Medical education after the first decade of democracy in South Africa

Until 1994, medical education was not spared from apartheid ideology in South Africa. The past 10 years have seen major changes to medical education that aim to redress past injustices in the quest for equity.

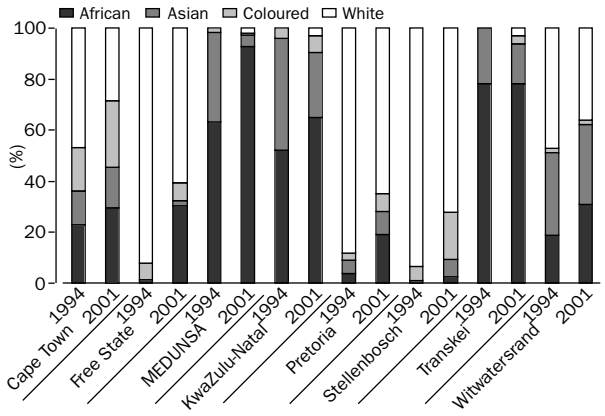
Under apartheid, South Africa's eight medical schools admitted, by law, students according to race. Three admitted black (including the apartheid-created racial categories of African, Indian, and Coloured) students. Of the five that admitted mainly white students, three taught in Afrikaans and two in English, thereby affecting the ethnic profile of the white students they admitted. This apartheid design for medical education, clearly had to be unravelled and replaced by one more responsive to the needs of the new democratic South Africa.

The proportion of all final year medical students who were African rose from 18·6% in 1994 to 30·1% in 2001.[1] All medical schools show a trend towards increasing the number of black, especially African, final-year students, although some have made greater strides in this respect than others (figure). Although the legacy of an inferior education system for African students remains an obstacle to rapid redress, enrolment of African students in the first year of medical training increased from 28·9% in 1994 to 60·3% in 2001.[1]

However, racial differences in attrition rates remain a matter of concern; from 1994 to 1998, the dropout rate across all medical schools was 19·9% for African students compared with 3·7% for white students.[1] The knock-on effect is a racial skew in postgraduate students undertaking specialist medical training. For example, in 2003, in the University of KwaZulu-Natal, Africans made up 53% of medical undergraduates, but only 20% of medical postgraduates.

Like many countries throughout the developing world, South Africa is struggling to retain skilled health professionals. Furthermore, the sustained losses of doctors to other countries has recently worsened whereas immigration of doctors to South Africa has slowed at a time when they are most needed to tackle health inequities.

The number of skilled professionals emigrating from South Africa, including doctors, engineers, accountants, teachers, and managers, rose from 2689 in 2002 to 4316 in 2003.[2] The University of Witwatersrand reported that over the past 35 years, about 44% of their medical school graduates have emigrated.[3] As one indication of the seriousness of this problem, the April, 2004, issue of the *South African Medical Journal* has 16 pages of advertisements for jobs abroad (most in the UK, Australia, and New Zealand) but only three pages for positions in South Africa.



Racial distribution of admissions to medical schools, South Africa 1994–2000

MEDUNSA=Medical University of South Africa. Data from reference 1.

Another form of brain drain to affect academic medicine is the loss of skilled medical professionals from universities to the private sector. More than half of South Africa's doctors work in the private sector that serves about 20% of the population. Since salaries and working conditions in overcrowded and underfunded public health services cannot compete with those in private health care, there has been a sustained net loss of workers from academia to the private sector.

Almost every medical school has difficulty recruiting and retaining professors and consultants. This difficulty sets up a vicious cycle of understaffed academic departments leading to increased workloads. The situation is compounded by effects of the AIDS epidemic; thus working conditions deteriorate further and more staff leave.

Before 1998, South African medical education was based on a system of 3 years in preclinical subjects followed by 3 years of clinical education, with practical training mostly based in large teaching hospitals.[4] Since then, most medical schools have restructured their undergraduate curricula in response to both international trends and pressure to respond to local needs. Three schools now provide a 5-year, student-centered, community-based programme with clinical training in hospitals and in primary health care settings.

In addition to 5 years of undergraduate training and a 1-year internship, in 1998, the government introduced a mandatory year of community service. New medical graduates are assigned to services outside academic medical teaching centres, often in remote locations to try to remedy disparities in urban and rural health-care provision. After some initial concerns, the programme has been generally well received and is now being extended to 2 years for doctors and 1 year for other health professionals such as pharmacists.[5]

South Africa's first decade of democracy has seen major challenges for medical education. Attempts to redress past inequities in student enrolment continue—however, the sustainability of the medical education system depends on the country's medical professionals regaining confidence in their public health-care system. Adequate funding and effective management of the public health-care services to improve working conditions as well as policies to slow, or even halt, the brain drain from academic medicine remain the difficult challenges of the next decade.

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1 The Parliamentary Monitoring Group. Health Portfolio Committee. Admission of medical students: statistical summary of student's admission demographics, May 29, 2001. http://www.pmg.org.za/docs/2001/viewminute.php?id=631 (accessed April 8, 2004).
2 Naidu E. Emigrant figures treble. *Sunday Tribune*. Mar 21, 2004: 1.
3 Weiner R, Mitchell G, Price M. Wits medical graduates: where are they now? *S Afr J Sci* 1998; **94:** 59–63.
4 De Villiers, PJT, de Villiers MR. The current status and future needs of education and training in Family Medicine and Primary Care in South Africa. *Med Educ* 1999; **33:** 716–21.
5 Reid SJ. Compulsory community service for doctors in South Africa: an evaluation of the first year. *S Afr Med J* 2001; **91:** 329–36.