THE STATE OF PROPOSED INDICATORS TO MONITOR THE IMPACT AND OTHER ASPECTS OF HIV/AIDS

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The indicators selected in this section are the death rates among the population aged 15-49, the child mortality rate and life expectancy at birth.

1.1 Death Rate

*Indicator description/definition*

The crude death rate of the population 15-49 is defined as the number of deaths (D) occurring within that age group in a specific year, expressed as a proportion (per 1 000) of the size of the mid-year population (N).

\[ CD = \frac{D}{N} \times 1\ 000 \]

The crude death rate has increased sharply between 1994 and 2001. This could be attributed to increase of HIV infection among the general population. The figure below indicates the projected mortality rates with and without the presence of AIDS.

*Source: SAHR 2002*
1.2 CHILD MORTALITY RATE

Indicator description/definition
The child mortality rate refers to deaths among children less than 5 years old (0-4 years age group). The indicator is also referred to as under 5 mortality. The rate is expressed as the number of children dying in a year per 1 000 children aged 0-4.

Source: Rehle & Shisana (AJAR)
The under-five mortality rate is much higher in non-urban areas (71.2) compared to urban areas (43.2). There are also great disparities between the provinces with the highest being 80.5 in Eastern Cape and the lowest 13.2 in Western Cape. Also, under-five mortality rate among the African population group (63.6) is more than double the rate for the coloured population group (28.2) (DOH 1998).

1.3 LIFE EXPECTANCY AT BIRTH

*Indicator description/definition*

Life expectancy at birth is an index reflecting the average number of years a person born in a specific population can expect to survive should prevailing mortality patterns continue throughout the life of this individual. It is calculated by means of a life table, and is not sensitive to the age structure of the population.

The impact of AIDS is projected to severely affect the life expectancy. During the period 2005-2010 the life expectancy at birth is expected to hit a low of 45.6 years, which is 22 years less than it would have been in the absence of AIDS.

Source: Rehle & Shisana (AJAR)
2  INDICATORS REFLECTING A REDUCTION IN THE TRANSMISSION OF HIV

In this section data gathered from the recent Nelson Mandela/HSRC study of HIV/AIDS was used to populate the proposed indicators. Indicators listed here monitor the national HIV prevalence of both women and males.

2.1  PERCENTAGE WOMEN AGED 15-24 INFECTED BY HIV

*Indicator description/definition*

The percentage of women aged 15-24 who are HIV positive. This indicator is calculated by dividing the number of women in this age category who tested HIV positive with the total number of women aged 15-24 who participated in the survey. The figure is weighted back to the respective population of South Africa.

![Graph showing percentage of women aged 15-24 infected by HIV]

*Source: Nelson Mandela/HSRC study of HIV/AIDS 2002*

Findings from the Nelson Mandela/HSRC study showed that female youth have a much higher HIV prevalence as compared to male youth (6.1%). African youth (10.2%) had the highest observed HIV prevalence, followed by coloureds with 6.4%. The major differences were found amongst various locality types with youth living in urban formal areas having significantly higher prevalence than youth living in urban formal areas.

2.2  HIV PREVALENCE RATES FOR MALES AGED 15-49

*Indicator description/definition*

The percentage of men aged 15-49 who are HIV positive. It is calculated by expressing the number of men in this age category who test HIV positive as a percentage of all men aged 15-49.
HIV prevalence was highest among Africans and for the population residing in urban informal areas. Women in this age group had a much higher prevalence (17.7%) than their male counterparts.

Source: Nelson Mandela/HSRC study of HIV/AIDS 2002
When considering the HIV epidemic, it is useful and necessary to take into account the broader economic, social and cultural conditions prevailing in a country.

Three indicators were identified for monitoring the socio-economic conditions that contribute to vulnerability to HIV/AIDS. The proportion of the population living below the poverty line. The relationship between HIV/AIDS and poverty is complex; often moderated by other factors. The percent of households who have access to water/electricity and the proportion of the population defined as migrant workers.

3.1 The proportion of households living below the poverty line

**Indicator description/definition**
The percentage of households living below a pre-determined poverty line.

For South Africa the poverty line can be defined by considering the poorest 40% of households (about 19 million people or just under 50% of the population) as ‘poor’, giving a monthly household expenditure level of R353 per adult equivalent.
Most of the poor live in rural areas: while 50% of the population of South Africa is rural, the rural areas contain 72% of those members of the total population who are poor. The poverty rate (which is the proportion of people in a particular group or area falling below the poverty line, and which measures how widespread poverty is) for rural areas is 71%.

3.2 ACCESS TO KEY RESOURCES-PERCENTAGE HOUSEHOLDS WITHOUT CLEAN WATER (RURAL AREAS) OR ELECTRICITY (URBAN AREAS)

**Indicator description/definition**
The percentage households without clean drinking water in rural areas.

**Percentage of households without clean water (rural areas)**

Source: OHS 1995, LFS 2000

Slow but steady progress has been made to increase access to clean water in rural areas.

**Indicator description/definition**
The percentage households without electricity in urban areas.

**The percentage households without electricity in urban areas**

Source: OHS 1995, LFS 2000
Although a high proportion of houses in urban areas are electrified, there has been a slight decrease in this proportion between 1995 and 2000. Possible reasons for this decrease could be increased unemployment and shrinking household capital.

3.3 PROPORTION OF THE POPULATION DEFINED AS MIGRANT WORKERS

Indicator description/definition
The percentage of households with a member who is absent from home, for employment purposes or for purposes of seeking employment.

According to the 1999 October Household survey, 8.5% of the South African population were migrant workers. African males were more likely than all other males and females to be migrants. African women were more likely than other women to be migrants. The Nelson Mandela/HSRC study of HIV/AIDS found Africans to have the higher rates of HIV.

Source: Stats SA 2001
People are empowered by knowledge. In terms of HIV/AIDS, such empowerment includes being able to read information booklets and internalise the content. Information can also be distributed by means of the radio, but a person needs to internalise the content of the message to act upon it. Being educated provides a person with the ability to read, hear and see HIV/AIDS-related messages and information in English, whereas being illiterate bars people from benefiting from information. Most South Africans do not use English as their home language. Important in Information, Education and Communication (IEC) campaigns is the access of the population to the mass media. Without the population having such access, IEC campaigns will not be successful.

4.1 PROPORTION OF THE POPULATION WHO COMPLETED GR. 12

**Indicator description/definition**
The percentage of the population 20 - 64 years old, who successfully completed 12 years of schooling.

The level of education has improved significantly from 1994, with only 14% of South Africans with matric compared to 23% in 2002. A larger proportion of the urban population (29%) completed matric as compared to their rural counterparts (13%). In 1994 only 5 percent of the rural population completed matric compared to 20 percent in the urban setting. The Nelson Mandela/HSRC study of HIV/AIDS shows that on a scale of 1-5 race was an important determinant of knowledge levels. Coloureds had a score of 3.29, Africans 3.64, whites 3.99, suggesting that coloureds and Africans had lower knowledge levels. The study found that preventive messages in Afrikaans were lacking and messages were more likely to be in English.

*Source: SAARF 2002, Stats SA 1998*
4.2 Percentage of the Population Aged 15 and Older Who Have Correct Knowledge of HIV Causation and Prevention

Indicator description/definition
The proportion of respondents who have correct knowledge of HIV causation and prevention is a measure of knowledge levels. In order to gain the most value from this indicator, it should be presented by two broad age ranges, namely among those aged 15-24 and those aged 25-64. Of special interest is the indicator value for the youth, given the media campaigns directed at this segment of the population.

| Proportion of respondents who have correct knowledge of HIV causation and prevention |
|---------------------------------|-----------------|-----------------|
|                                  | 15-24 years     | 25-49 years     |
| HIV causes AIDS                  | 81.2%           | 79.3%           |
| HIV not transmitted by kissing   | 75.9%           | 74.6%           |
| AIDS not caused by witchcraft    | 85.3%           | 86.1%           |
| HIV not transmitted by touching someone | 91.0%         | 89.9%           |
| AIDS cannot be cured by having sex with a virgin | 89.2%         | 92.8%           |

Knowledge levels are very high among both youth and adults.

<table>
<thead>
<tr>
<th>Proportion of population who can recall messages on prevention</th>
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<tr>
<td>15-24</td>
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<tr>
<td>Condom use</td>
</tr>
<tr>
<td>Faithfulness</td>
</tr>
<tr>
<td>Abstinence</td>
</tr>
<tr>
<td>No. of partners</td>
</tr>
</tbody>
</table>

Source: Nelson Mandela/HSRC study of HIV/AIDS 2002

Most South African youth and adults can recall prevention messages on condom use and faithfulness.
4.3 PROPORTION OF THE POPULATION WHO HAVE ACCESS TO TELEVISION

Indicator description/definition
The percentage of the population aged 15-64 with access to a working television set.

There has been a substantial increase in ownership of television sets. Almost 45% of rural households now have TVs, compared to 27% in 1994. Urban television penetration is now at 84% of all households. Data from the Nelson Mandela/HSRC study of HIV/AIDS presented below shows that radio has penetrated people in all areas.

Have access a few days a week to:

<table>
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<th></th>
<th>Radio</th>
<th>Television</th>
<th>Newspapers</th>
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<tbody>
<tr>
<td>15-24 years</td>
<td>82.6%</td>
<td>66.7%</td>
<td>28.4%</td>
</tr>
<tr>
<td>25-49 years</td>
<td>82.6%</td>
<td>70.1%</td>
<td>33.4%</td>
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Media informative/very informative for HIV/AIDS information:

<table>
<thead>
<tr>
<th></th>
<th>Radio</th>
<th>Television</th>
<th>Newspapers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban formal</td>
<td>74.0%</td>
<td>81.6%</td>
<td>54.3%</td>
</tr>
<tr>
<td>Urban informal</td>
<td>82.8%</td>
<td>61.7%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Tribal Authority Area</td>
<td>80.7%</td>
<td>52.2%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Farms</td>
<td>73.7%</td>
<td>54.8%</td>
<td>26.0%</td>
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5 INDICATORS REFLECTING HUMAN BEHAVIOUR PATTERNS WITH A BEARING ON THE TRANSMISSION OF HIV

The spread of HIV/AIDS is largely driven by the sexual behaviour and vertical transmission. Recently there is renewed interest in hosocomial or iatrogenic transmission. This is due to health service use of unsterile needles. That has been the understanding since the first AIDS cases were identified. Behaviour patterns that increase the risk of being infected include multiple sex partners, visits to sex workers and unprotected sex. Various ways exist to reduce risk, e.g. by being faithful to one partner and to use a barrier method (e.g. a condom) to prevent infection. Promoting condom use among the youth has been the main prevention strategy to date. It is important to monitor the success of these campaigns.

5.1 PERCENTAGE OF YOUNG WOMEN AGED 15-24 REPORTING ABSTINENCE IN THE LAST 12 MONTHS

Indicator description/definition
Percent of woman (15-24) who used a condom at last sex, of all young single sexually active people


There has been a substantial increase in the practice of abstinence among young women between 1998 and 2002.
5.2 **PERCENTAGE OF YOUNG WOMEN AGED 15-24 REPORTING THE USE OF A CONDOM DURING LAST SEXUAL INTERCOURSE**

*Indicator description/definition*
Percent of young women who used a condom at last sex, of all women sexually active.


Rates of condom use at last sex among all women have increased amongst all women with an increase from 8% to 28.6%. High level of last intercourse condom use could be attributed to the effectiveness of mass media communication campaigns.
6 INDICATORS REFLECTING SOCIO-CULTURAL ATTITUDES TOWARDS PERSONS LIVING WITH HIV/AIDS

6.1 ACCEPTING ATTITUDES TOWARDS THOSE LIVING WITH HIV/AIDS: WILLING TO CARE FOR A FAMILY MEMBER SICK WITH AIDS

Indicator description/definition
The percent of respondents saying that they would be willing to care for a family member who became sick as a result of HIV infection/manifesting AIDS related infections was 93.3% according to the Nelson Mandela/HSRC study of HIV/AIDS 2002.
It is widely expected that HIV/AIDS will have an impact on society. During the interviews conducted by the HSRC with officials at government departments and other institutions, the issue of AIDS orphans was mentioned frequently. Any increase in the number of orphans as a result of the AIDS-related deaths of their parents will impact directly on the functions of the Department of Social Development. In this regard mention can be made of grants and the provision of other social services.

7.1 Percentage children who are maternal orphans (maternal orphan rate)

*Indicator description/definition*

The maternal orphan rate is defined as the proportion of children aged 0-15 whose biological mother has died. Alternatively, an orphan can be defined as a child who lost both parents to death. Given the social realities in South Africa, it is preferable to use the first definition.

*Projected number of AIDS orphans*

Source: Rehle & Shisana (AJAR)

Ten years from now over 2.5 million AIDS orphans are projected for South Africa. South Africa’s percentage of maternal orphanhood is slightly higher than those in developing countries (2%). It is difficult to understand given the high prevalence of HIV in this country. It might be that the actual impact of the epidemic will be felt in the noto distant future (Anderson 2003).
8 CONCLUSION

The list of proposed indicators should be seen as the beginning of a process to implement a monitoring and evaluation exercise within the Chief Directorate and the Department of Social Development. Although this list focuses broadly on the functions of the Department, it is recognised that there may be a need to include other aspects. HIV/AIDS impacts on fields much wider than the functions of a single department. Thus, the Chief Directorate could eventually collect, analyse and disseminate indicators to a wider spectrum of users and stakeholders. Should the need arise, additional indicators can be added to the list.
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Health Systems Trust (2002). South African Health review


Department of Health, South Africa Demographic Health Survey, Pretoria, South Africa, 1998


