What is already known on this topic

For many years the NHS has relied on doctors who trained overseas to maintain adequate medical staffing, and these doctors, many of whom are from non-white ethnic groups, have tended to be concentrated in the less popular specialties

The percentage of newly trained UK medical graduates who are from non-white ethnic groups has increased substantially in recent years

What this study adds

NHS hospitals have become increasingly dependent on doctors who trained overseas: they represent 15% of consultants appointed during 1964-91 and 24% of those appointed since 1991

These doctors comprise a particularly high percentage of consultants in geriatric medicine, psychiatry, learning disability, and genitourinary

By contrast, UK trained doctors from ethnic minority groups have similar career destinations to those of UK trained white doctors

White men, but not white women, are substantially under-represented in the current intakes to UK medical schools

> concerns, they will be about under-representation of ethnic minorities and women. The high representation of ethnic minorities, and specifically those of Asian origin, indicates high academic achievement by them. It probably indicates that many of the most able school pupils from these ethnic groups, and perhaps particularly women, choose medicine as a career. The reasons for the substantial under-representation of white men merit further study. With increasing immigration from continental Europe, the broad group of white ethnicity may need further subdivision in future.

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Awards) for making its database available for analysis, and its chair, Lady Elizabeth Vallance, and medical director, Sir Netar Mallick, for their support for this study. We thank UCAS for supplying and giving permission to publish data on accepted applicants to medicine. We are grateful to all the doctors who participated in the Medical Careers Research Group surveys. Karen Hollick administered the surveys, and Janet Justice and Alison Stockford entered the data.

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The fate and career destinations of doctors who qualified at Uganda's Makerere Medical School in 1984: retrospective cohort study

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Little information exists on the career paths and destinations of graduates of medical schools from developing countries, in contrast with many such reports from the developed world.^{2 3} I present here perhaps the first report on career paths taken by graduates of Makerere Medical School in Uganda.

Participants, methods, and results

Twenty seven doctors who graduated from Makerere in 1984 participated in the study. A database was compiled from the graduation list. Information was obtained through a focus group discussion (three doctors), an email questionnaire (17, including the three focus group members), telephone interviews (six), and in-depth interviews (four).

Seventy seven doctors (58 men) graduated in 1984. Reliable information was obtained for 96% (74 (56 men), of whom 22 (19 men) are dead). Seven died between 1984 and 1989, six between 1990 and 1994, six between 1995 and 1999, and three since 2000. The presumed causes of death (death certificates were not available) were AIDS (11); suicide (six); road traffic injuries, hepatitis, and alcohol related disease (one each); and unknown (two). Five of the suicides were related to knowledge or fear of being HIV positive.

The table shows the country of residence, the form of employment and the nature of work for the 52 (37

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Country of residence and type of employment in 2004 for surviving Makerere medical graduates of 1984

	No of graduates
Country	
Uganda	36
Republic of South Africa	6
Kenya	3
Canada	2
United States	1
United Kingdom	1
Switzerland	1
Botswana	1
Zimbabwe	1
Employer, type of employment	
Ugandan Ministry of Health	22
Other government departments	6
Non-governmental organisations	6
World Health Organization	4
University sector	4
Private practice	5
Military	3
International organisations	2
Nature of work, type of appointment	
Clinical	31
Managerial or administrative	8
Public health	6
Academic	4

men) surviving Makerere graduates about whom I had reliable information. Forty three have specialised-the most popular fields being public health (13), surgery (seven), paediatrics (four), internal medicine (four), and ophthalmology (four); in this group, 27 of the 51 additional qualifications were from Makerere, and 36 were obtained between 1984 and 1994. The graduates now include a commissioner and a principal planner at the Uganda Ministry of Health; 16 at senior consultant or consultant (or equivalent) level; 12 medical officers special grade (that is, specialists below consultant level); two directors in the military medical services; two directors at international agencies; two directors of district health services; five medical superintendents; three senior lecturers; a senior professor; and technical experts for international organisations.

Comment

Other health care

The high death rate (30%) of young doctors within 20 years of graduation is a cause for concern. The profile of presumed causes of death highlights the impact of HIV/AIDS on countries that have a high prevalance of HIV, such as Uganda. The declining deaths-seven between 1984 and 1989, compared with three between 2000 and 2004—may partly point to the effective AIDS prevention campaigns for which Uganda has become renowned. That only 30% of the surviving 1984 graduates work outside Uganda is encouraging and suggests that the brain drain is not as massive in Uganda as it is in other African countries. In Ghana, for example, more than 60% of a cohort of doctors graduating between 1986 and 1995 had left the country within 10 years of graduation.4 Death has been a bigger brain drain than emigration among the 1984 Ugandan graduates.

Given the high proportion of health professionals working in the private sector in many countries,⁵ it is interesting that only 10% of the Ugandan graduates

What is already known on this topic

Little information exists on the career path and fate of African doctors

What this study adds

Thirty per cent of doctors who graduated from Makerere, Uganda, in 1984 have died (most as a result of AIDS related causes), and most surviving doctors work in Uganda in the public sector

work primarily in private practice. This may be due partly to the fact that many Uganda based doctors in public employment are able to do part time private practice as well. The low numbers of these graduates in academia reflects the worldwide unpopularity of academic medicine.

This study did not establish the reasons for the choices made, lacked documentary proof of cause of death, and obtained little information on the social lives of the graduates. Nevertheless, these findings should serve as a springboard for a detailed study on the career choices and paths (and reasons) of Makerere trained doctors and on the implications of such choices for the Ugandan health system.

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