

HIV/AIDS in Zimbabwe 'like snow in the desert'

HIV/AIDS prevalence is either dipping slightly or flattening out in most sub-Saharan countries, but in Zimbabwe, with its imploded economy, collapsed health system and authoritarian government, the prevalence has halved in the past 12 years. What can this anomaly be attributed to? Researchers and epidemiologists are baffled, but one top modeller offers a beguiling theory; Zimbabwe's population is simply better educated, thus enabling it to absorb and respond to prevention messages.¹ There is certainly evidence for behaviour change, but also massive displacement of populations (e.g. Operation Murambatsvina in 1995) that has disrupted adherence to antiretroviral therapy (ART) and almost certainly contributed to the mortality rate. It's no secret that most Zimbabweans are among the best educated people in southern Africa – and 'prevention messages only work if people are able to understand, internalise and act on them', says Brian Williams of the South African Centre for Epidemiological Modelling (SACEMA). He also makes a convincing argument for tailoring CD4 cell count ART initiation levels to the hugely differing HIV-negative prevalence baselines among different southern African populations, citing Botswana (average HIV-negative CD⁴ cell count 500) versus South Africa (average 1 200).

Ecological factors and blindness

As with other diseases, Africa has more than its share of blindness. The Nigeria National Blindness and Visual Impairment Study Group investigated the prevalence and causes of visual loss in different ecological zones across Nigeria.²

They found that 80% of blindness in all ecological regions was avoidable. Cataract was the commonest cause of blindness in all zones and glaucoma was the second-commonest cause. Trachoma was an important cause only in the Sudan savannah belt, where 8.3% of blindness was attributable to trachoma. Onchocerciasis was only seen in the Guinean forest savannah and rain forest belt. Corneal scars were the most important preventable cause of blindness across all ecological zones.

These findings from Nigeria can be used to estimate the need for eye care services for populations in similar ecological zones in West and Central Africa, provided that access to services is similar. The only exception may be glaucoma, where there may be ethnic differences in risk.

Down syndrome

The birth of a child with Down syndrome (DS) has many serious implications – physical and mental deficiencies, medical conditions and lifestyle challenges. The high incidence (1 in 600 births in South Africa) and high cost of medical care highlight the need for effective health care.

Horacia Naidoo and colleagues discuss their experiences in paediatric outpatient wards in Durban.³ DS studies have recognised the value of routine screening tests and genetic counselling, as they pre-empt the need for targeted therapy, early intervention programmes and support groups, which results in better quality of health and significant developmental progress. Their findings of irregularly performed screening tests and minimal counselling indicate a need for specific DS guidelines for the strict adherence and employment criteria of genetic staff. The numbers of their genetic

staff fell far short of national guidelines and need to be addressed in order to improve the quality of life of DS patients and their families.

Prenatal screening for DS was established in the 1970s using advanced maternal age (AMA) as a risk factor in the public health sector in South Africa. National policy also provides for free amniocentesis to be offered to AMA women. The effectiveness of prenatal screening for Down syndrome on the basis of maternal age in Cape Town was studied by Urban and colleagues.⁴ They too show that prenatal screening and diagnosis for DS-based AMA is working ineffectively in the Cape Town health district assessed, and this appears to be representative of a broader trend in South Africa. They propose that inclusion of fetal ultrasound in the process of prenatal screening for DS should be explored as a way forward.

Appropriate medical education

Educational factors that determine whether South Africa trains its doctors adequately are considered in two papers^{5,6} and an accompanying editorial.⁷

There is a serious overall lack of health care professionals in South Africa, with a shortage of about 80 000 in the public sector. There is maldistribution of the health workforce between the private and public sectors and between urban and rural areas. South Africa must train more health professionals, improve the retention of health care personnel, improve doctor-to-population ratios in public health care facilities, and distribute doctors better so as to address the health care needs of marginalised communities.

Medical schools can assist in addressing these needs. Firstly it is appropriate that applicants of rural origin be prioritised for admission to health science faculties since they are more likely to return to rural practice. The principles of the primary health care-based approach to the delivery of health care at all levels should form the foundation of health sciences curricula. The likelihood of choosing a rural career appears to increase when medical students are introduced to rural clinical practice through longitudinal placements for a year or more. Since 'assessment drives learning', primary health care needs should be emphasised by integration in the assessment processes.

Documented consent for vaginal deliveries

For a 'normal' vaginal delivery we have not been required to obtain informed consent. Ames Dhai and colleagues provide arguments that written consent should in fact be obtained for such a delivery.⁸

J PvN

1. Bateman C. HIV prevalence in Zimbabwe dropping like a stone. *S Afr Med J* 2011;101:10.
2. Rabiu MM, Gudlavalleti MVS, Gilbert CE, Sivasubramaniam S, Kyari F, Abubakar T. Ecological determinants of blindness in Nigeria: The Nigeria National Blindness and Visual Impairment Survey. *S Afr Med J* 2011;101:53-58.
3. Naidoo H, Aldous C, Ramdhani H, Winship W, Henriques N, Kormuth E. Down syndrome in paediatric outpatient wards at Durban hospitals. *S Afr Med J* 2011;101:27-28.
4. Urban MF, Stewart C, Ruppelt T, Geerls L. Effectiveness of prenatal screening for Down syndrome on the basis of maternal age in Cape Town. *S Afr Med J* 2011;101:45-48.
5. Reid SJ, Couper ID, Volmink J. Educational factors that influence the urban-rural distribution of health professionals in South Africa: A case-control study. *S Afr Med J* 2011;101:29-33.
6. Reid SJ, Cakwe M. The contribution of South African curricula to prepare health professionals for working in rural and under-served areas in South Africa: A peer review evaluation. *S Afr Med J* 2011;101:34-38.
7. Burch V, Reid S. Fit for purpose? The appropriate education of health professionals in South Africa. *S Afr Med J* 2011;101:25-26.
8. Dhai A, Gardner J, Guidozzi Y, Howarth G, Vorster M. Vaginal deliveries – is there a need for documented consent? *S Afr Med J* 2011;101:20-22.