Introduction

The relationship between poverty and health, and their impact on important infectious diseases, such as HIV, AIDS, tuberculosis (TB) and malaria is well known. The World Health Organization has identified the people who live in absolute poverty as being most vulnerable to such infectious diseases.1 This chapter explores the roles of poverty and hunger on HIV, AIDS and TB in South Africa. This choice of health conditions is influenced by the criteria identified by the Priority Public Health Conditions Knowledge Network on the Commission on Social Determinants of Health (CSDH) and takes into account the following:2

- These health states represent a large proportion of the total burden of disease in the country in terms of disability adjusted life years (DALYs). HIV and AIDS are responsible for the highest proportion (almost 40%) of the country’s burden of disease, followed (after interpersonal violence) by TB (3.7%).
- There are large disparities in the incidence and prevalence of these conditions within the South African population;
- They disproportionately affect certain groups within the South African population; and
- They constitute re-emerging as well as emerging (multi-drug resistant TB) epidemics.

The CSDH observed that, “health and illness follow a social gradient: the lower the socio-economic position, the worse the health”.4 The social gradient in South Africa is steep; Leibbrandt has shown that the gap between the rich and the poor within each race group is widening in the country and the Gini coefficient – a measure of inequality – has risen in all population groups in South Africa.5 The burden of disease thus reflects the social gradient in the country. For example, HIV prevalence values in the most deprived districts in the country is approximately double that of the least deprived.2 Similarly, the average TB cure rate in the most deprived districts is 55.3%, whilst in the least deprived it is 71.4%.2 Even within districts, disease rates vary according to the economic status of the area. In Cape Town for example, infant mortality is almost three times higher in squatter settlements than it is in middle-class suburbs.9

Progress in addressing poverty

Addressing poverty in South Africa has been a priority of successive democratic governments since 1994 and commitment remains high in this regard, both in terms of South Africa’s responsibility as a signatory to the Millennium Declaration and the country’s own articulated goals which include:

- halving poverty and unemployment by 2014; and
- ensuring a more equitable distribution of the benefits of economic growth, thereby reducing inequality.7

South Africa is committed to halving, between 1990 and 2015, the proportion of people whose income is less than US$ 1 per day, as well as halving the proportion of people who suffer from hunger – the first Millennium Development Goal (MDG). Although classified as a middle-income country (for which the poverty target is to halve the proportion of people living on less than US$ 2.50 per day), South Africa has chosen the lower indicator of US$ 1 per day because “the majority of the population [living in poverty] qualifies the country as a low-income country”.7

Progress towards achieving these goals has been slow, however, and is subject to interpretation. Whether the actual number of people living in poverty in South Africa has decreased since 1994 is a matter of some debate and depends on the methodology used in calculations and the period under review.9 Using Census data, for example, there was a small but undeniable increase in “measured poverty” between 1996 and 2001.9 However, using national accounts and Income and Expenditure Survey data, van der Berg and Louw found that the poverty headcount ratio decreased slightly between 1995 and 2000 although the actual number of people classified as poor increased as a result of population growth.10 For the period 2000 to 2004, van der Berg and Louw, using All Media and Products Survey data, found that poverty rates decreased dramatically.11 Meth, using General Household Survey and Labour Force Survey data, also found that poverty had declined somewhat during this period, probably due to the provision of social grants.12,13
**Poverty and HIV and TB**

This section explores the relationship between poverty, HIV and TB from two perspectives – food insecurity and income poverty.

**Food Insecurity**

Food insecurity, an indicator of poverty, has been associated with increased HIV transmission rates and has been cited as an important reason for non-adherence to antiretroviral treatment (ART).\(^{14}\)

Patients who are food insecure are less likely to adhere to treatment, leading to lower baseline CD4 counts and incomplete virological suppression. As a consequence, they are less likely to survive.\(^{13,15}\) The absence of food exacerbates the side effects of antiretroviral (ARV) medication and, because ARVs increase appetite, patients may experience “intolerable hunger in the absence of food”\(^{16}\) and may skip doses if they cannot afford to eat.\(^{17}\) Food insecurity was strongly associated with the experience of unpleasant HIV symptoms in a study of patients’ experience of HIV in the Eastern Cape.\(^{18}\) Dietary diversity in HIV-positive children in South Africa is significantly lower than in uninfected children and this may be an important contributor to poor outcomes of HIV-positive children, even those on ART.\(^{19}\)

The role of nutrition in TB is well established, with people who are malnourished being more vulnerable to developing the disease.\(^{20}\) In a study conducted in KwaZulu-Natal, food security amongst TB patients was shown to be low.\(^{21}\) Due to a lack of access to food, 42% of patients reported decreasing the size of their meals and 31% reported reducing the size of their children’s meals in the previous six months.

**Income poverty**

Income poverty is a strong predictor of food insecurity and thus has a profound impact on the development of TB and the prognosis of patients with HIV. The role of income poverty in the transmission rates of HIV, however, is controversial. Studies in sub-Saharan Africa and in rural KwaZulu-Natal have shown that members of wealthier households are more likely to become infected than those from poorer households.\(^{22,23}\)

However, the opposite view has also been expressed; Shisana and Simbayi, quoted in Booyse, found that the prevalence of HIV amongst South Africans aged 15 years and older who “lived in households that did not have enough money or were often too short of money to afford basics was 14%, compared with between 5% and 6% in households with enough money to afford most important things or extras.”\(^{24}\)

Financial constraints have been found to be major obstacles to the completion of TB treatment and TB preventive therapy.\(^{21,25-27}\) In Rowe’s qualitative study, financial limitations were universally reported by patients as barriers to adherence, while the cost of transport was reported as a hindrance to accessing clinics.\(^{27}\) Other studies also concluded that financial constraints were important factors in a patient’s failure to complete TB treatment, even in populations where knowledge of TB was good and trust in the public health system was fairly high.\(^{21,26,25}\) Expenses due to TB were often incurred against a backdrop of high unemployment. For example, most of the patients in two recent studies were unemployed, with rates of 84 and 72% respectively.\(^{26,27}\)

The relationship between poverty, hunger and HIV and TB emphasizes the importance of addressing poverty as a significant contributing factor to these diseases. Anti-poverty interventions are reviewed in two groups: those targeted to support TB patients and HIV-positive persons (e.g. food parcels, disability grants and micro-finance programmes) and, secondly, the broader anti-poverty interventions in the country.

**Targeted anti-poverty interventions for TB and HIV**

**Food parcels for TB patients**

Nutritional supplements for patients with TB have long been used in South Africa, in recognition of the significance of under-nutrition in patients with TB and their simultaneous lack of access to food. Although these interventions are available, studies have raised questions about their effectiveness based on issues of adequacy and implementation. In a recent survey in KwaZulu-Natal it was shown that, although patients value these parcels and regard them as very helpful, they reach only half (51%) of all patients with TB.\(^{21}\) Due to a lack of access to food, 42% of patients reported decreasing the size of their meals and 31% reported reducing the size of their children’s meals in the previous six months.

**Disability grants for TB and HIV**

Integrating interventions to address food security was recognised as crucial in treating HIV-positive persons and those suffering from AIDS-related diseases.\(^{14,16}\) In South Africa, patients with TB and HIV may qualify for disability grants if attending doctors find that they meet specific criteria.

In the few studies that have investigated these interventions, however, disability grants for patients with TB and HIV have been shown to have a relatively low coverage and, ironically, may also act as strong disincentives for the completion of
treatment. In a recent study conducted in the Eastern Cape, only 35% of patients with HIV were receiving the disability grant and in a further 13% the grant had recently been stopped. In a study conducted in KwaZulu-Natal (which did not distinguish between disability grants for TB or HIV) only 21% of TB patients received a disability grant for either condition. In a qualitative study investigating adherence to ART in KwaZulu-Natal, patients with HIV reported that the disability grants were very helpful, attributing the improvement in their health to the food they were able to buy with the grant money. However, termination of the grant (when a patient’s CD4 count returns to a certain level or when the TB is cured) was seen as problematic for patients.

Micro-finance programmes for trauma and HIV

The Intervention with Micro-finance for AIDS and Gender Equity (IMAGE) study conducted in Limpopo between 2001 and 2005 evaluated through a cluster randomised controlled trial the effects of a combined micro-finance and gender training programme exclusively for women, on issues relating to HIV and inter-personal violence. Participants experienced improved “economic well-being” and a 55% reduction in physical and sexual violence. This may, in turn, have resulted in reduced levels of HIV transmission. In addition, younger participants reported higher levels of HIV-related communication and HIV testing. These outcomes suggest a successful project worthy of replication.

Broader anti-poverty interventions in South Africa

Old age pensions can improve the social and health status of the elderly and improve the well being of other members of their households. Children, in particular, can benefit from the impact of old age pensions, with improvements in both school enrolment and nutrition. The old age pension (now known as the older persons grant) in South Africa has been shown to dramatically improve household finances and, in so doing, also improve the family’s food security. Data from the Agincourt demographic surveillance site demonstrates that children in households where there was a recipient of an older persons grant were significantly less likely to have missed meals because there was no money for food, compared to those where there was no pension recipient. In the same study, girl children living in the same household as female pensioners were significantly more likely to be enrolled in school.

Like the older persons grant, the child support grant confers a measure of financial stability on the household as it allows members to look for work “more intensively, extensively, and successfully than workers in comparable households without social grants”. Children living in households where the child support grant is received are also more likely to attend school, and have better nutritional status, than in households where no grants are received.

Concern has been raised regarding the perverse incentive effects of the child support grant, i.e. that women and especially young girls could become pregnant in order to access the grant. Evidence suggests, however, that this is unlikely to be the case. A study on teenage fertility in South Africa found that the rate of teenage pregnancy in the country peaked in 1996, two years before the initiation of the child support grant and levelled off in the early 2000s, suggesting that there is no association between the teenage pregnancy rate and the start of the distribution of the grant.

The benefits of social grants have prompted the CSDH to recommend that:

Governments…build universal social protection systems and increase their generosity towards a level that is sufficient for healthy living.

Debates about universal social protection (in the form of a Basic Income Grant) in South Africa have been ongoing for a number of years, with proponents claiming that such a grant will empower the poor and stimulate demand in communities. It is also argued that a Basic Income Grant is eminently affordable for the country and in fact, would result in savings for the government because people would be able to afford better food and so maintain better levels of health. However, it is unlikely that social grants alone will eradicate poverty in this country. Since much of the poverty in South Africa is chronic, and since episodes of illness can absorb all of the value of current social grants, it is important that other strategies (such as massive job creation, improvement of education systems, and wider coverage of basic services) complement the poverty-alleviating effects of social grants.

Other anti-poverty strategies have been less successful than social grants. These include the Expanded Public Works Programme (EPWP), National Youth Service, Learnership Programme and Co-operatives.

The EPWP, initiated in 2004, has created progressively more short term work opportunities every year over its lifespan, from 393 441 in 2004/05 to 1 449 806 in 2008/09. However, the scale of this programme remains too small to have a significant impact on poverty in the country. Compared to the total value of social grants disbursed in 2006/07 (R57 billion), the wage bill of the EPWP of less than R1 billion in the same year is paltry. Like other initiatives to build skills and facilitate employment, such as the National Youth Service, Learnership Programme, Co-operatives and Micro-financing, the scale reached is simply too small to impact on the massive rate of unemployment in the country.
Conclusion

Aside from the social grants system, which has been massively upcaled in the last 15 years, anti-poverty strategies in South Africa have been only partially successful since democracy. Programmes specifically designed to improve employment have been too small in scale to impact upon the high unemployment rates in the country. Compounded by a struggling education system, which has prepared pupils poorly for participation in a job market that increasingly calls for skilled workers, interventions to improve employment have not met with much success. Thus poor households are relying more and more on social grants, although these may not do as much for economic development in the country as regular employment. However, social grants may well benefit local economies by increasing the disposable income available in communities, and are considered important vehicles for the more equal distribution of economic growth. Certainly, the Gini coefficient for South Africa, although already high, would be far higher in the absence of these grants.

Poverty in South Africa will not be effectively addressed by a single intervention. A number of simultaneous actions are necessary to make a meaningful impact on the depth and prevalence of poverty in the country and on the attendant burden of poverty-related diseases. The country should do more of what works (increase the coverage and value of social grants); evaluate the effectiveness of what is currently done (disability grants for TB and HIV); and continue to try what is not yet fully tested (public works and micro-finance programmes). In addition, further growth in the economy will grow the number of jobs, while improved education will equip more people to fill these jobs.

Bold strategies and effective implementation are necessary to make a meaningful impact on the cycle of poverty, hunger and ill-health in South Africa.

References


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