



PROVINCIAL GOVERNMENT OF THE WESTERN CAPE

Migration Study in the Western Cape 2001

**The relationship between migration and the HIV-AIDS
pandemic: a preliminary South African analysis.**

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The relationship between migration and the HIV -AIDS pandemic: a preliminary South African analysis.

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1. Aim

Though thoughts on the relationship between migration and HIV/AIDS are often included in discussions relating to the spread of the pandemic, little attention has been paid explicitly to this relationship, in particular on how infection might impact on migration patterns. Accordingly, a project aimed at identifying preliminary hypotheses about this relationship, together with recommendations for future action, was planned.

This paper reports on this preliminary project.

2. Method.

A brief brainstorm by a small group of sociologists, epidemiologists and demographers led to the generation of an initial set of hypotheses relating to the relationship. A fundamental assumption made was that the *relationship is reciprocal* in the sense that not only do migration variables influence the spread of the pandemic but that consequences of the pandemic affect the nature of migration. Subsequently, this initial set of hypotheses was employed to launch wider discussion on the question at a small workshop bringing together demographers and epidemiologists. (Both the initial set of hypotheses as well as an attendance list of workshop participants are included in the appendix). The spatial context within which discussion took place was South Africa. Toward the end of the workshop, discussion was more sharply focused on particular relevant variables within the Western Cape.

3. Clarification of key ideas

Migration in its generic sense relates to people who leave the community where they were born. It relates to movement from one spatial area to another, from a sending area to

are receiving area. Further moves need also to be considered. There exist three models that often appear in analyses of migration in South Africa - Circulatory migration, Oscillating migration, Gravity flow migration. Each is closely tied to the notion of **urbanisation** and to the fact that jobs and income dominate people's reasons for moving.

Circulatory migration typically refers to a person who moves to town fairly early in adult life, either with a family or to establish a family soon after arrival. At retirement, this person (possibly with family members) returns to the rural home.

Oscillatory migration typically refers to labour migration: an adult moves in search of a job, returns to the rural home after this job has been completed and then repeats the cycle. This form of migration is often undertaken by individuals without their families. The third model of migration is *gravity flow* where people migrate permanently and move typically toward urban places.

For African migrants, it was noted that labour migration in South Africa has diminished substantially during the past decade and that gravity flow migration has been picking up. In the Western Cape (though not necessarily elsewhere in South Africa), there has been a significant drop in circulatory migration.

Social capital refers to the extent of trust that exists between residents in a community. Migrating households consider their social networks, and their kin networks in particular, as important resources. Members of these households accordingly continually invest in the maintenance of these links, in the caring of this social capital. Accordingly, it is important to identify this social dimension when a sending area and a receiving area are defined in migration analysis. People define their community of birth and community of current residence as much in such social terms as in terms of administratively defined borders (such as municipal and provincial boundaries).

A **pandemic** refers to a series of epidemics sharing similar epidemiological features or to epidemics present in more than one country in a region or to an epidemic of global proportions. By the first two criteria, the current HIV/AIDS epidemic in South Africa qualifies as a pandemic. (Some argued however that the term epidemic was more appropriate in South Africa).

4. How migration affects the spread of the pandemic

In the initial set of hypotheses developed (see appendix), three dimensions were identified: migration is selective *inter alia* in terms of age, gender, class and marital status and accordingly, the profile of an important sending community and of an important receiving community will differ in terms of such selectivity. In the second place, the

nature of trust and ties, of social capital, in such as sending and receiving community will differ, particularly for migrant individuals and households. Third, migration (and gravity flow migration in particular) is often step-wise. Individuals and households move more than once. These three dimensions may significantly influence the sexual behaviour of migrants.

Accordingly, a simple way to illustrate the hypotheses flowing from such an analysis regarding the influence of migration on the pandemic is to consider the abstract taken from a recent publication on the issue in Kenya:

The association of migration with AIDS in sub-Saharan Africa is well documented, yet the social and behavioral mechanisms underlying this relationship remain poorly understood. Using data from the 1993 Kenya Demographic and Health Survey, this article examines **whether migrants are more likely than nonmigrants to have multiple recent sexual partners and not use condoms with those partners**. Results indicate that **migration is a critical factor in high-risk sexual behavior and that its importance varies by gender and by the direction of movement**. Independent of marital and cohabitation status, social milieu, awareness of AIDS, and other crucial influences on sexual behavior, **male migrants between urban areas and female migrants within rural areas are much more likely than nonmigrant counterparts to engage in sexual practices conducive to HIV infection. In rural areas, migrants from urban places are more likely than nonmigrants to practice high-risk sex**. Given the predominance of men in urban migration and the large volume of circulatory movement between urban and rural areas, these results have serious implications for HIV transmission throughout Kenya. (compilers' emphasis)

('Migration, sexual behavior and the risk of HIV in Kenya' Brockerhoff & A E Biddlecom' *IMR* 33(4) 1999: 833-856)

It is often argued at the macro level that the spatial spread of the pandemic in Southern Africa may have followed important migration routes, in particular from south-east Africa into KZN (high prevalence) and Mpumalanga and subsequently along the eastern seaboard of South Africa, from ECape (low prevalence) to WCape (even lower prevalence), implying that the pandemic is further advanced in KZN than in the EC and in the WC. However, the example of the Northern (now Limpopo)

Province which has low prevalence however may be seen as a counterfactual. 1. Empirical evidence currently available and such macro explanations of the spread of the disease as a result of migration appear to be incomplete and at best, only partial explanations.

5. How the pandemic affects migration

Once an individual becomes aware of HIV -infection, or of being AIDS -sick (or aware of someone in this condition within the household) there are (at least) three pertinent motivational factors leading to a migration decision related to the pandemic: infected persons migrate (with or without their households)

- in search of improved medical services;
- in search of improved family or kin support; or
- to return to their community of birth to die (and accordingly to be buried in their ancestral home)

(A fourth and more indirect driving factor is migration consequent upon job loss due to infection or sickness)

This analysis however assumes that the individual in question is aware of his or her medical status. Currently, the large majority (probably in the region of 90%) of HIV -infected persons in South Africa are unaware of their status. Other than for those who *anticipate* the need for improved medical services or better kin support, the HIV -infected status in itself will have no effect on migration decisions. (The one exception to this is pregnant women migrating to be tested in an attempt to try and prevent giving birth to HIV -positive babies) As self -knowledge of infected status becomes more current (as will probably be the case in the South African infected community during the next five years) , the effect on migration decisions will increase.

6. Relevant data.

At present, no reliable data relating migration to the pandemic exists for the South African case. Two case studies in local university student communities (UDW some 6 years back and RAU last year) have utilized survey questionnaire and saliva testing methods to establish a relationship between infection and a number of socio -economic factors. A larger survey will be undertaken by the HSRC using saliva testing to establish infection prevalence. This study will also generate migration history data for respondents. It represents the first possible source of representative data on the relationship. The study will face the challenge of possible refusal by respondents to donate saliva for the test . It should also be noted that HIV -AIDS

epidemiological data in general are fragmented and sometimes unreliable - for various reasons.

7. The Western Cape context.

Compared to other South African provinces, the Western Cape is highly urbanized (over 90%), at long distances from the Gauteng -Durban space economy, and dominated by the Unicity of Cape Town (in which two-thirds of the provincial population reside). In addition, in-migration toward the Province and its Unicity is comparatively large and out-migrations small in comparison. These migration streams moreover are ethnically distinct. African in-migration streams are the largest and comprise young households of rural (Eastern Cape) origin; White migration, though smaller, is also large and comprise older individuals and couples (many of whom move on to other destinations). Finally, among the majoritarian ethnic group in the province, the Coloured group net migration streams are smaller.

It is also significant to point out that if the Capere region -- comprising the three provinces of Eastern, Northern and Western Cape -- is viewed as a 'cell', lifetime migration (from birth to present residence) for Coloured and African individuals and households takes place, overwhelmingly, within this cell. White individuals and households move within a much larger national and international context.

According to available epidemiological data, it appears that infection rates in the African Western Cape community are high and comparable to those of the Eastern Cape. Rates in the Western Cape for other ethnic groups appear to be significantly lower. Insofar as such profiles are made public, there is a danger that racial stereotyping and stigmatization may take place, in both civil society and state bodies. A strategy needs to be developed in this regard.

8. Recommendations.

Workshop participants recommended that more information and analysis along the lines of the outcomes of the workshop ought to be generated. The critical importance of the issue was underlined, particularly since information about infection will probably become more widely known both at community as well as at individual levels. Information will also prove useful for the planning of services.

In particular, since this project forms part of a wider migration project being completed for the Provincial Administration of the Western Cape, it was recommended that the Province ought to develop ways of taking this initiative forward.

Appendix 1.

The participants present at the 7 March workshop were:

- Professor Simon Bekker, Sociology, University of Stellenbosch
- David Bourne, University of Cape Town, Department of Public Health - UCT Medical School
- Dr Debbie Bradshaw, Medical Research Council
- Dr Neil Cameron, University of Stellenbosch, Community Health Department
- Catherine Cross, Human Sciences Research Council
- Professor Rob Dorrington, University of Cape Town, Centre of Actuarial Research
- Assoc Professor Rob Shell, University of the Western Cape, Statistics Department
- Kozette Swart, Sociology, University of Stellenbosch.

(Representatives from PAWC and University of Cape Town as well as four other researchers were also invited but could not attend)

Documentation for this workshop: agenda and initial set of hypotheses.

1. INTRODUCTION

This sub-project of the PAWK migration study will be investigating the relationship between migration and the spread of HIV/AIDS. A workshop in this relation is therefore organized for the purpose of producing a report that will be presented at a validity -testing workshop together with the other sub-projects on migration. This document sets out the proposed aims, purpose and structure of the workshop.

2. AIMS

To bring together a small group of demographers and epidemiologists to:

1. elaborate on the prepared set of hypotheses (the 'instrument') on the relation between migration and the HIV/AIDS pandemic
2. brainstorm ways of testing these hypotheses in the South African context
3. propose future activities in this regard to PAWC

3. PURPOSE

The purpose of this workshop will be to produce a short paper capturing the most relevant proceedings of this workshop by reflecting the three aims above.

A three-hour workshop is suggested with the following structure:

1. Welcoming and introduction of participants

2. Clarification and criticism of the instrument
3. Elaboration of the instrument
4. Brainstorming of South African application
5. Recommendations for future

(Preparation: participants will receive a prepared set of hypotheses (instrument) before the workshop. They are requested to read this document and prepare 1 page written comments)

4. THE INSTRUMENT

The following hypotheses are suggested to illustrate the relation between migration and the HIV/AIDS pandemic:

1. General hypotheses regarding the reciprocal influence of HIV / AIDS and internal migration
2. The influence of migration on the pandemic
 - a. Migration is selective, particularly i.t.o. age, gender, class, and marital status. Migrant's profiles typically differ from the profile of the sending and the receiving communities
 - b. Migrants arriving in a receiving community are often with little or no social capital and need to establish themselves in communities of strangers
 - c. Migration is often step-wise - households move more than once, and during moves sometimes leave members behind

Accordingly, particular cohorts of migrants, (e.g. children, young single men, young women) are more at risk for infection - both as carriers of infections as well as becoming infected when entering receiving communities

3. The influence of the HIV/AIDS pandemic on migration
 - a. Infected people migrate in search of improved medical services
 - b. Infected people migrate in search of better family support
 - c. Job losses due to infection lead to migration

Appendix 2 A snapshot of HIV/AIDS in the province (R. Dorrington)

Overall spread of the epidemic

The HIV/AIDS epidemic in the Western Cape not only lags the epidemic in other provinces by a number of years but prevalence levels are expected to plateau at a significantly lower level, as can be seen from Figure 1, which compares the antenatal prevalence levels as projected by the ASSA 2000 model. The lag is undoubtedly due to physical allocation of the province while to a large extent the lower plateau is a function of the different demographic mix of the population in the Western Cape.

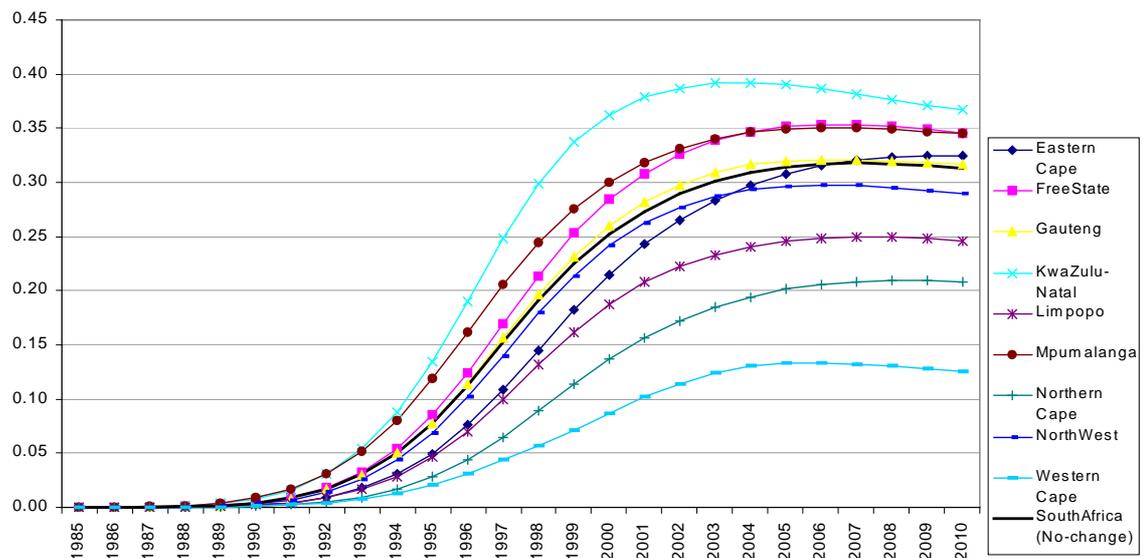


Figure 1. Comparison of the projected antenatal prevalence by province

Figure 2 shows the fit of the model to the antenatal survey points. Although the fit appears to be very good, there is some evidence, perhaps because the model does not adequately allow for in-migrants with a higher prevalence than the population they are joining, that the projections are on the high side.

Undoubtedly one of the major vectors spreading the epidemic into the black African townships in the early years was migrants from the Eastern Cape. However, prevalence levels in these townships are now comparable with those in the Eastern Cape and so it is unlikely that migration of infected people now has a major impact on the epidemic.

CalibrationData(HIVprevalence)-TotalPopulation

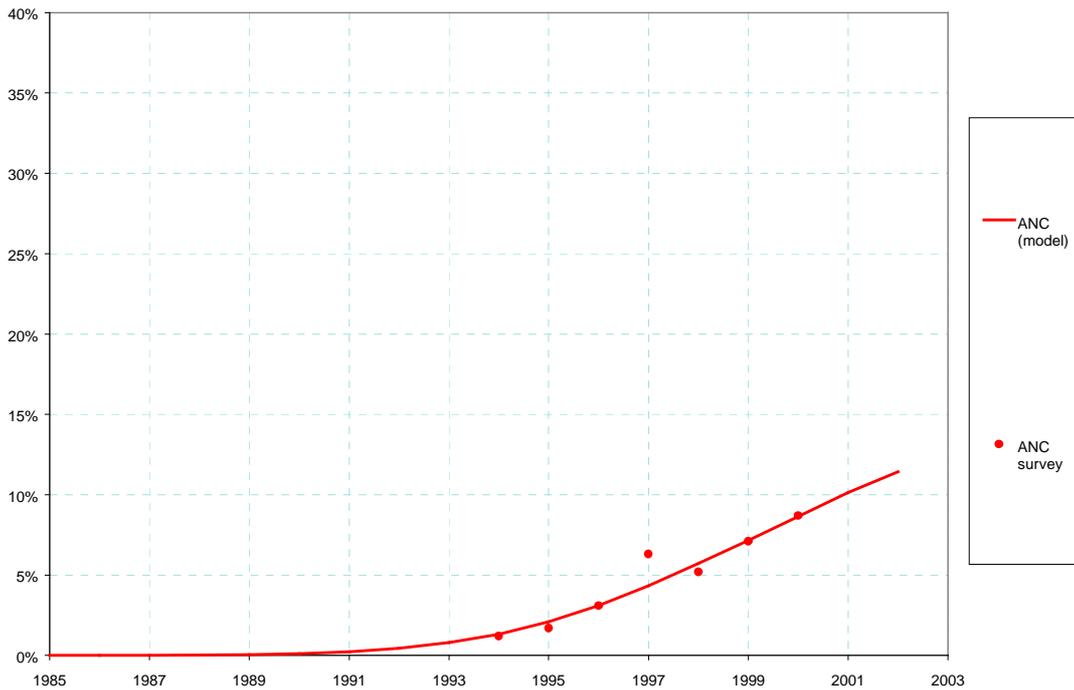


Figure 2. Comparison of model with the antenatal survey results

Geographical spread within the province

Although the province, for the first time last year, collected antenatal data from all the clinics, these results have not yet been made public, so the best we can do at this stage is consider the results of models set up to project the population by municipal and magisterial district. These results suggest the following prevalence levels by district:

<i>District</i>	<i>Prevalence among pregnant women (%)</i>	<i>Range (by municipal/magisterial boundaries) (%)</i>
Cape Town	9.2	4.4 – 16.4
DC1 (West Coast)	4.7	3.5 – 7.1
DC2 (Boland)	6.9	5.6 – 7.3
DC3 (Overberg)	7.4	4.1 – 10.2
DC4 (GrdnR/KK)	7.3	3.6 – 11.3
DC5 (CKaroo)	5.7	3.9 – 7.8

To a large extent the range of prevalence rates merely reflect the differences in demographic mix of the various districts. In addition to this, some districts are comprised of municipalities that are similar, and hence the prevalence rates are similar (e.g. DC2) and others, such as Cape Town, are very different, where prevalence rates range from a low of 4.4% for Bellville to a high of 16.4% for Mitchell’s Plain. However, once the results of the testing data are released one will get a much more accurate picture.