AIDS and mortality in South Africa

By *moderator*
Created *2009/11/17 - 9:54am*
17 November, 2009 - 09:54 ? moderator

By Nathan Geffen, 16 November 2009

On 2 November 2009, Statistics South Africa released the latest mortality data, which goes up to 2007 (Stats SA, 2009).

This table gives the number of recorded deaths per year:

Year	Number of recorded deaths by Stats SA
1997	317,131
1998	365,852
1999	381,820
2000	415,983
2001	454,847
2002	502,031
2003	556,769
2004	576,700
2005	598,054
2006	612,462
2007	601,033

You do not need to be a statistician to be astounded by this. Recorded deaths have increased over 90% in a decade. Improved death registration and population

growth can account for only a small portion of this increase. The vast majority of additional deaths are due to the HIV epidemic. A huge body of evidence shows this. For example, there has been a three-fold increase in TB deaths over the same period and TB is the leading cause of death in people with HIV. Also the age pattern of the deaths --younger instead of older adults comprise the bulk of them-- and the drop in the median age of death from 51 in 1997 to 44 in 2007 are consistent with the way AIDS works. (For more detailed evidence see Dorrington et al. 2006, Dorrington et al. 2001 and Stats SA, 2002).

Also noticeable is that the number of deaths appears to have stabilised from 2005 to 2007 and perhaps has even begun to decrease slightly. This is most likely due to the state's antiretroviral (ARV) treatment programme.
Unfortunately because the public sector programme has not been well monitored and there are numerous treatment providers in the private sector, there is not accurate data on the number of people on treatment. But by using several sources of data, including figures published by the Department of Health, medical aid data and public sector ARV procurement data it is possible to make reasonable estimates. Muhammad Aarif Adam of Sanlam and Leigh Johnson of the Centre for Actuarial Research have made plausible calculations of the number of people on treatment in the middle of each year up until mid-2008, shown in the next table (Adam and Johnson, 2009).

Year	**No people on treatment**
2001	6,000
2002	15,000
2003	26,000
2004	47,000
2005	109000
2006	229,000
2007	371,000
2008	568,000

The programme began in earnest in 2004 and the stabilisation of the death rate has coincided with it. If you consider that many, perhaps most, of the people on the programme would be dead by now that would easily account for stemming rising deaths. Make no mistake; there has been a massive surge in deaths in South Africa

for more than a decade and AIDS deaths continue to be very high; deaths might have stabilised but at a very high number. Life-expectancy declined to the low-50s. At least though, we are implementing the most effective known scientific medical intervention to mitigate the effects of the disease and it now appears that life-expectancy is increasing again.

But many unnecessary deaths occurred because of the delayed rollout of the ARV treatment programme. Two studies have conservatively estimated that former President Thabo Mbeki's AIDS denialist policies cost well over 300,000 lives (Nattrass, 2008; Chigwedere, 2008). Mbeki did not pursue this deadly policy without help though. Officials in government, civil servants and even some journalists supported his policy, tried to give it legitimacy and for a time succeeded in quashing the demand for a treatment rollout from health workers and AIDS activist organisations, like the Treatment Action Campaign (TAC). Thankfully, we have moved beyond this awful era of South African history.

PS: The last two weeks have seen what I believe is the final death-knell of state-supported AIDS denialism. Both President Zuma and Minister of Health Motsoaledi have delivered important speeches showing their intention to fight the epidemic. On page 35 of his presentation Motsoaledi quoted mortality data for 2008 from Home Affairs which appears to be far too large. I am unaware of how this number was derived and it appears to be an error. In other respects Motsoaledi's speech was excellent and his mistake is of no great importance.

References

Adam M and Johnson L. 2009. Estimation of adult antiretroviral treatment coverage in South Africa. September 2009, Vol. 99, No. 9 SAMJ

Chigwedere P. 2008. Estimating the Lost Benefits of Antiretroviral Drug Use in South Africa. JAIDS Journal of Acquired Immune Deficiency Syndromes. 49(4):410-415, December 1, 2008.

Dorrington R et al. 2001. The impact of HIV/AIDS on adult mortality in South Africa.

Dorrington R et al. 2006. The Demographic Impact of HIV/AIDS in South Africa.

Nattrass N. 2008. AIDS and the Scientific Governance of Medicine in Post-Apartheid South Africa. African Affairs 2008 107(427):157-176.

Statistics South Africa. 2002. Causes of death in South Africa 1997-2001 : Advance release of recorded causes of death.

Statistics South Africa. 2009. Mortality and causes of death in South Africa, 2007: Findings from death notification.
