have a role in developing alternatives like BSc and MPhil courses, leading to teaching posts in Medicine that may be particularly attractive to female graduates.

Finally, the loss of 11% of Pakistani graduates to four overseas countries (UK, USA, Canada and Australia),<sup>15</sup> added to those moving to Middle Eastern countries, is an important problem. The reasons students wished to migrate were summed up in the year 2008.<sup>16</sup> These included suboptimal salaries of the graduates, the suboptimal quality of training programmes and the poor state of government hospitals. In response to all these different but critical problems some accountable standards are proposed:

- (1) Each medical college is to establish and maintain an ongoing record of its graduates, their location, training and qualifications, and current level of practice. This is easily achieved in today's electronic age.
- (2) Each medical college, in accord with government advice, is to establish a standard for the percentage of graduates in active medical practice at, say, three years after graduation, with the aim of diminishing the current loss of valuable female graduates.
- (3) Each medical college is to establish a standard for the percentage of its graduates who are practicing family medicine, full or part time, 5 years after graduation.
- (4) Each medical college is to establish a standard for the level of medical migration of its graduates; through support and local encouragement the percentage of emigrants will be less than, say 8%, reducible, 5 years after graduation.

To make the standards effective, returns would be made to an appropriate body, perhaps provincial, possibly the Pakistan Medical and Dental Council; rewards for exceeding, and penalties for failure to meet the standards, would be duly applied. The concept of accountable standards should be taught in undergraduate courses, implanting the principle of responsibility to society in the minds of the student. The outcome of all this might be an important step in overcoming the present workforce problems in Pakistan, and bringing a new realization amongst the medical colleges of their social responsibility.

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