### Paper 4 HIV and fertility in South Africa: Some theoretical and methodological considerations

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In deliberating on the South African demographic landscape in 2002, two issues are prominent. The first is a sustained fertility transition (Moultrie & Timaeus, 2002) that is unmatched in the rest of sub-Saharan Africa, and the second is the devastating and ineradicable presence of HIV/AIDS morbidity and mortality (Varga, 1997). Here we have life and death issues linked via related factors that interpenetrate and inform one another in a complex nexus of reproductive health concerns. It is the objective of this paper to deliberate on these interconnections and to reassess demographic studies in this area as they straddle the gulf between scientific observation and description in a way that sometimes yields confusing results. The views offered by such studies are multiple and contradictory, revealing ruptures as well as continuities in the way sexual and fertility decision-making are perceived. In this respect Feyerabend (1970) wrote that unanimity of opinion may be fitting for some church, or for the followers of a tyrant, but it is most unfitting for science. Whereas it is almost old hat to lament the lack of demographic theory to assist in unraveling the interconnections between sexual decision-making and fertility behaviour, the sad fact remains that much of the existing theory and empirical research in this area fails to understand human social and demographic behaviour as largely symbolic or coded. Instead, socio-demographic behaviour, including intimate interpersonal behaviour, is seen as chronically rational and literal. This paper intends to demonstrate that it is difficult to untangle the web of forces linking HIV/AIDS and reproductive life in South Africa because the dynamics of sexual negotiation and decision-making and the role played by socio-cultural, economic and ideological factors in such dynamics are not well understood. In our third decade of sustained fertility transition and our second decade of AIDS, and after much deliberation, conferencing and research, we are hardly closer to unraveling the complex interconnections between HIV/AIDS and fertility.

### Why is the link between HIV/AIDS and fertility an important research focus?

The obvious answer to this question is that both HIV/AIDS and fertility pertain to the reproductive health needs of the population. Beyond this link, evidence from sub-Saharan Africa suggests that fertility is between 25 per cent and 40 per cent lower in HIV-positive women than amongst uninfected women (Zaba & Gregson, 1998; Gregson, Zaba & Hunter, 2002; Allen et al., 1993; Ryder et al., 1991). This needs further elaboration and to do so we have to consider the intricate interconnections of determinants that influence both fertility and HIV/AIDS. Before exploring this, I would like to suggest a few socio-demographic consequences of this hypothesised fertility-suppressive effect of HIV seroprevalence. The first and most worrying of these consequences is that the lower fertility performance of HIV-positive women implies that HIV-data based on antenatal surveillance will understate the true levels of infection amongst women of reproductive age (Gregson, Zaba & Hunter, 2002). At the time of writing, antenatal surveys were the only sources of information on HIV prevalence in South Africa, despite scepticism regarding the methodology. Such sources do not provide prevalence rates for males or age groups below 15 and above 50 years.

Second, the interrelatedness of HIV/AIDS and fertility yields a complex web of factors spanning both individual-level and population-level factors. At the level of population, AIDS mortality implies a loss of reproductive potential, whereas HIV affects fecundity via its link to other sexually transmitted infections (STIs). The mechanism works as follows: women already infected with STIs including HIV may have a lower parity due to impaired fecundity and may die before they reach the end of their reproductive age span, thereby potentially enhancing the fertility effect in some indices of birth performance in a population (Gregson, Zhuwau, Anderson & Chandiwana, 1997). In addition, the tempo and quantum effects of fertility may over time reflect a widening gap as the commencement of permanent unions or marriage are postponed in reaction to the socio-economic insecurities brought about by high levels of adult mortality due to HIV/AIDS. The structural changes in

population characteristics and processes due to HIV/AIDS mortality that will result in changes in fertility are at present the stuff of speculation and armchair modelling. Let us therefore first take account of the current situation in South Africa concerning fertility and HIV/AIDS.

# The current situation: A continued decline in fertility and rampant HIV/AIDS

According to UNAIDS (1998b) two out of three adults infected with the HIvirus were living in Africa. Of equal concern is the fact that nearly 90 per cent of HIV-infected children are living in Africa. Moreover, statistics for 1998 reveal that:

- 590 000 children under age 15 were newly infected with HIV;
- One-tenth of all new HIV infections were in children younger than 15;
- Approximately five persons between the ages of 10 to 24 are infected with HIV each minute;
- Nine out of ten new infections in children under 15 were in sub-Saharan Africa;
- Almost 510 000 children younger than 15 years died of AIDS-related causes in 1998;
- In 1999 there were 4.2 million people living with HIV/AIDS in South Africa; and
- The HIV prevalence rates amongst women of reproductive age are 36 per cent for Botswana, 25 per cent for Swaziland and Zimbabwe, 24 per cent for Lesotho and 20 per cent for Namibia, South Africa and Zambia (UNAIDS, 1998a).

Findings of the ninth antenatal clinic HIV surveillance survey conducted in 1998 (DoH, 1999) reveal that infection rates amongst South African women of reproductive age are still increasing. In 1990, less than one per cent of women attending public antenatal clinics were infected. By 1998, this figure had increased to 22.8 per cent. The growth curve in the number of infected women was virtually exponential over the past decade. As yet there are no signs that this trend will be reversed in the near future. Provincial infection rates vary greatly. Whereas about one-third of all women attending government antenatal services in KwaZulu-Natal are infected, only about five in 100 women in the Western Cape are HIV-positive.

Region		AIDS		
	Total	Adult prevalance rate* (percentage)	Percentage of HIV positive adults who are women	orphans
Sub-saharan Africa	29 400 000	8.8	58	12 100 000
East Asia and Pacific	1 200 000	0.1	24	5 600
Australia and New Zealand	15 000	0.1	7	120
South and Southeast Asia	6 000 000	0.6	36	850 000
Eastern Europe and central Asi	a 1 200 000	0.6	27	500
Western Europe	570 000	0.3	25	9 000
North Africa ar the Middle Eas	nd t 550 000	0.3	55	15 000
North America	980 000	0.6	20	70 000
Caribbean	440 000	2.4	50	85 000
Latin America	1 500 000	0.6	30	110 000
World	42 000 000	1.2 (38 000 000)	50 (19 200 000)	13 200 000

#### Table 4.1 Global HIV/AIDS estimates

\* This is the proportion of adults, 15 to 49 years of age. In 2002, 3.2 million children under the age of 15 years were living with HIV/AIDS.

Source: UNAIDS/WHO, 2002

The AIDS epidemic commenced more recently in South Africa than in Botswana or Zimbabwe, and due to this later start, the major demographic impact is both still to come and the subject of much speculation. The United Nations speculates that by 2015, South Africa's population will be 16 per cent smaller than it would have been in the absence of HIV/AIDS (UNAIDS, 1998a).

South African fertility is currently stabilising at a level close to replacement (TFR was estimated at 2.43 in 2001) – the lowest in sub-Saharan Africa. Despite three decades of fertility decline, South Africa still has a young fertility burden with one-sixth of all births to women in the 15 to 19 year-old age group (Moultrie & Timaeus, 2002). In addition, the fertility transition in

Province	HIV infection rate (percentage)			
KwaZulu-Natal	32.5			
Mpumalanga	30.0			
Free State	22.8			
Gauteng	22.5			
Northwest	21.3			
Limpopo	11.5			
Eastern Cape	15.9			
Northern Cape	9.9			
Western Cape	5.2			

Table 4.2 HIV prevalence by province, 1998

Source: DoH, 1999

**Table 4.3** Estimates of total and age-specificfertility rates, South Africa, 1996

Age group	Age-specific fertility rates
15–19	78
20–24	151
25–29	156
30–34	125
35–39	87
40–44	42
45–49	7
TFR	3.23

Source: Moultrie & Timaeus, 2002

South Africa is marked by a substantial increase in the birth interval, from a mean interval of 30 months in 1970 to a mean interval of 50 months in 1996 (Moultrie & Timaeus, 2002).

At the launch of the State of South Africa's Population Report (DoSD, 2000) on the 15th of September 2000, Jacques van Zuydam,<sup>1</sup> the head of the National Population Unit, claimed that fertility transition in South Africa took place in the absence of significant empowerment<sup>2</sup> of women. In the aforementioned report it is stated that:

There is general agreement that fertility began to decline among all major population groups in South Africa during the apartheid era. This occurred amidst the impoverishment of millions (especially African women), stark inequalities and the disempowerment of women. (DoSD, 2000, p. 40)

This summation of fertility trends in South Africa bears witness to the success of the family-planning programmes under the apartheid regime to lower fertility, but the same cannot be said of the programme's successes in respect of the International Conference on Population and Development's (ICPD)<sup>3</sup> emphasis on the empowerment of women. In fact, what does fertility transition mean within a context where actual female empowerment is lacking? We might begin to formulate answers to these questions by looking at biological and behavioural factors affecting both HIV/AIDS and fertility decision making.

### Individual-level factors: the interplay of social, economic and biological aspects

Biological or physiological aspects form, contribute to and act as obstacles to addressing the health and other needs experienced by HIV-positive women of reproductive age in South Africa. The lack of female empowerment within fertility decline in South Africa is an unresolved issue that goes to the deepest heart of demography as a social science and poses new questions about family-related behaviours such as childbearing and childrearing.

Another question that arises from the interplay between social and biological factors at the individual level is whether and to what extent HIV-positive women participate in (or have internalised) the somatisation<sup>4</sup> of their own lives and have constructed understandings of their own ability (or inability) to cope with their reproductive health. In this respect Littlewood (1999) states:

Understanding any illness as a biosocial pattern requires both an interpretation of how individuals choose or see themselves as constrained to engage in the illness for certain ends, explicit or otherwise, together with an explanation of its preconditions and influences. (p. 138) This biosocial pattern that links HIV/AIDS and fertility can be examined at the level of biological and behavioural factors. Although this is a false distinction that negates the move toward full embodiment in the social scientific study of health and illness, we may briefly indulge this dated framework to address some of the questions posed in this paper.

The biological factors that are associated with lower fertility in HIV-positive individuals are related to:

- Lower coital frequency due to illness;
- Less sperm production;
- The co-presence or epidemiological synergy of other STIs;
- Weight loss that leads to amenorrhoea; and
- Foetal loss.

Of greater importance for the purposes of this discussion is how people translate these biological realities and how this affects their demographic decisions and behaviour.

### Individual-level factors and fertility desires: behavioural change in response to HIV/AIDS

At the level of behaviour, an important consideration in sub-Saharan Africa is the fact that many men and women are unaware of their seropositive status unless they are specifically tested (as in the case of antenatal clinic clients) or they become ill. The question then arises how do couples or individual women react upon learning about their own seropositivity as far as their reproductive careers are concerned. Worldwide, the largest proportion of HIV-infected women are at an age when they are under strong social and cultural pressure to bear children and many of these young women only learn about their HIV-status once they have fallen pregnant and attend antenatal clinics (Dowling, 1994; Rutenberg, Biddlecom & Kaona, 2000). Within a context in which female empowerment is not fully achieved, fertility desires are driven by socio-economic considerations and social and familial obligations to provide offspring.

As pointed out earlier, the trend in Africa (including South Africa) seems to suggest that a woman might only learn about her seropositive status during antenatal testing and by that time she is already on her way to adding another pregnancy to her reproductive career. For a woman who has not reached her target number of children, learning about a condition that will forever alter her own reproductive options can be a devastating denial of her own future.

Sunderland (1990), in her study of the reproductive choices of HIV-positive women, found that 50 per cent continued their pregnancies to term. Two other notable studies in this regard are those by Levine and Neveloff Dubler (1990) and Arras (1990). Both these studies investigated reproductive decision-making in HIV-positive Western women and both suggest counselling for such women to 'lead full lives independently of reproduction' (Levine & Neveloff Dubler, 1990, p. 345) or to make different choices based on 'moral education' (Arras, 1990, p. 374). Curann (as quoted in Sunderland, 1990, p. 16) of the Centres for Disease Control's AIDS Program states: 'Someone who understands the disease and is logical will not want to be pregnant and will consider the test results when making family planning decisions'. Wilton (1997) emphasises that blame is often attached to any woman who falls pregnant in her HIV-positive state: 'But concern for the baby always outweighs concern for the mother, and a mother who, along with giving life, gives her baby a fatal illness becomes the opposite of a mother' (p. 70). Likewise, Teichler (1988) says:

Sex partners of drug addicts, who, like transfusion cases, are often infected without their knowledge (even knowledge that their partner may be at risk for AIDS) are sympathetic victims up to the point when they become pregnant, when they become baby killers. (pp. 210–11)

Bennett, Casey and Austin (1996) suggest that, 'When it comes to bearing children, the main message HIV-positive women are receiving from healthcare professionals (general practitioners in particular) is *not* to get pregnant' (p. 185).

Transplanting these ideas to contexts in which reproduction is part of female identity somehow rings false. Here, Singer's (1993) observation is particularly apt as she states that, 'arriving at the idea of self as an agency of choice depends upon being in a situation open to such possibilities. In patriarchy, this pluralization of possibilities is a dimension of male privilege' (p. 138). The prescriptive approaches of the abovementioned researchers silence the voices of women – a typical form of 'othering' that aims at telling HIV-positive

persons how to be, how to behave and how to be more responsible. In this respect, Hauer<sup>5</sup> (cited in Panos Institute, 1990b) makes a more insightful comment:

For many women, childbearing is seen as life-affirming in the face of poverty, drug use, racism, and perhaps the loss of other children to foster care or AIDS. In addition, even a 50 per cent perinatal transmission rate is perceived by some women as an acceptable risk. (p. 47)

In South Africa, most HIV-infections occurred in the mid- to late 1990s and HIV/AIDS is now reaching its morbidity and mortality peaks. This might lead to the idea that childbearing should be put on hold. There is, however, a paucity of empirical information to confirm whether individuals will act in accordance with this view. In fact, the little evidence available seems to suggest that there are few significant responses to HIV-infection in the form of sexual or contraceptive behaviour. In 1989, Professor Caldwell predicted that HIV/AIDS would hasten the onset of the fertility transition in Africa and would transform reproductive regimes. Almost a decade later, and after careful review, he concluded that although fertility declines were in evidence, behavioural change in response to HIV/AIDS was not (Caldwell, 1997).

Another level at which HIV-positive status as a physical reality operates to feed into the social, is in the area of stigmatisation. A woman who wishes to adhere to the social obligations and rewards of reproduction may wish to protect herself against possible social rejection and abandonment. Falling pregnant and giving birth would then have the social currency of dispelling any possibility that the woman is too ill to bear children (Rutenberg, Biddlecom & Koana, 2000).

These fears may even fuel a wish to have more, or more closely spaced, births (Temmerman, Moses, Kiragu, Fusallah, Wamola & Piot, 1990; Lutalo et al. 2000; Rutenberg, Biddlecom & Koana, 2000; Temmerman et al., 1994). In other words: to achieve a prior set of fertility desires, couples or individual women may deliberately shorten the space between births. Although there are not many studies in sub-Saharan Africa that focus on the ways in which consciousness of HIV/AIDS is, or is not, transforming reproductive strategies, the results render a confusing and contradictory picture.

Fear of stigmatisation and community rejection seem to keep fertility desires amongst HIV-positive couples high in Abidjan, Côte d'Ivoire (Aka-Dago-Akribi, Du Lou, Msellati, Dossou & Welffens-Ekra, 1999). Husbands' insistence on having more children and wives' fear of abandonment are cited as reasons for the non-adoption of contraception amongst HIV-positive couples in Zimbabwe (Meursing & Sibindi, 1995). Rutenberg, Biddlecom & Koana (2000) conclude that HIV/AIDS indirectly affects the fertility preferences of couples in Zambia. According to these researchers, fertility preferences irrespective of HIV/AIDS are already transforming toward a smaller ideal family size and it is the concern about the economic burden of caring for orphaned family members that indirectly exerts further downward pressure on fertility preferences in Zambia. In a study in Zimbabwe, Gregson et al. (1997) found that a small proportion of women consciously shorten their birth spacing upon learning about their HIV-positive status. The majority of HIV-positive women in this study, however, perceived longer birth intervals to be a better option to allow the woman to recover from the pregnancy or birth and to reassess the couple's economic situation. Is this possibly also a reason for the perceived increase in birth intervals in South Africa? Unfortunately, the survey data at our disposal cannot provide us with clear answers to this question.

Analyses from the South African Demographic and Health Survey (SADHS) reveal that South African women have fairly low fertility aspirations. It was possible to calculate from the data the proportion of sexually active women of reproductive age not using contraception but, at the same time, expressing a desire to either avoid further or future childbearing or to better space their future births. This construct is commonly referred to as the proportion of women of reproductive age who have an unmet need for family planning. Fifteen per cent of currently married South African women have an unmet need for family planning. The corresponding proportions for all women are ten per cent and for unmarried women six per cent. Moreover, the SADHS results reveals that more than a third (36 per cent) of recent births to South African women were reported as mistimed. Almost one in every five births (17 per cent) was not wanted at all. These findings are profound indicators of the extent of fertility control failures in South Africa. The figures for unwanted and mistimed pregnancies are high for South Africa when compared with Demographic Health Survey results for other African countries, for example Zimbabwe, 34 per cent mistimed and 10 per cent unwanted; Namibia, 21 per cent mistimed and 12 per cent unwanted (Du Plessis, 1999).

Background	Unmet n	eed for family p	Number of	
characteristic	For spacing	For limiting	Total	women
Age				
15–19	25.0	1.2	26.1	73
20–24	12.8	5.3	18.1	465
25–29	7.0	6.0	12.9	900
30–34	4.2	9.0	13.2	1 008
35–39	2.6	12.3	14.9	1 114
40–44	2.2	12.3	14.6	865
45–49	0.9	16.7	17.6	652
Residence				
Urban	2.8	8.1	10.9	3 038
Rural	7.5	13.5	21.0	2 039
Education				
No education	6.2	19.1	25.3	518
Grade 1 to 5	7.3	12.6	19.9	739
Grade 6 to 7	4.5	13.6	18.1	762
Grade 8 to 11	4.8	8.7	13.5	1 876
Grade 12	3.0	6.7	9.7	748
Higher	1.1	3.3	4.3	434
Group				
African	5.9	12.4	18.3	3 628
Coloured	2.4	6.0	8.4	553
White	0.7	4.0	4.6	615
Asian	0.7	4.9	5.7	250
Group				
African urban	3.8	10.4	14.2	1 810
African rural	8.0	14.3	22.3	1 818
Total	4.7	10.3	15.0	5 077
Not currently married	2.8	3.0	5.7	6 658
All women	3.6	6.1	9.7	11 735

 Table 4.4 Unmet need for family planning services, South Africa, 1998

Source: SADHS, 1998

Birth order and mother's age	Planning status of birth (includes current pregnancy) (percentages)					Number of births
	Wanted then	Wanted later	Wanted no more	Missing	Total	
Birth order						
1	38.6	51.8	8.3	1.3	100.0	1 794
2	53.6	31.7	13.5	1.2	100.0	1 336
3	54.6	27.4	16.9	1.1	100.0	843
4+	42.1	23.5	32.5	1.9	100.0	1 430
Age at birth						
< 19	20.2	65.8	12.5	1.6	100.0	900
20–24	42.9	44.2	11.7	1.2	100.0	1 410
25–29	57.4	28.4	12.9	1.3	100.0	1 279
30–34	57.2	21.5	20.2	1.1	100.0	988
35–39	49.4	14.1	35.2	1.3	100.0	612
40–44	38.9	20.4	35.4	5.3	100.0	187
45–49	37.7	19.3	43.0	0.0	100.0	28
Total	45.7	35.5	17.3	1.4	100.0	5 404

**Table 4.5** Planning status of births in the five years preceding the survey, according to birth order and mother's age at birth, South Africa, 1998

Source: SADHS, 1998

In the next section of the paper, I discuss factors related to both HIV/AIDS and fertility by using the familiar framework of proximate determinants of fertility. These factors are sexual unions or marriage, the use of contraception, induced abortion and voluntary and involuntary infertility (Bongaarts, Frank & Lesthaege, 1984; Bongaarts & Potter, 1983; Davis & Blake, 1956). I discuss the interrelatedness of each of these factors with HIV/AIDS and fertility in turn in the next section.

# The formation, duration and dissolution of sexual unions: why do women take part in unprotected sexual intercourse?

Since the HI-virus was first identified in 1981 its spread has largely been associated with unprotected sexual intercourse. In this regard, the prevalence of

Country/group	Total wanted fertility rate	Total fertility rate
South Africa, 1998	2.3	2.9
Cameroon, 1997	5.2	5.9
Ghana, 1997	4.2	5.2
Kenya, 1997	3.4	5.3
Nigeria, 1997	5.8	6.1
Rwanda, 1997	4.3	6.1
Senegal, 1997	5.0	6.0
South Africa, 1998		
African	2.4	3.1
Coloured	2.1	2.5
White	1.5	1.9
Asian	1.5	1.8
South Africa, 1998		
African urban	1.9	2.3
African rural	3.0	4.0

**Table 4.6** Comparative figures for total wanted fertility rates and total fertility rates, South Africa and selected sub-Saharan countries

Source: SADHS, 1998; Bongaarts, 1997

multiple sexual-partner relationships was an almost obsessive focal point in AIDS research. Sociological investigations<sup>6</sup> into HIV/AIDS tend to focus on behavioural aspects or on knowledge, attitudes, beliefs and practices regarding HIV/AIDS (the so-called 'KABP-studies'). KABP-studies provide interesting baseline information, but cannot tell us anything about interpersonal, cultural and socio-economic factors in sexual decision-making and behaviour. Given that the KABP-studies undertaken in Africa and locally indicate relatively high levels of the awareness of the modes of transmission of HIV, the question arises: Why do women partake in unprotected sexual intercourse? Obbo (1995) says: 'The student who needs to receive good grades, a worker who needs to keep a job or to be promoted, or a poor woman with no alternative way to generate an income that constitutes a living wage is in no position to say no to AIDS' (p. 81). Varga (1997) mentions a host of reasons, such as female socio-economic disempowerment, gender-biased culturally sanctioned powerlessness of women, women's emotional intimacy needs, women's lack of intimate communication skills, the powerful symbolic value of condomless sex as indicating trust and love, the stigmatisation of condom use and women's obligations to fulfil gender and familial roles through pregnancy and childbearing.

The emphasis on women in these studies is not coincidental. As explained earlier, since the late 1980s there has been a steady increase in HIV infection amongst women, and in sub-Saharan Africa, women comprise 52 to 55 per cent of HIV-infected persons (AIDSCAP, 1996). In South Africa, 48 per cent out of 8 571 AIDS cases reported to the DoH between 1982 and 1995 were women (Sidiropoulus et al., 1996). The overall HIV-infection rate amongst women in South Africa increased from 7.6 per cent in 1996 to 14.1 per cent in 1997 (Moleon, 2000).

This brings to the fore the issues of the social vulnerabilities of women, their socio-economic characteristics, perceived gender roles, ethnic identity and support systems. Farmer (1995) notes how poverty affects monogamous sexual unions in Haiti, forcing women with dependants into patterns of serial monogamy in a quest to find a financially secure partner. Orubuloye, Caldwell and Caldwell (1993) cite the economic dependence of women and weakening of lineage ties as reasons for persistent unprotected sex in Nigeria. McGrath, Rwabukwali & Schumann (1993) observe that economic need and culturally-sanctioned male high-risk sex are important factors to consider in Uganda. Schoepf (1995) mentions that poverty, prolonged economic hardships, structural adjustment programmes with an emphasis on the reduction in public health budgets (leading to the neglect of treatment for STIs that are important co-factors in HIV-infection), and institutionalised male dominance led to multiple-partner relationships, widening sexual networks and burgeoning HIV infection in the Democratic Republic of Congo.

In considering the socio-economic realities that shape the options open to South African women to protect themselves against unwanted and unprotected sex (of which a mistimed or unwanted pregnancy is one possible outcome and HIV infection another), some basic tensions between demographic research and AIDS research in demography's sister disciplines can be seen. These tensions centre on the notions of risk groups. Groups are often singled out for ethnographic HIV/AIDS research on the basis of their predisposition to perceived risk behaviours. The perverse use of so-called 'risk groups' in analysing and predicting the course of HIV/AIDS does nothing to encourage behavioural change as people construct themselves as not belonging to risk groups and it reinforces prejudices against certain groups. AIDS activists have already moved to the notion of risk contexts to refer to social, economic and political inequalities that form the fault lines for susceptibility to communicable disease. Risk contexts imply a contemplation of the prominence of material dimensions of risk embedded in the social realities of unequal opportunities in the educational, occupational and economic spheres and largely structured by race, gender and class.<sup>7</sup>

The use of categorisations and the creation of cohorts and distinct groups for the purposes of analyses, prediction and the working out of causal paths is a deeply entrenched working procedure in demography. In this respect, even a recent analysis of South African fertility patterns according to 'ethnicity's which claims to shed light on shifting identities and reproductive decisionmaking, leaves the conclusions firmly rooted in homogeneous, distinct, mutually exclusive and neat 'ethnic' categories (see Kaufman & James, 2001 and endnote 11 in this paper).<sup>9</sup> An apt appraisal of the shortcomings of such category-bound analyses can be found in the words of Appandurai (1993): 'Statistics are to bodies and social types what maps are to territories: they flatten and enclose' (p. 334).

'Unmet need' and 'at risk' are thus labels that carry the danger inherent in the use of any label; namely that labeling diverts attention away from the social circumstances that place these women at risk and locates the risk within these women themselves. Following such a shift in focus, the burden of transformation is placed on the shoulders of the affected group, whilst the larger society is absolved from any responsibility to address the inequalities of race, class and gender that create the conditions of risk. In terms of HIV/AIDS, 'safe sex' – as opposed to the category 'high-risk sex' – is equated with monogamous marital sex (or at least stable consensual unions), yet practices such as incest and intramarital rape persist (Singer, 1992). In that sense, HIV/AIDS discourse has reinvented the social myth that two-parent, stable families are the optimum social space for children:

One of the strategic utilities of the campaign for safe sex is the possibilities such a discursive framework offers for remarketing the nuclear family as a prophylactic social device. (Singer 1992, p. 68) The 'family' has not historically been proven to be a safe haven for women and children. Russell's (1982) research on marital rape, for example, reveals that sexual violence by husbands occurs along a continuum of coercion, intimidation, claims to ownership, rights and needs, economic pressure, persuasion and 'traditional' interpretations of marriage. Keeping in mind that according to the World Health Organization (WHO), unprotected heterosexual sex accounts for 70 to 75 per cent of all HIV infections worldwide (Wilton, 1994), unless male fidelity can be assured, conception cannot be combined with sex that is safe for women and their unborn children (Doyal, 1994).

I have already mentioned Professor Caldwell's (1997) conclusion that behavioural change in response to HIV/AIDS is lagging behind fertility transitions in Africa, and data from sub-Saharan Africa confirms that there is very little evidence to suggest that the threat of HIV/AIDS is changing sexual behaviour in any discernable way (Rutenberg, Biddlecom & Kaona, 2000). In 1990, van de Walle (1990) made this bold prediction:

It would be surprising if a much stricter sexual morality were not to emerge from the crisis. In the long run, sexual behaviour and marriage customs are likely to be profoundly transformed. Two pillars of the present nuptiality system in much of sub-Saharan Africa, the large difference in age at marriage and polygyny are likely to crumble under the impact. (p. 29)

Although this hypothesis still has to be tested with evidence from Africa, the evidence shows that HIV/AIDS flourish conjointly with inequality,<sup>10</sup> poverty, and the sex trade (Paicheler, 1992; Wilton, 1997). Van de Walle's (1990) predictions flagrantly ignore the multifaceted and fractured nature of nuptiality and family formation prior to the AIDS crisis. The role of apartheid, pass laws and the creation of homelands in the fracturing of black families in South Africa is a reality to be reckoned with in any consideration of family formation and fertility. Berger (1992) points out that women responded actively to these situations through concerted efforts to ensure economic self-sufficiency for themselves and their children. Thus it was not merely a case of a state-led breaking down of families, but rather a case that through the agency of women, family and domestic life was refashioned in accordance with the constraints enforced by institutionalised racism. As Berger (1992) explains:

Family relationships were being reconstructed in new ways that stressed the connection among women, children, and other female kin. This reorganisation of family life occurred because so many women became actual or de facto household heads at an early stage of their lives. (pp. 244–5)

Harrison, Lurie and Wilkinson (1997) conclude from their ethnographic study in a rural village in KwaZulu-Natal that consensual unions are fluid and changing. Preston-Whyte (1993) adds that for many South African women this reorganisation of domestic life implied a break between the socio-cultural institutions of childbearing and marriage and unmarried childbearing (by own volition or by default) and established an alternative route through a life in which choices were constrained by a lack of freedom and a desperate struggle for survival. Kaufman and James (2001) come to similar conclusions regarding Sotho and Ndebele women in South Africa, namely that these women reshaped their identities and actively recreated their reproductive careers and domestic arrangements to accommodate changing circumstances.<sup>11</sup>

Singer (1992) and Richardson (1994) observe that the very notion 'safe sex' is part of a male-dominant, phallocentric, classist and exclusionary discourse. It assumes that sex was safe prior to the problem of HIV/AIDS. Singer (1992) states:

Sex was safe, it seems, as long as it was mostly women who died for and from sex in childbirth, illegal abortions, faulty contraception, rape, and murder at the hands of their sexual partners. (p. 67)

Wilton (1997) adds to this:

Reproductive heteropolar regimes of gender have always made sex dangerous for women. The discursive package 'gender' constitutes femininity as inherently passive, responsive, responsible, nurturative and innocent of sexual desire/agency and masculinity as inherently active, initiating, irresponsible, unattached and potent with sexual desire/agency. (p. 126)

Even within stable consensual relationships, dangerous sexual practices such as 'dry sex' (the use of astringent preparations such as Dettol, Betadine powder, small stones, leaves, newspaper, tissues, cloth for douching or wiping the vagina before sexual intercourse) are directly and primarily aimed at male pleasure and may lead to abrasions that may increase the risk of STIs including HIV (Halperin, 2000). Cameron (1992) points out that in terms of the risk of HIV-transmission, phone-sex and certain forms of pornography can also be construed as 'safe sex', yet these practices carry physical and psychological threats for women. In addition, history reveals the violent appropriation of female bodies during colonial occupation and military invasions and the continued practice in the postcolonial global market via sex tourism.

In terms of fertility, the proportion of women in consensual unions is important, but so also is the age of entry into such unions, the duration of these unions, the sexual frequency in stable consensual unions and the mean number of fecund years spent outside of consensual unions (or spent not being exposed to the risk of conception in the absence of intentional family-planning efforts). Kaufman and James (2001) for example, found higher recent fertility rates amongst black South African women whose male partners return home only once a month or less, and they conclude that:

Men's migration plays a decisive role in reproductive outcomes, perhaps not in terms of a conjugal bond, but because of the ways in which women cope with the absence or lack of partners, through wage-earning activities or by establishing households on the basis of sibling or parental relationships. (p. 216)

Gregson (1994) hypothesises that HIV/AIDS may lead to rejuvenation in the age at entry into sexual unions. Two reasons are mentioned for this assumption. First, men might choose younger female partners with the assumption that they are more likely to be virgins or to have had fewer sexual partners and thus be HIV-negative. Second, teenage girls may increasingly be forced into sexual unions due to AIDS adult mortality and the resultant orphanhood and survival needs. Studies in Uganda, however, point out that such assumptions are unfounded as fear of HIV/AIDS exerts downward pressure on the age at first union and delaying marriage (Mukiza-Gapere & Ntozi, 1995; Asiimwe-Okiror, Opio & Musinguzi, 1997). Moreover, Caldwell (1997) hypothesised that, despite a dearth of evidence to draw any conclusions, HIV/AIDS will reduce the probability of remarriages. This hypothesis is supported by evidence from Zimbabwe (Gregson et al., 1997) and Uganda (Mukiza-Gapere &

Ntozi, 1995). The main reason for the decline in remarriages is the stigmatisation of widows whose partners have died of AIDS.

Before moving on to the use of condoms as another important proximate determinant in the nexus of factors affecting both HIV/AIDS and fertility, I wish to discuss sexual violence and the fear of violence under the broader subheading of why women might engage in unprotected sex. In this respect, Le Clerc-Madlala (1997), Varga (1997) and Varga & Makubalo (1996) point to the threat of physical violence or coercion as an important reason why South African teenagers engage in unprotected sex. Results from the SADHS reveal that 19.2 per cent of 5 077 currently married women (this is almost one in five women) suffered 'economic abuse' from their partners in the form of withholding of money to buy food or pay the rent or bills. In addition, 6.3 per cent of women reported physical abuse by a partner in the 12 months prior to the survey and four per cent of all ever-pregnant women reported that they were abused by their male partners during their pregnancies (DoH, 1999). Human Rights Watch (2001) reports a 20 per cent increase of rape and attempted rape in South Africa between 1994 and 1999. According to police statistics there were 51 249 cases of rape reported in South Africa in 1999 (Human Rights Watch, 2001). Hirschowitz, Worku & Orkin (2000) report that for the period 1996 to 1998, girls aged 17 years and vounger constituted 40 per cent of all reported rape and attempted rape victims. Observers mention the 'virgin cure myth' as a possible cause behind the increasing numbers of younger girls being raped or forced into sex (Human Rights Watch, 2001).

These shocking statistics, although disputed by some, provide a picture of women<sup>12</sup> whose reproductive health cannot be assumed to be a matter of free choice and informed decision-making. The current themes in South African public health education messages about HIV/AIDS centres around prevention through educating the youth about sexuality and the threat of STIs including HIV. The *leitmotif* is voluntary self-protection for the uninfected and compassion for the infected and the ill. In this respect, Aronowitz (1995) reminds us that 'compassion may itself be a substitute for justice' (p. 374). Whereas compassion always signifies inequality, justice may not be in the interest of the existing power structures as it might disrupt current power arrangements. Aronowitz (1995) observes:

Rather, the concern evinced by those in power for victims of AIDS, handicap, poverty, and other social diseases may be the occasion for a black-tie charity dinner, even as the charity diners cut public funds to the bone. (p. 374)

Wilton (1997) makes a scathing attack against the rhetoric of individual responsibility for health and points out how ridiculous such an individuated mode of thinking would be if applied to military defence in which each individual is made responsible for defending himself or herself against attack or invasion. Aronowitz (1995) emphasises:

Faced with the AIDS epidemic, to focus on self-help as some have done is to foreclose hope, except for the relatively small number of its victims who can be made more comfortable in their cline. (1995, p. 375)

In this bewildering context, the individual woman must exercise vigilance for her own reproductive health as ever more complex structures of power, domination and surveillance emerge.

### The use and non-use of contraception

The two central themes in this paper, namely HIV status and fertility decisionmaking, imply that the place of reason in sexual conduct has to be examined in order to locate desire (or preference) as an absent discourse in health, sexuality and HIV/AIDS. In other words, I wish to question the suitability of reasonable conduct or rational acts that process sexual facts as a model for sexual behaviour. Instead, I argue that sexual conduct is better regarded as interpersonal acts that are mediated by desire or preference. As Holland, Ramazanoglu, Scott, Sharpe and Thompson (1991) explain:

From a feminist perspective, using or not using a condom is not a simple, practical question about dealing rationally with risk, it is the outcome of negotiation between potentially unequal partners... In many sexual encounters women have little choice about whether or how to engage in sexual activity with men, the options being physical injury or more subtle forms of sanction. (p. 5)

Sobo (1993) asserts that condomless sex is used, 'as an adaptive and defensive practice that helps women maintain desired, idealised images of partners, relationships and selves' (p. 478). The assumptions of rationality in sexuality, individual choice and personal responsibility that underlie many public health care education campaigns, ignore the dynamics of relative power and different types of reasoned agency in sexual relations. This has the further discursive effect of transferring women's difficulties in translating knowledge about sexual risks into practice to the level of individual excuses (Richardson, 1994).

On the other hand Kline, Kline and Oken (1992) come to different conclusions regarding low levels of condom use. Instead of ascribing this to a female lack of agency in negotiating sexual matters, they cite women's low perceived susceptibility and a transition in gender roles as reasons for them engaging in unprotected sex. Sherr (1996) suggests that steering clear of pedestrian powerful/powerless dichotomies in discussing sexual relationships between men and women may go half way to solving this. In this regard she lists many scenarios portraying women's reactions to HIV/AIDS in heterosexual relationships that, she argues, can be seen as something other than lack of power – for example:

- Women's tendency to stay with their partners after disclosure of these male partners HIV-positive status is not powerlessness but 'commitment';
- Women's tendency to reveal their HIV-positive status to their male partner versus men's reported tendency not to disclose such details is not powerlessness but 'honesty';
- Women's reported greater exposure to unprotected sex from their HIV-positive male partners rather than the other way around is not powerlessness but 'male disregard', 'selfishness' and 'lack of responsibility';
- Women's reported greater tendency to be tested and to be tested without informed consent for HIV is not powerlessness but 'discrimination'; and
- Women's reported later attendance (in other words at more advanced stages of HIV-infection) for treatment and their tendency to rather bring their children for treatment than themselves is not powerlessness but 'self-sacrifice'. (Sher, 1996, p. 35)

I maintain that what Sherr lists as something other than female disempowerment is in the very fact dimensions of their disempowerment. By trying to move beyond a lack-of-empowerment-stalemate argument, Sherr is reifying the very issue she is intending to attack – lack of commitment, deceit, inattentiveness, egocentrism, disrespect, discrimination and self-deprivation reign supreme in heterosexual relationships precisely because women occupy a subordinate role. Freund (1998) puts it as follows: 'Their sense of reality, feelings and sense of self are "sacrificed" for purposes of maintaining certain family appearances' (p. 284). The consequence of one person in the dyad always undertaking the emotional work is that that person suffers the strain and develops a false consciousness, denial and a loss of authenticity.

This analysis is a hook on which to hang an understanding of how individuals can conspire as their own agents of social control or in reproducing adversarial arrangements. The chronic experience of emotional false consciousness thus has the consequence of reifying inequitable relationships and blaming the victim. By superimposing a Foucaultian term on Freund's analysis, we can deduce the consequence to be a docile body that, through a commitment to emotional work in close relationships, submits herself to surveillance, drug trials and dangerous sexual liaisons. Shilling (1993) makes the following assessment of Freund's work:

Freund's analysis not only examines some of the mechanisms by which society shapes our experiences of health and illness, but also has implications for how these experiences 'react back' upon social classifications and social relations. As Freund argues, the appearances and experiences of bodies act as concrete manifestations and prototypes of ideas about socially appropriate bodies, which can help sustain social divisions and inequalities. (p. 117)

The docile female body, accepting family-planning advice from a health expert who knows best, is a sad legacy of family planning programmes under the apartheid regime that enabled a fertility transition in the absence of actual female empowerment, which leaves HIV/AIDS education and the containment of new infections in the doldrums. In the words of Greenhalgh (1995):

The social construction of the family is seen as a political process that unfolds over time. It is political in that relations of power within the society both shape reproductive practices and in turn are shaped by them – thus, micro-power and micro-history become crucial dimensions of reproductive process. (p. 15) South African academics and activists tend to partake in continual reform mongering as far as the Information, Education and Communication (IEC) campaigns regarding HIV and public-health education are concerned. The current ABC-campaign (abstain, be faithful and condomise) aimed at the South African youth is one such target for criticism. The question arises whether the criticisms are justified. As far as the acceptance of modern contraceptives is concerned, it is important to note that the fertility transition in South Africa has been driven by a high prevalence of modern contraceptive use. Of greater importance for the purpose of this paper, however, are trends in the use of condoms to prevent STI and HIV infection, and trends in contraceptive use amongst HIV-positive women to prevent mother-to-child transmission. Although it is almost impossible in a macro-level analysis to sort out which proportion of the contraceptive prevalence rate is attributable to HIV/AIDS prevention, and which proportion to spacing and limiting of births, evidence suggests a substantial increase in condom use in Africa (see Table 4.7).

Country	1988–1994	1996–1999	
Côte d'Ivoire	14	23	
Ghana	4	14	
Тодо	4	16	
Zambia	9	17	
Zimbabwe	13	18	
Uganda	10	17	
South Africa	4.6 (1987-89 HSRC)*	22.2 (1998 SADHS)	
Cameroon	9	22	

Table 4.7 Percentage ever use of condoms (various DHS-rounds)

\* Unpublished tables

Evidence from the SADHS suggests that condom use is more common amongst younger, unmarried and urban women (DoH, 1999).

Notwithstanding these apparent increases in condom use, the stigma attached to condoms has an institutional antecedent. The previous family-planning programme tended to compartmentalise family-planning services from STI care delivery systems, with the former emphasising female hormonal methods for spacing and limiting births and the latter emphasising the prophylactic use of condoms for male protection against STIs. This, at least in part, informed a lay discourse that linked condom use to 'loose sex' and banished it to nonstable sexual unions. The only available study on dual-method use in South Africa (that is, the use of condoms in conjunction with another contraceptive method) indicates that the prevalence of this is low and that the decision to use a condom is more often the sole domain of the male partner (Myer, Morroni, Mathews and Little, 2002). However, as Caldwell and Caldwell (2002) observe, the ICPD ideal of integrating STI and family-planning services is not a feasible ideal in sub-Saharan Africa because the thinking about these two reproductive health issues, and the people and sexual dynamics involved, differ to a large extent.

# Voluntary infecundity: breast-feeding and post-partum abstinence

Breastfeeding and post-partum abstinence are regarded as stalwart proximate determinants of fertility in sub-Saharan Africa. At the same time, however, breast-milk is a vector for HIV. According to Carpenter et al. (1997), one of the central concerns in HIV/AIDS and fertility research is the need to predict the probable future burden of children infected via vertical transmission or the number of AIDS orphans.

At this juncture it might be helpful to review the available facts on mother-tochild-transmission ([MTCT] or vertical transmission). Information on the risks of vertical transmission is often confusing and overdramatised (Bennett, Casey & Austin, 1996). Pinch (1994) states: 'Current analyses of vertical transmission are artificially simplistic, positing rather sterile, empirical findings about the process for women, but lacking a full consideration of the multiple dimensions of womanhood involved' (p. 38). The risk of vertical transmission without any antiretroviral intervention ranges from 15 to 50 per cent. Transmission can occur during pregnancy or delivery. Breast-feeding introduces an additional risk of HIV transmission. In developing countries, an estimated one-third to half of all HIV infections are transmitted via breast-feeding (UNAIDS 1998b). Vaginal delivery carries a greater risk of HIV-transmission to the baby.

These biological co-factors that elevate the risk to both the mother and the baby are often discussed in ambivalent terms. So, for example, Caesarean

section, hypothesised to reduce the risk of vertical transmission by lowering the baby's exposure to blood and vaginal secretions, is termed a 'compromised benefit' (see Campbell, 1999, p. 42) due to the increased risk of maternal morbidity. In actual fact, poor women, without medical aid benefits and not near well-equipped medical centres, are more likely to have vaginal births or be denied Caesarean sections even if they wanted this. Furthermore, the following glib remark is made in respect of another important co-factor, breast-feeding:

It is recommended that (HIV) infected women not breast-feed their infants. In developing countries, however, because of their high infant mortality rates from infection and malnutrition and their lack of clean water to mix formula, breast-feeding is viewed as the best way in which children can be fed. (Campbell, 1999, p. 43)

Again, the message is: if you lack the financial and other resources, there is little you can do to protect yourself and your children from the ravages of HIV/AIDS. Surely, the provision of safe drinking water is given a further impetus with HIV/AIDS and cannot be used as a reason why an important risk co-factor cannot be addressed in a poor country. Whilst listing poor nutrition, low socio-economic status and limited access to health care amongst 'additional risk factors for poor pregnancy outcomes' (Campbell, 1999, p. 47) in HIV-positive mothers, Campbell makes the following assessment: 'Indeed, in assessing the impact of pregnancy on HIV disease it appears that these factors have a more adverse effect on HIV disease than does pregnancy itself' (p. 47). It seems a strange sorting-out of which risk factor belongs where and in what sequence. HIV infection moves along the social fault lines of inequality and disempowerment and it is almost commonplace that these factors are related with higher rates of maternal, child and general mortality and morbidity. Hankins (1996), for example, states: 'Income is a significant predictor of HIV status in women around the world with lack of economic autonomy appearing to be the major impediment restricting the ability of women to control their own sexual decision making, regardless of their HIV status' (p. 3). In the fictional absence of HIV infections, poor mothers who are malnourished and lack access to good quality medical care are at risk of maternal and infant morbidity and mortality.

Timing	Transmission rate (percentage)				
	No breast-feeding	Breast-feeding up to 6 months	Breast-feeding for 18 to 24 months		
During pregnancy	5 to 10	5 to 10	5 to 10		
During labour	10 to 20	10 to 20	10 to 20		
Through breast-feeding	g				
Early (first 2 months)		2 to 10	2 to 10		
Late (after 2 months)		1 to 5	5 to 10		
Overall	15 to 30	25 to 35	30 to 45		

#### Table 4.8 Estimated risk and timing of MTCT of HIV

Source: De Cock et al., 2000

De Cock et al. (2000) provide a more detailed account of the estimated risks of MTCT as reproduced in Table 4.8.

When the HIV-positive woman is asymptomatic, pregnancy or childbirth will not affect the progression of HIV or the onset of AIDS. Pregnancy and childbirth will, however, adversely affect the progression of illness in women with a more advanced level of CT4-depletion. All babies born to HIV-positive women have HIV-antibodies in their blood until 18 months of age at which stage seroconversion can be more conclusively tested. There are some tests available that seem to be able to detect HIV-seroprevalence accurately in babies by the age of six months. About 20 per cent of HIV-infected children develop serious illness within their first year of life and most of these children die by their fourth birthdays (UNAIDS, 1998a).

The SADHS results show that approximately 10 per cent of South African babies from birth to three months of age are exclusively breast-fed, whereas 73 per cent of these babies are fed a mixture of breast-milk and other supplementary feeds. The proportion of exclusively breast-fed infants from birth to 12 months of age in South Africa is a low 3.5 per cent (South African Government, DoH/Medical Research Council/Macro International, 1999). Unfortunately, it was not possible to trace comparable data for earlier dates to ascertain whether these figures represent a decline in full breast-feeding. It should be noted, however, that a study of 549 HIV-positive women and their

newborn babies (that is 549 mother-baby pairs) at two perinatal clinics in Durban revealed that those babies exclusively breast-fed for the first three months were significantly less likely to become HIV-positive through MTCT than those babies who were either bottle-fed or fed on breast-milk with other supplementary feeds (Coutsoudis, Pillay, Spooner, Kuhn & Coovadia, 1999; Coutsoudis, Pillay, Kuhn, Spooner, Tsai & Coovadia, 2001). In populations with low levels of contraceptive prevalence, the absence of breast-feeding might put pressure on women to curtail post-partum abstinence in order to prevent their partners seeking other sexual partners. Moreover, increased infant mortality at young ages due to HIV/AIDS may further reduce post-partum infecundity periods, thereby inflating fertility.

# Involuntary infecundity: HIV and the epidemiological synergy of STIs

Earlier on, I mentioned the biological factors associated with HIV infection and AIDS that may affect fecundity. In conjunction with HIV, there are also other STIs that may lead to pathological sterility. The WHO (2001) estimates that 12 per cent of 15- to 49-year-olds has a curable STI, whereas other studies suggest that two to seven per cent of pregnant and contracepting women have cervical gonorrhea, chlamydia or syphilis, and anything between four and 34 per cent of such women have trichomoniasis (Askew & Baker Maggwa, 2002). The prevention and cure of STIs are important public health goals in their own right, but the presence of STIs enhances the sexual transmission of HIV (Askew & Baker Maggwa, 2002). The complexities of condom use for STI prevention and how it interacts with other reproductive health issues were already discussed.

In South Africa, STIs are a major concern amongst young adults and a study in the Hlabisa district in KwaZulu-Natal found that ten per cent of young adults have at least one STI per year (Wilkinson, Ramjee, Sturm & Abdool Karim, 1997). Results from the SADHS show that 12 per cent of adult men in South Africa have had symptoms of an STI in the three months prior to the 1998 survey. These percentages were higher for men residing in non-rural areas (16 per cent) and for the 25- to 34-year age groups (South African DoH, 1999). Harrison et al. (1997) found, from an ethnographic study in rural KwaZulu-Natal, that 50 percent of all women clinic attendants have at least one STI and that there are many obstacles mediating partner notification in the case of a STI. Based on various smaller site studies in KwaZulu-Natal, researchers at the Medical Research Council (MRC) estimate that around 25 per cent of women in South Africa have at least one STI and that about half of these are asymptomatic conditions that remain undetected and therefore untreated (Wilkinson et al., 1997). STIs commonly affect fecundity and the treatment and prevention of such infections, leading to a reduction, have the potential effect of increased fertility.

Wilton (1997) provides an interesting history of the social construction and the feminisation of STIs in which female sexuality began to signify a sex/disease/death package that converged around notions of contamination and excess. Wilton (1997) opines that public-health education regarding STIs shifted from the attentive gaze directed at the body of the innocent male victim on to a gaze of the body of the guilty female source of infection. Wilton explains how, once it became apparent that people who were not gay men could and had become infected with HIV, the familiar old hetero-binary narratives kicked in again. Within this narrative, female bodies are regarded as the reservoirs of infections, the wellspring of contamination and the prime indices for the spread of the disease. Wilton (1997) comments: 'AIDS discourse generally constructs a familiar model of women-as-risk-to-men, both sexually and maternally (through vertical transmission of HIV during pregnancy or birth' (p. 69). It is not difficult to see how this construction of STIs and HIV/AIDS feeds a surveillance methodology that focuses primarily on pregnant women within the academic field, and a myth that condoms are for protecting males against STIs within lay discourse.

### Induced abortion: putting women's empowerment to the test

Although there might be a slight increase in the incidence of induced abortion in west Africa, it is unknown whether HIV/AIDS contributes to this rise. Induced abortion may prevent an unwanted and potentially HIV-positive baby, but it does not prevent HIV in the mother. In addition, fecundity may return more rapidly after an abortion than after a full-term delivery due to the absence of breast-feeding and post-partum abstinence, necessitating both barrier and other contraceptive methods (Gregson, Zaba & Hunter, 2002). Although abortion on demand is available to women in South Africa, there are moral, religious and service barriers that restrict equal access to legal pregnancy termination services in South Africa (DoH, 1999). In 1997, 31 312 legal abortions were performed in this country and almost all of these were carried out in urban hospitals (Dickson-Tetteh & Billings, 2002).

### Conclusion

In this paper we discussed available evidence on the interrelatedness of HIV/AIDS and fertility in Africa and South Africa. Although some interesting trends emerge from the quantitative data at our disposal, there is little conclusive evidence. We are left with a rather muddled picture of the reproductive health status in this country. In many instances, the complexities and diversities of, and transitions in, reproductive and sexual decision-making cannot be captured, measured or interpreted with any certainty. A confusing picture emerges in which the contexts of reproductive decision-making are obscured. Macro-analysis makes it almost impossible to single out the independent effect of HIV/AIDS on fertility change.

Within the fraternity of demographers in this country there are those who are scornful of small-scale qualitative studies and demographic work in the HIV/AIDS field, focusing instead on building models and estimates of HIV infection and AIDS morbidity and mortality. These estimation models have all the trimmings and trappings of scientism and appear objective and detached. Moreover, such models typically take on the characteristics of Malthusian doomsday-scenarios, whilst reifying risk notion categories and ignoring the important fact that we are dealing with an exceptionally hardy and acclimatising virus that changes and adapts to new challenges to such an extent that we are now dealing with two strains of the virus, namely HIV-1 and HIV-2. Such research often underscores and widens the chasm between research interests and disease prevention, between demographic scenario-building and effective behavioural change. In this regard, the words of Gagnon (1992) are fitting:

It is methodological doubt that characterizes the majority of mainline social science professionals who have strong personal and professional commitments to participation in programs of behavior monitoring and change and whose career lines have been defined by giving programmatic advice to policymakers about what to do when faced with various social problems. (p. 33)

Maybe at the heart of it all there is, as articulated by Herdt (1991), a fear that by 'going smaller scale' (p. 20), or by studying the marginal, we ourselves (the researchers) will become marginalised in our disciplines. In my own research, I have found the available quantitative analyses of fertility preferences unable to offer a conceptualisation of a woman's dynamic role in her own reproductive career, or, as Phillips (1992) states, to 'regard persons as actors located within social and historical webs of meaning' (p. 19). Increasingly, I have became interested in exploring how the physical reality of HIV status and subjective reactions to it influence South African women's understanding of reproduction in an era of HIV/AIDS. So far I have found macro-analysis useless in providing answers to such research questions.

In restricting our research engagement with reproductive decision-making to analysing interrelated proximate or other variables, our knowledge becomes largely correlational rather than theoretical. Of course the seriousness of the pandemic and its implications for people's fertility decision-making (and lives!) demand vigilance against a mass of qualitative studies that dot the demographic landscape but make no attempt to posit and test explicit theories. We cannot do with theorising that is merely retrospective accounts of what has been done and prescriptions of what might still be done. Instead, as Obermeyer (1997) suggests:

The qualitative methodologies now advocated to study demographic behaviour can escape the limitations of quantification in terms of both analytic strategy and interpretation. But the extent to which this is true will depend less on the methods themselves than on the ability of the researcher to formulate questions and define the right blend of method to address them. It may be that some method combinations are especially prone to oversimplifying, and there are often difficult tradeoffs between clarity and complexity. Qualitative methods that are based on asking individuals about their behaviour and motivations do not always resolve the frequent dissonance between statements, perceptions, and reality. This issue involves more than the validity of measurements, and reflects the implicit models of social action that are brought to bear in explaining the connections between actions, norms and representations. (p. 816)

Precisely because in-depth ethnographic work spanning three or more years might be inconsistent with the urgency and the progression of HIV/AIDS (Herdt, 1991), we need qualitative demographic studies that incorporate critical reflection, rigorous demonstration of the conditions of evidence gathering and a careful description of analytical and conceptual phases. The tragic reality of HIV/AIDS forces us to deal with the biological underpinnings of sex, to look at women as a group and to come to terms with vulnerability and susceptibility to disease along the contours of sex, gender, class, race and age. Studies of this nature therefore clearly do not merely reside within the realm of micro-analysis. To understand reproductive decision-making and behaviour as complete forms of agency we have to move beyond agency as meaning-making to also include agency as institution-making (Williams & Bendelow, 1998). The value of micro-level studies of process lies precisely in the light they cast on questions of action, and in producing amendable or alternative models of determination and change. Perhaps most importantly, such models will be partial and contingent, not universal. With this type of research focus, a fertility transition in the absence of the empowerment of women will not sit so easily in the mind of demographers who should be alarmed by the very presence of such an aberration.

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#### Notes

- 1 From Jacques van Zuydam's welcoming address and overview at the launch and repeated by him during a radio broadcast on SAFM in September 2000.
- 2 In this paper, empowerment of women refers to the development of women's ability to alter or control the patterning of experiences that affect their sub-ordination. It is therefore not only material equity, but includes cultural resources such as knowledge and social respect.
- 3 The ICPD was held in Cairo in 1994.
- 4 Somatisation here refers to making the physical body the terrain of interest. Turner refers to the somatic society as 'crucially, perhaps critically structured around regulating bodies' (1992:12–13).

- 5 Similar sentiments are expressed by Kurth (1993), Nichols (1989), Temmerman et al. (1990) as well as Selwyn and Antoniello (1993). In fact, Temmerman et al. (1990) found that some of the HIV-positive women in their study expressed the desire to increase their number of pregnancies so that they might have a child before their CD4-cell counts diminish any further or so that at least some of their children might beat the odds and survive. In this respect, some HIV-positive women might therefore have higher levels of fertility preferences.
- 6 Alternatively such sociological studies focus on the social impact of AIDS and the social construction of the meaning of AIDS (Aggleton & Homans 1988; Aggleton, Hart & Davis 1989; Aggleton, Davis & Hart 1990; Feldman & Johnson 1986; Fineberg 1988; Mann & Carbalo 1988; Weeks 1989).
- 7 Although it has become almost a cliché to declare that class is less important in post-industrial society, and to use such terms as 'class dealignment' or even 'the death of class' (Pakulski & Waters 1996), many studies still reveal differences in human condition and experience in terms of what sociologists call social class (Lee & Turner 1996).
- 8 Kertzer and Arel (2002:11) opines: 'The compulsion to divide people into racial categories has never been far from the drive to divide them into ethnic categories. In fact, the two concepts are often blurred, a confusion having largely to do with a belief that identity can be objectively determined through ancestry.'
- 9 Here it might be fitting to heed the postmodern feminists' call to be sensitive to 'the fractured identities modern life creates' (Harding 1986:28) or to 'the construction of the self as a form of "bricolage" rather than the product of membership of social collectivities' (Bury 1998:13).
- 10 In South Africa, rising rates of under- and unemployment (especially amongst men), the relocation and closing-down of clothing, glass, automobile-assembly, electronic and other industries, a trend of jobless economic growth, labour shedding in commercial agriculture, an already overcrowded informal economic sector that is becoming increasingly less profitable and the prevalence of serial polygamy and female-headed households mean that women increasingly become the sole incomeearners in the household. Many of these factors hold antecedents in this country's colonial and apartheid past and continue to shape current configurations of deprivation that contribute to the feminisation of poverty. Conjugal conflicts over household incomes and resources and household decision-making is greatly exacerbated as men transfer their anxieties about the loss of jobs and their declining opportunities for creating a positive sense of self into the domestic domain.

As economic conditions continue to worsen, the social fabric is further tearing apart (Niehaus 1994; Sharpe 1994).

- 11 I have some reservations about these authors' use of ethnic categories as measured by language in large scale sample surveys to conclude a link between 'shifting ethnic identities' and reproductive behavioural change. Again, Kertzer and Arel (2002:19) sum this problem up best in saying: 'The problem with this approach is that, by focusing mainly on the technical aspects of measurement, it takes for granted the existence of the category itself. This is unproblematic when categories refer to objective markers such as age. But to assume that categories denoting cultural affiliation can be enumerated as objectively as age is to assume that identities can be reduced to an essential core within each individual, a core that exists outside of politics.'
- 12 It should be noted that young men in South Africa too, often face threats against their reproductive health – the tragic deaths of teenage boys during initiation rituals being one example. Furthermore, although in some regions HIV-infection among women is spreading more rapidly than among men, the number of HIV-infected men globally is greater. The ubiquitousness of sexual violence in South Africa compels us to consider the socialisation of young men in terms of intimate relationships and sexual agency.

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