

The Macroeconomic Impact of HIV/AIDS on the KZN and South African Economies: Estimates Using Workplace Testing Programme Data

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Acknowledgements

- Global Fund
- KZN DoH
- DCCI – Brad Mears assisted by Jeff Gow
- Epicentre – Cherie Cawood (testing)
- CADRE – Mark Colvin (prev. estimates)
- UKZN – Alan Matthews (population-demographic modelling)

STUDY AIM

To estimate the macro-economic impacts of a given level of HIV infection in four prominent sectors of the KZN provincial economy.

Methodology

- Standard HIV impact study:
 - Sero-prevalence survey of sample of companies in different sectors; HIV prevalence estimates for 10 years.
- Population/demographic model to capture the effects AIDS has on workers across different occupations.
- Macro modelling to estimate and measure the extent of AIDS on economic growth and poverty in KZN.

Sero-Prevalence surveys

- 4 sectors:
 - agriculture
 - transport
 - manufacturing
 - tourism/services
- 10000 employees participated
- VCT was offered to those employees who wished to know their HIV status.

Macro Model

- Utilised computable general equilibrium (CGE) micro-simulation macro model
- Innovative feature: captured the industry structure of South Africa's economy and the linkages between producers and households
- Use: to estimate HIV/AIDS impacts on growth, poverty and inequality.

Limitations of the Study

- Companies not randomly selected
- Most companies from Durban area (*85% of KZN GDP concentrated in PMB, Richards Bay & Durban; Durban : 61% of GDP*)
- Unable to include financial services companies nor sizeable sample of tourism sector companies (*key growth sectors in KZN*)
- Up to 2 year gap between some company surveys
- No data on the effects of ART on SA population = unable to include ART as factor in modelling
= Crude 'with AIDS' versus 'without AIDS' scenarios

Prevalence Findings

- Rapid tests on 6,689 employees; 1,411 (21.1%) were HIV positive
- Labour Workforce Survey = 924,196 employees in the four sectors
- Study estimate 22% HIV positive (204,000)
- Crude HIV prev. levels varied between companies: 5.3% to 30%.
- Age and pop. classification standardised HIV prevalence levels varied from 10.6% to 29.3% (indicated that differences between companies not attributable to these factors only)
- Greater HIV prevalence variation between companies than between sectors:
transport (16.1%); manufacturing (19.7%), agriculture (23.4%), tourism/services (24.3%).

Key Demographic Findings: HIV/AIDS 2002-2025, KZN

- HIV/AIDS reduces KZN's overall population growth
 - 1.85% under the *Without AIDS* scenario
 - 0.79% under the *With AIDS* scenario.
- 2002-2025:
 - 11,800,000 people will die of AIDS in SA
 - 3,000,000 people will die of AIDS in KZN
- Population growth rate declines by 1.06%

Key Economic Findings: HIV/AIDS 2002-2025, KZN

- Declines in the labour supply larger than declines in population growth rates
- Employment growth rate declines 1.12%
- Dependency ratio falls from 5.05 under the *With AIDS* scenario to 4.98 under *Without AIDS* scenario.

Economic Findings con't.

- Lower-skilled 'black' workers have highest prevalence rates
- High HIV prevalence and a larger proportion of AIDS sick people = negative effect on labour productivity
(also projection is that effect is higher in KZN than in the rest of the country).
- Labour productivity growth :
 - 1.80% per annum under the *With AIDS* scenario
 - 1.92% per annum *Without AIDS* scenario
- Labour productivity negative effect highest in Agriculture sector

Summary

By 2025 , KZN economy will be 43% smaller than it would have been without HIV/AIDS

(SA economy: 37% smaller)

Note: ART mitigation effects not included

Conclusions

- HIV/AIDS has macro-economic effects
(Denial in 2005 by Minister of Finance)
- HIV/AIDS significant factor for company planning and operations
(Majority of companies in SA do not have HIV policies and programmes)
- HIV/AIDS is a significant factor for regional and Ethekewini [Durban] metropolitan strategic planning
(Little evidence of strategic thinking and programme planning in terms of 'development in the context of HIV/AIDS')