

# The growing burden of chronic diseases among South African women

**South Africa's demographic transition has resulted in an increasing incidence of chronic disease, resulting in a double burden of disease.**

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Most discussions on women's health in South Africa have focused on two interconnected areas, i.e. sexual and reproductive morbidity and mortality and HIV/AIDS.<sup>1</sup> This is not surprising, given the extent of these problems and the harmful effects they continue to have on so many women's lives. However, it is important that they are placed in the context of broader changes in South African life and the additional health hazards these developments may pose for women.

When the newly emergent HIV/AIDS pandemic is added to the equation, the picture is one of a 'triple burden' of ill health. When the epidemic of injuries is added, it becomes a quadruple burden.

## Old and new diseases

Historically, societies experiencing economic growth have undergone a 'demographic transition'. This is reflected in a shift from 'diseases of poverty' (mainly infections and problems associated with reproduction) to the so-called 'chronic diseases of affluence', including cancer, heart disease and mental health problems. This in turn leads to an increased life expectancy and a growth in the proportion of older people in the population, as we can see in countries such as the USA and the UK.

However, in many developing countries like South Africa the pattern has been much more complicated. Currently the population

is experiencing a double burden, with 'modern' diseases appearing in addition to the old ones that remain unresolved as a result of continuing poverty.<sup>2</sup> When the newly emergent HIV/AIDS pandemic is added to the equation, the picture is one of a 'triple burden' of ill health. When the epidemic of injuries is added, it becomes a quadruple burden.<sup>3</sup> Consequently, the last decade in South Africa has seen a decline in life expectancy rather than the expected improvement.<sup>4</sup>

These burdens are bearing down especially heavily on women for the following reasons: (i) because they remain at the centre of the continuing crisis of maternal morbidity and mortality; and (ii) because they are over-represented among those living with and dying of HIV/AIDS. Because of these crises, the increasing significance of chronic diseases in women has often been overlooked. Yet, a glimpse at the future shows the dangers of failing to take these problems seriously.

Mortality rates among South African women aged 15 - 54 years have increased rapidly over the last few years. About half of these deaths are due to HIV and 16% to infections and maternal causes. However, most of the remainder (24%) are caused by the growing incidence of non-communicable diseases.<sup>5</sup> These chronic problems are not always fatal, but they can be a major cause of illness and disability. The challenges they pose for poorer women in particular, and for those in older age groups, are illustrated here with reference to cancers of the breast and cervix, cardiovascular disease and mental health problems.

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### *Women's cancers*

Deaths from cancer of the cervix have traditionally been associated with poverty, while breast cancer is more common among women in more affluent populations. This is reflected in patterns within South Africa, where cervical cancer has always been a much greater problem among black women, particularly in rural areas, compared with white women. In contrast, the incidence of breast cancer has been much higher in white women.

In recent years breast cancer rates have been increasing among all South African women and have now surpassed those of cancer of the cervix.

Cancer of the cervix is largely preventable, but still ranks 10th among the leading causes of death in South Africa for women aged 15 - 54 years. The incidence rate for black women is 38.5/100 000 compared with 15.9/100 000 for white women. Around 84% of all South African women diagnosed with the disease are black.<sup>6</sup> Moreover, this group of women usually present at a relatively late stage; hence cure rates are low.<sup>7</sup> This reflects in part the overall lack of primary care services, especially in rural areas, but also stems from the absence of effective health information strategies.

In the past decade, screening policies have been introduced that offer opportunities for a limited number of Papanicolaou (Pap) smears to women over the age of 30,<sup>8</sup> aimed at reducing the incidence of cervical cancer by 60%. However, there have been significant

problems both in ensuring the availability of services and in promoting their uptake.<sup>9</sup> When the disease is diagnosed, access to specialist care can also be very limited, especially in rural areas.

For women between the ages of 15 and 44, CVD ranks 3rd in the size of the disease burden whereas it is 6th for men in the same age group.

The recently developed human papillomavirus (HPV) vaccines offer great potential for primary prevention of cervical cancer in South Africa. It has been established that the high-risk HPV is a necessary cause for cervical cancer.<sup>10</sup> HPV vaccines have been registered with the South African Medicines Control Council and are available in the private health sector, but are still to be introduced into the public health sector. The high cost of the vaccines is a barrier. However, a local study has suggested that adding the HPV vaccine to the current screening programme in South Africa is a cost-effective strategy.<sup>11</sup> Besides cost, the logistic challenges of vaccine delivery will need to be addressed. For maximum effectiveness the vaccine should be administered to young adolescents. Furthermore, recognising the potential impact of the vaccines on the incidence of cervical cancer, secondary prevention remains vitally important – not all women will be vaccinated, some cervical cancers are caused by types of HPV against which the vaccines do not protect and the vaccines are not effective in women who already have HPV infection.<sup>11</sup>

In recent years breast cancer rates have been increasing among all South African women and have now surpassed those of cancer of the cervix. Among white women the incidence rate currently stands at 70.2 per 100 000, while it is around 11.3 among black women.<sup>12</sup> The rise in breast cancer has been especially marked among the many black women who are moving into the towns. Although the reasons are complex, it seems to reflect a reduction in protective factors such as late menarche, young age at first birth, long lactations, large families and physically active lives.

These trends are likely to increase with greater urbanisation, and many of these migrant women will find it especially difficult to access expensive screening and treatment facilities. Recent data from a number of different hospitals showed that only 22% of black patients presented with early cancer (stages I and II) compared with around 69% of those who were not black. Conversely, stages III and IV were most prevalent in black women (77.8%) compared with non-black women (30.7%). This clearly has a major effect on survival rates.<sup>12</sup>

### *Cardiovascular disease*

The last two decades have been marked by an increase in the incidence of cardiovascular disease (CVD) among women in many of the world's poorest countries.<sup>13</sup> Moreover, these problems are increasingly found not just in older women but also in those who are pre-menopausal. This pattern can be observed in South Africa where 1 in 4 women below the age of 60 now has some form of CVD. For women between the ages of 15 and 44, CVD ranks 3rd in the size of the disease burden whereas it is 6th for men in the same age group.<sup>13</sup>

Evidence shows that CVD is usually thought of as a white male problem worldwide. This also applies in South Africa where the growing incidence among black women has received scant attention. The major reasons for this increase include higher smoking rates, higher rates of obesity, and lack of physical exercise. Yet very little money has been put into gender-sensitive strategies for health promotion, detection and treatment of risk factors, and early signs of clinical disease.

### *Mental health problems*

Problems related to mental health have received very little attention in developing countries in general and in South Africa in particular. This reflects in part that these problems are not major causes of death. However, they are responsible for a huge burden of distress and disability, especially among the poor.

Very little information is available on mental health problems in the South African population. However, a recent study by the Medical Research Council indicated that severe depression is the second leading cause (after HIV) of years lost due to disability among South African women.<sup>14</sup> Both depression and anxiety disorders are much more common among women than men. This reflects the continuing gender inequalities in South African society and their links with poverty.

## Chronic diseases

Low socio-economic status, unemployment and lack of education are all important factors underlying depression in women. These are found especially among rural black women who comprise half of the poorest people in South Africa. For these women, depression and anxiety are often exacerbated by low status and lack of autonomy in decision making. There is also growing evidence of the link between gender violence and mental health problems, including post-traumatic stress disorder. Finally, the HIV epidemic is a major cause of depression both among those (predominantly women) who are affected and among those caring for others.

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### Promoting women's health

The unfinished agendas of poverty-related illness and lack of reproductive services remain a major issue for women and require a comprehensive response. Similarly, the growing HIV epidemic demands further inter-sectoral responses that meet the needs of both women and men. But at the same time it is essential that appropriate attention is paid to the increasing burden of chronic diseases that are especially likely to damage the health of those older women who are taking upon themselves so much of the growing burden of caring for others. Taken together, these problems will require increased provision of gender-sensitive health promotion strategies, improved primary care, and better access to higher-level services, including diagnosis and treatment. This will need to

be done against the background of wider initiatives with regard to both gender and socio-economic inequalities.

#### References

1. Shung King M, Mhlanga ER. The context of maternal and child health. In: Ijumba P, Padrarath A, eds. South African Health Review 2006. Durban: Health Systems Trust, 2006: 107-126.
2. Myer L, Ehrlich RI, Susser ES. Social epidemiology in South Africa. *Epidemiol Rev* 2004; 26: 112-123.
3. Bradshaw D, Nannan N. *Health status. South African Health Review 2003/2004*. Durban: Health Systems Trust, 2004.
4. Dorrington R, Bourne D, Bradshaw D, Laubscher R, Timaeus IM. The Impact of HIV/AIDS on Adult Mortality in South Africa. Technical Report. Cape Town: Medical Research Council, 2001.
5. Bradshaw D, Nannan N. Mortality and morbidity among women and children. In: Ijumba P, Padrarath A, eds. South African Health Review 2006. Durban: Health Systems Trust, 2006:127-150.
6. Mqoqi N. Research Update 2003; 5(4): 1-4.
7. Denny L. Prevention of cervical cancer. In: Ijumba P, Padrarath A, eds. South African Health Review 2006. Durban: Health Systems Trust, 2006: 333-346.
8. National Guidelines for Cervical Cancer Screening Programme. Pretoria: Department of Health, 2002.
9. Moodley J, Kawonga M, Bradley J, Hoffman M. Challenges in implementing a cervical screening program in South Africa. *Cancer Detect Prev* 2006; 30: 361-368.
10. Wallboomers JMM, Jacobs MV, Manos MM, et al. Human papillomavirus is a necessary cause of invasive cervical cancer world wide. *J Pathol* 1999; 189: 12-19.
11. Harries J, Moodley J, Barone M, Mall S, Sinanovic E. Preparing for HPV vaccination in South Africa: Key challenges and opinions. *Vaccine* 2009; 27: 38-44.
12. Vorobiof D, Sitas F, Vorobiof G. Breast cancer incidence in South Africa. *J Clin Oncol* 2001; 19(185): 125-127.
13. Leeder S, Raymond S, Greenberg M, et al. *A Race Against Time: The Challenge of Cardiovascular Disease in Developing Economies*. New York: Columbia University, 2004.
14. Moultrie A, Kleintjes S. Women's mental health in South Africa. In: Ijumba P, Padrarath A, eds. South African Health Review 2006. Durban: Health Systems Trust, 2006: 347-373.

### In a nutshell

- The South African population is currently experiencing a double burden of diseases, with 'modern' diseases appearing in addition to the old ones that remain unresolved because of continuing poverty.
- When the newly emergent HIV/AIDS pandemic is added to the equation, the picture is one of a 'triple burden' of ill health, or even a quadruple burden when the epidemic of injuries is added.
- As a result, the last decade in South Africa has seen a decline in life expectancy rather than the expected increase.
- The burden is especially heavy for women for the following reasons: (i) because they remain at the centre of the continuing crisis of maternal morbidity and mortality; and (ii) because they are over-represented among those living with and dying of HIV/AIDS.
- As a result of these crises, the increasing significance of chronic diseases for women has often been overlooked.
- Cervical and breast cancer are important causes of morbidity and mortality among South African women, breast cancer predominantly affecting non-black women, while cervical cancer is a higher burden among black women.
- In both cases black women tend to present later in the course of the disease, with a concomitantly poorer outcome.
- Cardiovascular disease is increasing among both menopausal and pre-menopausal women, largely as a result of urbanisation and changing lifestyles.
- Mental health problems are a major cause of disability and distress, affecting more women than men and being a particular burden among poorer women.