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This paper examines the health status of South African youth in the past fifteen years using available quantitative data. Specific areas of interest here include youth disability, substance abuse, sexual and reproductive behaviour and HIV and AIDS. We also assess the pattern of health status implied in official statistics on mortality and causes of death among the youth.

The State of Youth in South Africa:
IS THE HEALTH STATUS OF YOUTH
IMPROVING?

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Africa Strategic Research Corporation

and

Human Science Research Council

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Abbreviations

ASDR	Age specific death rate
ASFR	Age specific fertility rate
DoH	Department of Health
SACENDU	South African Community Epidemiology Network on Drug Use

Summary

This paper examines the health status of South African youth in the past fifteen years using available quantitative data. Specific areas of interest here include youth disability, substance abuse, sexual and reproductive behaviour and HIV and AIDS. We also assess the pattern of health status implied in official statistics on mortality and causes of death among the youth.

The analysis shows some evidence of behaviour change in aspects of sexual and reproductive health among the youth. Emerging evidence suggests the beginning of a declining trend in the rate of HIV prevalence among the youth since about 2005. The speed and age-specific patterns of this change are yet to be more fully understood. Hopefully a declining trend in HIV prevalence rate will be consolidated among the youth in the next few years. Recent statistics show significantly higher rate HIV prevalence among young women than among young men. This gender gap remains a cause for concern in the fight against HIV and AIDS in the country.

Although we do not know as much about other areas of health for which trend data are not easily available for the specific age groups included in this study, there appears to be some gains in youth health that are translating into lower youth age-specific death rates. The genuineness of this potentially favourable trend can only be confirmed as more annual youth death statistics become available in the next few years. Ultimately, good health profile is a key to active participation of the youth in the society and economy now and in the future. Therefore, investing in the health of the youth should remain a national policy priority.

IS THE HEALTH STATUS OF SOUTH AFRICAN YOUTH IMPROVING?

1. Introduction

Has the health status of the youth in South Africa experienced major improvements in the past fifteen years? This question immediately raises issues about definition, indicators and availability of data. First, how do we define or describe a healthy young person in South Africa today? Acceptable definitions of youth health in South Africa need not differ radically from the general definition of health as a state of complete physical, mental and social well-being. For our purposes here, all elements in this widely used definition of health should apply, taking into consideration the demographic and social factors that are important for the health of the youthful subgroup of the population.

The second challenge is about acceptable indicators of youth health. The national Department of Health (2001) produced the *Policy Guidelines for Youth and Adolescent Health*, which identified health priorities that include sexual and adolescent health, mental health, substance abuse, violence, unintentional injuries, birth defects and inherited disorder, nutrition and oral health. However, researchers are yet to agree on these and on how to apply them consistently in ways that provide good trends in youth health status. Disagreement in this area stems from among other things choice of demographic definition of the youth. Many health researchers use the standard age groups in health literature (namely 15-24) while analysts from other disciplines often use other criteria to define the youth. This is a particularly common situation in South Africa given the fact that the official demographic definition of the youth includes a very wide age range of 14-35 years.

Apart from problems of demographic definition of the youth, questions about how the overall health status of the youth should be conceptualized and operationally defined in applied health research remain largely unresolved. There is more agreement on monitoring indicators for specific areas of health challenges (such as HIV and AIDS, tuberculosis and nutrition) than there is on the general health status of the youth. The challenge of generating an agreed set of composite indicators for measuring the overall status of youth health is not unique to South Africa. Researchers and health managers in transitional and more established health systems have identified a need for good indicators for use in assessing the state of youth health (see Brown 2008, Hogan and, Stagner and Zweig 2008, Eccles, Brown and Templeton 2008, Day and Grey 2009, Goodburn and Ross 2008, Land, Lamb and Mustillo 2008, Hill et al. 2007, Obermeyer 2005, Eccles et al 2008, Lopez 2008, Benneth and Lu 2008). The United Nations family approaches youth health from a holistic perspective, preferring to work with the concept of youth well-being which subsumes their health status (see United Nations, 2003, 2007, 2008). In this perspective, many

factors outside traditional health confines are included thus compounding the challenge of developing generally agreed indicators of youth health status.

Thirdly, there are no easily accessible sets of data with good potential to address the main question we ask in this paper. There are components of youth health information in national censuses and large-scale surveys conducted by government departments including Statistics South Africa and National Department of Health. In addition to these, major national research institutions such as Medical Research Council and Human Sciences Research Council have conducted surveys that contribute information about youth health in South Africa. Studies by universities and private research agencies also contribute data on the state of youth health in the country. However, with the exception of some reproductive health indicators, consistent and strictly comparable statistics on youth health status hardly exist for the first half of the 1990s and the past few years.¹

This paper addresses these issues only indirectly and pragmatically. It uses any available indicators of acceptable quality to examine possible trends in the status of youth health in the past ten to fifteen years in South Africa. We are interested in changes in youth health status that could reflect in selected indicators such as disability, substance abuse and sexual and reproductive health behaviour. We also examine statistics on mortality and causes of death among the youth with a narrow interest in youth age-specific mortality rates and causes of death.

In the absence of nationally standardized and professionally agreed composite indicators of youth health status, researchers work with various measures depending on their areas of interest and availability of information. Ideally we would prefer to undertake original computations from sets of data that produce the information that is in use in the literature on youth health in South Africa. Unfortunately some of the data-sets that have recently become available² are yet to be released to the public for this level of analysis. As a result, on some instances, we use published information that sometimes does not group or permit lower-level breakdown of important variables.

We focus attention on people aged 15-24 years.³ The direction and depth of our analysis are determined primarily by the nature, quality and accessibility of available information. The scope of this paper does not extend directly to broader questions

¹ Statistics South Africa is collecting data in a health module of the 2008/2009 Living Conditions Survey. Health questions in this study include self-assessments of general health status, type of current illness, medication, injury, disability and experiences with access to health services. Hopefully this study will provide new data health status for the youth in the coming years.

² Notably the 2008 HIV prevalence survey and the 2008/2008 Living Standard survey by Statistics South Africa. See also Shisana et al. 2005 and Shisana and Simbayi 2002.

³ This is a more restricted age group than the 14-35 age range, which is the formal definition in South Africa's National Youth Policies hitherto. It is more consistent with the definition adopted by World Health Organization and used by the National Department of Health in the *Policy Guidelines for Youth and Adolescent Health* (2001).

about youth health interventions in South Africa. Many health programmes have been implemented in the period of interest. These include national initiatives as well as bilateral and multilateral intervention programmes. Some of these programmes have been concluded while others are currently at various stages of implementation. Their individual and joint contributions to the status of youth health do not fall within the scope of the present analysis. The aim here is a search for generalized but identifiable change in the health status of the youth in the context of major social transitions that South Africa experienced in the past fifteen years.

2. Demographic profile

Basic demographic characteristics of the youth population of South Africa are presented in Table 1. The estimated size of the youth population aged 15-24 is 10.1 million. This number represents 20.5% of the estimated total national population in 2009. This subgroup of the population is expected to increase in absolute size and its relative share of the national population well into the next decade. The numbers of males and females are roughly equal in this age range. Africans have an overwhelming majority share of the national youth population (83.7%). The shares of other population groups are 7.9%, 2.2%, 6.2% for Coloureds, Indians and Whites respectively. More people aged 15-24 years live in KwaZulu-Natal (22.6%) than in other provinces. Other provinces with at least ten per cent of the youth population aged 15-24 include Gauteng, Eastern Cape and Limpopo. Northern Cape has the smallest share of this sub-group of the population (2.2%). The percentages in Western Cape, Free State and North-West are 9.7, 5.8 and 6.4 respectively.

Table 1. Demographic characteristics of the youth population (aged 15-24), 2009

Characteristic	Number	%
<i>Age group</i>		
- 15-19yrs	5 214 300	51.4
- 20-24yrs	4 920 900	48.6
<i>Sex</i>		
- Male	5 069 600	50.0
- Female	5 065 700	50.0
<i>Pop group</i>		
- African	8 486 300	83.7
- Coloured	795 900	7.9
- Indian	226 200	2.2
- White	624 800	6.2
<i>Province</i>		
- Eastern Cape	1 548 500	15.3
- Free State	589 200	5.8
- Gauteng	1 788 900	17.6
- KwaZulu-Natal	2 293 300	22.6
- Limpopo	1 247 700	12.3
- Mpumalanga	797 100	7.9
- North West	664 200	6.6
- Northern Cape	222 000	2.2
- Western Cape	984 400	9.7

Characteristic	Number	%
All 15-24 years	10 135 300	100

Source: Calculated from Statistics South Africa. 2009. *Mid-Year Population Estimates 2009*.

3. Trend in disability among the youth

The Integrated National Disability Strategy (Office of the Deputy President, 1997) has made good progress in redirecting attention to disability as a health concern that must be confronted with policy and targeted programmes in South Africa. No detailed studies of disability among the youth have been conducted in South Africa.⁴ Data from the 1996 Census estimated a disability level of 6.7% in the national population. Statistics South Africa (2005) estimated a national prevalence rate of disability of 5% based on the 2001 Census data. The most current prevalence rate of disability based on the 2007 Community Survey data is 4.0%.

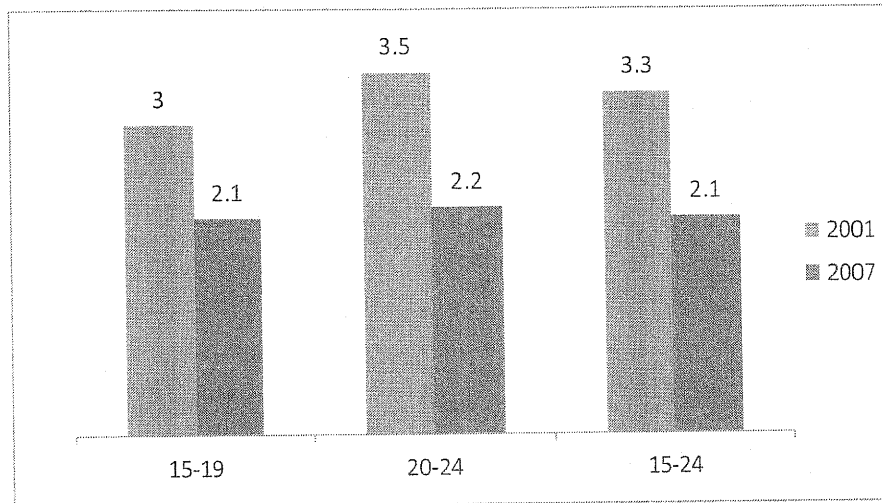
Figure 1 shows that the prevalence rate of disability among people aged 15-24 years was 2.1% in 2007. This was a decline from 3.3% reported from the 2001 Census. The same trend is observed for young people aged 15-19 and those aged 20-24 years. Important as it is, this apparent decline in disability rate should be carefully examined in order to eliminate possible influences of data quality and differences in definition of disability.

Differences in the prevalence of disability in South Africa according to gender, population group and province based on the most recent (2007) data are presented in Table 2. The data shows a higher rate of disability among males than among females in the 15-24 age range. There are also more disabled young people among Africans than in the other three population groups. With rates of 2.8% and 2.7% respectively, Eastern Cape and Northern Cape have relatively higher proportions of their youth populations with disabilities than the other provinces. Reported rates of disability in Gauteng and Western Cape are relatively low — 1.7% and 1.6% respectively.

⁴ Information about disability among the youth can be extracted from available data for the general population. Since 1996, three official sources collected information on disability which provides an indication of trend among the youth. (1996 census, 2001 census and Community Survey of 2007). Before these, the National Department of Health conducted a baseline of disability in South Africa (see Schneider, 1999). We note that there are important differences in definitions which make it difficult to analyse trend in disability with comparative data sets.

Is the health status of South African youth improving?

Figure 1 - Youth disability, 2001 and 2007



Sources: Calculated from Statistics South Africa, 2001 Census and 2007 Community Survey data.

Table 2. Differences in disability prevalence (%) among the youth, South Africa 2007

	15-19	20-24	15-24
<i>Sex</i>			
- Males	2.3	2.5	2.4
- Females	1.7	1.9	1.8
<i>Pop group</i>			
- African	2.1	2.3	2.2
- Coloured	1.6	2.1	1.8
- Indian	1.7	2.0	1.9
- White	1.5	1.7	1.5
<i>Province</i>			
- Eastern Cape	2.5	3.2	2.8
- Free State	2.0	2.5	2.3
- Gauteng	1.7	2.5	1.6
- KwaZulu-Natal	2.2	2.2	2.2
- Limpopo	1.8	2.5	2.2
- Mpumalanga	2.0	2.4	2.2
- North West	2.4	2.4	2.4
- Northern Cape	2.4	3.1	2.7
- Western Cape	1.6	1.8	1.7
All Youth 15-24yrs (South Africa)	2.1	2.2	2.1

Source: Calculated from the 2007 Community Survey data.

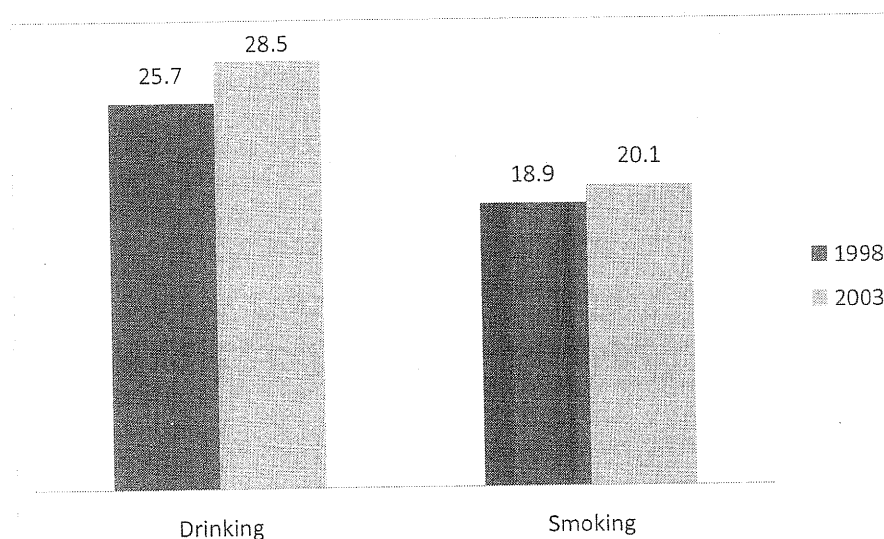
4. Substance Abuse

Direct and indirect impacts of substance abuse on health status in South Africa have been established by research (Peltzer and Cherian, 2000; Peltzer et al, 2001; Madu and Matla, 2003; Ward 2007; Van der Bijl, 2004). Equally important for youth health are the long-term health and social impacts and the powerful reinforcing relationships that exist in the use of alcohol, tobacco and drugs. Young smokers are more likely than others to use alcohol and drugs and are more likely engage in other forms of behaviour that put their health at risk (Fisher and Kapiga 2007, Liu et al, 2006, Leggett 2001, Bailey et al.1999).

4.1 Use of alcohol

Figure 2 shows a small increase in the percent of all people aged 15-24 who drink alcohol from 25.7% in 1998 to 28.5% in 2003. Although use of alcohol is generally higher among young males than young females, the small increase observed in the five years period is consistent for both sexes. The South African Demographic and Health Survey (see Table 3) found that in 1998, 35.5% of males aged 15-24 years reported that they have used alcohol compared to 15.8% of their female counterparts. Comparable statistics for 2003 are 38.5% for males and 18.5% for females. Table 4 shows that 24% of all people aged 15-19 years reported that they used alcohol in 2003. The percent of youth who used alcohol in Western Cape (46.1%) was the highest in the country for that year. It is followed by 37.3% in the Northern Cape, 34% in Gauteng, 28% in North West, 24.1% in Eastern Cape and 20.8% in Free State. The youth in KwaZulu-Natal, Mpumalanga and Limpopo reported relatively low levels of use of alcohol in 2003 - 11.8%, 12.8% and 17.7% respectively.

Figure 2 - Drinking and smoking amongst youth (15 - 24), 1998 and 2003



Sources: SADHS 1998 and 2003 reports.

4.2 Use of tobacco

Levels and gender patterns of use of tobacco by South African youth are similar to the levels and patterns of alcohol use. In 2003, twenty percent of young people in South Africa reported that they used tobacco. This was about a percentage point increase from the level of prevalence (18.9%) five years previously in 1998. In both years, more males used tobacco than females (see Table 3). But while no significant change was recorded for males in the two periods, the prevalence rate of tobacco use among females rose from 9.8% in 1998 to 12.0% in 2003. Teenagers in Western Cape report the highest rate of tobacco use in South Africa in 2003 (33.8%). Those in Northern Cape reported the second highest rate of tobacco use (28.1%). The reported rate of tobacco use in 2003 was relatively low in Limpopo (6.1%), Northern Cape (9.5%) and North West (9.6%). Other provinces with relatively high rate of tobacco use by teenagers are Eastern Cape (17.1%), Free State (16.7%), Gauteng (15.7%) and KwaZulu-Natal (11.5%).

4.3 Drug abuse

The true population-based prevalence rate of drug abuse among the youth in South Africa is difficult to establish from conventional national censuses and surveys. However, various local-level statistics, specialized data-sets and youth perceptions⁶ indicate widespread abuse of drugs among the youth especially in the metropolitan areas. In many instances, empirical evidence is apparent in the destructive impacts of drug use on the health and social lives of affected young people and their families.

Useful information which gives an indication of the scale of the health damages from drug abuse has been routinely collected by the South African Community Epidemiology Network on Drug Use (SACENDU) unit of the Medical Research Council since 1996. SACENDU's monitoring reports include service statistics from different treatment centres across the country (SACENDU, 2009). SACENDU service statistics indicate that during 2006, substance abuse treatment centres in the country had more than five thousand eight hundred patients aged 15-24 years. More than five thousand patients were treated in 2007 and 2008 respectively. The majority (77%) of all treatments in 2008 were new cases. During the second half of 2008, the primary substance abused by all patients under the age twenty who were treated in these centres were cannabis (52%), alcohol (15%), heroin (9.7%) and methamphetamine (8.2%). Others were methaq (3.8%) and cocaine (2.6%). One may not be able to establish levels and trends of drug abuse among the youth with these

⁶ A National Survey of youth aged 15-24 in 2003 found that they ranked substance abuse second only to HIV and AIDS as the most important problem of young people in South Africa (see RHRU 2004).

statistics but they give an indication of a major health problem, which is difficult to capture in official censuses and conventional health and social surveys.⁷

Table 3. Substance use among South African youth aged 15-24 years

	1998	2003
<i>% ever used alcohol</i>		
- Male	35.5	38.5
- Female	15.8	18.5
- All	25.7	28.5
<i>% ever used tobacco</i>		
- Male	28.0	28.1
- Female	9.8	12.0
- All	18.9	20.1
<i>% ever used drugs</i>		
- Male	*	*
- Female	*	*
- All	*	*

* No reliable population-based estimates for comparable periods.⁵

Sources: Sources: SADHS 1998 and 2003 reports.

Table 4. Differences in % of 15-19 youth using alcohol and tobacco by province, 2003

Province	% ever used alcohol	% ever used tobacco
- Eastern Cape	24.1	17.1
- Free State	20.8	16.7
- Gauteng	34.0	15.7
- KwaZulu-Natal	11.8	11.5
- Limpopo	17.7	6.1
- Mpumalanga	12.8	9.6
- North West	28.0	9.5
- Northern Cape	37.3	28.1
- Western Cape	46.1	33.8
All 15-19yrs	24.6	15.1

⁷ The importance of drug abuse for health in the society has been corroborated by several local and international studies. See for instance Peltzer and Cheriau 2000, Fisher et al. 2007 2001, Madu and Matla 2003, Morojela et al. 2005, Morojela et al. 2006.

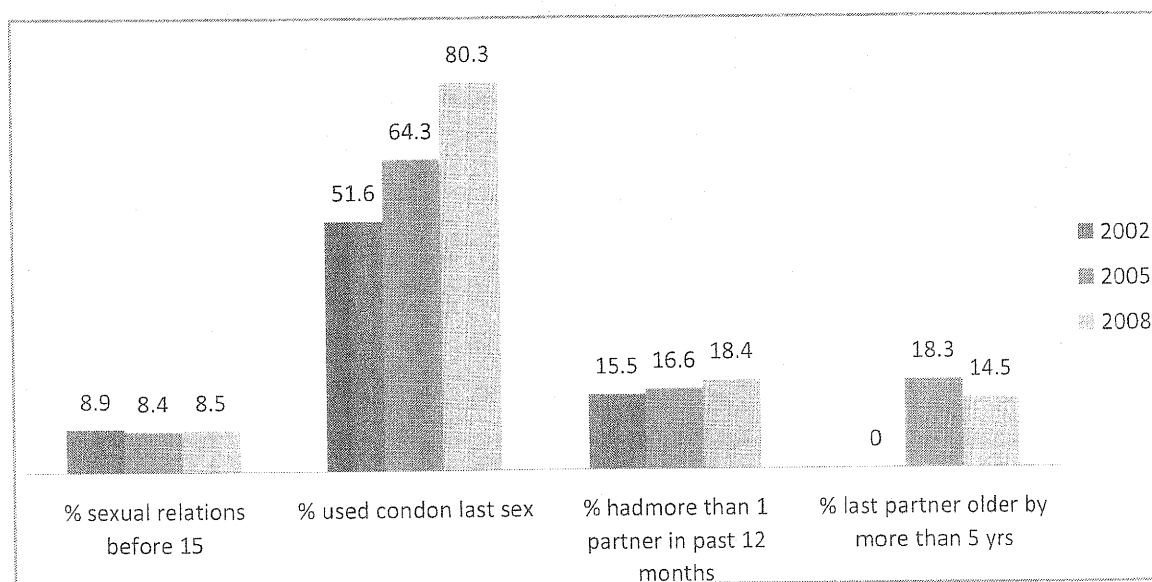
⁵ This does not imply total absence of estimates in different classified and public domain data sets. No figures are reported here because we could not find statistics that meet comparable definitions and quality for 1998 and 2003.

Sources: SADHS 1998 and 2003 reports.

5. Sexual and reproductive health behaviour

Since the emergence of the HIV and AIDS, sexual behaviour of young people has been subjected to intensive public health research in South Africa. Against this background, this section does not review all research and evidence about sexual behaviour of the youth. The aim is to use some emerging data to assess whether there have been major changes in patterns of sexual and reproductive behaviour that are associated with the health status of the youth. Some of the most widely used indicators of sexual and reproductive health behaviour are percent of people aged 15-24 years who have sexual relations before the age of 15 years, percent of sexually active people in this age range who used condom during their last sexual relations, percent who had more than one sexual partner in the past twelve months and percent whose last sexual partner was five or more years older. Trends in these four behaviour-related indicators are summarized in Figure 3.

Figure 3 - Sexual behaviour of youth, 2002 - 2008



Source: Human Sciences Research Council 2008 HIV Prevalence Survey Report.

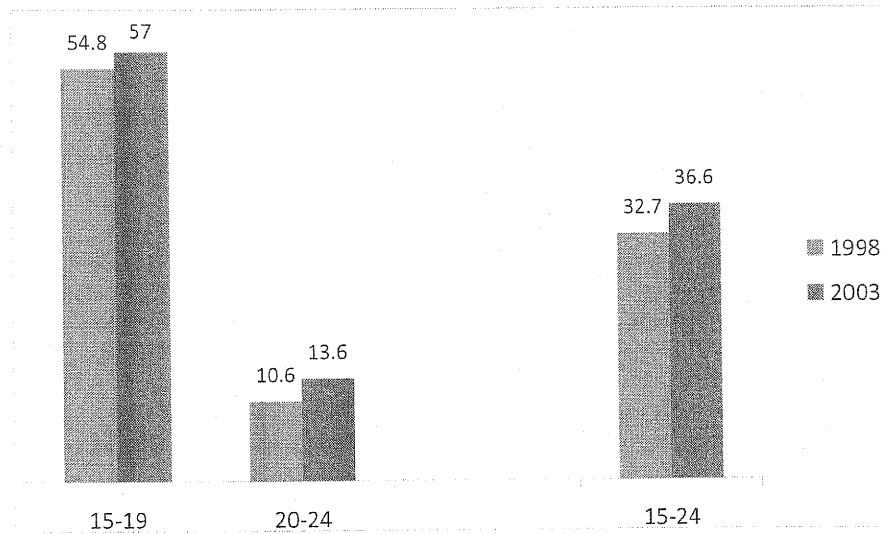
5.1 Timing of first sexual relations

Age at first sexual relations has received considerable research attention that reflects its importance for the risk of HIV infection (Anderson, et al. 2007, Baumgartner, et al. 2009, Hallett et al. 2007, Sing et al. 2000, Juarez and LeGrand 2005, Harrison et al. 2005). The information in Figure 3 (above) does not show a major change in the proportion of South African young people who have sexual relations before the age of

15. This statistic was 8.9% in 2002 but declined to 8.4% and 8.5% in 2005 and 2008 respectively.

Table 5 (below) shows clear gender differences in timing of first sexual relations generally, males engage in first sexual relations earlier than females, but the recent trend shows a slightly falling proportion of males engaging in sex before the age of 15. This is the opposite of the trends observed for females (see Table 5). The declining trend among women aged 15-24 is clearer in the light of SADHS data for an earlier period which show that in 1998, 8.5% of had their first sexual relations by the age of 15 years.

Figure 4 - % of women who have never had sex, 1998 and 2003



Sources: SADHS 1998 and 2003 reports.

Related to the timing of first sexual relations is the trend in sexual abstinence, which has not received sufficient attention in South African studies of sexual behaviour in the era of HIV and AIDS. Data from the two waves of Demographic and Health Survey (1998 and 2003, see Figure 4) indicate an interesting trend. The per cent of young women who reported that they never had sexual relations increased slightly from 23.7 in 1998 to 36.6 in 2003. Among women in the youngest reproductive age group the change was from 54% in 1998 to 57% in 2003. For those aged 20-24, the per cent of people who were not sexually experience were 10.6 and 13.6 in 1998 and 2003 respectively. If these trends are confirmed by more recent data⁸, they would

⁸ Comparable data from the RHRU survey suggest a different trend relative the SADHS 1998 data. Thirty-three per cent of people aged 15-24 (52% of those in the 15-19 age group and 11% of those in the 20-24 age group) reported in 2003 that they were never sexually active.

suggest an important contribution of the abstinence component of reproductive health campaigns, which should be more systematically investigated by studies and intervention programmes in youth health.

5.2 Condom use

A major change in the reproductive behaviour of the youth in the past few years is that an increasing number of them make use of condom. Figure 3 (above) shows that the percentage of young people who used condom during their last sexual relations was 51.6 in 2002; it increased significantly to 64.3 in 2005 and jumped to 80.3 in 2008. This rapid increase in the use of condom among sexually active young people is true for both males and females (Table 5). For women, this change is almost dramatic if considered with information for 1998 (SADHS) which shows that only 17% of all women aged 15-24 used condom during their last sexual relations.

5.3 Multiple sexual partnerships

There is no sign of a major behaviour change regarding multiple sexual partnerships among young sexually active young people in the past six years. In 2002, 15.5% of young people aged 15-24 years had sexual relationship with more than one partner in the past twelve months. Comparable data for 2005 and 2008 are 16.6% and 18.4% respectively. These data indicate an increasing trend in the proportion of young people having multiple sexual partnerships (Figure 3). Table 5 shows a major difference between young men and young women regarding sexual partnerships. Only 8% of females reported that they had multiple sexual partners in the past twelve months in 2002; this figure declined to 6% since 2005. In contrast, as many as 23%, 27.2% and 30.8% of males reported that they had multiple sexual partners in 2002, 2005 and 2008 respectively.

5.4 Inter-generational sexual relations

In 2005, 81.7% of sexually active teenagers aged 15-19 years had sexual partners who were within five years of their age. This figure increased slightly to 85.5% in 2008. Only 18.3% and 14.5% of young people had sexual relationship with people older than them by more than five years in these two periods. This apparently favourable trend conceals a major gender difference. Table 5 shows that only 2% of males had sexual partners who were five or more years older than themselves in 2005 compared to 18.5% of females. In 2008, only 0.7% of males had significantly older sexual partners, whereas as many as 27.6% females did so in the same year.

Table 5. Trend in selected patterns of sexual behaviour among young people in South Africa

	Male	Female	All
% (15-24) had sexual relations before age of 15			
2008	11.3	5.9	8.5
2005	11.9	5.1	8.4
2002	13.1	5.3	8.9

		Male	Female	All
% 15-24 used condom during last sexual relations	2008	87.4	73.1	80.3
	2005	72.8	55.7	64.3
	2002	57.1	46.1	51.6
% 15-24 had more than one sexual partner during last 12 mths	2008	30.8	6.0	18.4
	2005	27.2	6.0	16.6
	2002	23.0	8.0	15.5
% 15-24 with last sexual partner 5 years older	2008	0.7	27.6	14.5
	2005	2.0	18.5	18.3

Source: HSRC (2009).

Table 6. Provincial differences in the timing of first sexual relations, 2002 - 2008

Province	% of 15-24 year olds who had sex before age 15	
	2008	2002
- Eastern Cape	7.8	7.7
- Free State	9.6	0.9
- Gauteng	7.8	6.3
- KwaZulu-Natal	4.9	4.6
- Limpopo	11.2	5.5
- Mpumalanga	15.0	4.9
- North West	8.5	2.5
- Northern Cape	7.3	3.6
- Western Cape	9.3	6.0
All 15-24yrs	8.5	5.0

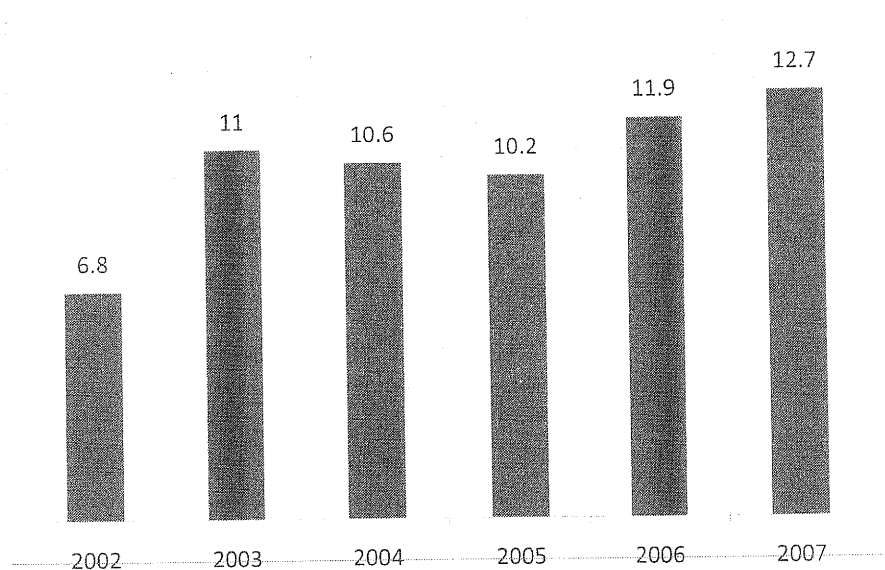
Source: HSRC (2009).

5.5 Pregnancy and induced abortion

Major health and social consequences of teenage childbearing have been documented by the work of several researchers including Schmidt et al., 2006, Magadi 2006, Zabin and Kiragu 1998 and Berenson et al., 1997. In South Africa, research such as the findings of the 2003 Survey of the Youth has highlighted the important role of pregnancy as predictor of HIV infection among people in the 15-24 age range. In 1998 16.4% of all women aged 15-19 reported that they were ever pregnant. The per cent of 15-19 year old women who reported that they were ever pregnant was 16.2% in 2003. A total of 56.6% of all women aged 20-24 reported that they have ever been pregnant with 18.5 years as their mean age at first pregnancy. Among the sexually active women, 33% of those aged 15-19 years and 59% of those aged 20-24 years reported ever being pregnant (Reproductive Health Research Unit, 2004).

There are no reliable data about trends in induced abortion or termination of pregnancy among young people aged 15-24, partly because it is usually a traumatic experience for the individual and seen as a socially undesirable event. As a result, it is usually under-reported in population surveys. Only 3% of all ever pregnant women aged 15-24 in 2003 reported that they ever had an induced abortion (RHRU, 2004). Available statistics are usually for induced abortion performed in government health facilities, which in a number of situations are not the first place of choice for most women seeking abortion services. However such data suggest an increasing trend in induced abortion among young women. Data for all young women under the age of 18 are shown in Figure 5 and points towards an increase in the contribution of young women under the age of 18 to all induced abortion performed in government public health facilities. These statistics indicate an increasing trend in the contribution women under the age of 18 to all reported cases of induced abortion since 2002. Figure 5 shows that in 2002, 6.8% of all induced abortion carried out in government facilities were among young women under the age of 18. In the five years that followed, this increased to 12.7% in 2007.

Figure 5 - Induced abortions for women under age 18 as a % of all induced abortions, 2002 - 2007



Source: DoH reports

6. Marriage

The prevalence of marriage among the youth in South Africa is amongst the lowest in the developing world (compared with data for other 38 countries reported in Khan and Mishra, 2008). Researchers have shown interest in the complex interactions of marriage and reproductive health among the youth in South Africa. (Kaufman, et al. 2001, Chimere-Dan 1997, Garenne et al. 2000). The timing of marriage is important for maternal and child health. It has also been associated with the risk of HIV

infection especially in sub-Saharan Africa (Clark, 2004, Garenne, 2004, Dixon-Muller 2008, Zabin and Kiguru 1998). Table 7 shows no major change in the trend of marriage among the youth aged 15-24 since 2001. Only 8.8% of young people in this age range have ever been married. There is some upward trend in the per cent of young people aged 15-19 who have ever been married. In 2001, only 2.9% of the youth in this subgroup were married (Table 7). This rose to 3.8% in 2007. The same pattern of change is observed for both males and females in this age group (Table 8). On the other hand, a decline in the per cent of females who have ever married between 2001 and 2008 reflects in a small decline in the prevalence of marriage among people in the 20-24 age group. The per cent of the youth in this age group who have ever been married fell from 14.6% in 2001 to 13.7% six years later in 2007.

Table 7. Summary indicators of marriage and childbearing, 1998-2007

	1998	2001	2007
% ever married (15-19yrs)	4.1	2.9	3.8
% ever married (20-24yrs)	25.6	14.6	13.7
Age-specific fertility rate (15-19yrs)	.076	.067	.054
Age-specific fertility rate (20-24yrs)	.139	.126	.119

Sources: Computed from data from SADHS 1998, Census 2001 and Community Survey 2007.

Table 8. Prevalence of marriage among South African youth, 2001 and 2007

	2001	2007
<i>% Ever married</i>		
15-19yrs		
Male	1.3	2.9
Female	4.4	4.8
All	2.9	3.8
20-24yrs		
Male	8.1	8.6
Female	21.0	18.6
All	14.6	13.7
All 15-24yrs		
Male	4.7	5.8
Female	12.7	11.7
All	8.8	8.8

Source: Calculated from Community Survey 2007 data.

Table 9 shows that in 2007 among the youth aged 15-24 years, the rate of non-marriage was higher among Africans (97% have never been married) and Coloureds (96.1% have never been married) than among Whites (94% have never been married) and Indians

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(89.7% have never been married). Provincial differences in Table 9 show that non-marriage is particularly pronounced among the youth in KwaZulu-Natal and Northern Cape. The prevalence of marriage among the youth is comparatively higher in Free State (4.9%), Gauteng (4.6%), Western Cape (4.3%) and Limpopo (4.0%).

Table 9. Percentage of youth ever married by population group and province, 2007

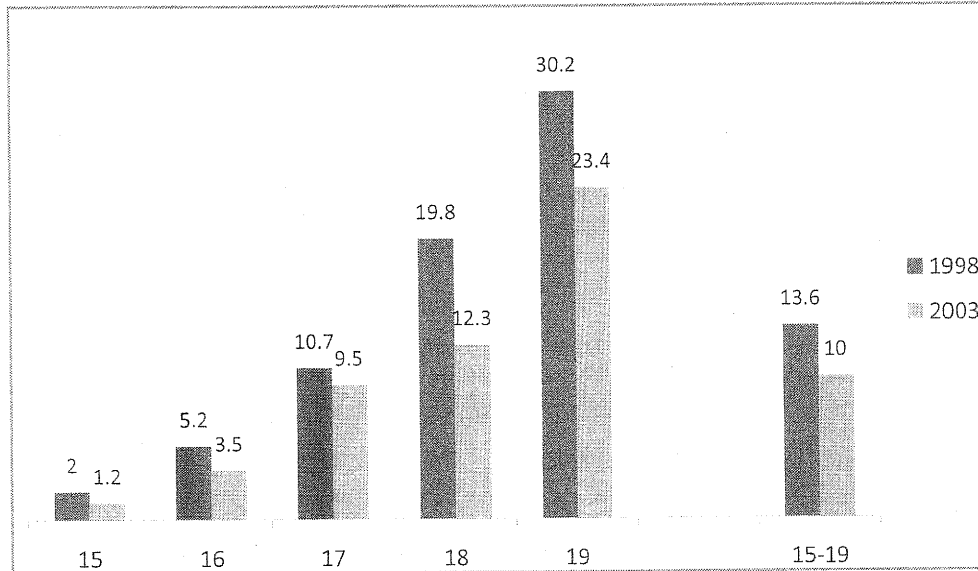
		15-19yrs	20-24yrs	15-24yrs
Pop group	African	1.0	5.2	3.0
	Coloured	0.8	7.1	3.9
	Indian	2.7	17.1	10.3
	White	1.4	10.7	6.0
Province	Eastern Cape	1.5	7.2	3.9
	Free State	1.0	9.1	4.9
	Gauteng	1.2	7.3	4.6
	KwaZulu-Natal	0.8	3.3	2.0
	Limpopo	1.1	8.0	4.0
	Mpumalanga	0.8	4.6	2.6
	North West	0.6	4.3	2.4
	Northern Cape	0.5	4.0	2.1
Western Cape	1.2	7.2	4.3	
All youth 15- 24yrs		1.0	6.1	3.5

Source: Calculated from Community Survey 2007 data.

7. Childbearing

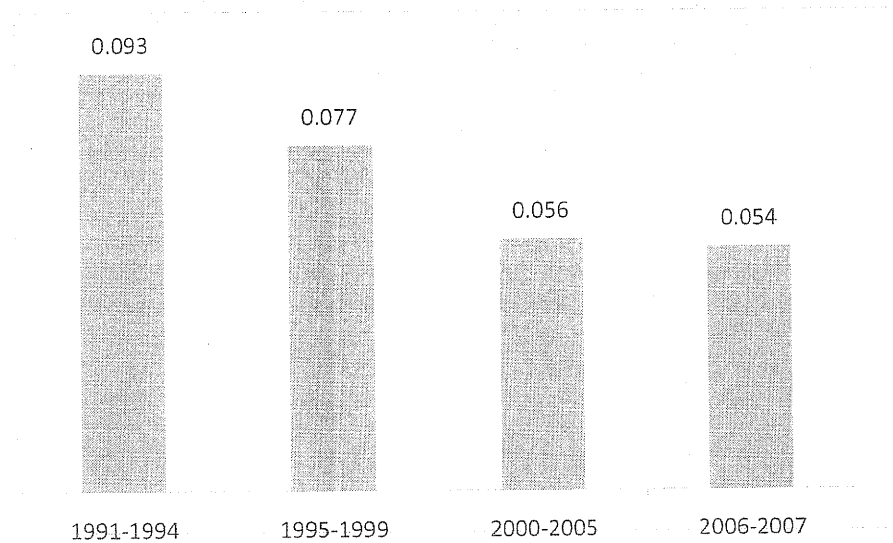
During the 1980s and the 1990s, worries about teenage childbearing in South Africa were directly related to official concerns about rapid population growth and the contribution of teenage births to the overall total fertility rate, which was perceived to be too high. Today as in the past, reproductive health concerns have helped to raise issues about teenage pregnancy and childbearing to a high level of research and policy agenda. In particular, in the past few years, debates about teenage childbearing in South Africa have moved from predominantly demographic and reproductive health concerns to issues about public welfare and economics (see Makiwane, forthcoming). Besides these debates, the health concerns of teenage childbearing in South Africa are particularly serious considering the fact that most teenage girls who become pregnant and go on to have babies do so outside any form of a socially recognized marital union. Figure 6 shows a declining trend in the per cent of South Africans aged 15-19 who were mothers in 1998 and 2003. In 1998, 13.6% were mothers compared to 10% in 2003. This trend is consistent for women in each single age from 15 to 19.

Figure 6 - % of teenagers that are mothers, 1998 and 2003



Source: SADHS 1998 and 2003 reports.

Figure 7 - Teenage (15-19 years) specific fertility rate, 1990 - 2007



Source: Makiwane forthcoming.

Trends in teenage childbearing in South Africa are presented in Figure 7. The data show that for all South Africa, the teenage specific fertility rate declined from 1998 to 2007. Other published data show that although the levels are comparatively higher for Africans and Coloureds, the declining trend in teenage fertility is universal for all

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population groups. There is also evidence that teenage childbearing is declining in both rural and urban areas of South Africa (see Table 11).

Table 10. Trend in teenage specific fertility in South Africa by population group, 1998 and 2003

	1998	2003	% change
African	.081	.058	28
Coloured	.081	.048	31
Indian	.026	.024	8
White	.020	.014	30
All teenagers (15-19yrs)	.076	.056	30

Source: Makiwane forthcoming.

Table 11. Trend in teenage specific fertility rates by province, 1998 and 2003

		1998	2003
Province	Eastern Cape	.079	.053
	Free State	.055	.051
	Gauteng	.052	.035
	KwaZulu-Natal	.092	.069
	Limpopo	.090	.059
	Mpumalanga	.100	.064
	North West	.060	.062
	Northern Cape	.075	.055
	Western Cape	.067	.035
All 15-19 years		.076	.056

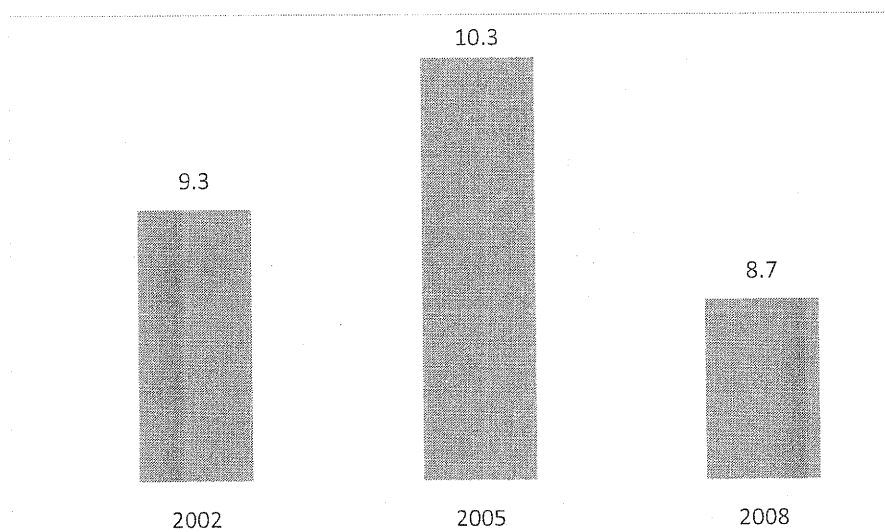
Source: Makiwane forthcoming.

8. Youth, HIV and AIDS

The HIV and AIDS epidemic remains the major health challenge among young people in South Africa. It impacts powerfully on several critical aspects of youth health today. However, it is not possible to give adequate attention to any of its important dimensions in relation to the youth in the general analysis of youth health status undertaken here. A simple question highlighted in this section is whether emerging data suggest a declining rate of HIV infection among the youth aged 15-24 years.

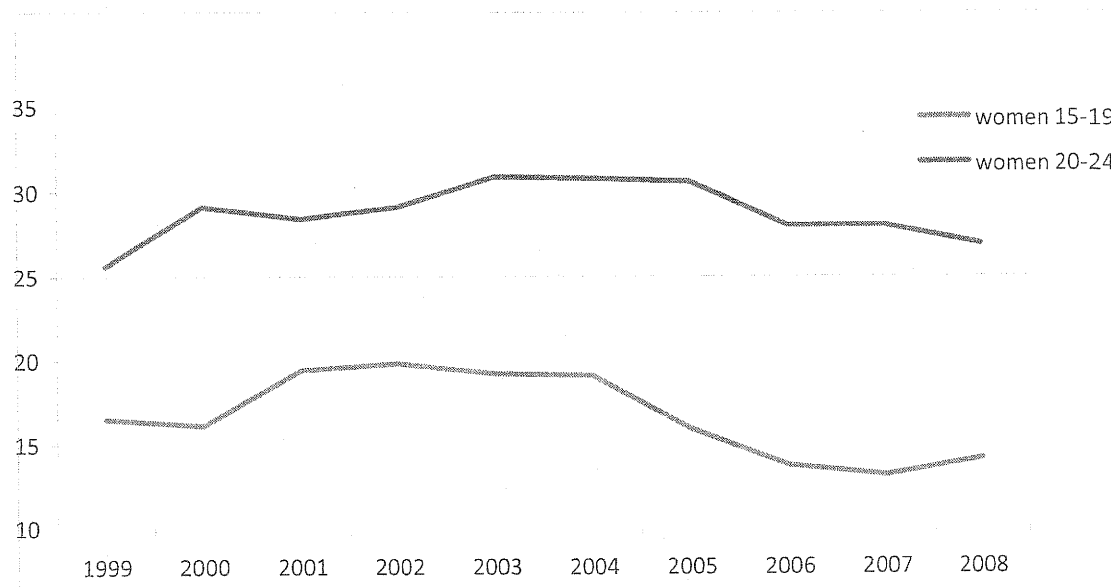
There is growing consensus among experts that the prevalence rate of HIV in South Africa peaked in about 2005 for the entire population. This conclusion is supported by data from recent rounds of national population-based (HSRC, 2009) and ante-natal facility (National Department of Health, 2009) surveys. The prevalence rate extrapolated for the general population from the antenatal clinic data for 2008 was 17.5%. Figure 8 shows that the prevalence rate of HIV among the youth rose from 9.3% in 2002 to a peak of 10.3% in 2005 and then declined to 8.7% in 2008. HIV prevalence rate may be stabilizing, but there are still worries about the youth age groups. The declining trend suggested by population-based survey data for 2002, 2005 and 2008 (HSRC 2009) appears to agree with the information from annual survey of women using public ante-natal health services (DoH, see Figure 9).

Figure 8 - HIV prevalence for 15 - 24 year olds, 2002-2008



Source: Calculated from HSRC 2009.

Figure 9 - HIV prevalence among women 15 - 24 year, 1999-2008



Source: Calculated from DOH annual survey reports, 1999-2009.

Table 12 shows a prevalence rate of 4.6% among people in the 15-19 age group and 13.1% among those aged 20-24 years. Trends in the provincial prevalence rates are shown in Table 13. The peak level of prevalence of HIV among the youth in 2005 is visible in all but North West and Northern Cape where the prevalence rate has experienced a consistent decline since 2002. Mpumalanga and Western Cape are the only two provinces where the 2008 prevalence rate of HIV among the youth is higher than the rate estimated from the 2005 survey. But in all provinces, the rates estimated from 2008 survey are consistently lower than estimates from the 2002 survey.

8.1 Gender differences in HIV prevalence rate

One of the most disturbing aspects of HIV prevalence is the wide gender differences in its rate among all youthful age groups. Data for 2008 (Table 12) show a substantially higher rate of prevalence among women in both 15-19 and 20-24 age groups. In both age groups, HIV prevalence rate is higher among women—6.7% in the 15-19 age group compared to 2.5% of men in the same age group; and 21.1% for women aged 20-24 years compared to 5.1% for men aged 20-24 years. This pattern of gender difference in HIV prevalence rate is true for men and women well into the end of their thirties. The HSRC (2009) estimated that women aged 20-34 are the most at-risk subgroup of the South African population, with an HIV prevalence of 32% in 2008.

Researchers have drawn attention to the contributions of various factors including cultural ideals of masculinity and femininity, dominant norms that weakens young women's sexual negotiation powers in normal and in violent situations, and patterns of

deliberate risky sexual behaviour as a survival strategy by women (Moore et al, 2007, Simbayi et al 2005 Auerbach, et al, 2006, Marston and King, 2006 Lloyd, 2005). Despite progress in these and other areas, researchers are yet to fully understand the complex socially constructed gender roles and inequalities which on balance have detrimental effects on the health of women and increase degree of their vulnerability to HIV infection. This evidence calls for modifications of existing interventions, and if necessary development of new ones that will sufficiently address the wide differences in HIV prevalence rates among young men and women in South Africa.

Table 12. Differences in HIV prevalence among the youth based on age and sex, 2008

	Male	Female	All
15-19	2.5	6.7	4.6
20-24	5.1	21.1	13.1
15-24	3.8	13.6	8.7

Source: Calculated from HSRC 2009.

Table 13. HIV Prevalence among South African youth by province, 2002-2008

	2002	2005	2008
Eastern Cape	9.2	11.7	6.6
Free State	8.7	10.3	3.8
Gauteng	11.6	9.0	10.1
KwaZulu-Natal	7.2	16.1	15.3
Limpopo	5.6	7.4	3.9
Mpumalanga	17.7	10.1	15.5
North West	8.3	6.6	6.3
Northern Cape	11.8	6.4	5.9
Western Cape	11.2	2.3	3.0
All	9.3	10.3	8.7

Sources: HSRC 2002, 2005 and 2008 Survey reports

9. Youth mortality and causes of death

Statistics on annual reported deaths provide good insights on patterns of youthful mortality. This is particularly so because people in youthful ages are generally known to experience lower levels of mortality in a fairly normal circumstances. If we observe exceptionally levels and inconsistent patterns of mortality, these may be relatively easier to explain by researchers who are experienced in South Africa's epidemiology and demography.

Table 14 show an eight-year trend in age-specific mortality rates for young people aged 15-24 based on reported deaths. Without minimizing possible impacts of data quality,

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the most general conclusion about these trends is that they do not indicate large changes in the recent times. A small downward change from a peak level in 2006 is observed for people in the 20-24 age group. (See Table 14)

Table 14. Trends in age-specific death rates (ASDR) among South African youth, 1997-2007.

YEAR	15-19		20-24	
	N	asdr*	N	asdr*
2001	8,434	16.9	19,920	46.4
2004	9,326	18.9	25,470	45.4
2006	9,467	19.2	25,726	55.3
2007	9,038	18.2	24,588	52.6

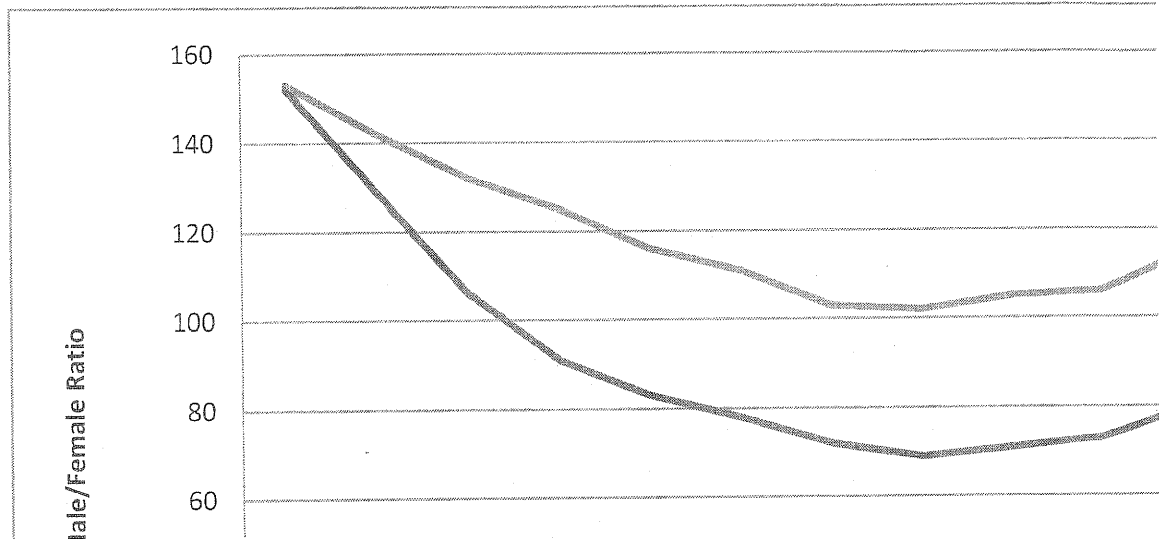
* per 10,000.

Source: Statistics South Africa mortality data and reports.

9.1 Gender differences in youth mortality

Gender differences in the trend in mortality contribute important insights to the state of health of South African youth in the past fifteen years. Figure 10 presents a ten-year summary of gender difference in reported male and female deaths from 1997 to 2007 in the form of age-specific male-female sex ratios. A ratio below 100 indicates a higher number of female deaths. A ratio above 100 indicates a higher number of male deaths. A ratio of 100 indicates an equal number of male and female deaths. The data show that young people aged 15-19 have consistently experienced higher male mortality. Between 2003 and 2005 gender differences in death among young people narrowed but widened in 2006 and 2007. The experience of people in the 20-24 age group is more dramatic. Before 2000, males aged 20-24 experienced higher mortality than females in the same age group, but since 2000, the reverse has been the case. The age-specific death ratio has remained consistently below 100 for the 20-24 age group since 2000, indicating a higher number of female deaths in this age group.

Figure 10 - Ratio of male to female deaths, 1997 - 2007



Source: Calculated from STATSSA reports.

9.2 Causes of death among the youth

The ten leading causes of death in among South African young people as reported in 2006 and 2007 are shown in Table 14. Tuberculosis ranked as the major leading cause of youth mortality in 2005 and 1997. A total of 14.9% and 15.2% of deaths in 2006 and 2007 were attributed to tuberculosis. A somewhat surprising feature of this table is that HIV ranked on fifth in the league table of causes. A number of observers believe that this ranking is influenced by genuine problems of inaccurate allocation of causes and also intentional avoidance of socially-stigmatized causes such as HIV.

Table 15 presents a summary of deaths caused by events of undetermined intent among the youth based on the 2006 records of deaths. A highlight of these statistics for research and youth health management interest is the very high proportion of death due to ICD Y24 or other and unspecified firearm discharge (3.8%). Another statistic of research and social challenge is the significant proportion of youth death that is attributable to hanging, strangulation and suffocation. A relatively high per cent (2.5%) of deaths to young people in 2006 were categorized as caused by ICD Y20, which should include suicide. These statistics should be interpreted with caution because of obvious problems in their reporting, collection and presentations. At the same time they offer useful leads for more rigorous investigations of causes of youth mortality in South Africa.

Table 15. The ten leading underlying natural causes of youth death (15-24) in 2006 and 2007

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Code *	Cause of death	2006 %	2007 %
A15-A19	Tuberculosis	14.9	15.2
J10-J18	Influenza and pneumonia	7.8	6.8
A00-A09	Intestinal infectious diseases	4.7	4.6
D80-D89	Certain disorders involving the immune mechanism	3.1	2.9
B20-B24	Human immunodeficiency virus (HIV) diseases	3.0	2.8
G00-G09	Inflammatory diseases of the central nervous system	2.5	2.5
B25-B34	Other viral diseases	2.3	1.9
I30-I52	Other forms of heart diseases	1.8	1.8
J20-J22	Other acute lower respiratory infections	1.1	1.1
G40-G47	Episodic and paroxysmal disorders	1.1	1.0
	Other natural causes	25.1	25
	Non-natural causes	33	34.5
	All causes	100	100
	Number of reported deaths	34,871	33,626

* Codes are based on the Tenth Revision, International Classification of Diseases, 1992.

Sources: Calculated from STATSSA data on cause of death for 2006 and 2007

Table 16. Death caused by events of undetermined intent among the youth (15-24), 2006

Code *	Causes of death	N	%
Y14	Poisoning by and exposure to other and unspecified drugs, medicaments and biological substances	34	0.1
Y17	Poisoning by and exposure to other gases and vapours	26	0.1
Y18	Poisoning by and exposure to pesticides	50	0.1
Y19	Poisoning by and exposure to other and unspecified chemicals and noxious substances	123	0.4
Y20	Hanging, strangulation and suffocation	895	2.6
Y21	Drowning and submersion	230	0.7
Y24	Other and unspecified firearm discharge	1320	3.8
Y26	Exposure to smoke, fire and flames	298	0.9
Y28	Contact with sharp object	538	1.5
Y29	Contact with blunt object	593	1.7
Y34	Unspecified events	3535	10.1
	Total	7642	22
	% of all youth deaths		22.5

* Codes are based on the Tenth Revision, International Classification of Diseases, 1992.

Sources: Calculated from STATSSA data on Causes of death for 2006 and 2007.

10. Discussion

Weaknesses in available data limit what we currently know about trends in the overall health status of the youth in South Africa. There has probably been some downward trend in the prevalence of disability among the youth although possible problems in the defining and differences in the quality of data cannot be ruled out in the observed trend. There was an increase in the use of alcohol and tobacco among the youth within the relatively short period from 1998 to 2003. This leaves a gap in our knowledge of the true situation in the past five years. Nationally representative and population based trend data are not available but small scale studies, data from South African Police Services and service statistics indicate that drug use is increasingly becoming a major health problem among the youth especially in the metropolitan areas of the country.

There are signs of small increases in the proportion of the youth who abstain from sexual relations in younger ages in the short period between 1998 and 2003. This trend should be confirmed and updated with more recent data. The timing of first sexual relations appears to have experienced little change as indicated in the 1998 and 2003 data. By far the biggest change in reproductive health behaviour of the youth is an increase in condom use by sexually active youth population of South Africa. No such major change is evident in the statistics on multiple sexual partnership and inter-generational sexual relations. Data on pregnancy and induced abortion among the youth are sketchy and possibly unreliable but suggest an increase in the number of unwanted pregnancies, hence a rising trend in the share of the youth in the total number of induced abortion performed in public health facilities in the country. Timing of marriage among the youth shows no major change in trend. At the same, available information indicates a declining rate of childbearing by the youth.

The interrelations of the indicators examined here and other dimensions of youth health trend and their possible impacts on the health status of the youth defy any simplistic judgment. This is especially true when the data that inform our assessment of these issues are not of very good quality. It makes sense to relate them to more concrete and empirical trend in two areas, namely trend in HIV prevalence among the youth and trend in reported youth mortality. Informed observers suggest that HIV prevalence peaked in 2005 in the total population. The most recent population based survey (HSRC, 2009) which estimated some decline among the youth between 2005 and 2008 indicate that this trend is most probable true in the youth population. Clearer understanding of this trend could throw some light on the recent trend in youth mortality. Mortality measures from reported deaths shows a small decline in death rate among the youth but no change in patterns of causes of death among the youth in South Africa. The drivers and patterns of this important change in the trend of youth health should become clearer as new HIV prevalence data become available in the near future from population based surveys and other dependable sources. However the observed patterns sexual partnership and marriage among the youth do not reduce concerns about the immediate future change especially in the light of recent evidence from simulation studies which indicate that concurrent partnerships and non-spousal sexual relations are among the major drivers of HIV trend in South Africa (Johnson, et al. 2009, Halperin, et al 2007, Parker et al 2007).

It is unclear whether the observed decline in age specific death rate estimated for the youth for 2007 is a function of data quality or the beginning of a new trend that could be consistent with the observed declining trend in HIV prevalence among this subgroup of the South African population. Statistics on cause of death helps but do not provide definitive answers to the issues because these data sets are too weak in quality to support an in-depth analysis especially in regard to causes such as tuberculosis, HIV and AIDS.

10.1 Youth health in development

Development of youth health is an indispensable component of national development. The youth population are an integral part of the population that constitute the object of development plans and programmes. Good health for the youth must be seen as basic needs. A healthy youth population is more likely to contribute required skills for broad-based socioeconomic development. In this regard, the concept of youth dividend is predicated on an assumption that the youth population will be healthy and have good access to opportunities and skills for self-fulfilment. A challenge for South Africa is to keep the youth population healthy, primarily as a basic human right, and in order for them to contribute to national economic growth and human development in the longer term.

Investment in youth health yields immediate and long-term dividends for human development and economic growth. First, provision of access to health services to the youth is a basic need of the youth. The youth cannot be expected to draw from generational or immediate parental stocks for guaranteed progress and successful integration into productive member of the society. Many of them are not yet economically productive. Only a relatively small number have just entered the economy and their financial contributions cannot be expected to replace public health expenditure on them. A longer time investment on youth health makes good returns for economic growth. Low risk health behaviour by the youth that results from promotive and preventive health interventions reduces future costs to the State in forms of maternal and child health care, child maintenance grant and HIV and AIDS care in the larger population. In this sense, investment in youth health generates financial and other resources that could be more positively invested in youth skills development to maximize their contribution to national development.

The *Policy Guidelines on Youth and Adolescent Health* (National Department of Health, 2001) outlined challenges, identified priorities and suggested indicators and interventions for youth health in South Africa. Before and following these overarching guidelines, many intervention programmes have been implemented to address aspects of youth health in the country. A two-pronged implementation response is required for activities in various existing and new programmes that expect to impact positively on youth health. A holistic approach would engage in vigorous programmes that encourage healthy lifestyle among young people. Related activities would include among others, intensive programmes of public health education that facilitate health promoting social institutions and the family in which the youth develop positive values of physical, emotional and spiritual health. Such an approach would promote physical fitness, good dietary habits, personal hygiene and avoidance of risky sexual behaviour

and substance abuse. At the same time, there is a need for active implementation of existing and new intervention programmes to reduce the prevalence rates of youth suicide, physical accidents, violence, injuries and other preventable health problems. Lessons learnt from HIV and AIDS interventions can be applied in designing and implementing promotive and preventive health interventions in other equally important aspects of youth health in South Africa. There is also a need for inter-sectoral collaboration in developing conducive social, community and family environments in which young people are encouraged to make healthy choices as they experience major phases of transition into adulthood.

10.2 Areas of need in youth health research

Researchers and programme managers are easily tempted to overlook the health patterns, behaviour and needs of the youth in public health research (see Goodburn and Ross, 2008, Lutge et al. 2007, Paton et. al 2009) on the assumption that they are relatively a healthy sub-group in the society.⁹ Transition into adulthood is an uncertain and risk-filled experience for most adolescents and youth people. It involves among other things pscho-somatic and social processes that affect health behaviour and eventually impact on the overall health status of the youth (see Lloyd, et al 2005). Questions raised by the health experiences of the South African youth in these and related areas are yet to be fully addressed in systematic programmes of public health research. Important youth health priorities identified by the Policy Guidelines for Youth and Adolescent Health (Department of Heath 2001, WHO 1997, UNAIDS 2004) such as mental health, violence, unintentional injuries, birth defects and inherited disorders, nutrition and oral health were not covered in this analysis. Other areas of youth health and well-being identified by the National Youth Policy 2009-2014 (2009) including improving youth friendly health services and information were also not addressed. These limitations of scope serve albeit indirectly to highlight an urgent need for better approaches and indicators for monitoring improvements in youth health. Following high interest and extensive work, researchers have fairly good knowledge about patterns and trends in reproductive health, prevalence and trends in HIV and AIDS among the youth. Unfortunately, not as much is known about several other areas of youth health. As a step towards correcting this imbalance in knowledge about youth health, there is a need for studies that aim to develop professionally acceptable sets of composite indicators for monitoring and assessing the overall health status of the youth in South Africa.

The current state of knowledge about HIV and AIDS among the youth does not reflect the huge investments in research activities on this epidemic in the past two decades.

⁹ Clearly this assumption does not apply in the case of HIV and AIDS. In the recent times, legitimate concerns about HIV and AIDS nearly overshadowed research interest in other equally important aspects of youth health in South Africa. As a result the past few years have witnessed an unprecedented degree of research interest and commensurably huge volumes of research output on HIV and AIDS among young people. (See also some of research publications by UNFPA (2004) World Bank (2007) and WHO (2009).

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Knowledge about the interactions of individual-level factors and social, economic and cultural factors that affect risk behaviour, sexual networking and HIV prevalence rate is not well-advanced. Gillespie et al (2007) illustrates the slow pace of progress in our current understanding of non-clinical correlates the spread of HIV among the youth. In South Africa, much public health and social science research in HIV and AIDS is predominantly descriptive. In a number of cases, attempts at explanatory analysis are little more than repetitions of generalities within the confines of commonsense knowledge. For instance, although the gender dimension of the HIV and AIDS has been extensively investigated, there are no clear and definitive explanations for the persistence of a wide gender gap at this matured stage of the epidemic in South Africa. Health and social scientists are yet to take advantage of the challenges presented by the AIDS epidemic to make fundamental advances in understanding and explanations of health determinants in South Africa and other transitional societies with a high prevalence rate of HIV.

Intensive research activities on the South African health system from the late 1980s into the 2000s were well-justified because several problems that reflect in the health profile of the South African youth have roots in past social and economic inequalities. In the past 15 years, the South African society and health system have been transformed in ways that aim for equity and a greater degree of access to basic services by all sections of the national population. In this regard, questions about health determinants among the youth have become more complex. Systemic, behavioural and other factors make complex contributions to the status of health among young people that remain to be sufficiently understood by researchers, policy makers and programme managers.

In view of important changes in the South African society in the past decade, there is a need for researchers to identify the critical factors that determine the status of youth health and in what combinations they do so. Such studies will advance knowledge of the contributions of traditional health determinants and emerging factors in the South African context (Bradshaw 2008, Hallman 2003, Harrison et al 2008, Hallman 2004, Rani and Luke 2004, Luke 2003, Campbell et al 2005, Varga 2003). Clarifying these and similar issues calls for youth-targeted public health research with improved explanatory models. As information on youth health in South Africa improves, we expect socioeconomic differences to become important in the trend of youth health in South Africa. Differences by population group, province, rural-urban residence, parental background, personal education and sometimes work status may contribute important insights into emerging patterns socioeconomic determinants of trend in youth health in South Africa. From a policy perspective, quantitative and qualitative gender analysis should be central in monitoring and understanding trend in youth health. A number of indicators we examined in this analysis show important gender differences in patterns and trends while others are gender specific and need necessarily be related to total youth population only indirectly.

A major limitation of this assessment is apparent in the number of areas that are covered, although the choice was based on available and quality of relevant data. Important questions about improvements in youth health in South Africa over the past one and half decades remain largely unanswerable partly due to a lack of appropriate empirical data. Areas for which there are some answers include reproductive health behaviour and youth risk for HIV and AIDS. Further research is needed to generate

more comprehensive data in a number of other areas such substance use, injuries, accident, suicide, mental health, nutritional and dietary behaviour of the youth. Improvements are also needed in statistics on mortality and causes of death among the youth. Contextually appropriate youth health indicators can be used to influence the directions and outcomes of health policy and programmes as well facilitate the planning and implementing youth health services at the local levels. In the light of these important benefits, researchers and policy makers should actively engage with the methodological and policy challenges in refining available youth health indicators in South Africa.

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