

## ISSUES IN MEDICINE

### The crisis in South African family practice

As the veil of apartheid, academic boycotts and sanctions is slowly lifted off South Africa, the damage that has been done is gradually being assessed. Perhaps the worst hit medical discipline has been South African family practice and primary care. In the last 20 years or so, a revolution in family practice has taken place in most Western countries that has left South African family practice in a state comparable to that in England during the nadir of the National Health Service in the 1950s and 1960s.

Since the 1960s countries such as Great Britain, the USA, Canada, Holland, Australia and New Zealand have created structures for vocational training, uniform postgraduate examinations, extensive continuing medical education programmes, recertification and quality assurance programmes. During this period in South Africa, a few good men and women have struggled to create and run the South African Academy of Family Practice/Primary Care and the National General Practitioners Group and have established six full university departments of family medicine, often against fierce resistance from the established disciplines.

This has left family practice with an inertia that has been inherited from this prolonged period of striving, not only against the wider political conditions but also against the entrenched South African medical establishment with its traditional orientation to specialisation. Family practice is not entirely blameless in this respect, since we have been loath to leave the comfort zones of our private practices. History will undoubtedly judge us on this, as well as on our acquiescence to a medical system that trained heart transplant surgeons while the population died of diarrhoea and depression.

How can we catch up on this backlog? We have no national morbidity surveys and few sex/age/disease registers. We cannot actually tell anyone what we do.

We have no audit, no quality assurance and hardly any CME. General practice and primary care in both urban and rural areas is unassessed, unregulated and of varying degrees of quality and distribution. The few vocational programmes that have been established with great effort by a few dedicated GPs struggle against a lack of facilities, funds and teachers. Postgraduate examinations like the M.F.G.P. are poorly supported and of low status.

The recent designation of 'family physician' by which a doctor can be registered by the South African Medical and Dental Council if he or she has a postgraduate degree in family practice such as the M.Fam.Med. or M.F.G.P. is a step in the right direction, but confers no additional monetary incentives in private practice.

Family practice and primary care in South Africa have reached such a state that it is difficult to know where to begin. But begin we must. It almost needs a commission of inquiry to highlight the legacy of neglect.

A national strategic plan for the implementation of a unitary, uniform system of postgraduate examinations, vocational training, certification, recertification and quality assurance programmes is needed, supported by the government and the Medical Association of South Africa.

Much has been debated and written on the need for upgrading family practice/primary care, yet it seems to be turning into a cloud of political hot air made vaporous by vested interests. May we ask whoever takes over after the last white night of April 27th that they please switch the lights on again for the lost discipline of South African medicine?

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### Towards health for all South Africans

There is worldwide concern about the crisis in health and health care.<sup>1,2</sup> While the nature and extent of this concern vary between countries, there are several concerns common to all. These include the rising cost of health care; the continued perception that the medical profession remains hospital-bound and emphasises curative care; failure to consider community demands in deciding health policy at both the national and the local level; the low priority given to preventive and promotive services in most countries; and failure to implement intersectoral collaboration at national, regional or local level. The result of the last point is that policies are often implemented which directly impede improvements in health.

Concerns about the future health of populations and the implications for human development led the World Bank to devote its 1993 World Development Report to the health sector for the first time.<sup>2</sup> They were concerned that from an economic perspective the \$1,7 trillion invested in health services per year did not appear to be delivering the level of health one would expect. They also realised that health should no longer be considered merely a consumption item and that investing in health was in fact crucial for sustainable human development.

Many global concerns are reflected in South Africa. This article comments on the current state of health of the nation, identifies key determinants of health, and highlights the need to take action now to improve the future health of the country.

#### The health status of South Africans

Overall, the picture is one of a high number of preventable deaths, diseases and disabilities that particularly affect children; simultaneously there is a high occurrence of behaviours that place the population at long-term risk for an increasing incidence of chronic diseases, trauma and AIDS.

#### Infant mortality rate (IMR)

In South Africa both race and regional variations exist with regard to the IMR. For example, there is a 10-fold variation in the IMR between whites and blacks.<sup>3</sup> Within regions there is a 1½-fold variation in the IMR between the worst and best regions.

By combining data across regions for all races it emerges that for the worst-off one-third of the population, the IMR is 80. This group consists entirely of blacks living in the northern and western Transvaal and KwaZulu/Natal. Race and regionally based information is needed in order to target resources maximally.

#### Median age at death

White women have a median age at death of 75 years compared with 44 years for black men. For all races, women are at an advantage relative to men, the disparity being about 5 - 7 years. The overall magnitude of the differences by race is strongly influenced by the high

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proportion of deaths occurring in early childhood; additionally, a high proportion of premature and preventable deaths occur at all other ages.

### Adult mortality

A very specific measure of adult mortality is to determine what percentage of people who survive to age 15 will die before their 60th birthday. For comparative purposes, the figure is 12% for Japanese men and 6% for Japanese women. In contrast, for all South African men, the figure is 38% compared with 25% for women.<sup>4</sup> The figures are highest among black men, where 42% who survive to their 15th birthday will die before their 60th birthday, compared with the lowest figure among white women (17,5%).<sup>4</sup>

### Excess mortality by race and gender

There is an almost 9-fold excess of deaths among black children under 5 years relative to whites. This drops to a 2½- to 3-fold excess until about 50 years of age, and after that drops back to around 1½-fold. The excess in early childhood is predominantly due to the most highly preventable causes of death, namely diarrhoea, acute respiratory infections, pneumonia, nutritional deficiency and measles. In 15 - 50-year-olds, the excess is due particularly to tuberculosis, trauma (of which homicide and motor vehicle collisions are most important),<sup>5</sup> and chronic diseases such as diabetes and hypertension. In black and coloured women of child-bearing age, septic abortions play a key role in the excess.<sup>6</sup>

### Infectious diseases

The most important notifiable disease is tuberculosis. Approximately 100 000 new cases occur annually, of which 80 000 are notified. This figure has not varied much over the last few years.<sup>7</sup>

The death rate from certain infectious diseases has shown a substantial decline. These include diarrhoeal diseases in general, typhoid, polio (no cases were reported during 1992), and even malaria. Measles is one of the most preventable diseases, yet it is not prevented, and in 1992 we recorded 19 000 cases.

Between 15% and 50% of children in diverse settings are heavily infected with parasites. This infestation substantially contributes to iron deficiency in childhood. Highly cost-effective measures exist to deworm whole populations.

### Nutritional status

There is no national nutrition surveillance system. The available nutritional status data indicate that while there is no problem of acute malnutrition, a large sector of the population is vulnerable with regard to nutritional status; for example, 8 - 15% of newborns have a low birth weight, and 25 - 40% of the population under the age of 5 years are stunted.<sup>8</sup> The high level of stunting places children at risk of subsequent impaired intellectual development and school performance.

### Mental health

In South Africa, there has been little rigorous research into the true extent of the problem of mental disorders. It is likely to be substantial and represents a confluence of the high pressure of sociopolitical change and violence that has taken its toll on the mental health status of all South Africans, particularly children and adolescents. Also, high levels of organic disorders such as those associated with syphilis, tuberculosis and alcoholism are important causes of psychiatric disease. Some of these organic disorders are curable but still inadequately detected.

### Disability

South African studies carried out in urban and rural areas estimate that between 5% and 8% of the population suffer from a disability requiring some form of health intervention and/or disability grant. With the population steadily ageing, the absolute number of disabled will increase over the next few decades. Planning now for the disabled and the elderly would therefore be prudent.

### HIV/AIDS

With AIDS, infection occurs 10 - 14 years before disease and death. We currently have about 350 000 to 400 000 HIV-infected people in the country. AIDS will pose a major threat to the health services and, importantly, to the economy, by the end of this century and well into the next.<sup>9,10</sup> The response (including public, private and non-government organisations) has not matched the extent of the problem.

### Determinants of health

The health status of individuals and populations is influenced by a range of factors. Over time, these will either improve or decrease the health status of South Africans. Key determinants are briefly summarised.

**Genetic factors** have yet to become a major factor except in confined communities, and the national impact is small.

**Apartheid** has been documented as both a direct and indirect cause of much death, disease and misery.<sup>3,11,12</sup> It will leave a legacy of race being inextricably linked to peoples' prospects of survival and their quality of life. This will remain for many decades until economic and social interventions exert an effect. For that reason, statistics will need to be kept by race, so as to identify groups at particular risk who need to be targeted for intervention.

The rate of economic growth and change in average annual per capita income have been negative at a time when average population growth has been extremely high. In future the highest priority needs to be given to effective measures aimed at reducing **population growth** so as to allow for improved quality of family life, and to reduce the pressure on health and other social services.

The **provision of water, sanitation and housing** has historically been associated with profound declines in death rates. Nationwide only a quarter of the population have adequate sanitation and about half the total population have adequate water supplies.

An integrated approach to rural development would profoundly improve the health of about 50% of South Africans. So far, investments in appropriate rural development have been inadequate, but there are signs that local development agencies are starting to focus more strongly on rural areas.

**Urban development strategies** are now receiving considerable attention. By 2005 we will have huge cities such as greater Johannesburg (with over 10 million people) and greater Durban (with over 5,5 million). Urbanisation still holds the hope for overall improvements in health, but also carries with it many potential risks.<sup>13</sup> Most urban development planners have yet to incorporate a specific focus on health in both the design and the implementation of new township development.

Education, particularly **education of women**, not only improves the productivity of women and thereby their ability to generate income for the family, but also results in improved education of children, improved health of children and the likelihood of having fewer children.<sup>14</sup> While school enrolment has increased steadily over the last few decades in South Africa, the

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school drop-out rate for boys is particularly worrisome, since it is known that boys who drop out are far more likely to smoke, drink, use a variety of illicit drugs, and engage in violent behaviour and unsafe sex. Innovative ways of reaching 'hard-to-reach' out-of-school children need to be pursued with vigour.

**Electrification** has many health benefits and is seen as a high priority across the political spectrum. Improvements to health, direct and indirect, would be substantial.

**Rural/urban migration and urban/rural migration** have profoundly influenced the health status of South Africans ever since the discovery of diamonds and gold. Miners from the rural areas have been subjected in earlier years to high levels of occupational and mining-related injuries and diseases for which they are inadequately compensated. Further, the migrant labour system has contributed to high rates of sexually transmitted diseases and now HIV/AIDS among rural families. The health implications of rural/urban migration will need to be addressed specifically.

**Transnational migration** has started accelerating since 1990. There are now approximately 2 million 'visitors' to South Africa per year, mainly crossing the northern and north-eastern borders. The risk of increased transmission of a number of infectious diseases means that the time has come for South Africa to become involved in a regional approach to disease control.

Certain industries have in the past substantially contributed to adverse health effects. Some are now actively pursuing mutually beneficial partnerships between the public and private sectors. For example, the **oil industry** recently started to examine the prospects of introducing child-resistant containers for paraffin and supports reduction in lead levels, both beneficial to health.

The **food industry** can play a key role in ensuring promotion of affordable, low-fat, high-fibre and highly nutritious foods. However, the **sugar industry** continues to market sugar products to the black population; the adverse impact on dental health of children is already apparent.

The **alcohol and tobacco industries** require special mention. The breweries derive considerable profits from beer sales to the black population, so it is in their short-term interests to market and sell beer products, regardless of the consequences for health. Studies in South Africa show that alcohol is a major determinant of motor vehicle injuries and homicide. It is, however, possible to drink alcohol in safe proportions, and 'drive safe' campaigns supported by the alcohol industry are an example of the kind of responsible approach needed.

The **tobacco industry** is different. Tobacco cannot be safely consumed if it is used the way the manufacturer recommends. The tobacco industry's targeting of the black population and their attempt to buy respectability by supporting sports and cultural and environmental events make it particularly slippery to control. It needs to be singled out as one industry which this country cannot afford to allow to succeed. In fact in its recent report the World Bank calculated that 'the nett effect on global welfare of investing in tobacco is emphatically negative'.<sup>2</sup>

The **public and private health sectors** are of course crucial determinants of health. The future role of the private sector has still to be clarified and will not be discussed. We can expect a decreasing role for central government in future; a smaller role for very large hospitals; and a greater emphasis on local authority and district level based health care. Already national health policy emphasises the primacy of local authority initiatives. However, sufficient finances have not moved from the provinces to the local authority to make this policy work.

### Likely future major trends

Major demographic and epidemiological trends, combined with changes in the impact of determinants mentioned, mean that we are likely to see **continued and substantial declines** in many infectious diseases, particularly diarrhoea and pneumonia, and hopefully the eradication or partial elimination of measles and polio.

In contrast, **steady increases** can be expected in a range of diseases (lung cancer, chronic lung disease and heart disease) associated with the aggressive marketing of tobacco, increased consumption of high-fat diets, and the continued high level of air pollution.

Despite the likely shift away from acute infectious diseases to chronic diseases, funding should not be transferred from infectious and nutritional diseases to the treatment of lung cancer, chronic lung disease and heart disease. That would increase inequity in health status by race. Strengthening **preventive and promotive services** for chronic diseases and stopping inefficient curative practices are likely to show the greatest benefit to reduce inequity.

**Rapid increases** can be expected in AIDS. Given that the bulk of the South African population is already infected or harbours the tuberculosis organism, it is likely that we will see an explosion of tuberculosis by the end of the century unless massive and unprecedented concerted action occurs. AIDS and tuberculosis together are likely to be not only the dominant infectious diseases filling our hospitals, but the dominant *diseases* filling our hospitals. AIDS will challenge our ability to provide long-term home care backed with good institutional care. It will also significantly affect the size and composition of the work force and test our ethical and moral ability to maintain basic human rights.

The future of **trauma rates**, particularly homicide and motor vehicle injuries, is unclear. Improved prospects for peace in the country and the institution of strong measures against alcohol are likely to impact on both of these. **Malaria** is also in the unclear category. Increased transnational migration and the increasing emergence of resistant malaria mean that while malaria is currently not a problem for South Africans, it may re-emerge.

### Is spending in the health sector producing effective results?

Is the R22 billion invested in the health sector, of which about 50% is invested in the private sector, buying the level of health for South Africans one would expect? Analysis suggests that it is not.

In fact, the World Bank recently put South Africa's health status relative to its income into the worst category in the world along with Gabon.<sup>2</sup> To understand why, we must recognise that it is *how* a country spends its resources, and not *how much*, that determines health status. In South Africa there is an over-emphasis on doing the wrong things; where the right things are done they are often done wrongly, and there is under-emphasis on the right things. Overall use of the least cost-effective measures is widespread, and most interventions are unevenly applied, particularly with regard to race, region and age, and we tend to still favour adults living in the cities.

Correcting the balance could mean that we could buy substantially more health for our existing rands. But to shift resources requires strong political commitment to break what have become strong vested interests. If future health planners have greater insight into both epidemiology and economics, it is likely that the balance could shift.

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**The high road for health**

Health for All is possible in South Africa. It requires the building of a national commitment and vision, and simultaneous taking into account of the unique opportunity that history has brought us to restructure both our economy and our health sector. Embarking on the 'high road to health for all' will require at least six criteria to be met.

**Political commitment**

Political commitment is required at national, regional and local levels in order to ensure development of 'healthy public policy' — considering at cabinet level how every department of government can contribute to health, and ensuring trade-offs in the development process do not cause health to suffer.

**Public participation**

Public participation is crucial for priority setting. Broad-based participation and governance in priority setting from the design through to the implementation and ultimately sustaining of health interventions, be they clinics, health promotion strategies, or the like, are crucial.

**Setting of realistic national, regional and local goals backed by resources**

To date several blueprints have been produced for a future primary health care system. Blueprints without definable goals are useless. The process of setting goals is in itself a powerful way of building long-term community and health service commitment to Health for All.

**Upgrading key skills**

The upgrading of professional skills in the public health disciplines with a specific focus on epidemiology, health economics, behavioural sciences and environmental health, is crucial. Already, a number of initiatives to develop schools of public health are underway.

**Redefining government's role**

A clear definition of government's role in the health sector is needed. This includes five distinct areas: (i) information, education, communication; (ii) public health legislation; (iii) fiscal policy; (iv) direct involvement in health care; and (v) research.

Modern methods of social marketing, greater use of combined education and entertainment strategies and all means of sending out positive health messages are crucial if the spread of AIDS is to be prevented; if alcohol and tobacco risks are to be reduced; and if family planning methods are to be encouraged.

The use of public health legislation has been well developed for infectious diseases, but has been underused for chronic diseases in South Africa. Legislation is needed to protect human rights and to stop harmful business practices.

The third government role relates to fiscal policy. In many countries a system of incentives and disincentives is used to promote a series of health policies. Incentives are used to reduce the price of essential foods; disincentives through taxation are used not only to decrease consumption of harmful products (such as tobacco and alcohol), but to act as an important source of revenue for health promotion programmes.

The fourth role relates to direct investment in the public health sector. There appears to be emerging consensus for the type of reforms and focus required. Preventive and promotive approaches should be given

high priority and a package of basic cost-effective health care for all, regardless of the ability to pay, should be instituted. The shift away from doing the wrong things, or the right things inefficiently, will save millions of rands. Specific attention needs to be given to reducing inequity in access to health care, even at the cost of reduced efficiency.

The fifth role of government relates to supporting research. The global concept of essential national health research is starting to take shape in South Africa.<sup>15</sup> Substantially increased investment in research could yield large pay-offs for future health. All research is severely underfunded in South Africa at a time when it is most needed. Further, policy makers need to draw more heavily on available research findings that already clearly identify steps needed to move along 'the high road'.

**Better use of technology for health**

The final area relates to the need to take advantage of local technological opportunities that could benefit the health sector. Just to mention two, the tremendous growth of information technology and the capacity within South Africa, should mean that the best health information system needed to monitor and evaluate progress towards Health for All can be rapidly and effectively introduced. Similarly, breakthroughs in molecular biology are likely to yield new drugs and diagnostic approaches.

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