

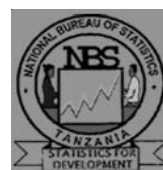
AIDS in Africa During the Nineties: Tanzania Youth Report

**A review and analysis of surveys
and research studies**

**The MEASURE Project
Tanzania National AIDS Control Programme
Tanzania National Bureau of Statistics**



**National AIDS Control Programme,
Ministry of Health**



**Bureau of Statistics,
Ministry of Planning**

July 2004

SR-04-28

Also available:

AIDS in Africa During the Nineties: Uganda. A review and analysis of surveys and research studies. Uganda AIDS Commission; Republic of Uganda Ministry of Health; The MEASURE Project. Carolina Population Center, University of North Carolina at Chapel Hill, 2003.

AIDS in Africa During the Nineties: Ghana. A review and analysis of survey and research results. Ghana AIDS Commission; The MEASURE Project. Carolina Population Center, University of North Carolina at Chapel Hill, 2003.

AIDS in Africa During the Nineties: Young People in Kenya. Kenya National AIDS/STD/TB/Leprosy Control Programme; National AIDS Control Council; The MEASURE Project. Carolina Population Center, University of North Carolina at Chapel Hill, 2003.

AIDS in Africa During the Nineties: Zimbabwe. A review and analysis of survey and research results. National AIDS Council, Ministry of Health and Child Welfare, The MEASURE Project, Centers for Disease Control and Prevention (CDC/Zimbabwe). Carolina Population Center, University of North Carolina at Chapel Hill, 2002.

AIDS in Africa During the Nineties: Tanzania. A review and analysis of surveys and research studies. National AIDS Control Programme, Tanzania; Bureau of Statistics, Tanzania, The MEASURE Project. 2001. Carolina Population Center, University of North Carolina at Chapel Hill, 2002.

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Recommended citation:

National AIDS Control Programme, Tanzania, Bureau of Statistics, Tanzania, and the MEASURE Project. *AIDS in Africa During the Nineties: Tanzania Youth Report.* Chapel Hill, NC: MEASURE Evaluation, Carolina Population Center, University of North Carolina at Chapel Hill; 2004.

This report was made possible by support from the U.S. Agency for International Development (USAID) under the terms of Cooperative Agreement HRN-A-00-97-00018-00. The views and opinions expressed herein are those of the authors, and do not necessarily reflect those of USAID.

ACKNOWLEDGMENTS

This report is based on an analysis and review of existing data during the nineties and was carried out as part of a series of reports on AIDS in Africa. This report focuses exclusively on youth 15-24. Funding for the report series was provided by the United States Agency for International Development (USAID - Africa Bureau/Sustainable Development and the Global Bureau on HIV/AIDS). Many people and institutions have contributed in different ways to this report, including the National AIDS Control Programme in Tanzania, the Bureau of Statistics in Tanzania, USAID/Tanzania, MEASURE *DHS+* and MEASURE *Evaluation*.

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1. INTRODUCTION

The first reported cases of AIDS occurred in Tanzania in 1983. Since that time, the epidemic has spread throughout the country at an alarming pace—driven primarily by high-risk heterosexual behavior. At the end of 1999, UNAIDS estimated that 1,300,000 adults (15 and over) and 59,000 children (0-15) were living with HIV/AIDS and that 140,000 people had died of AIDS that year.¹ The progression of the HIV/AIDS epidemic in Tanzania has taken a severe toll on the country's youth. Though young Tanzanians aged 15-24 years comprise only 20% of the population, it is believed that they account for approximately 60% of the country's new HIV infections each year.²

Efforts to combat the problem of HIV/AIDS in Tanzania started as early as 1985. At that time, the country established a national AIDS Task Force that focused on developing short-term strategies for mobilizing the health sector by informing and training health workers, and establishing blood safety regulations. Later, the government set up a National AIDS Control Programme (NACP) under the Ministry of Health. Though more formal attempts were made to combat the country's growing HIV/AIDS problem, visible attempts to tackle the problem of HIV infection among adolescents in Tanzania did not begin until the early 1990s when studies began to show high levels of sexual activity among primary and secondary school students.^{3,4} These findings, coupled with a growing concern over teen pregnancy rates and the reality of increasing HIV infections within this population, resulted in policy changes that targeted young people. In 1994, the Tanzania Ministry of Education and Culture developed a new curriculum to enhance primary school students' knowledge of HIV and other sexually transmitted infections (STIs).^{5,6}

In general, HIV-infection reduction programs targeting young people strive to:

- Increase knowledge regarding modes of HIV transmission and strategies for disease prevention.
- Encourage monogamous sexual activity.
- Promote abstinence from sex until marriage.
- Encourage young people to always use condoms when engaging in sex outside of their permanent monogamous relationship.

Many HIV prevention programs are designed with the intention of not only increasing knowledge about HIV/AIDS but also reducing HIV risk behaviors among adolescents. In order to determine the effect of risk reduction programs it is necessary to monitor and evaluate the success of such interventions. Demographic and Health Surveys (DHS) provide the most comprehensive information regarding adolescent HIV risk, including levels of HIV-related knowledge, patterns of sexual behavior, and use of methods of HIV prevention. These regular sources of data, along with other national surveys, help to explain the situation currently facing young people in Tanzania and provide the best indication of whether prevention programs have significantly impacted young people's knowledge about HIV/AIDS and their resultant sexual behaviors.

This summary report collectively examines the general trends in adolescent HIV knowledge, sexual behavior, and condom use, using all of the existing quality data sources pertaining to HIV-related knowledge and behavior in Tanzania during the 1990s. The report briefly describes each of the data

Figure 1.1. Map of Tanzania.



Source: CIA website, 2002

sources and explains the complexities associated with interpreting these data. A description of several demographic indicators is included to illustrate how changing aspects of young people's lives may correlate to levels of HIV-related knowledge and patterns of risky sexual behaviors. The report specifically considers awareness and knowledge of HIV/AIDS, attitudes toward HIV/AIDS, some aspects of sexual behavior, and the relationship between knowledge and behavior. The report also includes a discussion of the implications of these summary findings on current HIV prevalence rates for young people in Tanzania.

Data sources

This report summarizes data on young men and women (15-24 years) from four cross-sectional surveys conducted in Tanzania between 1991-1992 and 1999. As part of the World Health Organization's Global Programme on AIDS (GPA), HIV-related knowledge and behavior surveys were conducted in many countries from 1989-1991. Two surveys were conducted in Tanzania in 1989 but a decision was made not to include them in this report. Surveys that are included in this report are a 1991-1992 DHS; a smaller scale 1994 DHS-type survey called the Tanzania Knowledge, Attitudes and Practice (TKAP) survey; the 1996 DHS Survey; and the 1999 DHS called the Reproductive and Child Health Survey (RCHS).

Table 1.1. National data sources for estimates of AIDS-related knowledge and sexual behavior indicators

Survey	DHS ¹ 1991/92	TKAP ² 1994*	DHS ¹ 1996	RCHS ³ 1999
Data collection				
Women 15-19	2,243	852	1,746	969
Women 20-24	1,835	922	1,677	793
Women 15-49	9,238	4,225	8,120	4,029
Men 15-19	521	429	495	839
Men 20-24	306	324	373	607
Men 15-59	2,114	2,097	2,256	3,542

¹Demographic and Health Survey

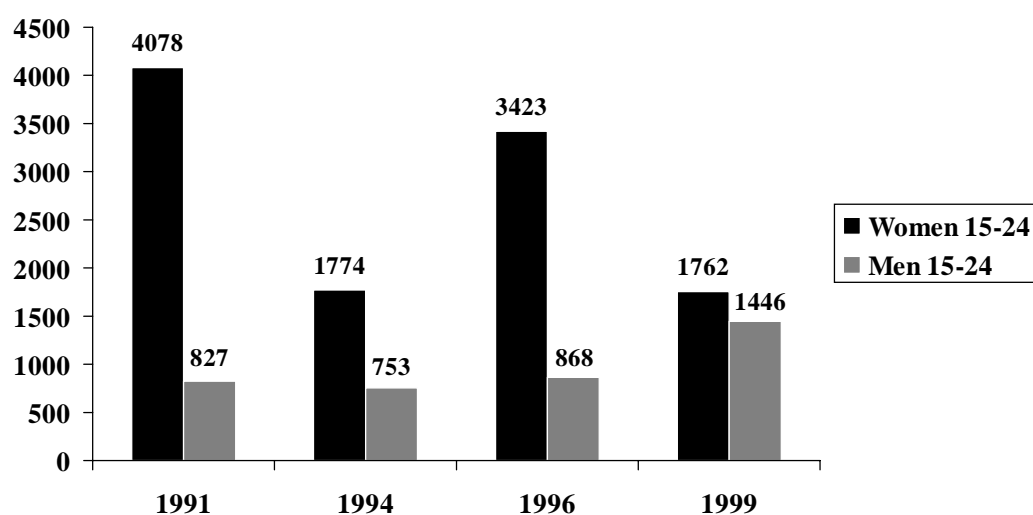
²Tanzania Knowledge, Attitude and Practice Survey

³Reproductive and Child Health Survey

* The 1994 survey excluded samples from Zanzibar province.

Table 1.1 shows the number of men, women, and young people included in each of the five surveys. All of these surveys included a nationally representative sample of women (15-49 years) and men (15-59 years) who were randomly selected from households within survey enumeration areas.

Figure 1.2. Number of male and female survey respondents, 1991-1999.



Limitations of the data

There are inherent limitations with the survey data included in this report, despite the rigorous application of exact methodologies in conducting them. The first issue pertains to comparability of questions across surveys. The wording of questions sometimes differed over time, as certain items were omitted and others were added. Some surveys incorporate prompting in knowledge-based questions while others do not. Assessment of individual sexual behavior questions do not always refer to the same time period. Data collection techniques were also enhanced over time. For example, in earlier surveys, information about non-marital, non-cohabiting partners was obtained by asking whether or not a person had any, or the number of partners, etc. In 1999, a 'partner history' was used to collect this information, a technique that is thought to obtain more accurate estimates of such sexual activity.

Another issue associated with the data used for this report concerns the reliability of self-reported data regarding sexual behavior. Several issues affect the way sexual behavior is reported by respondents. Respondents may forget information, avoid answering questions regarding sexual behaviors that are considered to be taboo, such as premarital sex, or report what he or she perceives to be the desired response, such as having less partners or using condoms frequently. Validation studies designed to determine the degree to which respondents misreport sexual activity indicate that women are more likely to under-report extramarital sex compared with men. It is likely, therefore, that high risk sexual behaviors among young people, particularly women, are underestimated in survey data. Though this creates difficulty for the estimation of accurate levels of risky behavior, if the tendency to under-report does not vary over time, then monitoring changes in behavior over time is less problematic. For this report, trends in sexual behavior will accurately reflect changes over time.

Finally, the use of cross-sectional surveys limits data to different representative samples of individuals each year. Though researchers cannot track an individual's behaviors over time, there should be a relatively high level of behavioral consistency among a given age cohort over time. For example, a group of people in any given age group should say more or less the same thing about certain past behaviors as people five years younger who reported behaviors in a survey five years earlier.

2. A CHANGING WORLD: WHAT SHAPES YOUNG TANZANIAN LIVES?

(See Appendix Tables A.1, A.2, A.3, A.4, A.5, and A.6 for data presented in this chapter.)

- Radio is the leading form of media exposure for young Tanzanians. Men are more likely to listen to the radio, read the newspaper, and watch television than their female counterparts.
- Current school attendance among young people decreased between 1991 and 1996.
- During the 1990s, young men were approximately 20-30% more likely to be employed than young women.
- Trends in marriage have varied little during the last decade—the vast majority of women were married between the ages of 20-24.
- Contraceptive use has steadily increased, particularly among older age groups (20-24 years).

Several factors shape the lives of young people. This section examines young peoples' exposure to media sources, educational background, employment, and marital status in an effort to explore how these experiences might affect their outlook and behavior. This section also reports on contraceptive use, pregnancy, childbearing, and mobility among this sample of young Tanzanians.

Exposure to media

Mass media campaigns provide some of the most effective means of conveying HIV prevention messages to the general population. Media campaigns can disseminate information about HIV/AIDS, including modes of transmission and methods to avoid infection. Changes in exposure to media sources have the potential to influence young people's access to critical information about HIV.

Radio was the leading source of media exposure for both young Tanzanian men and women 15-24 years between 1991 and 1999 (Figures 2.1 and 2.2). Interestingly, the proportion of women, who listened to the radio once a week increased from the early to mid 1990s and then decreased to below 1991 levels by the end of the decade, whereas the percentage of men who listened to the radio decreased steadily from 79% in 1991 to 44% in 1999. Radio exposure was followed by weekly contact with newspaper and television. Trends among those who read the newspaper once a week followed patterns similar to radio listeners, yet with significantly lower levels of coverage particularly toward the late 1990s. Exposure to television increased over the decade, from only 5% of men and women watching television at least once weekly in 1991 to 20% of young men and 14% of young women in 1999.

Figure 2.1. Percent of women aged 15-24 exposed to various media, 1991-1999.

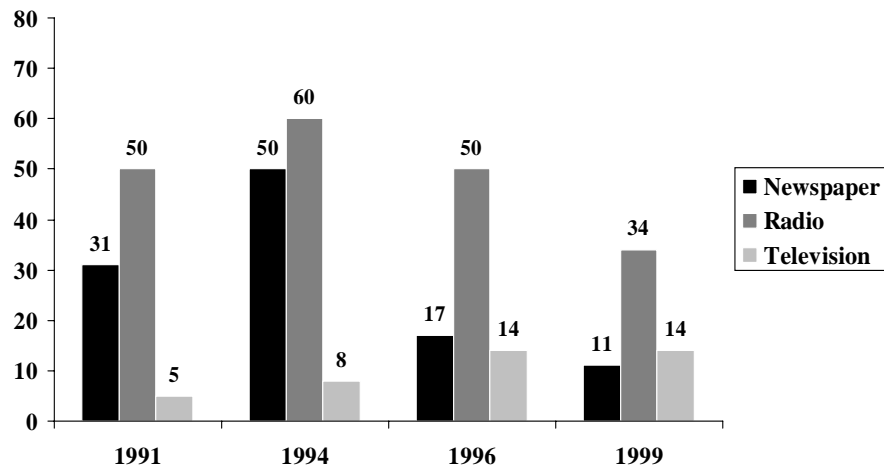


Figure 2.2. Percent of men aged 15-24 exposed to various media, 1991-1999.

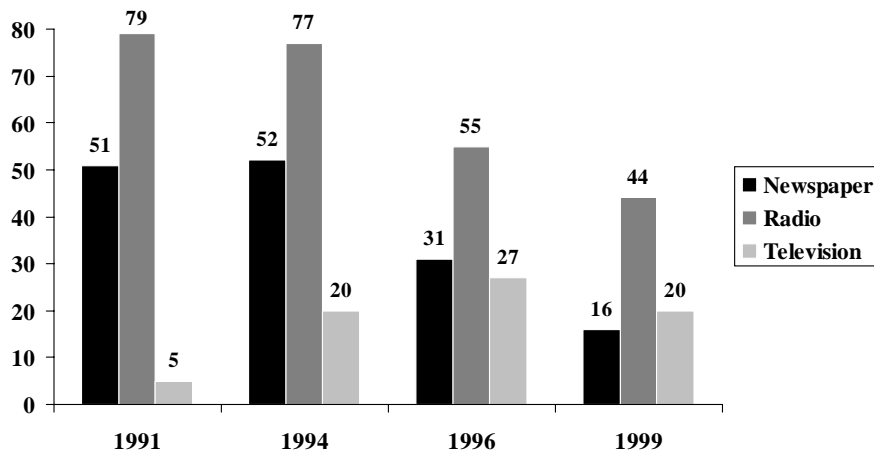
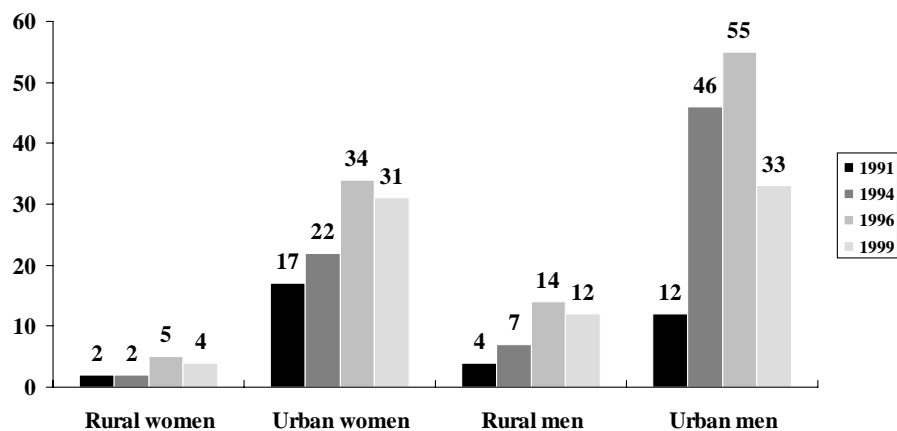


Figure 2.3. Rural and urban men and women aged 15-24 who watch TV at least once a week, 1991-1999.



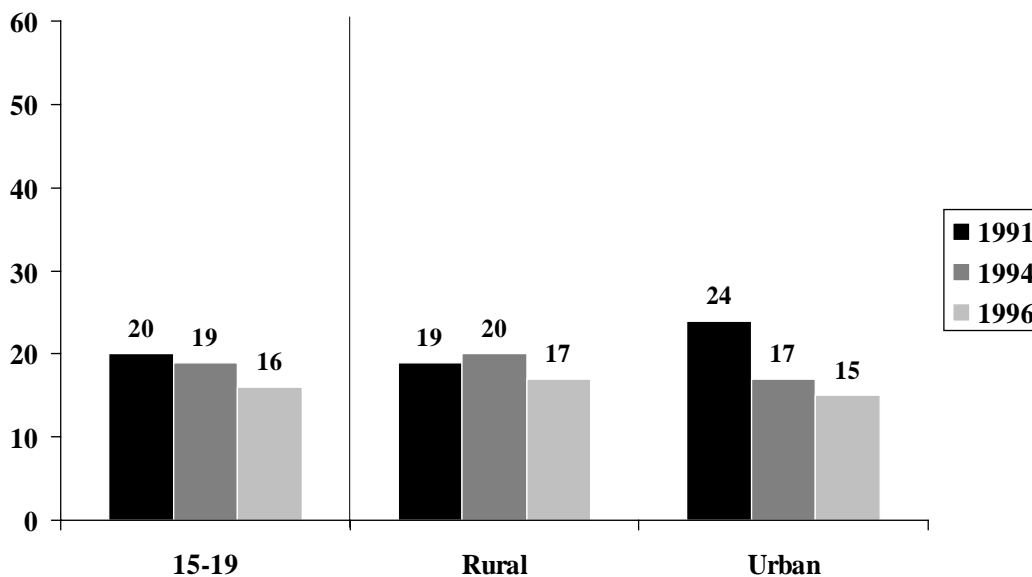
By 1999 exposure to television surpassed exposure to newspapers among Tanzanian youth and levels of exposure are continuing to increase, particularly among young urban men (Figure 2.3). From 1991 to 1999, young women and men in urban areas were more likely to watch television than those individuals living in rural areas, although the percentage of exposure increased for both genders in both areas over this time period (Figure 2.3). The proportion increased from 17% in 1991 to 31% in 1999 for young urban women and from 12% in 1991 to 33% in 1999 for young urban men, with a high of 55% of young urban men watching television in 1996. The proportion of young men and women in rural areas with access to television also increased from 2% in 1991 for young rural women to 4% in 1999 and from 4% in 1991 to 12% in 1999 for young rural men.

Education

Education is one of the greatest assets to a child’s and a young adult’s social, cognitive, and emotional development. Education not only provides young people with academic ability, but also exposes them to necessary social skills and health information. As mentioned earlier, AIDS education in Tanzania did not begin until the early to mid 1990s. As AIDS curricula were increasingly incorporated into educational programs, exposure to school-based HIV prevention programs remained deficient as a result of incomplete coverage of the program and high levels of school dropout.

Current school attendance among young women 15-19 years old has steadily declined since 1991, when attendance for this group was at a high of 20% (Figure 2.4). In five years, the proportion of young women 15-19 who were enrolled in school decreased to 16% in 1996. Percentages for both urban and rural females 15-19 also declined between 1991 and 1996.

Figure 2.4. Percent of women aged 15-19 years currently in school, 1991-1996.



Trends in current school attendance for young Tanzanian men 15-19 years old were comparable to those of young women, though teenage boys were more likely to be attending school at the time of the surveys (Figure 2.5). For both urban and rural males attendance was highest in 1991 and declined steadily thereafter. Change in school attendance has been especially dramatic for urban males. Between 1991 and 1996 there was a 23% decline.

Data from the surveys indicate that few young people 20-24 years old in Tanzania were able to obtain secondary education from 1991 to 1999, especially for young rural men and women (Figures 2.6 and 2.7). Differences between men and women were relatively small, and the proportions of female and male respondents who did not have a secondary education were mostly equal throughout the 1990s. Between 84% and 93% of both men and women in the 20-24 year old age group did not have secondary education. Urban males and females were much more likely to have some secondary education than rural respondents. Perhaps if AIDS education is going to make an impact in school populations, it should start during primary school. Decreasing school attendance across genders and age groups represents a further challenge to incorporating HIV/AIDS prevention messages into the school curriculum.

Employment

Current employment was examined for young men and women. The population of young people for whom employment status is most important is young men and women aged 15-24 years who were not in school at the time of the survey. Proportions of employed young men from 1991-1996 were generally much higher than that for young women (Figures 2.8 and 2.9). These findings are not surprising considering that many young women leave school to get married and start families and are not likely to be employed outside of the home.

Figure 2.5. Percent of men aged 15-19 years currently in school, 1991-1996.

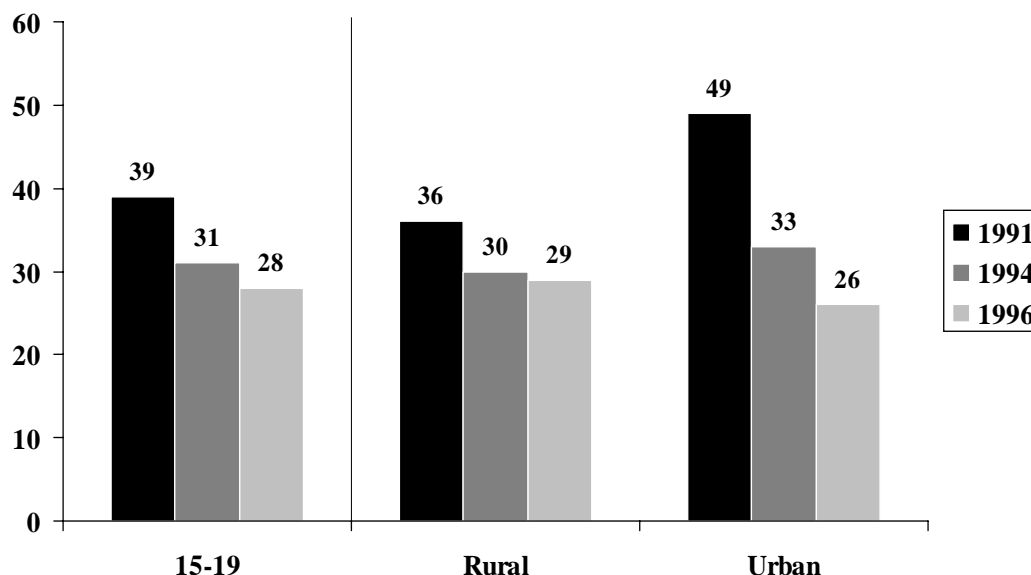


Figure 2.6. Percent of women aged 20-24 who obtained a secondary education, 1991-1999.

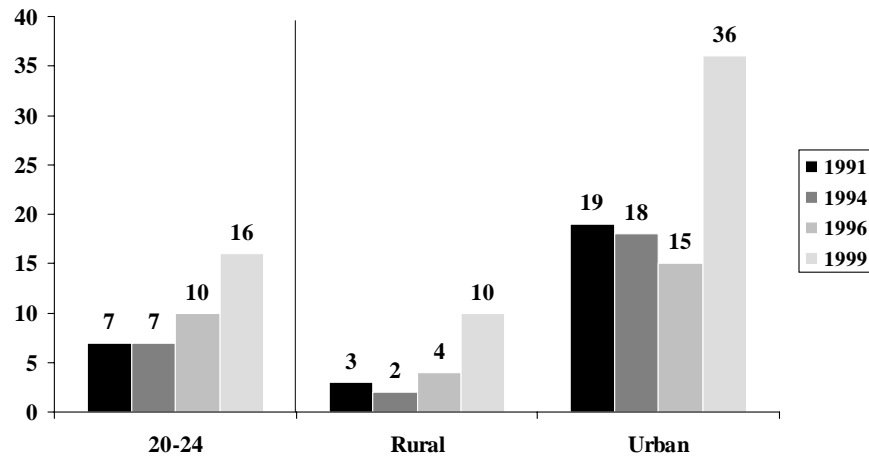


Figure 2.7. Percent of men aged 20-24 who obtained a secondary education, 1991-1999.

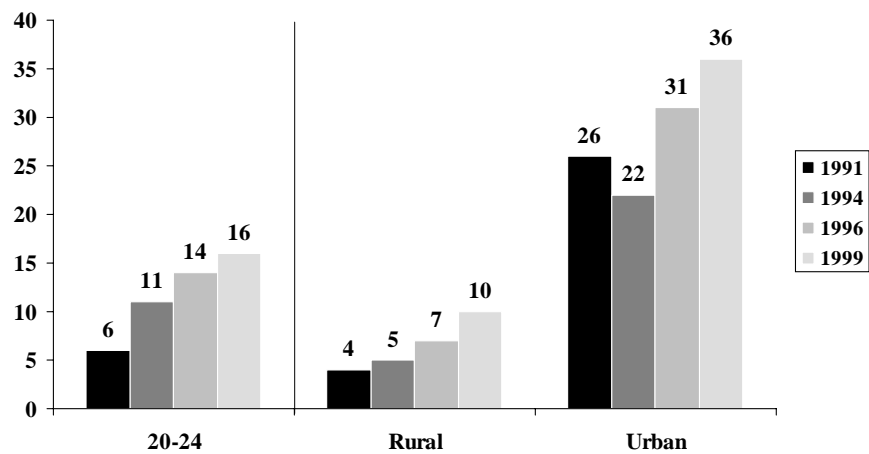
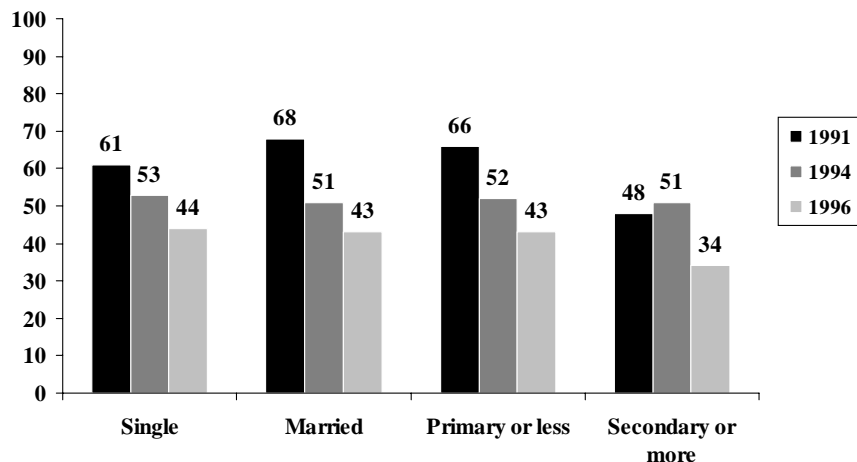
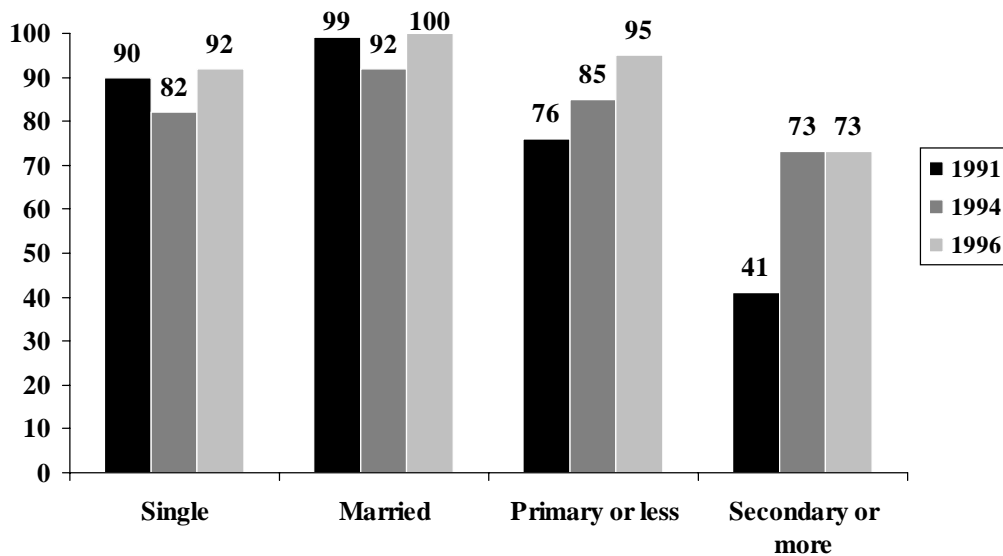


Figure 2.8. Percent of women aged 15-24 who were currently employed, among those who were no longer in school, 1991-1996.



*Missing data for women 15-24 years in 1994

Figure 2.9. Percent of men aged 15-24 who were currently employed, among those who were no longer in school, 1991-1996.



Rates of employment were considerably lower for women than men in each of the surveys in the 1990s, and the percentage of both employed men and women declined during the 1990s. From 1991 to 1999, the proportion of all young single women 15-24 years old who were employed decreased from 59% to 46%. Marital status among the group of young, out of school women did not have a large impact on employment status. For the most part, married women (68% in 1991 and 43% in 1996) were just as likely as single women (61% in 1991 to 44% in 1996) to be working (Figure 2.8). When employment status was examined by educational background for young women, the data revealed decreases in employment over time for women with all levels of education. For example, unemployment levels for women with primary or no education decreased from 66% in 1991 to 43% in 1996, while employment levels for women with secondary or higher educational backgrounds decreased from 48% in 1991 to 34% in 1996.

For young Tanzanian men no longer in school, employment levels were not only higher compared to their young female counterparts, but there were increases in employment over time. Data from 1991-1996 demonstrated that approximately 80-90% of young single men and 90-100% of married men were employed at the time of the surveys. (A caveat is that there are small numbers of married men.) Young men with a primary or lower education were more likely to be employed than young men with a secondary or higher education. However from 1991-1996 the greatest increase in employment was among men currently not in school with a secondary and above education (41% in 1991 to 73% in 1996), whereas among all men currently working (in school and not in school), this figure decreased from 89% in 1991 to 67% in 1999. Increases in employment among men not in school occurred across all categories, including by age, marital status, and education (Figure 2.9).

Trends over time show substantial increases in employment for men and substantial decreases in employment for women. With the spread of AIDS, young women may find it necessary to remain at home to care for ill family members rather than pursuing an education or obtaining employment.

Marriage

Marital status is an important determinant of sexual behavior. During the last decade, the median age at first marriage in Tanzania has ranged from 17-17 ½ years for young women, and 18 ½-19 years for young men. For the most part, trends in marriage in Tanzania have varied little during the 1990s. Based on the surveys, approximately one in four young women aged 15-19 years are married, while three in four women aged 20-24 years are married (Figure 2.10). In both age groups, the proportion of married men is less than married women. Only about 3% of young men aged 15-19 years and 23-30% of men 20-24 years were married, which was approximately 20% less than women aged 15-19 years and nearly 30-40% less than women aged 20-24 years.

Contraceptive use

Despite low levels of overall contraceptive use among young sexually active Tanzanians (15-24 years old), this population has demonstrated encouraging increases in modern contraceptive use during the last decade (Figure 2.11). From 1991 to 1999, contraceptive use among young females 15-19 years increased from 2% to 13%, respectively. Women aged 20-24 showed an almost four-fold increase in use during this same period (6% in 1991 to 23% in 1999).

From 1991-1999, for both age groups of men, contraceptive use in the last year showed a greater increase than for women during these years, surpassing women in all categories. By 1999, the amount of contraceptive use for men 15-24 rose to 27% from 7% in 1991. By the end of the decade, 24% of young men aged 15-19 years and 30% of men aged 20-24 years reported using modern methods of contraception.

Figure 2.10 Percent of men and women aged 15-24 married, by age, 1991-1999.

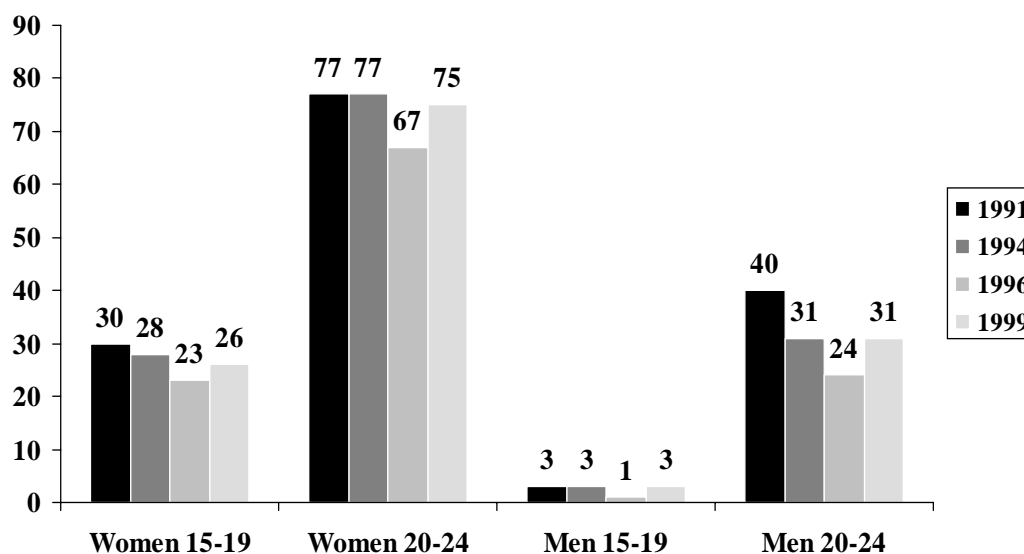
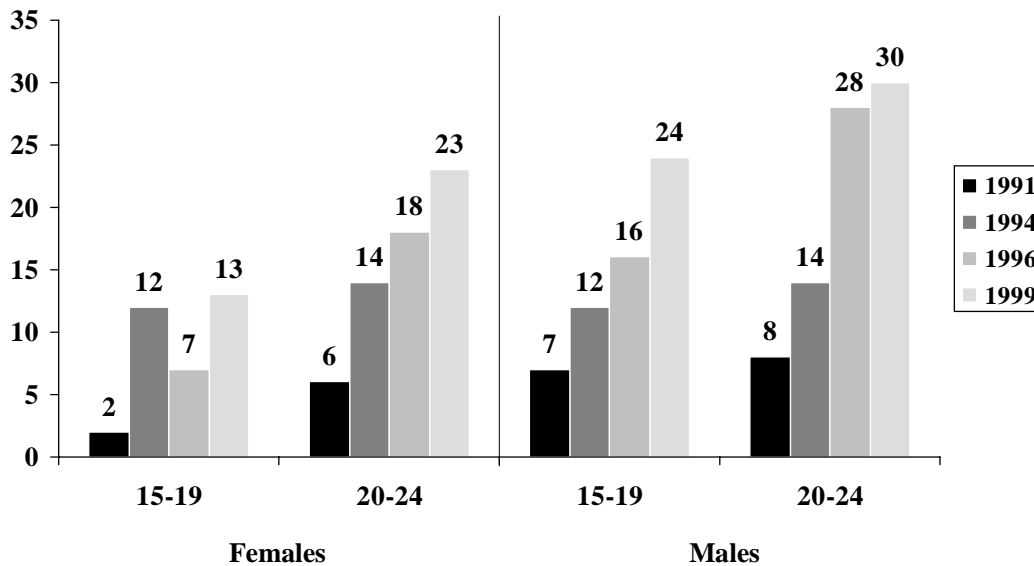


Figure 2.11. Percent of women and men aged 15-24 years currently using modern contraception of those who had sex in the last year, by age, 1991-1999.



Throughout the 1990s there has been an overall increase in contraceptive use among single and married women who had sex in the last year (Figure 2.12). In 1991, there was little difference in contraceptive use according to marital status for young men and women (7% of men and 4-5% of women). There were large increases in contraceptive use for both single and married women over the course of the decade, and in 1999 5% more single women than married women (23% for single women and 18% for married women) reported contraceptive use. Similar patterns in contraceptive use during the 1990s were seen among single and married men 15-24 years old (by 1999, 29% of single men and 20% of married men reported contraceptive use).

Since 1991, contraceptive use among rural and urban young people has increased considerably (Figure 2.13). For example, from 1991 to 1999, contraceptive use increased from 10% to 32% for young urban women and from 11% to 41% for young urban men.

When contraceptive use was examined by level of education, the data showed that throughout the 1990s, educated young people reported greater contraceptive use compared to less educated men and women (Figure 2.14). In 1999, the proportion of young women with a secondary or higher education who used modern contraception was 19% higher than those with primary education or lower. The difference among young men was also high at 16%.

Childbirth

Questions on whether a respondent had ever been pregnant were not included in the surveys, but questions on ever given birth were included in all four surveys (Figures 2.15 and 2.16). The results show that from 1991 to 1999, about 45% of Tanzanian women 15-24 years had ever given birth prior to the survey, with the majority of pregnancies being among women 20-24 years. For the most part, trends in the proportion

Figure 2.12. Percent of single and married women and men aged 15-24 currently using modern contraception of those who had sex in the last year, 1991-1999.

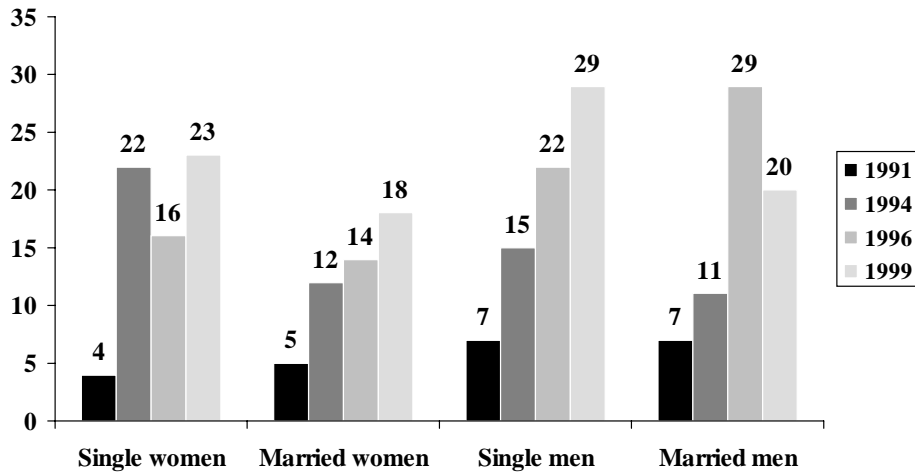


Figure 2.13. Percent of rural and urban sexually active women and men aged 15-24 who used modern contraception in the last year, 1991-1999.

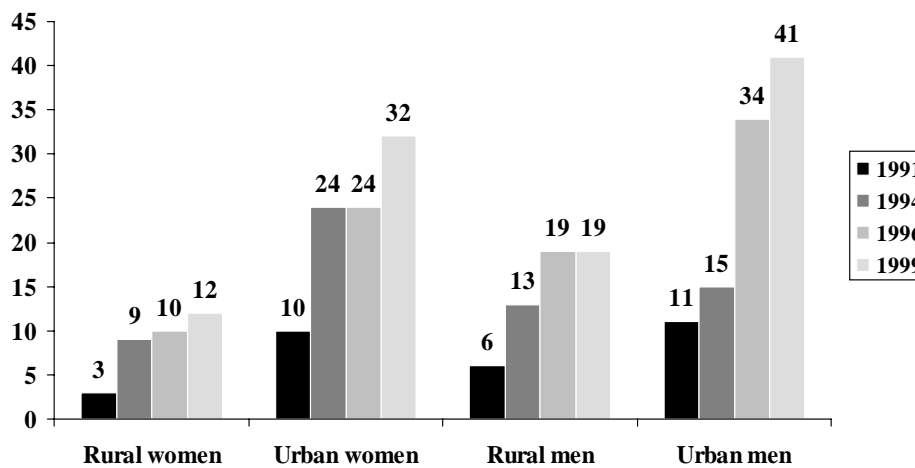
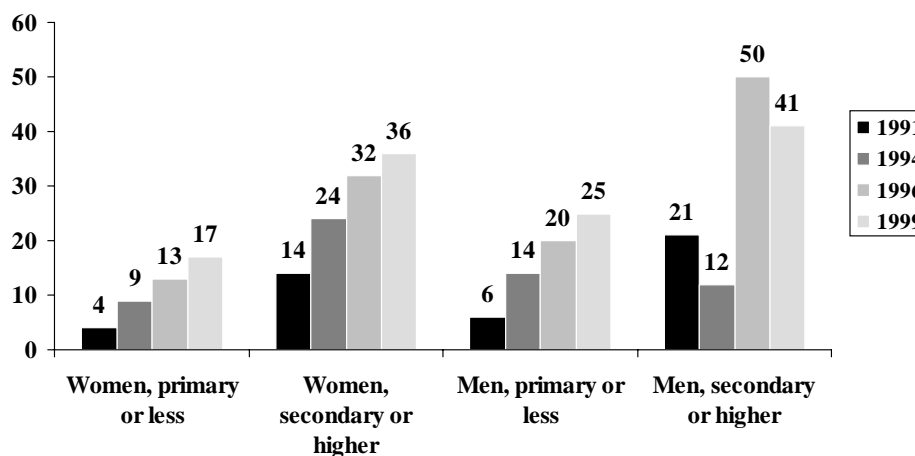


Figure 2.14. Percent of sexually active women and men aged 15-24 who used modern contraception in the last year, by education, 1991-1999.



of younger women who had ever given birth showed slight decreases for young women in all categories. The percent of single women 15-19 who had ever given birth decreased from 9% in 1991 to 7% in 1994 and then increased slightly to 8% in 1996. By 1999, 5% of young single women 15-19 years old reported having given birth, while 29% of single women 20-24 years had given birth (this is a dramatic decrease from 40% in 1991).

Population mobility

The surveys used for this report provided information on the length of time that the respondents lived in their current place of residence. The proportion of women 20-24 years who changed residence during the 1990s steadily decreased from 25% in 1991 to 8% in 1996, only to increase to 28% in 1999 (Figure 2.17). For young men 20-24 years, there were less pronounced decreases among rural populations and more steady rates of increasing mobility for urban populations (Figure 2.18).

The reported mobility for both men and women increased sharply in 1999. For example, the rate among rural women jumped from 7% in 1996 to 27% in 1999. During the same period, the rate nearly tripled for urban women in the same age group, from 13% in 1996 to 37% in 1999. Less distinct increases were observed among urban and rural young men during the same period. In general, young urban youth were more likely than rural youth to have lived at their current place of residence less than five years. The surge in mobility may reflect young people’s growing need to move to new areas in search of better financial and social environments. However, more data and perhaps some qualitative research would be needed to fully understand the changes in mobility.

Figure 2.15. All women 15-24 years old who have ever given birth, and by residence, 1991-1999.

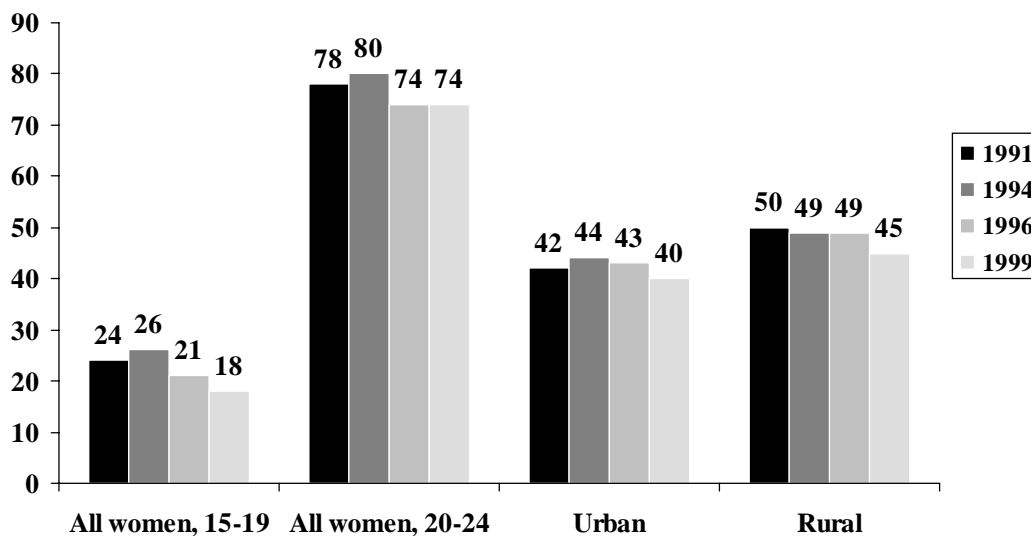


Figure 2.16. Sexually active single women 15-24 years old who have ever given birth, 1991-1999.

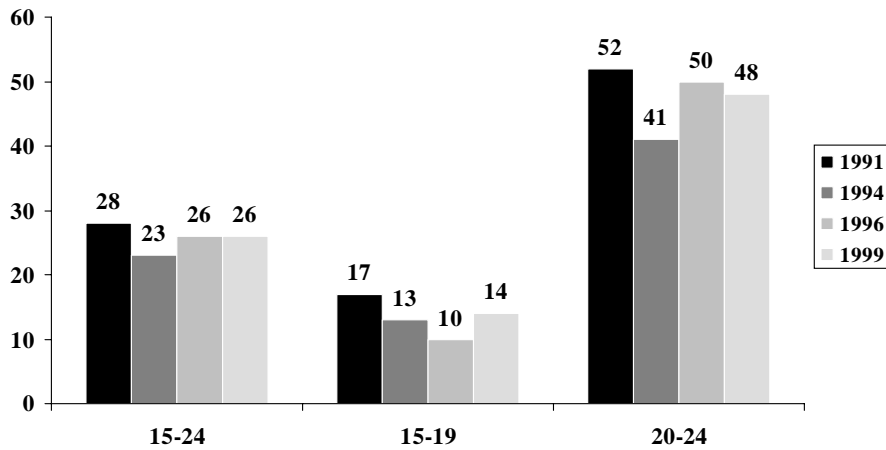


Figure 2.17. Percent of women aged 20-24 who have lived at their current residence less than 5 years, by residence, 1991-1999.

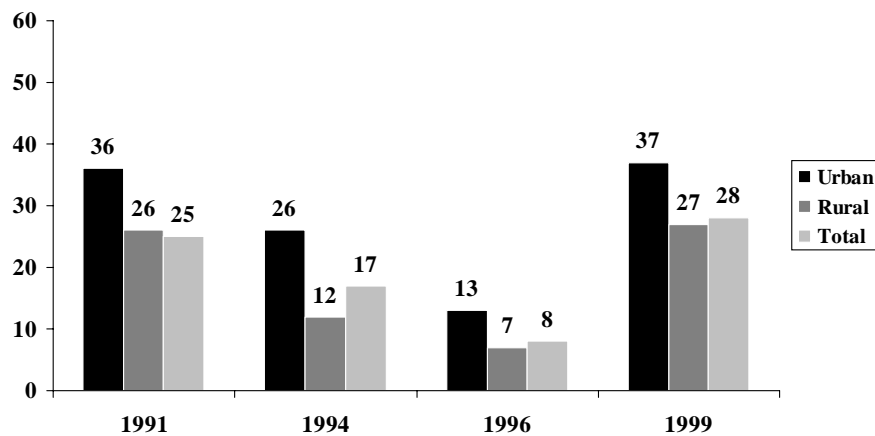
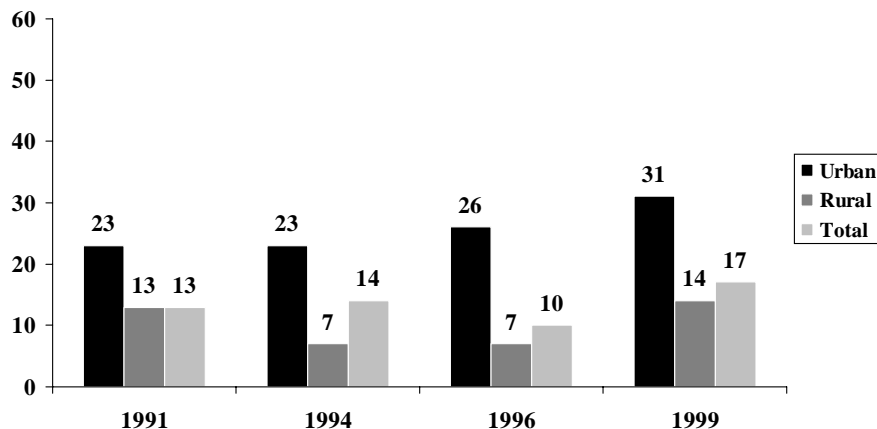


Figure 2.18. Percent of men aged 20-24 who have lived at their current residence less than 5 years, by residence, 1991-1999.



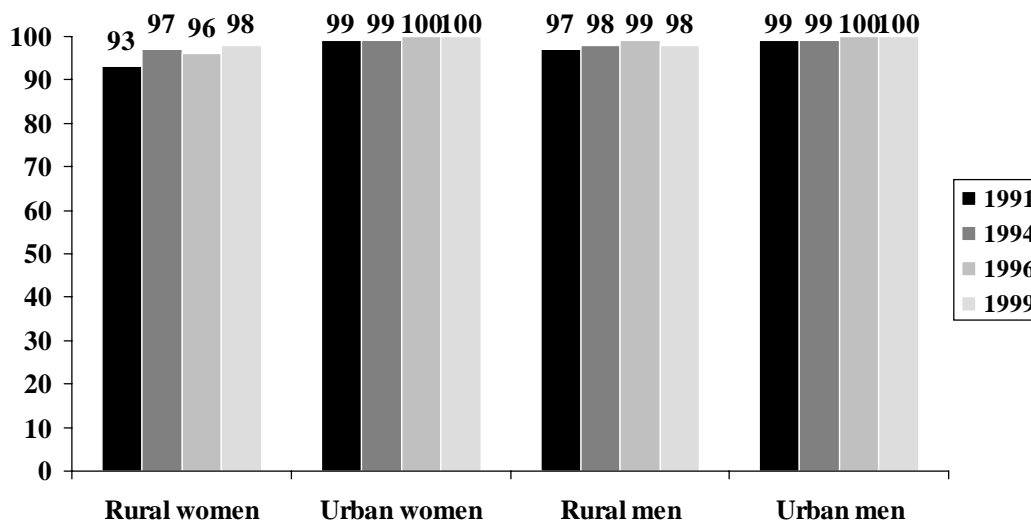
3. HIV-RELATED KNOWLEDGE

(See Appendix Tables B1 and B2 for data presented in this chapter.)

- There is almost universal awareness of HIV/AIDS among Tanzanian youth—98% of young men and women aged 15-24 years had heard of AIDS in 1999 and 100% of young urban men and women had heard of AIDS.
- From 1994-1999, there was a plateau in further knowledge about HIV/AIDS, which signals a pressing need for continued public education programs.
- Rapidly growing numbers of young people know someone who is living with HIV or who has died of AIDS (in 1999 over 50% of both young men and women).

The general level of HIV/AIDS related knowledge has been high among the young adult population in Tanzania for well over the past decade. The 1999 survey results showed that 98% of men and women aged 15-24 years had heard of AIDS, with a slightly greater degree of awareness among urban youth compared to rural youth (Figure 3.1).

Figure 3.1. Percent of men and women aged 15-24 who have heard of AIDS, by residence 1991-1999.



Knowledge that HIV/AIDS can be avoided

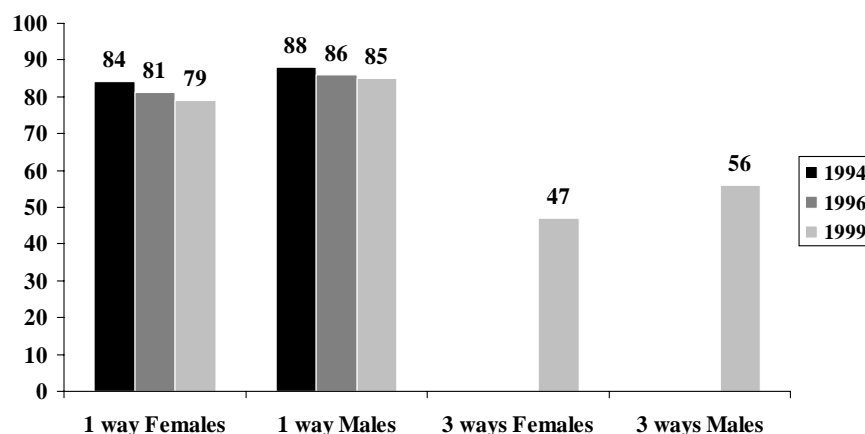
Though survey findings demonstrated that the majority of young people are aware of the existence of AIDS, there is still a significant gap between this knowledge and the understanding of how the disease can be avoided. The first survey to assess more specific knowledge of HIV/AIDS was conducted in 1994.

Over time more respondents were able to name one way of preventing AIDS when prompted.* In 1994, over three quarters of the young men (88%) and young women (84%) surveyed could offer one way of protecting themselves when prompted by the interviewer. The 1999 survey showed a slight decrease in young people's ability to identify one way of preventing HIV even when prompted (85% for men and 79% for women) (Figure 3.2). More male and female respondents 20-24 were able to name one way of preventing AIDS than their younger counterparts 15-19 (Figure 3.3).

These findings show the need to link young people's awareness of HIV/AIDS with further understanding of how it is transmitted and how it can be prevented. When young men and women were asked to name three ways of preventing AIDS in the 1999 survey (prompted), only 56% of men and 47% of women 15-24 years old responded correctly (Figure 3.2).

The clear disparity between male and female awareness of preventive methods suggests that young Tanzanian women may have less access to accurate HIV prevention information. These surveys also indicate disparities in knowledge levels between urban and rural populations, with rural women having the least knowledge (Figure 3.4). Though the ability to name at least one method of protection increased for both urban and rural males and females from 1994 to 1999, young rural women still have far lower levels of this HIV-related knowledge than males and urban females. With this in mind, it is important to consider the sources of HIV/AIDS information for young people in Tanzania and the inconsistencies that may exist.

Figure 3.2. Percent of men and women aged 15-24 who were able to name 1 or 3 ways of preventing AIDS when prompted, by age, 1994-1999.



* In general abstaining from sex, staying faithful to one partner and consistently using condoms are considered valid responses in this context. There was some variation in the way the questions were asked among the surveys.

Figure 3.3. Percent of men and women aged 15-24 who were able to name 1 correct way of preventing AIDS when prompted, by age, 1994-1999.

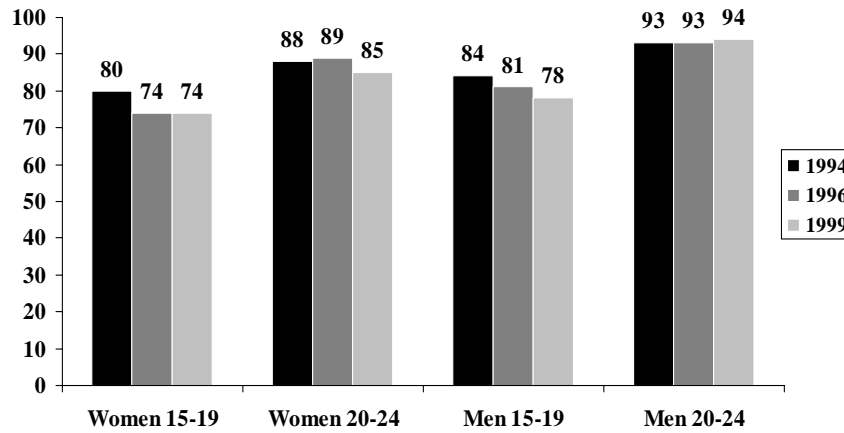


Figure 3.4. Percent of men and women aged 15-24 who were able to spontaneously name 1 method of preventing AIDS without prompting, by residence, 1994-1999.

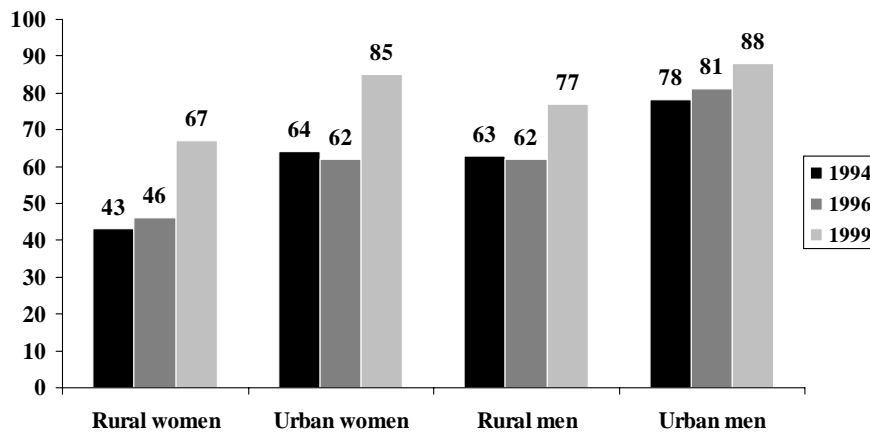
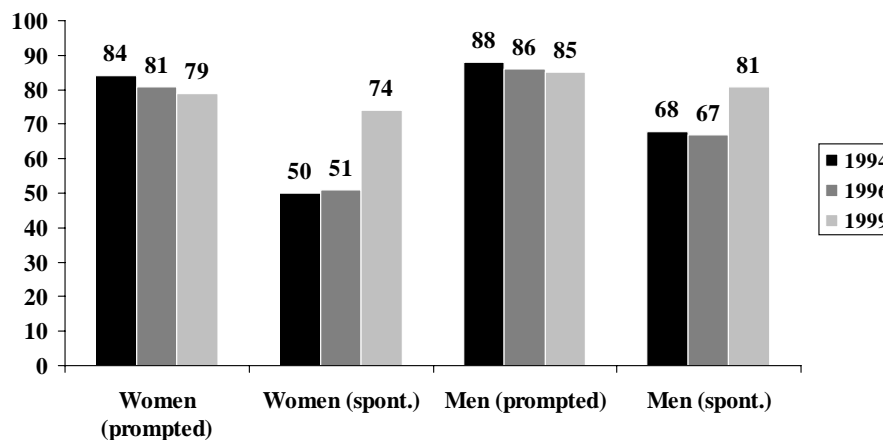


Figure 3.5. Percent of men and women aged 15-24 who were able to name 1 way of preventing AIDS when prompted and spontaneously, 1994 - 1999.



In 1994, only 68% of young men and 50% of young women could give one correct way of preventing AIDS when not prompted (compared to 88% and 84%, respectively, when prompted) while, in 1999, 81% of young men and 74% of young women offered one correct way of preventing AIDS when not prompted (compared to 85% and 79%, respectively, when prompted) (Figure 3.5).

Tanzania's 1998-2002 National AIDS Control Programme includes objectives for developing and increasing public access to HIV/AIDS information, education and communication (IEC) materials through various media sources. The program also stresses the need to strengthen and expand Tanzania's school-based HIV/AIDS educational efforts. Though the country is concerned with meeting these objectives, the survey findings show that young Tanzanian women generally have less exposure to all media sources (Figures 2.1 and 2.2) and are less likely to currently be enrolled in school than young men 15-19 years old (Figures 2.4 and 2.5). These findings imply that greater efforts must be made to inform young people, specifically young women, of the ways in which they can protect themselves from HIV.

Misconceptions about HIV/AIDS

Infected individuals can appear healthy

The 1991 survey reported that little more than half of young men (62%) and women (56%) 15-24 years old knew that infected individuals could appear healthy (Figure 3.6). The percentage of young women with this knowledge steadily increased over the next eight years and in 1999 more than two-thirds knew that an infected person could appear healthy. The trend was not as positive for young men. Although young men were generally more likely to know that an HIV-infected person can appear healthy, the percentage of respondents reporting this knowledge decreased slightly from 1996 to 1999. Thus, there is a need to continue efforts to educate young populations about the potential for asymptomatic HIV infection.

Mother-to-child transmission of HIV

Knowledge that HIV can be transmitted from mother-to-child (MTCT) has remained relatively constant among young men and women in Tanzania for the last decade. In 1999, more than 80% of both male and female respondents 20-24 years were able to correctly answer the question regarding vertical transmission of HIV (Figure 3.8). Roughly 10% more young urban men knew the possibilities of MTCT in contrast to those men living in rural areas, while nearly 20% more urban women (90%) knew of this mode of transmission compared with rural women (73%) (Figure 3.9). Educating more women on MTCT can prevent more babies from being infected with HIV.

Knowing someone with HIV or who has died of AIDS

The number of young men and women in Tanzania who knew someone with HIV or someone that had died of AIDS has increased. In 1994, the proportion of young men and women who knew someone infected with HIV or who had died of AIDS was 45% for women and 43% for men 15-24 years old (Figures 3.10 and 3.11). By 1999, more than 50% of all young men and women knew someone who was living with HIV or had died of AIDS. Also during that year, older men and women 20-24 years were 10% more likely than young men and women to know someone impacted by HIV/AIDS.

Figure 3.6. Knowledge that HIV infected individuals can appear healthy, men and women 15-24 years, 1991-1999.

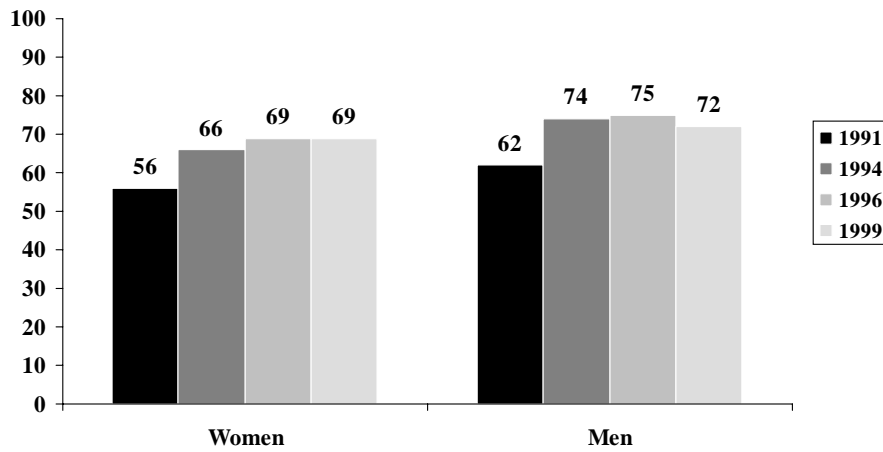


Figure 3.7. Knowledge that HIV infected individuals can appear healthy, urban and rural men and women 15-24 years, 1991-1999.

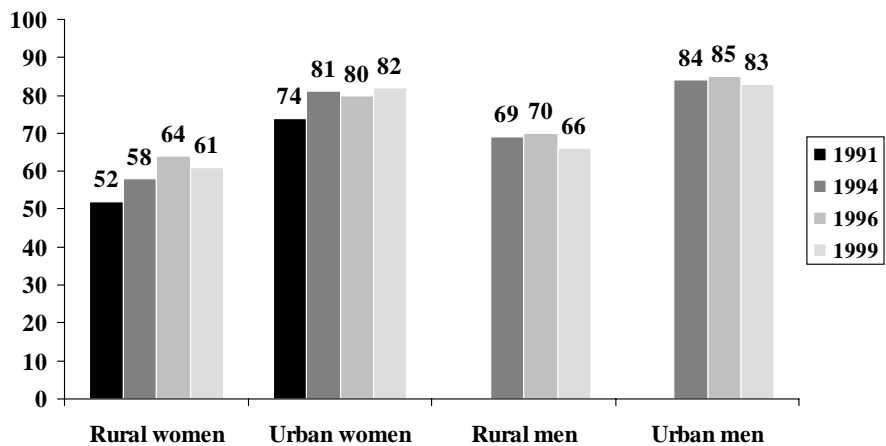


Figure 3.8. Percent of men and women aged 15-24 who know that HIV can be transmitted from mother to child, 1991-1999.

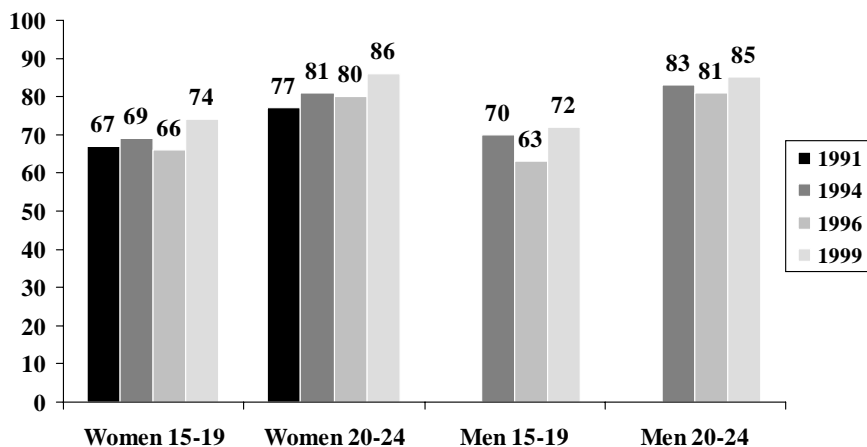


Figure 3.9. Percent of urban and rural men and women aged 15-24 who know that HIV can be transmitted from mother to child, 1991-1999.

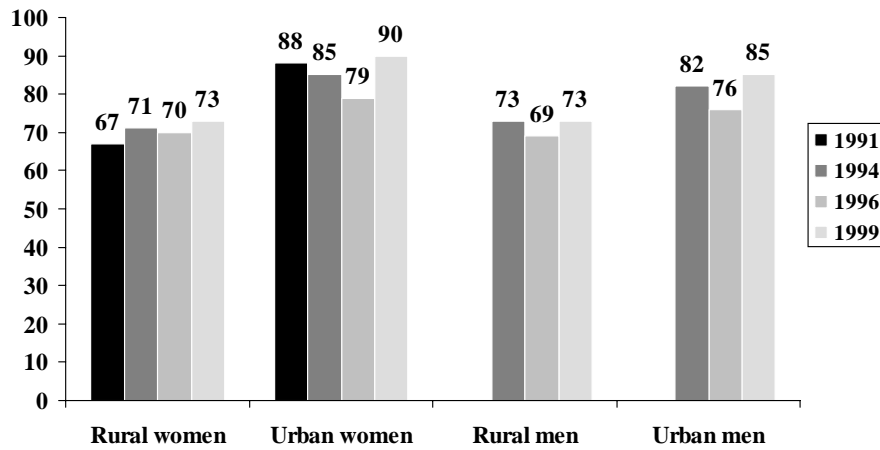
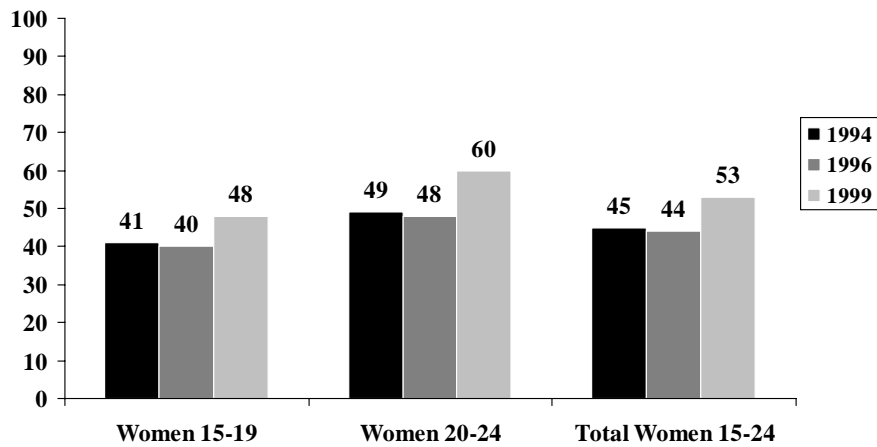
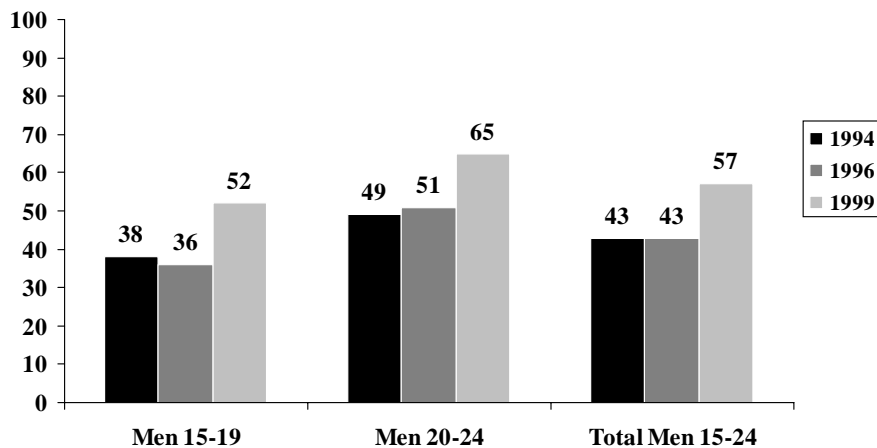


Figure 3.10. Percent of women aged 15-24 who know someone with HIV or who know someone who has died of AIDS, 1994-1999.



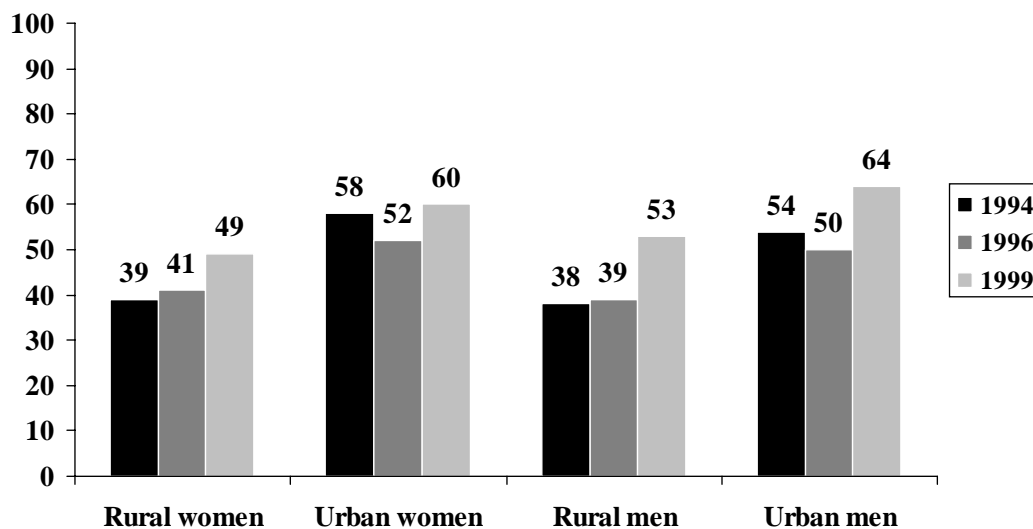
*Missing data for women 15-24 years in 1991

Figure 3.11. Percent of men aged 15-24 who know someone with HIV or who know someone who has died of AIDS, 1994-1999.



Despite the fact that levels are consistently higher among urban populations compared to rural, the proportions of young people in rural areas who know someone infected appears to be growing more rapidly, especially among rural males. In five years, the number of rural males who knew someone directly affected by HIV/AIDS increased from 38% in 1994 to 53% in 1999 (Figure 3.12). These steadily growing numbers express indirectly the extent to which individuals are personally exposed to and affected by this epidemic. Personal knowledge of someone living with HIV, or who has died of AIDS, may also be an important indicator of perceived risk of HIV/AIDS in the community.

Figure 3.12. Percent of urban and rural men and women aged 15-24 who know someone with HIV or who know someone who has died of AIDS, 1994-1999.



4. AGE AT FIRST SEX AND PREMARITAL SEX

(See Appendix Tables C1 and C2 for data presented in this chapter.)

- The percent of women who were sexually active prior to age 15 has steadily increased from 1991-1999, while the percent of women who were sexually active prior to age 18 has remained constant during this period, with a minimal decrease. There are slight differences between urban and rural young people.
- The median age at first sex remained at 17 among women and increased from 16-17 among men aged 15-24 from 1991-1999.
- Approximately one-third of single women and half of single men 15-24 years had engaged in premarital sex in the last year before the survey.

Early initiation of sexual intercourse among adolescents and youth, particularly among those who engage in premarital sex is a major concern in HIV prevention programs. The risk of HIV infection associated with early sexual activity is thought to be particularly high for young women with immature vaginal tracks, which make them more susceptible to abrasions and other sexually-related trauma. Younger women also often engage in sexual relations with older men, who are more likely to be infected with HIV.

Sexual activity before age 15 and 18

The five national demographic surveys conducted in Tanzania have attempted to study trends of the reported age of first sexual encounter by examining the proportion of people who say they have already had sex by a given age, typically by age 15 or 18 (Figure 4.1). The 1991 survey found that 28% of women aged 15-24 had already engaged in sexual activity before age 15 and 61% of women 18-24 reported having sex before their 18th birthday (Figure 4.2). Following the 1991 survey, the percentage of young women initiating sex by age 15 remained constant while the percentage steadily increased for those reporting to have had sex by the age of 18. By 1999, 27% of young women had initiated sex before age 15 and 71% before the age of 18. The difference in the proportion of those who have their first sex before the age of 15 and those who have their first sex before the age of 18 suggests that the majority of young women who have had sex prior to age 18, did so between ages 15 and 18 (Figure 4.2).

For young males, trends in sexual activity before 15 and 18 years old show greater fluctuations (Figure 4.3). For example, the 1991 survey found that 46% of young male respondents aged 15-24 years were sexually active by the age of 15. The 1994 survey documented a decrease to 37%. This number dropped to 28% in the 1996 survey and by 1999, the proportion of young men who had initiated sexual activity before the age of 15 remained at 28%. The rates of sexual activity by age 18 among male respondents ranged from a high of 79% in 1991 to a low of 64% in 1999, which closely

Figure 4.1. Percent of men and women aged 15-24 who had sex before age 15 and 18, 1991-1999.

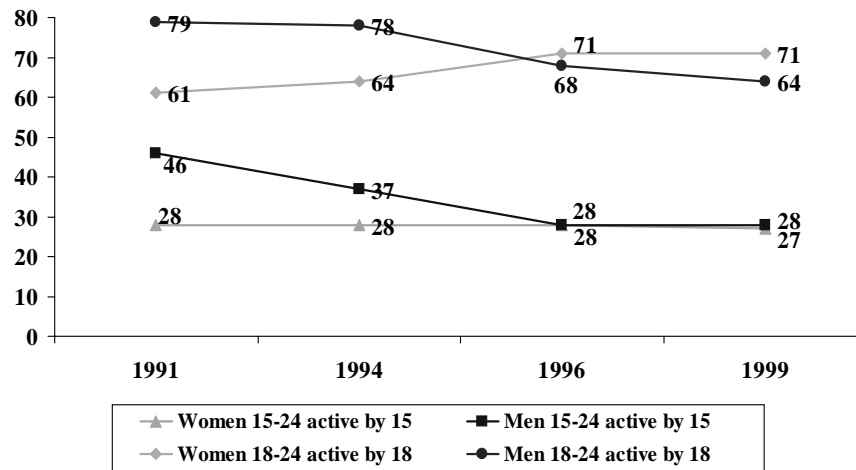


Figure 4.2. Percent of women aged 15-24 who initiated sexual activity before age 15 and 18, 1991-1999.

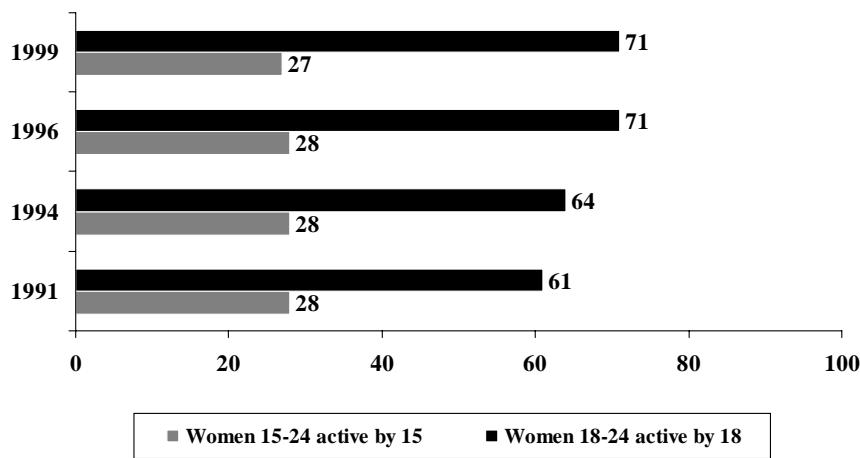
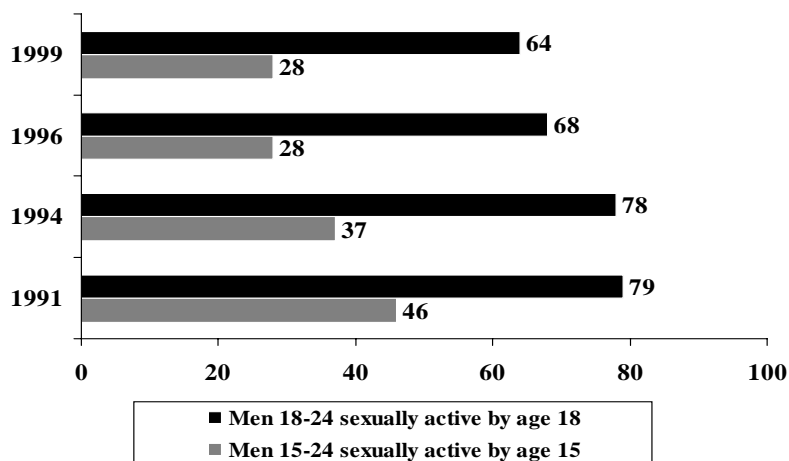


Figure 4.3. Percent of men aged 15-24 who initiated sexual activity before age 15 and 18, 1991-1999.



followed the fluctuating trends in the 15-19 year age group. Small numbers may be an important factor contributing to the varying patterns of sexual activity among young Tanzanian men. The marked fluctuations observed between levels documented by the 1991 survey and the others may also be a function of the differences in the way questions were asked.

The data indicated that there were relatively small rural and urban differences in age at first sex for young male respondents, prior to both ages 15 and 18. Trends in age at first sex among rural and urban respondents over time were consistent with the findings presented for both young men and women (Figures 4.4 and 4.5). The proportion of women who were sexually active by age 15 was higher for rural women compared to urban women for the 1991 and 1999 surveys. There were very small differences between rural and urban men who initiated sex before age 15 and 18.

Median age at first sex

An alternate method of examining patterns of early sexual activity among young people is to look at median age at first sex. Young people between the ages of 15-24 are asked whether they have ever had sex, and if so at what age did they first have sex.

The median age at first sex for young Tanzanian women was calculated to be 17.4 years old in 1991. The median age declined slightly to 17.3 in 1999. Trends for young men showed an increase in their age at the first sexual encounter from 1991 to 1996, which was followed by a decrease in 1999 which nonetheless remained higher than the median age in 1991. In 1991, the age at first sex for young men was 15.9 years old, and by 1996, the age of sexual debut rose to 18.5 years old, but dropped to 17.4 years old by 1999.

Figure 4.4. Percent of rural men and women aged 15-24 years who had sex before ages 15 and 18, 1991-1999.

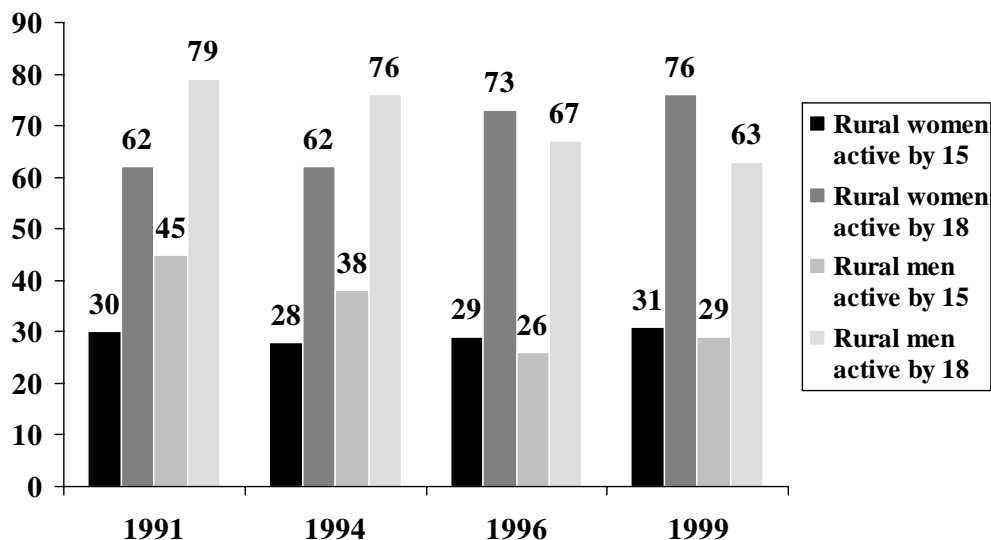


Figure 4.5. Percent of urban men and women aged 15-24 years who had sex before ages 15 and 18, 1991-1999.

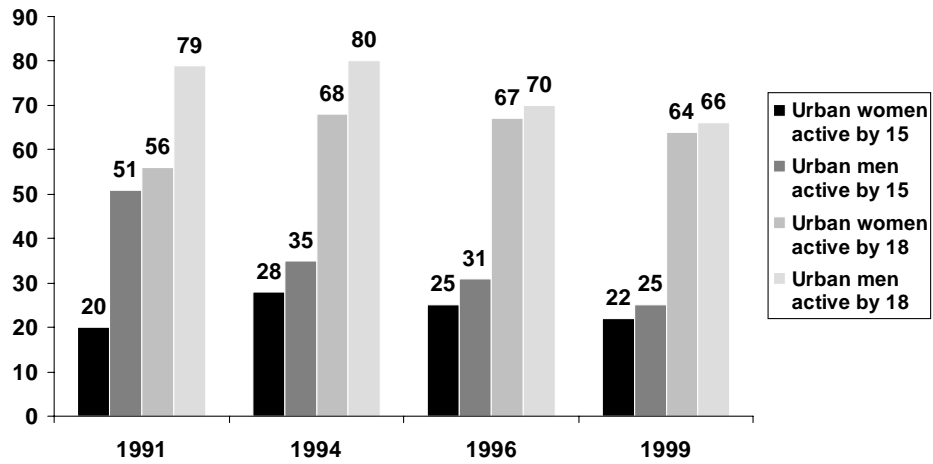


Figure 4.6. Percent of all single men and women aged 15-24 who have had premarital sex in the last year, 1991-1999.

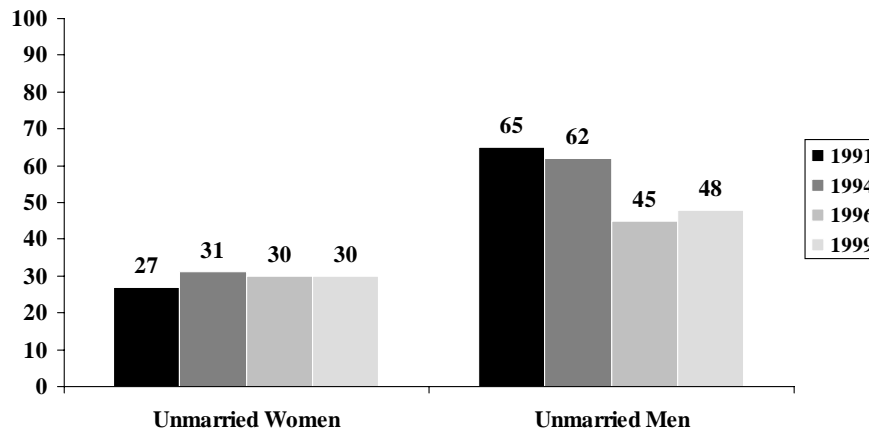
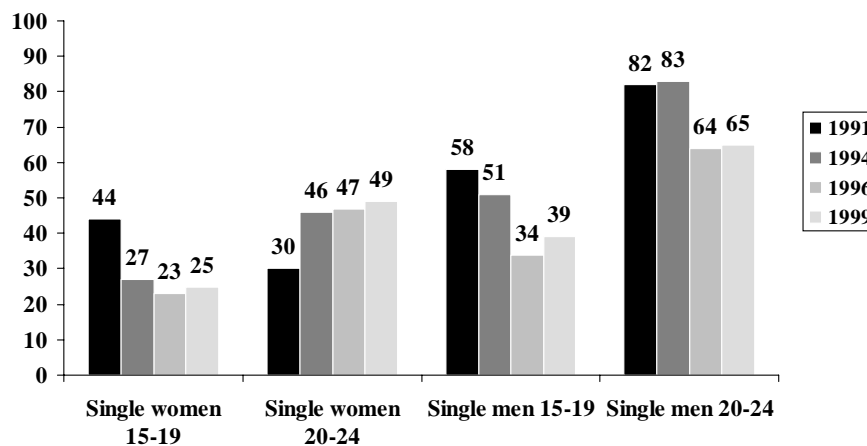


Figure 4.7. Percent of single men and women aged 15-24 years who have had premarital sex in the last year, 1991-1999.



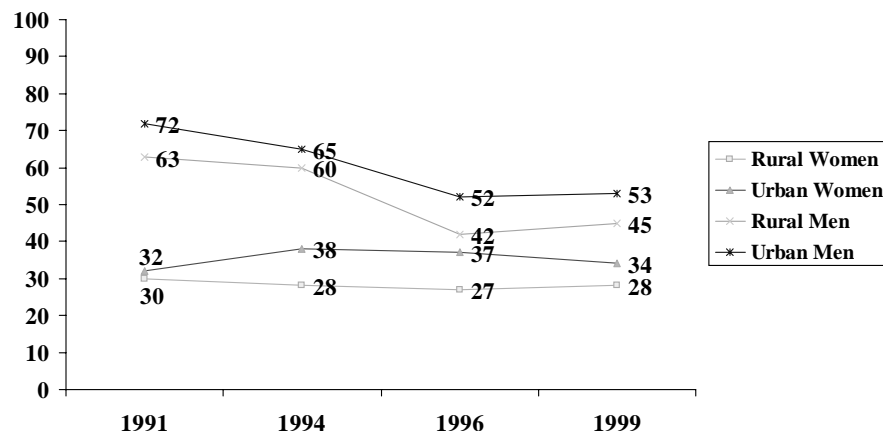
The decreasing percentage of young men who initiate sex at an early age may be indicative of changing social norms regarding abstinence, sexual debut and sexual relationships. However, the percentage of young women, both urban and rural, who had their first sexual encounter by the age of 15 has increased slightly from 1991 – 1999 and has greatly increased during these years for young women who have had their first sexual encounter by the age of 18. In 1991, 62% of rural young women older than 18 had their first sex by the age of 18, while this percentage increased to 76% in 1999. The trend remains the same for urban women in this category, increasing from 56% in 1991 to 64% in 1999. Earlier initiation of sexual activity among young Tanzanian women is a concern since it leaves young people open to the risk of contracting HIV.

Premarital sex

For over a decade, trends in marriage among populations of young Tanzanians aged 15-24 have remained relatively constant, with nearly 50% of young women and 15% of young men being married (Figure 2.10). Though young men were noticeably less likely than young women to be married at a young age, they were almost equally likely to have had sex and therefore more likely to have engaged in sexual activity before marriage. The trends presented here need to be interpreted with caution, as only a small number of men were available for analysis.

Approximately one third of single women from 15-24 years old reported having premarital sex in the last year during the period from 1991-1999 (Figure 4.6). Levels of premarital sexual activity were greater in the older age group (20-24 years) for both men and women (Figure 4.7). Though levels of premarital sex have been on the decline for young men, they were still more likely than young women to report this activity. In 1999, 18% more young men reported engaging in premarital sexual activity than young women aged 15-24 years.

Figure 4.8. Percent of rural and urban men and women aged 15-24 years who have had premarital sex, 1991-1999.



5. SEX WITH MULTIPLE PARTNERS

(See Appendix Tables C3 and C4 for data presented in this table.)

- Young women were far less likely to report sex with more than one partner in the last year compared with young men 15-24 years.
- There are few differences between the proportion of older and younger and unmarried rural and urban men and women aged 15-24 years who are having sex with multiple partners.
- Higher levels of multiple partnerships were reported among single respondents.
- Married rural women were the least likely to have more than one sexual partner—6% in 1999.

The extent to which individuals engage in multiple partnerships can influence the dynamics of HIV transmission. Individuals who have a high rate of new partner acquisition or who engage in concurrent multiple sexual partnerships are at greater risk of both becoming infected and spreading the infection to others.

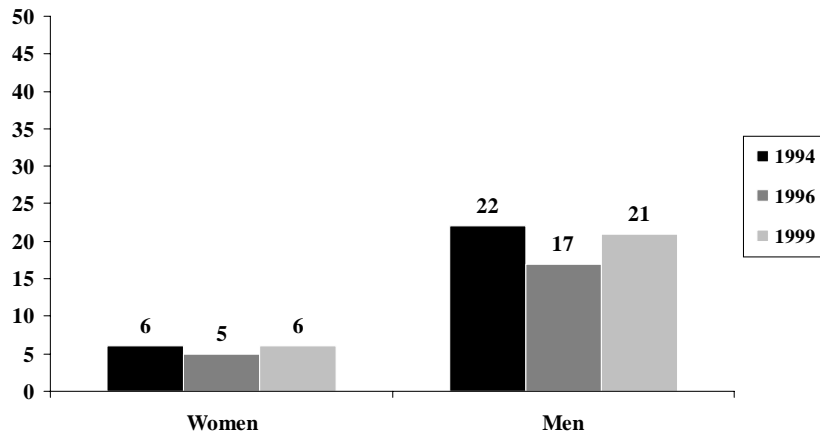
There are different methods of questioning individuals about whether they have had multiple sexual partnerships. The first way is to ask respondents to recall their lifetime number of sexual partnerships. Results from this method are often difficult to interpret due to the complexity associated with controlling for the length of time each person has been sexually active and the inability of lifetime data to demonstrate recent changes in sexual behavior. An alternate technique asks individuals about sexual behavior during a defined period of time in the recent past—most commonly, during the last year.

Sex with multiple partners

The 1994 and 1996 surveys examined in this report asked sexually active young men and women aged 15-24 to recall if they had had sex with more than one partner in the last year. The 1999 survey used a partner history for the last three partners during the past 12 months. Across all surveys, young women were far less likely than young men to have had multiple partners in the last year (Figure 5.1).

The number of women with multiple partners (among all women regardless of sexual activity in the past year) has remained at around 6%, while the percentage of young men (among all men regardless of sexual activity in the past year) with more than one partner remained around 20%. However, when the denominators are restricted to respondents who were sexually active in the past year, the trend shows a decrease over time. Between 1994 and 1999 the percent of young sexually active single women (15-24) with more than one partner declined from 32% to 15%. The decline for young sexually active single men (15-24) was from 46% to 38% during the same time period.

Figure 5.1. Percent of men and women aged 15-24 years who had sex with more than one partner in the last year, 1994-1999.



For the most part, there were few differences in the number of multiple partnerships among younger (15-19 years) and older (20-24 years) respondents; older females and males had slightly higher levels of multiple partnerships than their respectively younger counterparts (Figure 5.2). By the end of the decade in 1999, urban women 15-24 years were 1% less likely than rural women to report having more than one partner, compared to urban men who were 8% more likely than rural men to report this behavior. (Figure 5.3)

Sex with multiple partners among the single and married

For women, single respondents were much more likely to have multiple partnerships than their married counterparts whereas single and married men respondents were equally likely to have multiple partnerships (Figure 5.4). As mentioned earlier the number of single women who reported sex with more than one partner gradually decreased from 32% in 1994 to 15% in 1999. For single men, sex with multiple partners also decreased between 1994 and 1999. Following a high of 46% in 1994, the percentage of single men aged 15-24 who had sex with multiple partners fell to 38% in 1999.

Overall, married rural women were the least likely to have had sex with more than one partner in the last year. Between 1994 and 1999, there was great change in the proportion of married women engaging in sex with multiple partners—from 3% to 8%. The percentage of urban married women reporting multiple partners dramatically increased over the same five year period, from 4% in 1994 to 14% in 1999, placing married urban female respondents equally as likely as their single counterparts to have multiple partners. Married men, on the other hand, have reported significantly higher rates of sex with multiple partners. In fact, rates of multiple partnerships among married men during the latter part of the decade surpassed those of single men. The 1999 survey found that 40% of married men engaged in multiple sexual relations, while single men were 2% less likely to engage in similar behaviors (38%). It should be noted that the numbers of married men were small. In interpreting these trends, it must be recalled that the 1999 survey was likely to obtain more accurate estimates due to the refined method of tracing partners over time, using a history. Therefore, in some respects the 1999 figures are not comparable to those estimated in earlier surveys.

Figure 5.2. Percent of men and women aged 15-24 years who had sex with more than one partner in the last year, by age group, 1994-1999.

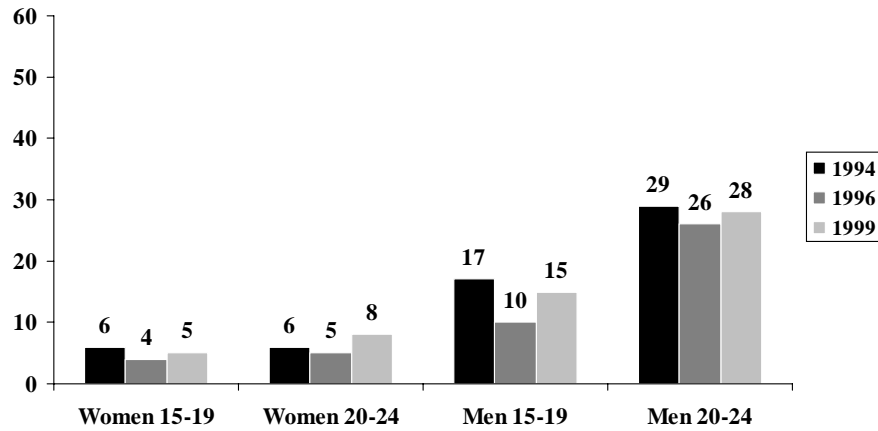


Figure 5.3. Percent of single rural and urban men and women aged 15-24 years who had sex with more than one partner in the last year, 1994-1999.

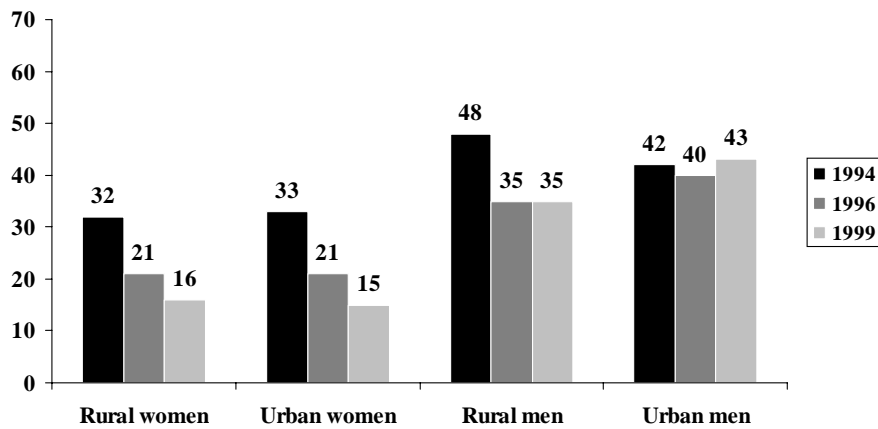
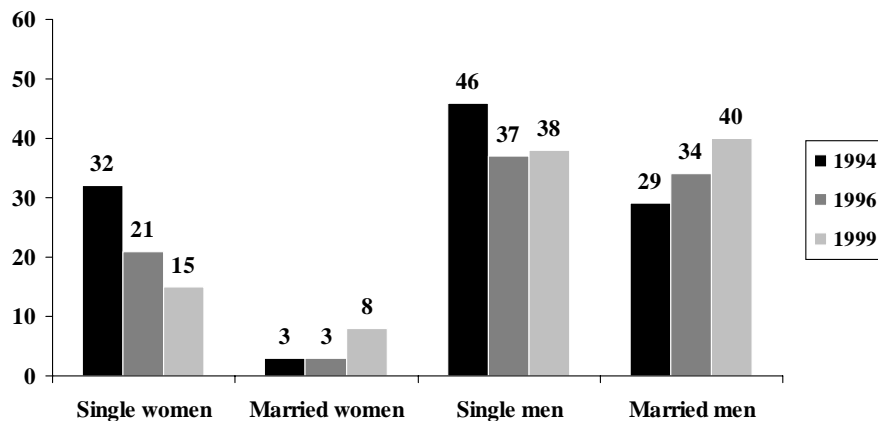


Figure 5.4. Percent of single and married men and women aged 15-24 years who had sex with more than one partner in the last year, 1994-1999.



6. CONDOM USE

(See Appendix Tables D1, D2, E1, and E2 for data presented in this chapter.)

- Condom use has gradually increased in both rural and urban areas, most noticeably in the late 1990s.
- Urban men 15-24 years have demonstrated the greatest level of condom use among those who have had sex in the last year.
- Only about 20% of young women and 30% of young men 15-24 years reported using a condom at last sex with a non-marital or non-cohabiting partner.
- Recent unprotected extramarital sex is increasing among single and married women 15-24 years.
- In 1999, 22% of married men 15-24 years engaged in unprotected extramarital sex.
- Amidst growing perceptions of HIV risk among younger populations, there are still high levels of premarital sexual activity and low levels of condom use.

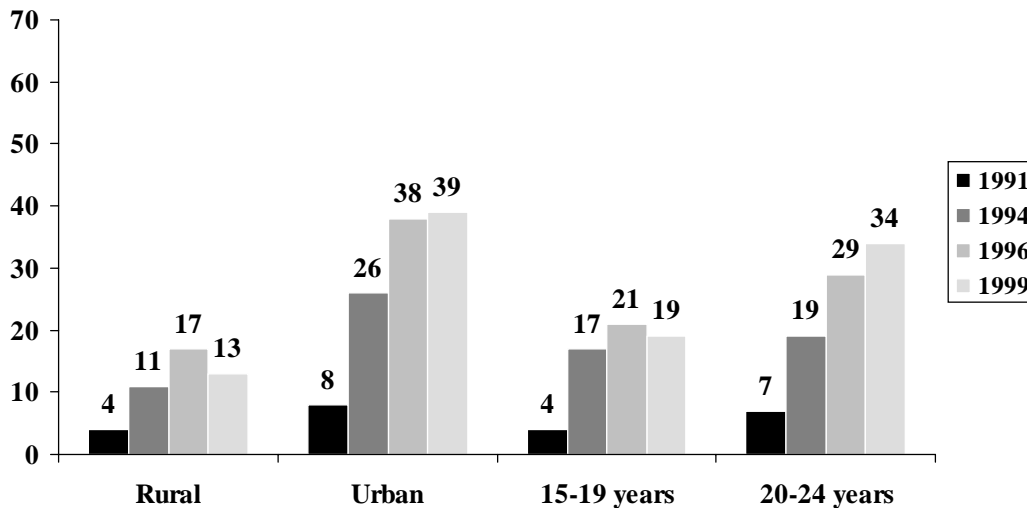
Aside from abstinence, condom use is the most effective method of protection from STIs and HIV for young people. Condom distribution has been a key component of the National AIDS Prevention Programme in Tanzania through distribution of free condoms by the Ministry of Health and by social marketing of Salama condoms. In light of the high levels of premarital sex and multiple partnerships among both married and single men, there is an ever present need for the continued support of condom use as a means of slowing the spread of HIV among young people in Tanzania.

Condom use can be explored in a variety of different ways. The surveys in this report examine use of condoms *ever* according to marital status, during discrete periods of time (ever, in the last year, and at last sex), and by other indicators of sexual risk behavior, such as multiple partnerships, and with marital (cohabiting) or non-marital (non-cohabiting) partners. The four surveys included relatively consistent measures of condom use. The three most recent surveys (1994, 1996 and 1999) added condom use at last sex to determine more immediate behavior changes. Researchers agree that examining condom use at last sex provides a more appropriate measure of consistent condom use within a population over time.

Prior condom use

When young single people were asked if they had ever used a condom, among those who have ever had sex, the data showed increasing condom use among both rural and urban, and younger (15-19) and older (20-24) populations of men and women (Figures 6.1 and 6.2). For young single women 15-19 years, condom use increased from 4% in 1991 to 19% in 1999. Trends in condom use for young men in the same age group demonstrated increases during the last decade as well (14% in 1991 to 30% in 1999). During this period, comparable increases were observed for men and women 20-24 years. Men and women 20-24 had higher levels of use compared to younger men and women.

Figure 6.1. Percent of single women aged 15-24 years who have ever used a condom among those who have ever had sex, 1991-1999.



Within this group of young single male and female respondents who had ever had sex, the largest increase in condom use was among the urban population. For example, in 1999, the proportion of young men and women reporting condom use was 20% more than in 1991.

Condom use in the last year

In each of the four surveys, young single men and women who reported sex in the last year were also asked whether they had ever used a condom. Patterns of condom use among this group were similar to those who had ever had sex. In 1999, there was an observable difference in condom use between young urban men who had ever had sex (56%) and those who had sex in the last year (61%) (Figures 6.2 and 6.3). Interestingly, condom use in the last year among rural and urban women and rural men has declined somewhat, while use has steadily increased to 52% for urban men. Thus, it is essential to continue to educate and empower youths to protect themselves and their partners through condom usage.

Condom use and multiple partners

When levels of condom use were estimated for single respondents who had more than one partner in the last year, more pronounced results in condom use were observed among rural women 15-24 years (Figure 6.4). From 1994 to 1996, reported condom use among rural women increased from 14% to 22%, respectively, and then decreased back to 14% by 1999. The levels of reported condom use among their urban counterparts increased more dramatically between 1994 and 1996 and decreased to 47% in 1999. By the late 1990s, urban women 15-24 years were three times more likely to have ever used a condom compared to rural women in the same age group.

Young rural men with more than one sexual partner in the last year also demonstrated decreases in condom use during the latter part of the decade. By 1999, only 35% of rural men indicated that they had ever used a condom. In contrast, 70% of urban men indicated that they had ever used a condom. A caveat is that sample sizes for some of the cells are small.

Figure 6.2. Percent of single men aged 15-24 years who have ever used a condom among those who have ever had sex, 1991-1999.

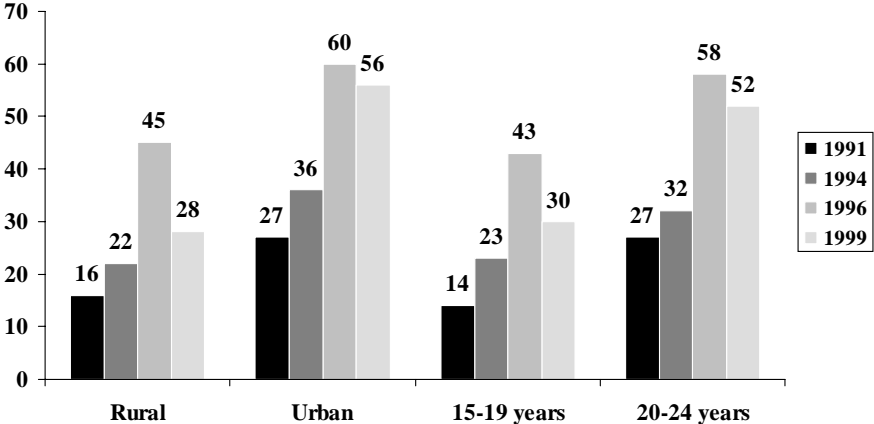


Figure 6.3. Percent of single men and women aged 15-24 years who have ever used a condom among those who have had sex in the last year, 1991-1999.

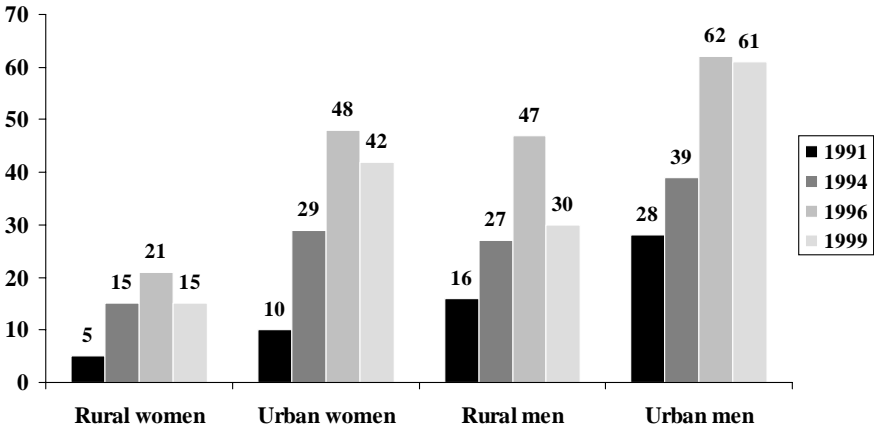
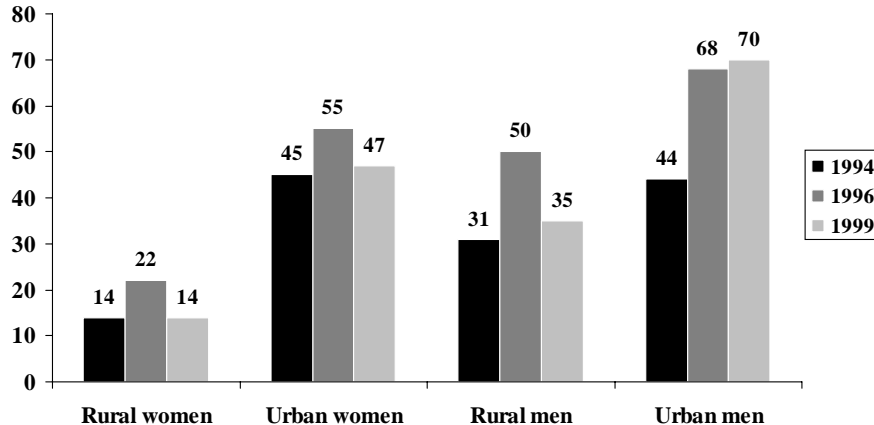


Figure 6.4. Percent of single men and women aged 15-24 years who have ever used a condom among those with more than one partner in the last year, by residence, 1994-1999.



Note: Some of the sample sizes are small. Please refer to the appendix tables for more details.

Condom use at last sex

The data show that among young single people aged 15-24 years who have ever used a condom over two-thirds of young women and 78% of young men in 1999 reported using a condom at last sex (Figures 6.5 and 6.6). Far fewer of those young people who had sex in the last year used a condom at last sex. Only about 23% of young women and 36% of young men fell into this category in 1999.

Condom use with non-marital or non-cohabiting partners

As a result of the high levels of extramarital sexual activity in Tanzania, it is important to also examine condom use among people in union with non-marital or non-cohabiting partners. The 1994, 1996 and 1999 surveys questioned young respondents about their condom use at last sex within the last year, with someone other than their spouse or cohabiting partner. From 1994 to 1999, condom use with a non-marital or non-cohabiting partner remained at 20-24% for young women and varied around 35% for young men 15-24 years (Figure 6.7).

Interestingly, when the data were examined by residence, there was a substantial increase in condom use at last sex with a non-marital or non-cohabiting partner among urban women 15-24 years. The level of condom use increased from 28% in 1994 to 40% in 1996 and decreased to 35% in 1999. For urban men 15-24 years, the increase was similar—46% in 1994, 51% in 1996 and to 50% in 1999. In general, condom use declined among the rural population of young people engaging in sex with a non-marital non-cohabiting partner.

Condom use with marital or cohabiting partners

The last three surveys also examined condom use with marital or cohabiting partners. The data showed nominal condom use at last sex with a marital or cohabiting partner for all women 15-24 years, regardless of residence (Figure 6.8). Among young men 15-24 years, the proportion who reported condom use at last sex with a marital or cohabiting partner decreased—14% in 1994 compared to 7% in 1999. Overall, levels of condom use at last sex were considerably lower for married men and women compared to those engaged in non-marital or non-cohabiting relationships.

Recent unprotected sex

An alternative method of presenting levels of sexual risk is to look at recent unprotected sex. This indicator refers to young people who have had sex in the last year, and have never used a condom. The data showed that approximately one-fourth of rural and younger (15-19 years) single women in Tanzania engaged in unprotected sex during the 1990s (Figure 6.9). The percent of young women having unprotected sex declined between 1991 and 1999. Though levels of unprotected sex were greater among urban women during the 1990s, these levels eventually fell to levels comparable to their rural counterparts by the end of the decade. Women 20-24 years were the most likely to have reported unprotected sex (29% in 1999).

Despite the fact that single Tanzanian men had higher levels of unprotected sex compared to their female counterparts during the earlier part of the decade, there were noticeable declines in unprotected sex after 1994, which is encouraging (Figure 6.10). By 1999, less than one-third of all young men 15-24 years reported unprotected sex.

Figure 6.5. Percent of single women aged 15-24 years who used a condom at last sex among those who a) ever used a condom, b) had sex in the last year, and c) had sex with more than one partner in the last year, 1994-1999.

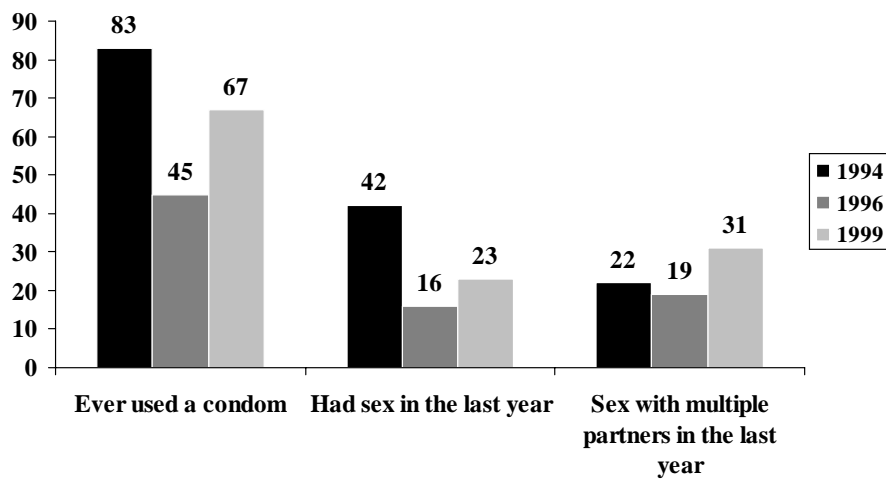


Figure 6.6. Percent of single men aged 15-24 years who used a condom at last sex among those who a) ever used a condom, b) had sex in the last year, and c) had sex with more than one partner in the last year, 1994-1999.

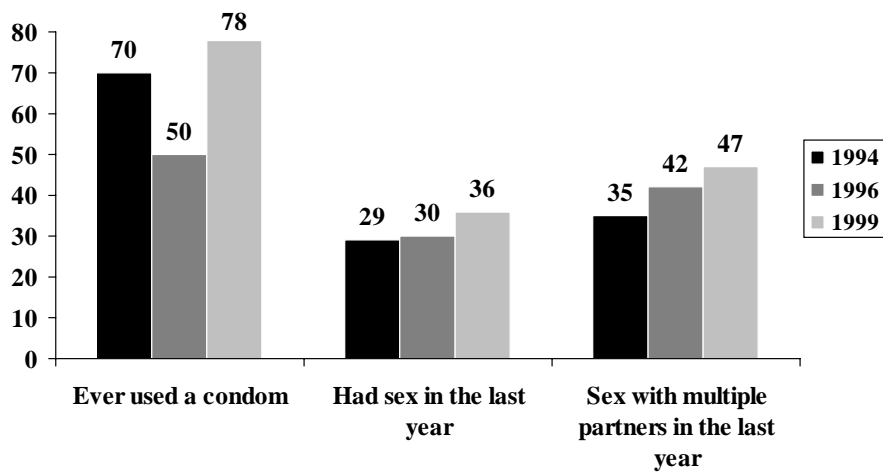


Figure 6.7. Percent of men and women aged 15-24 years who used a condom at last sex with a non-marital or non-cohabiting partner in the last year, 1994-1999.

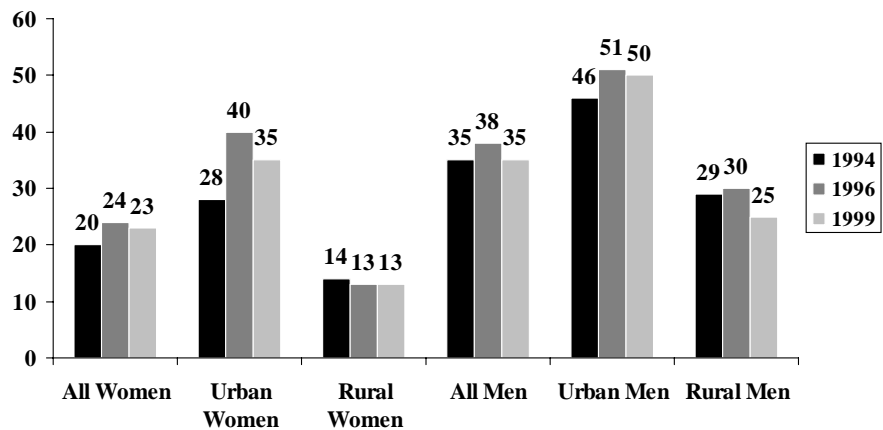
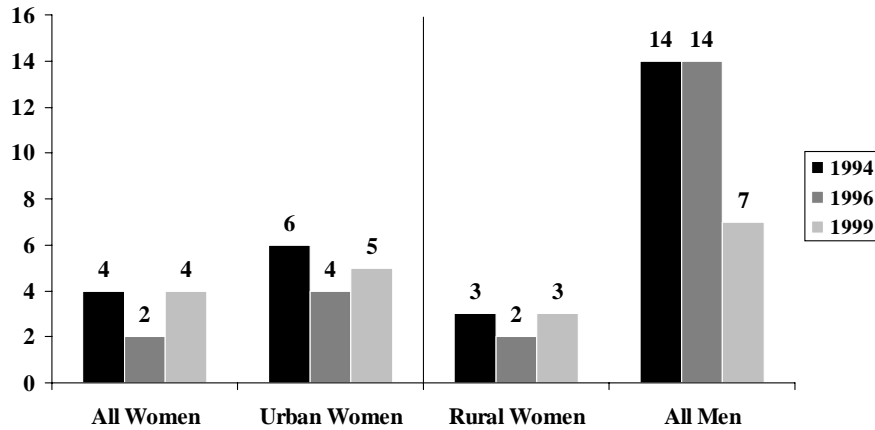


Figure 6.8 Percent of men and women aged 15-24 years who used a condom at last sex with a marital or cohabiting partner in the last year, 1994-1999.



Note: The numbers of married men are too small to show a breakdown by urban/rural status.

Figure 6.9 Percent of recent unprotected sex among single women aged 15-24 years, by age and by residence, 1991-1999.

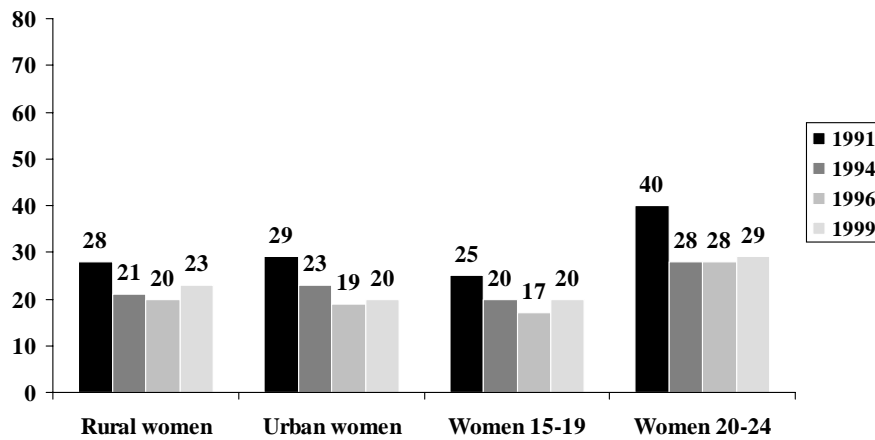
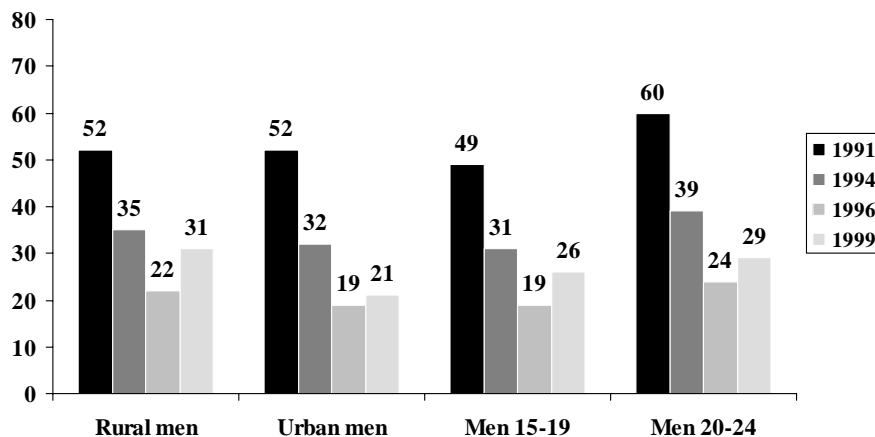


Figure 6.10 Percent of recent unprotected sex among single men aged 15-24 years, by age and by residence, 1991-1999.



Married women 15-24 years engaged in the least amount of unprotected sex with extramarital partners—about 5% (Figure 6.11). Young married men 15-24 years were around 15% more likely than married women to have had unprotected extramarital sex. When contrasted with unprotected sexual activity among single men and women in the same age group, single respondents had a far higher level of risk activity, particularly young single men. Trends over time for both married men and women show gradual increases, which may be an indicator of changing norms regarding sexual behavior in Tanzania. (A caveat is that there were small numbers of married men.)

Perception of moderate or high AIDS risk

Perception of being at risk for becoming infected with HIV provides an indication of how serious the problem is being perceived within a population. The 1994 TKAP, the 1996 DHS, and the 1999 RCHS surveys asked men and women 15-24 years who had recently engaged in unprotected non-marital sex whether they felt at moderate or high risk for becoming infected with HIV (Figure 6.12). From 1991 to 1999, more young men than young women 15-24 years reported recent unprotected sex, yet from 1996 to 1999 the percent of young men and women who felt at risk for becoming infected with HIV were almost the same. These findings highlight young women's inability to negotiate safe sex with their partners and their heightened vulnerability to HIV/AIDS.

There are still high levels of premarital sexual activity and unprotected sex, and low levels of condom use within this population of young people, which continues to put them at considerable risk for HIV/AIDS.

Figure 6.11. Percent of married men and women aged 15-24 years who engaged in recent unprotected sex with an extramarital partner, 1991-1999.

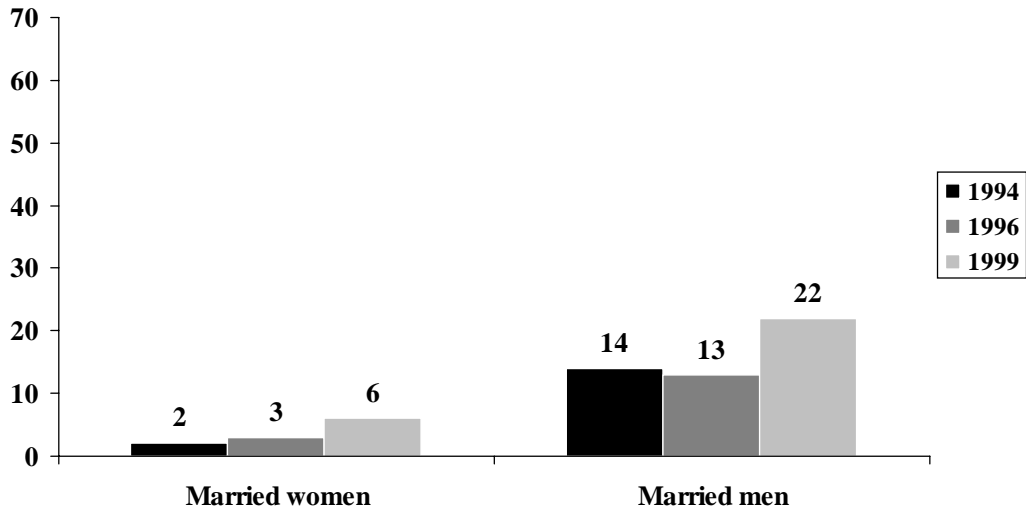
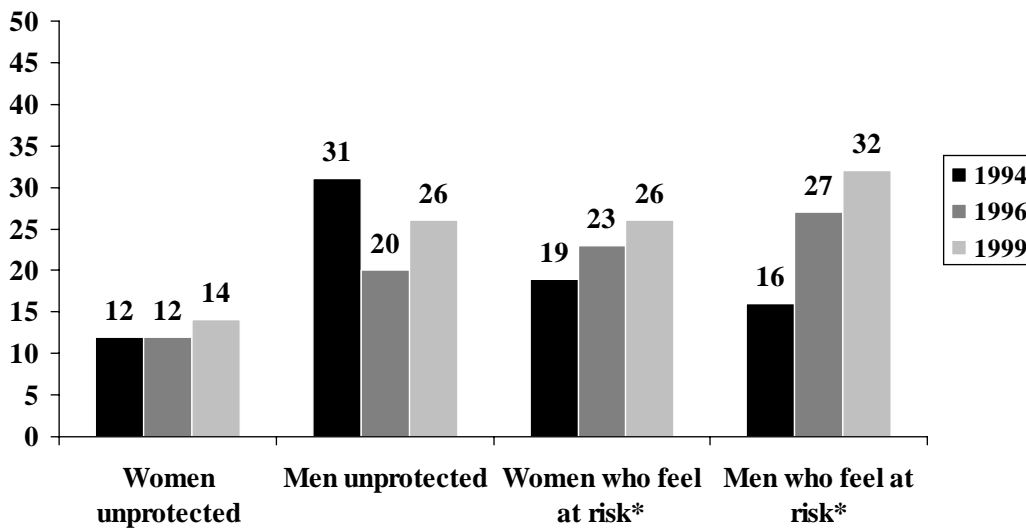


Figure 6.12. Percent of Tanzanians aged 15-24 years who feel at moderate or high risk for AIDS, among those who have had recent unprotected sex, 1994-1999.



*Feel at moderate or high risk for AIDS of those who had recent unprotected sex.

7. THE RELATIONSHIP BETWEEN KNOWLEDGE AND BEHAVIOR

(See Appendix Tables F1 and F2 for data presented in this chapter.)

- 24% of young men reported sex with more than one partner despite knowledge that monogamy reduces AIDS risk.
- Continual increases were observed in the percent of young women who engage in unprotected sex, even though they are aware that condoms protect against AIDS. Although there was a decrease in this same category for young men between 1994-1996, the percentage increased again between 1996 and 1999.

The link between HIV-related knowledge and HIV risk behavior is often difficult to assess, especially considering the differing levels of exposure to preventive information within populations, and the influence of sociocultural and gender norms on behavior. This report's examination of HIV-related knowledge, behavior and condom use has revealed that while there is a very high basic awareness of HIV/AIDS and a growing understanding of methods of prevention, there is still a need to reduce the level of sexual risk behavior among young Tanzanians.

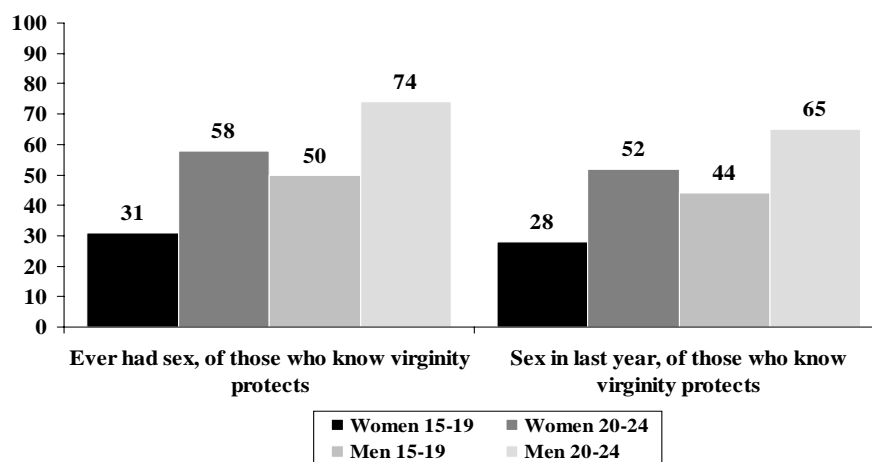
*Knowledge that abstinence protects against AIDS**

In 1999, young single men and women 15-24 years old who reported knowing that abstinence protects from AIDS were asked if they had ever had sex. Women in the younger age group (15-19 years) were the least likely to have ever had sex with only 31% of respondents answering positively (Figure 7.1). Older women aged 20-24 were almost twice as likely (58%) as younger women to have ever had sex despite their knowledge that abstinence is the best personal defense against AIDS. Since younger women were less likely than their older counterparts to have had sex in general, it is possible that this finding is a reflection of their sexual inexperience rather than an indication of behavior modification associated with the knowledge that abstinence provides protection from AIDS.

The percentage of men and women 20-24 years old who knew that abstinence protects against AIDS, yet still engaged in sexual activity in the last year (52 for men in 1999 and 34 for women in 1999), indicates that either preventive messages are not reaching this group of young people, or they are engaging in risk behavior regardless of having received HIV prevention messages.

* The original question asked in the survey was: "Can people protect themselves from getting the AIDS virus by abstaining completely from sex?"

Figure 7.1. Percent of sexual behavior among single men and women aged 15-24 years who know that abstinence protects against AIDS, 1999.*



*The original question asked in the survey was: "Can people protect themselves from getting the AIDS virus by abstaining completely from sex?"

Knowledge that monogamy protects against AIDS

The 1994, 1996, and 1999 surveys also considered the likelihood that young Tanzanians, who knew that monogamy provided protection from AIDS, would have sex with more than one partner. Involvement in multiple partnerships was slightly higher for urban women compared to rural women 15-24 years old (Figure 7.2). For example, in 1999, 6% of rural women and 8% of urban women 15-24 years had sex with more than one partner. At the same time, the difference between rural and urban young men 15-24 years was even slighter (23% of rural men in 1999 and 24% of urban men in 1999). These figures were quite high in 1996 with 54% of urban men and 56% of rural men responding positively when asked if they had sex with more than one partner while knowing that monogamy protects against AIDS. By the end of the decade, these percentages declined and returned to the 1994 levels. This sharp increase in 1996 needs to be evaluated further by looking at HIV prevention and education activities between 1994 and 1996. The data used in this report are not sufficient to elaborate further upon this unexpected finding.

Recent unprotected non-marital sex & knowledge that condoms protect against AIDS

Likewise, the proportion of male respondents who knew that condoms protected against AIDS and still engaged in unprotected, non-marital sex was typically higher than the proportion of females engaging in similar risk behaviors (Figures 7.3 and 7.4). The primary difference between males and females was the slight increase in risk behavior among both rural and urban, and younger (15-19) and older (20-24) groups of women during the second half of the decade, and the overall decline of this same behavior in males.

For example, from 1996 to 1999, the proportion of urban women who reported unprotected non-marital sex increased from 13% in 1994 to 17% in 1999. The greatest increase in this behavior among women was in the 15-19 year old age group, increasing from 15% in 1994 to 21% in 1999. During the same period, the greatest decline in recent unprotected non-marital sex was among young urban men—from 31% in 1994 to 21% in 1999, however, the percentage of rural men in this category only decreased from 35% in 1994 to 34% in 1999.

Figure 7.2. Percent of sex with more than one partner among men and women aged 15-24 years who know that monogamy protects against AIDS, 1994-1999.

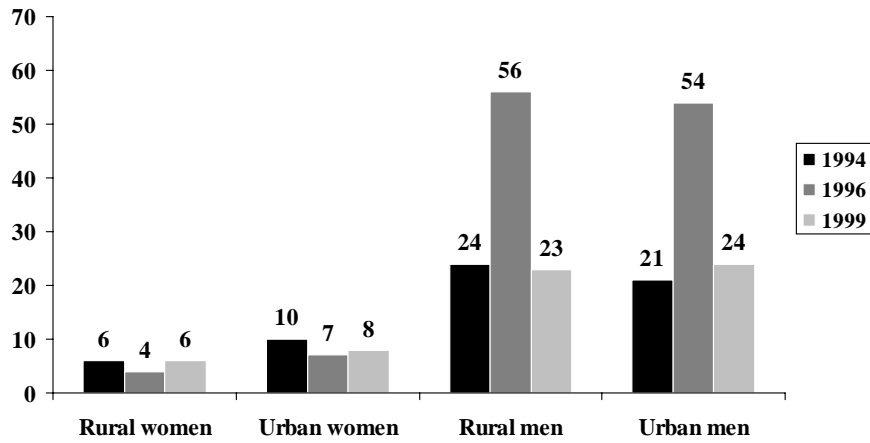


Figure 7.3. Percent of women aged 15-24 years who recently engaged in unprotected non-marital sex, among those who knew condoms protect from AIDS, 1994-1999.

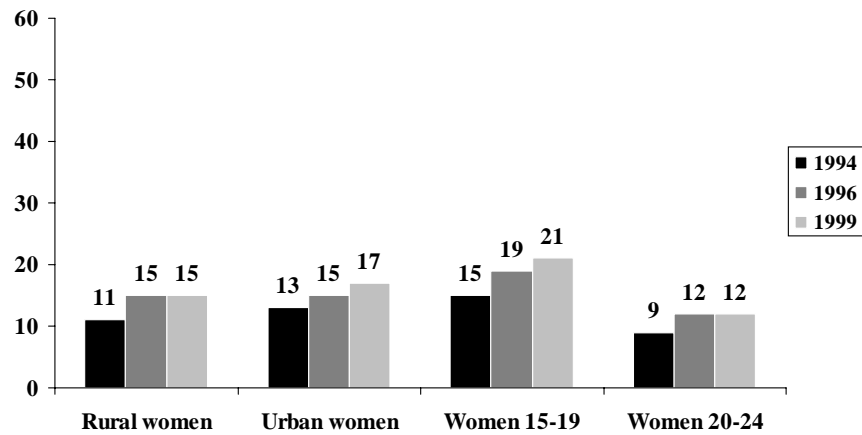
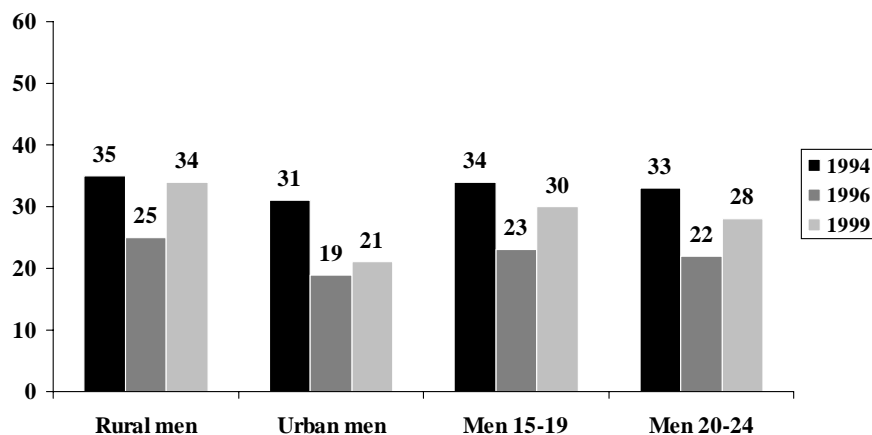


Figure 7.4. Percent of men aged 15-24 years who recently engaged in unprotected non-marital sex, among those who knew condoms protect from AIDS, 1994-1999.



In each of these cases, it is clear that there is a large proportion of young people in Tanzania who are aware of the risks associated with HIV/AIDS and continue to engage in risky sexual behaviors. It is evident that a large part of sexual risk behavior among young men and women in Tanzania is not only associated with lack of knowledge about methods of HIV prevention, but it may also be linked to other sociocultural forces that impact sexual behavior.

8. HIV PREVALENCE LEVELS

Many aspects of a youth's life influence their risk for contracting HIV. In a country such as Tanzania that is significantly impacted by the spread of HIV/AIDS, it is essential to monitor trends in HIV infection in the general population for the control and understanding of disease transmission. Monitoring provides information on the frequency and rate of infection, disease prevalence in the general population and within sentinel groups, and trends over time indicate changing levels of risk within populations.

Since the onset of the HIV epidemic, different methods have been employed to estimate the level and spread of HIV infection in the general population. Cross-sectional surveys provide period prevalence estimates that can be compared with series of subsequent cross-sectional studies to show trends in HIV infection. Due to the complexity and expense of these studies, smaller scale surveillance of specific populations has taken place. In Tanzania, both methods of surveillance and data collection have been used.

Population-based studies

In 1987, a population-based study was conducted in the Kagera region of Tanzania to determine the magnitude of HIV infection and the presence of associated risk factors in three areas categorized as having high, intermediate, and low levels of AIDS cases. The study found HIV prevalence rates of 20.7% in urban and 3.6% in rural among young men and women 15-24 years.⁸ A further analysis determined that HIV prevalence was not only higher in urban than rural areas, but the spread of the disease was heterosexual with comparable infection rates for both men and women. An exception to the latter finding was in the urban town of Bukoba, where women 15-24 years had a higher HIV prevalence (27%) than men (11%) in the same age group.⁹

Two later studies used the 1987 data along with two population-based studies carried out in 1993 and 1996 to show changes in HIV prevalence among young men and women in the Kagera region. The two subsequent studies concentrated on the rural Bukoba and urban Bukoba town areas. Among urban and rural adolescents and youth 15-24 years, the changes in HIV prevalence were most significant for young women. In the urban Bukoba town, HIV prevalence among young urban women 15-24 years decreased from 27.6% (1987) to 11.2% (1993) (Figure 8.1). Levels similarly declined for rural women in the same age group, with a drop from 9.7% (1987) to 3.1% (1996).¹⁰

These observed changes in HIV infection among young women are believed to reflect changes in incidence, because much of the new HIV infection in this age group is newly acquired as a result of exposure to unprotected sex at first intercourse.¹⁰ Thus, the declines in HIV prevalence among this age group more likely reflect declines in incidence and/or the depletion of the susceptible population through increases in infection and the subsequent rise in HIV/AIDS mortality.¹⁰

Figure 8.1. HIV prevalence from cross-sectional data, 1987, 1993, & 1996.

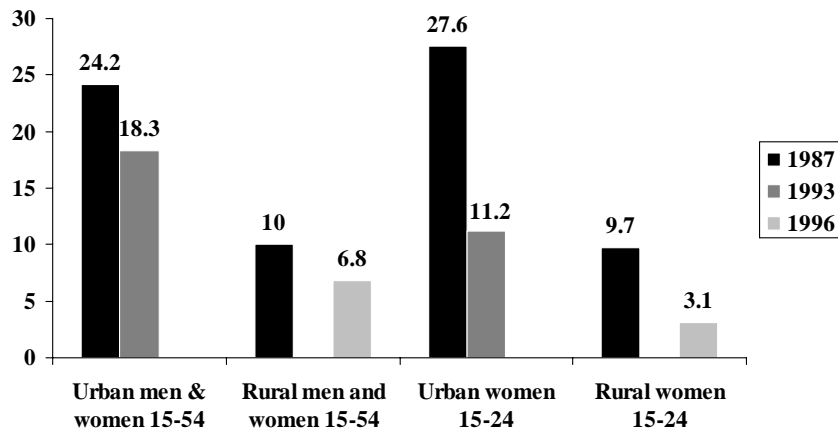
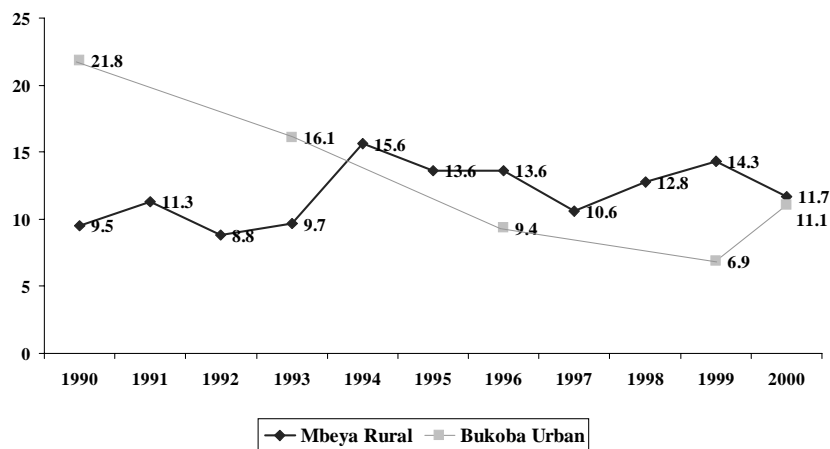
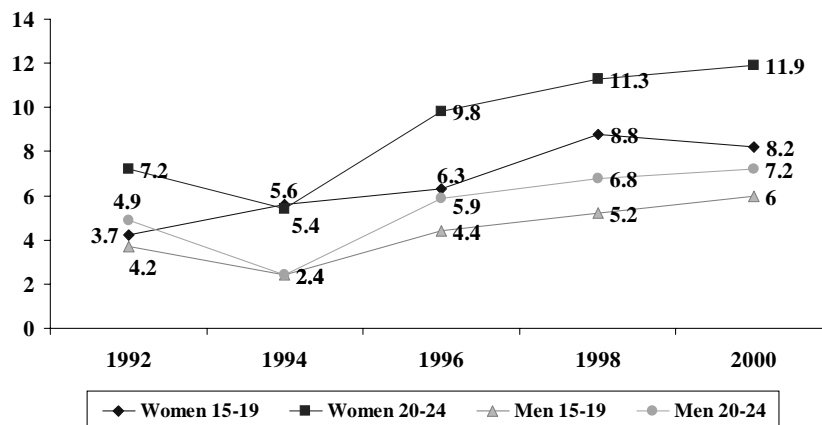


Figure 8.2. HIV prevalence among antenatal women aged 15-24 years, 1990-2000.



Source: Tanzania NACP HIV/AIDS/STI Surveillance Report, 2000

Figure 8.3. HIV prevalence among male and female blood donors aged 15-24 years, 1992-2000.



Source: Tanzania NACP HIV/AIDS/STI Surveillance Report, 2000

Furthermore, the identified declines among specific gender and age group may suggest the possible success of gender- and age-specific interventions. Though it is difficult to make quantitative assessments of the relative contributions of individual interventions due to the multiple effects of social factors and simultaneously conducted interventions, targeted interventions may be more appropriate than generalized ones.¹⁰

Using sentinel surveillance data

The 1987 study was followed by the establishment of a sentinel surveillance system in 1990, through the Ministry of Health's NACP. The system was created to collect and monitor data obtained from hospitals, regional medical centers, antenatal clinics, blood donation centers, and STI clinics. Data for women 14-24 years attending antenatal clinics in the urban town of Bukoba indicated decreases in HIV prevalence throughout the 1990s, followed by a moderate increase from 1999 to 2000 (6.9% to 11.1% respectively). During the same period, HIV prevalence among antenatal women 14-24 years from the rural area of Bukoba/Mbeya, fluctuated considerably, yet 2000 levels were comparable to those of urban women in Bukoba (11.7%) (Figure 8.2).¹¹

The screening of blood donors was introduced in the country in 1987 at regional and referral hospitals. Since that time, this program has extended to include all hospitals providing blood transfusion services throughout the country. Data collected through blood donor screening show gradual increases in HIV prevalence among populations of young male and female blood donors 15-24 years (Figure 8.3). For the majority of the 1990s, young women 15-24 years have had higher HIV prevalence rates than their male counterparts. The most recent data for 2000 show that HIV prevalence among young women 20-24 years was 11.9% and 8.2% for those 15-19 years. The level of HIV infection among young men that same year was 6% for those 15-19 years and 7.2% for those 20-24 years.¹¹

Additionally, data from the Infectious Disease Clinic in Dar Es Salaam for 2000, indicated that among a small group of STI patients (N=552), 32 (5.8%) youth aged 15-24 years were HIV infected.¹¹

Though sentinel surveillance data provide good indications of the trends in HIV prevalence among specific populations of at-risk individuals, these data are not the best indicator of disease progression throughout the population. Antenatal clinic data, for example, does not represent all pregnant women in Tanzania and it does not include women who use contraceptives such as condoms, which protect against HIV and pregnancy. Finally, antenatal data provides no indication of levels of HIV infection among men.

In light of the limitations associated with sentinel surveillance data, a comparative study was conducted to assess the usefulness of these data in estimating the magnitude of HIV infection in the general population. Data from the 1987 population-based study in the Kagera region town of Bukoba were compared with data from antenatal mothers and blood donors from the same town. From this study, it was determined that female blood donors more closely represented the HIV seroprevalence of females in the general population than women attending antenatal clinics or male blood donors, while male blood donors had lower HIV seroprevalence than males in the general population.¹²

The gap between HIV prevalence among young men and women in Tanzania is a concern. The fact that young women under 25 years are almost twice as likely as their male counterparts to be infected with HIV suggests that they are exposed to greater sexual risks. Though both groups of young people are exposed to early sexual debut, young women are less likely to report that they engage in premarital sex, multiple sexual partnerships, and extramarital sex. They are also less likely to have used a condom with their partner in the past. This is most likely the result of young women's inability to negotiate condom use with their partners. Furthermore, young women are more apt than young men to engage in sexual relationships with older partners, who may already be HIV infected. These factors, as well as other socioeconomic influences, may contribute to young women's increased risk of HIV infection. Thus, it is important to continue to provide young people, particularly young women, with the information necessary to make informed choices and the skills necessary to protect themselves and their partners from AIDS.

9. SUMMARY

Findings from the five surveys analyzed in this report show many of the changes that have occurred in the lives of young Tanzanians during the last decade. In general, exposure to media has fallen among young people 15-24 years, with particularly low levels among women in rural areas. The number of young men in school also dropped from the early 1990s from about 40% to about 30%. The percentage of women currently in school fell from 20% in 1991 to 16% in 1996. Declines in media coverage, as well as high drop out rates, have most likely reduced young people's contact with important health promotion information regarding HIV/AIDS.

Despite the changes that have taken place in the lives of young Tanzanian men and women, trends in marriage have remained relatively constant during the last decade. Though one in four women age 15-19 years and two thirds of women 20-24 years are married, premarital births continue to contribute substantially to the total number of births in these age groups. Contraceptive use has increased somewhat during the latter part of the 1990s, yet there is still a high number of young, single sexually active men and women who did not report use of modern methods of contraception in the last year.

Awareness about AIDS is very high among this young group of men and women, but there is a clear gap between awareness and being able to name methods of prevention. Since the collection of HIV/AIDS related information began in the mid 1990s, there have been moderate increases in the proportion of young men and women who can name, unprompted, at least one method of prevention. By 1999, 20% of young men and over 25% of young women still could not spontaneously and correctly identify one accurate way of preventing HIV infection. These findings suggest an ongoing need to continue efforts to educate young people about how to protect themselves and their partners from AIDS.

A clear concern among this group of young people is the plateau in knowledge that infected persons can appear healthy. From 1991 to 1994, there were noticeable increases in knowledge among young men and women. The plateau between two-thirds and three-fourths that followed this increase suggests that there is a large proportion of young people who are unaware of the asymptomatic nature of HIV infection. This group of young people may be unnecessarily putting themselves at risk because they perceive their healthy looking partners to be disease free. The belief that healthy looking individuals are not HIV positive is one of the greatest misconceptions about HIV infection and should be widely stressed during promotional campaigns.

As the HIV/AIDS epidemic in Tanzania continues to spread, the proportion of young men and women who know someone with HIV or who know someone that has died of AIDS continues to increase. By 1999, over 50% of all young people aged 15-24 knew someone personally affected by this disease. In spite of this increasing awareness, involvement in sexual risk behaviors remains high. Sexual initiation before age 15 and 18 is still common among this age group, as is premarital sexual activity among young sexually active men and women. The percentage of multiple partnerships is about four times greater for young men compared to young women, with rates for married men within 10% of those of single men.

Condom use among young men and women in Tanzania is increasing. These increases are hopeful, despite the other sexual risk behaviors in which young people are currently engaged. The greatest increase in condom use has been among young urban men during the late 1990s. Condom use remains the lowest for young women, who may not be able to adequately negotiate condom use with their partners. Data from 1996 and 1999 show higher levels of use among those who had ever used a condom, at nearly 75% by 1999. However, the use of condoms was much lower among those who reported either having had sex in the last year or for those with multiple partners in the last year. Regardless of the increases in condom use among young people, there still remains a need to increase condom use not only within the younger population, but also throughout the country.

A major factor in sexual risk behavior among young Tanzanians is their individual perception of AIDS risk. Among those who recently engaged in unprotected sex, young women have maintained comparable perceptions of risk compared with young men. Personal perception of risk may be evident in an individual's risk behavior despite HIV/AIDS-related knowledge. The mismatch between knowledge and behavior implies that knowledge-based educational programs alone may not be sufficient in reducing high-risk behavior. Other programs that focus on empowerment of youth, particularly women, would be helpful in enabling youth to translate their knowledge into behavior.

The results from different population-based studies as well as data from sentinel surveillance of antenatal women and blood donors show slowly declining HIV prevalence. For young people, HIV infection is generally lower in rural areas as compared with urban areas. There remains a notable gap between HIV prevalence among young men and women, with young women at the greatest risk of being infected. As mentioned earlier, young women are less exposed to sexual risks compared to their male counterparts, yet they shoulder the majority of the country's HIV burden. Efforts must be made to reduce the risk of HIV infection within Tanzania's adolescent and youth population, with special attention paid to young women who are capable of passing the disease to their unborn children. Further research is needed to understand the best methods of protecting young women and men from HIV/AIDS. Though great progress has been made toward empowering Tanzanian youth with the knowledge necessary to protect themselves from contracting HIV/AIDS, there is still much more that can and must be accomplished in order for that knowledge to be translated into a marked and sustained decline in HIV/AIDS prevalence among youth in Tanzania.

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APPENDIX TABLES

A. Sociodemographic characteristics

Table A.1. Socio-demographic distribution of young Men and Women from 1991-1999

	1991		1994		1996		1999	
	Women	Men	Women	Men	Women	Men	Women	Men
Total Sample	4078	827	1774	753	3423	868	1762	1446
Age								
15-19	55	63	48	57	51	57	55	58
20-24	45	37	52	43	49	43	45	42
Highest level of education								
Primary or less	93	93	94	92	92	90	83	85
Secondary and above	7	7	6	8	8	10	17	15
Marital status								
Single	49	84	47	85	55	89	52	85
Married	51	16	53	15	45	11	48	15
<u>Ages 15-19</u>								
Marital status								
Single	70	97	72	97	77	99	74	97
Married	30	3	28	3	23	1	26	3
<u>Age 20-24</u>								
Marital status								
Single	23	61	23	69	33	76	25	69
Married	77	40	77	31	67	24	75	31
Place of residence								
Urban	22	20	31	33	30	29	36	36
Rural	78	80	69	67	70	71	64	64
Length of time lived in place of residence								
Less than 5 years	25	13	17	14	8	10	28	17
5 years or more	75	87	83	86	92	90	72	83
<u>Age 20-24</u>								
Lived in place of residence								
Less than 5 years								
Urban	36	23	26	23	13	26	37	31
Rural	26	13	12	7	7	7	27	14

Table A.2. Media Exposure among young MEN and WOMEN from 1991-1999

	1991		1994		1996		1999	
	Women	Men	Women	Men	Women	Men	Women	Men
Read newspaper once a week								
Yes	31	51	50	52	17	31	11	16
No	69	49	50	48	82	69	89	84
Listened to radio once a week								
Yes	50	79	60	77	50	55	34	44
No	50	21	40	23	50	45	66	56
Watched TV at least weekly								
Yes	5	5	8	20	14	27	14	20
No	95	95	92	80	86	73	86	80
Watches TV at least weekly								
Urban	17	12	22	46	34	55	31	33
Rural	2	4	2	7	5	14	4	12

Table A.3. Education among young MEN and WOMEN from 1991-1999

	1991		1994		1996		1999	
	Women	Men	Women	Men	Women	Men	Women	Men
15-19 Years:								
Currently in school								
Yes	20	39	19	31	16	28	NA	NA
No	80	61	81	69	84	72		
Currently in school								
Urban	24	49	17	33	15	26	NA	NA
Rural	19	36	20	30	17	29		
20-24 Years:								
Had secondary education								
No	93	91	93	89	90	86	84	85
Yes	7	6	7	11	10	14	16	15
Had secondary education								
Urban	19	26	18	22	15	31	36	25
Rural	3	4	2	5	4	7	10	12
15-19 Years:								
Highest level:								
<i>Primary or less</i>								
Urban	82	79	90	85	85	87	72	85
Rural	96	98	97	99	96	96	92	95
Highest level:								
<i>Secondary and above</i>								
Urban	18	21	10	15	15	13	28	15
Rural	4	2	3	1	4	4	8	5
20-24 Years:								
Highest level:								
<i>Primary or less</i>								
Urban	81	74	82	78	80	69	64	75
Rural	97	96	98	95	94	93	90	88

Table A.4. Employment among young MEN and WOMEN from 1991-1999

	1991		1994		1996		1999	
	Women	Men	Women	Men	Women	Men	Women	Men
Currently working								
Yes	59	89	54	62	43	70	46	67
No	41	11	46	38	57	30	54	33
Not in school:								
Currently working								
15-19	61	87	46	78	36	90	NA	NA
20-24	68	97	56	89	50	96		
Currently working								
Single	61	90	53	82	44	92	NA	NA
Married	68	99	51	92	43	100		
Employment by highest level of education:								
Primary/No edu.	66	76	52	85	43	95	NA	NA
Secondary and above	48	41	51	73	34	73		

Table A.5. Contraception, pregnancy and child bearing among young WOMEN from 1991-1999

	1991	1994	1996	1999
Currently using modern contraceptives of those who had sex in the last year				
15-24	5 (2306)	14 (977)	14 (1788)	19 (1070)
15-19	2 (960)	12 (319)	7 (605)	13 (410)
20-24	6 (1346)	14 (658)	18 (1183)	23 (660)
Currently using modern contraceptives of those who had sex in the last year				
Single	4 (603)	22 (181)	16 (412)	23 (278)
Married	5 (1703)	12 (795)	14 (1376)	18 (792)
Currently using modern contraceptives of those who had sex in the last year				
Urban	10 (488)	24 (301)	24 (531)	32 (382)
Rural	3 (1818)	9 (676)	10 (1257)	12 (688)
Currently using modern contraceptives of those who had sex in the last year				
Primary or less	4 (2206)	9 (676)	13 (1672)	17 (949)
Secondary or higher	14 (100)	24 (301)	32 (114)	36 (121)
Has ever given birth (all young women)				
15-24	48 (4078)	48 (1774)	47 (3423)	43 (1762)
15-19	24 (2229)	26 (914)	21 (1729)	18 (963)
20-24	78 (1849)	80 (860)	74 (1694)	74 (799)
Has ever given birth (all young women)				
Urban	42 (891)	44 (558)	43 (964)	40 (643)
Rural	50 (3187)	49 (1216)	49 (2459)	45 (1119)
Has ever given birth, of those who are single (premarital pregnancy)				
15-24	16 (1991)	12 (828)	16 (1713)	10 (915)
15-19	9 (1571)	7 (622)	8 (1287)	5 (717)
20-24	40 (420)	29 (206)	38 (426)	29 (198)
Has ever given birth, of singles who had sex in the last year				
15-24	28 (603)	23 (181)	26 (412)	26 (278)
15-19	17 (417)	13 (117)	10 (245)	14 (181)
20-24	52 (186)	41 (64)	50 (167)	48 (97)

Table A.6. Contraception, pregnancy and child bearing among young MEN from 1991-1999

	1991	1994	1996	1999
Currently using modern contraceptives of those who had sex in the last year				
15-24	7 (583)	13 (289)	24 (371)	27 (800)
15-19	7 (307)	12 (116)	16 (142)	24 (350)
20-24	8 (276)	14 (173)	28 (229)	30 (450)
Currently using modern contraceptives of those who had sex in the last year				
Single	7 (447)	15 (189)	22 (271)	29 (593)
Married	7 (136)	11 (100)	29 (99)	20 (207)
Currently using modern contraceptives of those who had sex in the last year				
Urban	11 (127)	15 (93)	34 (119)	41 (296)
Rural	6 (456)	13 (196)	19 (252)	19 (504)
Currently using modern contraceptives of those who had sex in the last year				
Primary or less	6 (550)	14 (239)	20 (239)	25 (718)
Secondary or higher	21 (33)	12 (50)	50 (40)	41 (82)

B. National trends in knowledge, by age and residence

Table B.1. Trends in Knowledge about HIV/AIDS among young WOMEN from 1991-1999

	1991	1994	1996	1999
Has heard of AIDS				
15-24	94 (4078)	98 (1773)	97 (3421)	98 (1762)
15-19	93 (2229)	97 (859)	96 (1727)	98 (963)
20-24	96 (1849)	99 (914)	98 (1694)	99 (799)
Has heard of AIDS				
Urban	99 (891)	99 (557)	100 (963)	100 (643)
Rural	93 (3187)	97 (1216)	96 (2458)	98 (1119)
Can name at least one correct way of preventing AIDS ¹ (spontaneous)				
15-24	NA	50 (1774)	51 (3423)	74 (1762)
15-19		42 (860)	42 (1729)	67 (963)
20-24		57 (914)	51 (3423)	82 (799)
Can name at least one correct way of preventing AIDS ¹ (spontaneous)				
Urban	NA	64 (558)	62 (964)	85 (643)
Rural		43 (1216)	46 (2459)	67 (1119)
Can name at least one correct way of preventing AIDS ² (prompted)				
15-24	NA	84 (1774)	81 (3423)	79 (1762)
15-19		80 (860)	74 (1729)	74 (963)
20-24		88 (914)	89 (1694)	85 (799)
Can name at least one correct way of preventing AIDS ² (prompted)				
Urban	NA	89 (558)	90 (964)	88 (643)
Rural		81 (1216)	78 (2459)	74 (1119)
Can name at least three correct ways of preventing AIDS (spontaneous) ¹				
15-24	NA	2 (1774)	1 (3423)	13 (1762)
15-19		2 (860)	1 (1729)	11 (963)
20-24		2 (914)	2 (1964)	15 (799)
Can name at least three correct ways of preventing AIDS (spontaneous) ¹				
Urban	NA	2 (558)	2 (964)	18 (643)
Rural		2 (1216)	1 (2459)	10 (1119)
Can name at least three correct ways of preventing AIDS (prompted)				
15-24	NA	NA	NA	47 (1762)
15-19				39 (963)
20-24				57 (799)
Can name at least three correct ways of preventing AIDS (prompted)				
Urban	NA	NA	NA	58 (643)
Rural				41 (1119)

¹ Spontaneously mentions at least one of the three ways (abstinence, monogamy and condom use) of respondents who have heard of AIDS.

² Prompted only for condom use and faithfulness in 1994 and 1996, while 1999 included abstinence of respondents who have heard of AIDS.

Table B.1. Continued

	1991	1994	1996	1999
Can name at least two correct ways of preventing AIDS (prompted)				
Urban	NA	65 (558)	69 (964)	85 (643)
Rural		48 (1216)	50 (2459)	72 (1119)
Knows HIV can be transmitted from mother to child				
15-24	71 (4078)	75 (1774)	73 (3328)	79 (1762)
15-19	67 (2229)	69 (860)	66 (1666)	74 (963)
20-24	77 (1849)	81 (914)	80 (1662)	86 (799)
Knows HIV can be transmitted from mother to child				
Urban	88 (891)	85 (558)	79 (958)	90 (643)
Rural	67 (3187)	71 (1216)	70 (2370)	73 (1119)
Knows infected person can appear healthy				
15-24	56 (4078)	66 (1774)	69 (3326)	69 (1214)
15-19	50 (2229)	60 (860)	63 (1666)	63 (963)
20-24	64 (1849)	71 (914)	74 (1660)	76 (799)
Knows infected person can appear healthy				
Urban	74 (891)	81 (558)	80 (957)	82 (643)
Rural	52 (3187)	58 (1216)	64 (2369)	61 (1119)
Knows someone with HIV or who has died of AIDS				
15-24	NA	45 (1774)	44 (3423)	53 (1762)
15-19		41 (860)	40 (1729)	48 (963)
20-24		49 (914)	48 (1694)	60 (799)
Knows someone with HIV or who has died of AIDS				
Urban	NA	58 (558)	52 (964)	60 (643)
Rural		39 (1216)	41 (2459)	49 (1119)

Table B.2. Trends in Knowledge about HIV/AIDS among young MEN from 1991-1999

	1991	1994	1996	1999
Has heard of AIDS				
15-24	97 (826)	98 (753)	98 (868)	98 (1446)
15-19	96 (518)	97 (430)	97 (493)	98 (845)
20-24	99 (308)	99 (323)	99 (375)	99 (601)
Has heard of AIDS				
Urban	99 (167)	99 (249)	100 (256)	100 (523)
Rural	97 (659)	98 (508)	99 (612)	98 (923)
Can name at least 1 correct way of preventing AIDS ¹ (spontaneous)				
15-24	NA	68 (753)	67 (868)	81 (1446)
15-19		63 (430)	60 (493)	74 (845)
20-24		75 (323)	77 (375)	90 (601)
Can name at least 1 correct way of preventing AIDS ¹ (spontaneous)				
Urban	NA	78 (249)	81 (256)	88 (461)
Rural		63 (503)	62 (612)	77 (709)
Can name at least one way of preventing AIDS ² (prompted)				
15-24	NA	88 (753)	86 (868)	85 (1446)
15-19		84 (430)	81 (493)	78 (845)
20-24		93 (323)	93 (375)	94 (601)
Can name at least one way of preventing AIDS ² (prompted)				
Urban	NA	91 (249)	94 (256)	91 (523)
Rural		86 (504)	83 (612)	82 (923)
Can name at least 3 ways of preventing AIDS (spontaneous) ¹				
15-24	NA	3 (753)	4 (868)	19 (1446)
15-19		1 (430)	3 (493)	16 (845)
20-24		5 (323)	5 (375)	22 (601)
Can name at least 3 ways of preventing AIDS (spontaneous) ¹				
Urban	NA	2 (249)	7 (256)	27 (523)
Rural		3 (504)	3 (610)	14 (923)
Can name at least 3 ways of preventing AIDS (prompted)				
15-24	NA	NA	NA	56 (1446)
15-19				50 (845)
20-24				63 (601)
Can name at least 3 ways of preventing AIDS (prompted)				
Urban	NA	NA	NA	63 (523)
Rural				51 (923)

1 Spontaneously mentions at least one of the three ways (abstinence, monogamy and condom use) of respondents who have heard of AIDS.

2 Prompted only for condom use and faithfulness in 1994 and 1996, while 1999 included abstinence of respondents who have heard of AIDS.

Table B.2. Continued

	1991	1994	1996	1999
Can name at least 2 ways of preventing AIDS (prompted)				
15-24	NA	66 (753)	64 (868)	83 (1446)
15-19		62 (430)	57 (493)	76 (845)
20-24		71 (323)	71 (375)	93 (601)
Can name at least 2 ways of preventing AIDS (prompted)				
Urban	NA	78 (249)	72 (256)	89 (523)
Rural		60 (504)	60 (612)	80 (923)
Knows HIV can be transmitted from mother to child				
15-24	74 (827)	76 (753)	71 (868)	77 (1446)
15-19	69 (518)	70 (430)	63 (493)	72 (845)
20-24	83 (309)	83 (323)	81 (375)	85 (601)
Knows HIV can be transmitted from mother to child				
Urban	86 (167)	82 (249)	76 (256)	85 (523)
Rural	71 (660)	73 (504)	69 (612)	73 (923)
Knows infected person can appear healthy				
15-24				
15-19	62 (827)	74 (753)	75 (868)	72 (1446)
20-24	56 (518)	68 (430)	66 (493)	67 (845)
	71 (309)	81 (323)	86 (375)	80 (601)
Knows infected person can appear healthy				
Urban				
Rural	75 (167)	84 (249)	85 (256)	83 (523)
	58 (660)	69 (504)	70 (612)	66 (923)
Knows someone with HIV or who has died of AIDS				
15-24	NA	43 (753)	43 (868)	57 (1446)
15-19		38 (430)	36 (493)	52 (845)
20-24		49 (323)	51 (375)	65 (601)
Knows someone with HIV or who has died of AIDS				
Urban	NA	54 (249)	50 (256)	64 (523)
Rural		38 (504)	39 (612)	53 (923)

C. National trends in sexual activity, by age and residence

Table C.1. Trends in sexual activity among young WOMEN from 1991-1999

	1991	1994	1996	1999
Sexual activity by age 15				
15-24	28 (4078)	28 (1774)	28 (3423)	27 (1762)
15-19	26 (2229)	25 (860)	25 (1729)	24 (963)
20-24	30 (1849)	30 (914)	31 (1694)	31 (799)
Sexual activity by age 15				
Urban	20 (891)	28 (558)	25 (964)	22 (643)
Rural	30 (3187)	28 (1216)	29 (2459)	31 (1119)
Sexual activity by age 18 (of those aged 18+)				
18-24	61 (2818)	64 (1265)	71 (2405)	71 (1136)
18-19	62 (969)	65 (351)	70 (711)	69 (337)
20-24	61 (1849)	64 (914)	71 (1694)	73 (799)
Sexual activity by age 18 (of those aged 18+)				
Urban	56 (616)	68 (406)	67 (717)	64 (464)
Rural	62 (2202)	62 (859)	73 (2405)	76 (672)
Median age at first sex				
15-24	17.4	17.4	17.3	17.3
Had premarital sex in last year of those still single				
15-24	27 (1571)	31 (750)	30 (1891)	30 (915)
15-19	44 (420)	27 (578)	23 (1328)	25 (717)
20-24	30 (1991)	46 (172)	47 (563)	49 (198)
Had premarital sex in last year of those still single				
Urban	32 (506)	38 (261)	37 (593)	34 (377)
Rural	30 (1485)	28 (489)	27 (1298)	28 (538)

Table C.2. Trends in sexual activity among young MEN from 1991-1999

	1991	1994	1996	1999
Sexual activity by age 15				
15-24	46 (827)	37 (753)	28 (868)	28 (1446)
15-19	46 (518)	38 (430)	26 (493)	29 (845)
20-24	47 (309)	35 (323)	30 (375)	26 (601)
Sexual activity by age 15				
Urban	51 (167)	35 (249)	31 (256)	25 (523)
Rural	45 (660)	38 (504)	26 (612)	29 (923)
Sexual activity by age 18 (of those aged 18+)				
18-24	79 (479)	78 (503)	68 (558)	64 (887)
18-19	77 (170)	77 (180)	63 (183)	62 (286)
20-24	80 (309)	78 (323)	70 (375)	65 (601)
Sexual activity by age 18 (of those aged 18+)				
Urban	79 (103)	80 (170)	70 (179)	66 (331)
Rural	79 (376)	76 (333)	67 (379)	63 (556)
Median age at first sex				
15-24	15.9	15.7	18.5	17.4
Had premarital sex in last year of those still single				
15-24	65 (691)	62 (517)	45 (770)	48 (1234)
15-19	58 (504)	51 (345)	34 (484)	39 (817)
20-24	82 (187)	83 (172)	64 (286)	65 (417)
Had premarital sex in last year of those still single				
Urban	72 (144)	65 (178)	52 (240)	53 (472)
Rural	63 (547)	60 (339)	42 (530)	45 (762)

Table C.3. Partner Rates in young WOMEN from 1991-1999

	1991	1994	1996	1999
Sex with more than one partner in last year, of singles with sex in last year				
15-24	NA	32 (262)	21 (597)	15 (278)
15-19		28 (166)	19 (313)	14 (181)
20-24		40 (96)	24 (284)	16 (97)
Sex with more than one partner in last year, of singles with sex in last year				
Urban	NA	33 (108)	21 (233)	15 (130)
Rural		32 (154)	21 (364)	16 (148)
Sex with more than one partner in last year, of married with sex in last year				
15-24	NA	3 (848)	3 (1532)	8 (759)
15-19		1 (212)	4 (401)	8 (221)
20-24		4 (636)	3 (1131)	9 (538)
Sex with more than one partner in last year, of married with sex in last year				
Urban	NA	4 (228)	7 (371)	14 (229)
Rural		3 (620)	2 (1161)	6 (530)
Sex with more than one partner in last year, of all young people				
15-24	NA	6 (1774)	5 (3423)	6 (1762)
15-19		6 (860)	4 (1729)	5 (963)
20-24		6 (914)	5 (1694)	8 (799)
Sex with more than one partner in last year, of all young people				
Urban	NA	7 (558)	7 (964)	8 (643)
Rural		5 (1216)	4 (2459)	5 (1119)

Table C.4. Partner Rates in young MEN from 1991-1999

	1991	1994	1996	1999
Sex with more than one partner in last year, of singles with sex in last year				
15-24	NA	46 (348)	37 (371)	38 (594)
15-19		39 (183)	30 (164)	37 (322)
20-24		53 (165)	42 (207)	40 (272)
Sex with more than one partner in last year, of singles with sex in last year				
Urban	NA	42 (124)	40 (132)	43 (248)
Rural		48 (224)	35 (239)	35 (346)
Sex with more than one partner in last year, of married with sex in last year				
15-24	NA	29 (91)	34 (95)	40 (175)
15-19		38 (8)	0 (7)	42 (19)
20-24		28 (83)	36 (88)	40 (156)
Sex with more than one partner in last year, of married with sex in last year				
Urban	NA	27 (26)	50 (16)	28 (36)
Rural		29 (65)	30 (79)	43 (139)
Sex with more than one partner in last year, of all young people				
15-24	NA	22 (753)	17 (868)	21 (1446)
15-19		17 (430)	10 (493)	15 (845)
20-24		29 (323)	26 (375)	28 (601)
Sex with more than one partner in last year, of all young people				
Urban	NA	21(249)	21(256)	22 (523)
Rural		22 (504)	15 (612)	20 (923)

* Some cells in this table are quite small, thus the corresponding results should be interpreted with caution.

D. National trends in condom use, by age and residence

Table D.1. Trends in condom use among young WOMEN from 1991-1999

	1991	1994	1996	1999
Ever used a condom, of singles who have ever had sex				
15-24	5 (765)	18 (348)	25 (853)	25 (395)
15-19	4 (496)	17 (214)	21 (435)	19 (222)
20-24	7 (296)	19 (134)	29 (418)	34 (173)
Ever used a condom, of singles who have ever had sex				
Urban	8 (202)	26 (159)	38 (317)	39 (187)
Rural	4 (563)	11 (189)	17 (536)	13 (208)
Ever used a condom of singles who had sex in last year				
15-24	6 (602)	21 (232)	32 (559)	27 (339)
15-19	5 (416)	18 (154)	24 (296)	19 (195)
20-24	10 (186)	27 (78)	40 (263)	38 (144)
Ever used a condom of singles who had sex in last year				
Urban	10 (163)	29 (99)	48 (221)	42 (161)
Rural	5 (439)	15 (133)	21 (338)	15 (178)
Ever used a condom, of singles with more than one partner in last year				
15-24	NA	27 (49)	35 (100)	29 (41)
15-19		23 (31)	30 (50)	27 (26)
20-24		33 (18)	40 (50)	33 (15)
Ever used a condom, of singles with more than one partner in last year				
Urban	NA	45 (20)	55 (40)	47 (19)
Rural		14 (29)	22 (60)	14 (22)
Used a condom last time, of singles who ever used a condom				
15-24	NA	83 (46)	45 (215)	67 (100)
15-19		78 (27)	51 (93)	71 (42)
20-24		89 (19)	40 (122)	64 (58)
Used a condom last time, of singles who ever used a condom				
Urban	NA	77 (26)	47 (122)	71 (72)
Rural		90 (20)	42 (93)	57 (28)
Used a condom last time, of singles who had sex in the last year				
15-24	NA	42 (120)	16 (566)	23 (348)
15-19		33 (78)	14 (302)	18 (201)
20-24		57 (42)	18 (264)	29 (147)
Used a condom last time, of singles who had sex in the last year				
Urban	NA	45 (53)	24 (222)	37 (162)
Rural		39 (67)	11 (344)	10 (186)

Table D.1. Continued

	1991	1994	1996	1999
Used a condom last time, of singles with more than one partner in the last year				
15-24	NA	22 (49)	19 (103)	31 (42)
15-19		13 (31)	15 (53)	27 (26)
20-24		39 (18)	24 (50)	38 (16)
Used a condom last time, of singles with more than one partner in the last year				
Urban	NA	35 (20)	34 (41)	53 (19)
Rural		14 (29)	10 (62)	13 (23)
Used a condom at last sex with non-marital non-cohabiting partner in the last year				
15-24	NA	20 (122)	24 (160)	23 (379)
15-19		13 (63)	22 (79)	19 (205)
20-24		27 (59)	27 (81)	28 (174)
Used a condom at last sex with non-marital non-cohabiting partner in the last year				
Urban	NA	28 (50)	40 (67)	35 (179)
Rural		14 (72)	13 (93)	13 (200)
Used a condom at last sex with marital/cohabiting partner in last year				
15-24	NA	4 (792)	2 (1290)	4 (722)
15-19		5 (199)	2 (339)	2 (239)
20-24		4 (593)	3 (951)	4 (513)
Used a condom at last sex with marital/cohabiting partner in last year				
Urban	NA	6 (225)	4 (333)	5 (220)
Rural		3 (567)	2 (957)	3 (502)

* Some cells in this table are quite small, thus the corresponding results should be interpreted with caution.

Table D.2. Trends in condom use among young MEN from 1991-1999

	1991	1994	1996	1999
Ever used a condom, of singles who have ever had sex				
15-24	19 (469)	27 (448)	50 (430)	40 (687)
15-19	14 (304)	23 (252)	43 (204)	30 (361)
20-24	27 (165)	32 (196)	58 (226)	52 (326)
Ever used a condom, of singles who have ever had sex				
Urban	27 (111)	36 (154)	60 (156)	56 (297)
Rural	16 (358)	22 (294)	45 (274)	28 (390)
Ever used a condom of singles who had sex in last year				
15-24	19 (446)	31 (318)	52 (340)	43 (606)
15-19	15 (292)	27 (177)	43 (160)	33 (320)
20-24	27 (154)	38 (141)	61 (180)	55 (286)
Ever used a condom of singles who had sex in last year				
Urban	28 (104)	39 (114)	62 (122)	61 (255)
Rural	16 (342)	27 (204)	47 (218)	30 (351)
Ever used a condom, of singles with more than one partner in last year				
15-24	NA	35 (130)	57 (144)	52 (221)
15-19		26 (65)	43 (65)	44 (116)
20-24		45 (65)	68 (79)	60 (105)
Ever used a condom, of singles with more than one partner in last year				
Urban	NA	44 (43)	68 (56)	70 (104)
Rural		31 (87)	50 (88)	35 (117)
Used a condom last time, of singles who ever used a condom				
15-24	NA	70 (103)	50 (217)	78 (277)
15-19		71 (49)	41 (87)	82 (108)
20-24		69 (54)	56 (130)	76 (169)
Used a condom last time, of singles who ever used a condom				
Urban	NA	72 (46)	52 (94)	79 (167)
Rural		68 (57)	49 (123)	77 (110)
Used a condom last time, of singles who had sex in the last year				
15-24	NA	29 (318)	30 (346)	36 (625)
15-19		24 (177)	22 (164)	29 (331)
20-24		35 (141)	37 (182)	45 (294)
Used a condom last time, of singles who had sex in the last year				
Urban	NA	33 (115)	37 (124)	52 (260)
Rural		27 (203)	26 (222)	26 (365)

Table D.2. Continued

	1991	1994	1996	1999
Used a condom last time, of singles with more than one partner in the last year				
15-24	NA	35 (131)	42 (140)	47 (228)
15-19		26 (66)	32 (63)	41 (119)
20-24		45 (65)	49 (77)	54 (109)
Used a condom last time, of singles with more than one partner in the last year				
Urban	NA	44 (43)	51 (53)	65 (106)
Rural		31 (88)	36 (87)	32 (122)
Used a condom at last sex with non-marital non-cohabiting partner in the last year				
15-24	NA	35 (229)	38 (180)	35 (684)
15-19		23 (107)	29 (68)	29 (334)
20-24		44 (122)	44 (112)	40 (350)
Used a condom at last sex with non-marital non-cohabiting partner in the last year				
Urban	NA	46 (79)	51 (73)	50 (264)
Rural		29 (150)	30 (107)	25 (420)
Used a condom at last sex with marital/cohabiting partner in last year				
15-24	NA	14 (103)	14 (99)	7 (176)
15-19		18 (11)	8 (12)	11 (19)
20-24		13 (92)	15 (87)	7 (157)
Used a condom at last sex with marital/cohabiting partner in last year				
Urban	NA	10 (29)	40 (20)	14 (36)
Rural		15 (74)	8 (79)	6 (140)

* Some cells in this table are quite small, thus the corresponding results should be interpreted with caution.

E. National trends in sexual risk behavior, by age and residence

Table E.1. Trends in sexual risk behavior among young WOMEN from 1991-1999

	1991	1994	1996	1999
Recent unprotected sex, of those who are single				
15-24	28 (1991)	22 (828)	20 (1891)	22 (915)
15-19	25 (1571)	20 (622)	17 (1328)	20 (717)
20-24	40 (420)	28 (206)	28 (563)	29 (198)
Recent unprotected sex, of those who are single				
Urban	29 (506)	23 (299)	19 (593)	20 (377)
Rural	28 (1485)	21 (529)	20 (1298)	23 (538)
Recent unprotected extramarital sex, of those who are married				
15-24	NA	2 (945)	3 (1532)	6 (847)
15-19		1 (237)	3 (401)	7 (246)
20-24		3 (708)	2 (1131)	5 (601)
Recent unprotected extramarital sex, of those who are married				
Urban	NA	2 (259)	4 (371)	8 (266)
Rural		2 (686)	2 (1161)	5 (581)
All with recent unprotected non-marital sex				
15-24	NA	12 (1774)	12 (3423)	14 (1762)
15-19		15 (860)	14 (1729)	16 (963)
20-24		8 (914)	11 (1694)	11 (799)
All with recent unprotected non-marital sex				
Urban	NA	13 (558)	13 (964)	15 (643)
Rural		11 (1216)	12 (2459)	13 (1119)
Feel at moderate or high risk for AIDS, of those with recent unprotected sex				
15-24	NA	19 (903)	23 (1459)	26 (879)
15-19		16 (309)	22 (504)	23 (345)
20-24		22 (594)	24 (955)	28 (534)
Feel at moderate or high risk for AIDS, of those with recent unprotected sex				
Urban	NA	30 (260)	23 (362)	29 (271)
Rural		15 (643)	23 (1097)	25 (608)

Table E.2. Trends in sexual risk behavior among young MEN from 1991-1999

	1991	1994	1996	1999
Recent unprotected sex, of those who are single				
15-24	52 (691)	34 (641)	21 (770)	27 (1270)
15-19	49 (504)	31 (417)	19 (484)	26 (826)
20-24	60 (187)	39 (224)	24 (286)	29 (444)
Recent unprotected sex, of those who are single				
Urban	52 (144)	32 (217)	19 (240)	21 (487)
Rural	52 (547)	35 (424)	22 (530)	31 (783)
Recent unprotected extramarital sex, of those who are married				
15-24	NA	14 (112)	13 (95)	22 (176)
15-19		15 (13)	0 (7)	32 (19)
20-24		14 (99)	14 (88)	20 (157)
Recent unprotected extramarital sex, of those who are married				
Urban	NA	9 (32)	0 (16)	17 (36)
Rural		16 (80)	15 (79)	23 (140)
All with recent unprotected non-marital sex				
15-24	NA	31 (753)	20 (868)	26 (1446)
15-19		31 (430)	19 (493)	26 (845)
20-24		32 (323)	22 (375)	27 (601)
All with recent unprotected non-marital sex				
Urban	NA	29 (249)	18 (256)	20 (523)
Rural		32 (504)	21 (612)	30 (923)
Feel at moderate or high risk for AIDS, of those with recent unprotected sex				
15-24	NA	16 (300)	27 (184)	32 (450)
15-19		16 (139)	30 (84)	33 (229)
20-24		16 (161)	25 (100)	30 (221)
Feel at moderate or high risk for AIDS, of those with recent unprotected sex				
Urban	NA	15 (92)	20 (40)	26 (115)
Rural		16 (208)	29 (144)	34 (335)

F. National trends in knowledge behavior mismatch, by age and residence

Table F.1. Trend in Knowledge behavior mismatch among young WOMEN from 1991-1999

	1991	1994	1996	1999
Ever had sex, of singles who know that virginity ¹ protects from AIDS (prompted)				
15-24	NA	NA	NA	38 (605)
15-19				31 (451)
20-24				58 (154)
Ever had sex, of singles who know that virginity protects from AIDS (prompted)				
Urban	NA	NA	NA	41 (282)
Rural				36 (323)
Sex in the last year, of singles who know that virginity protects from AIDS (prompted)				
15-24	NA	NA	NA	34 (605)
15-19				28 (451)
20-24				52 (154)
Sex in the last year, of singles who know that virginity protects from AIDS (prompted)				
Urban	NA	NA	NA	41 (282)
Rural				36 (323)
Sex with more than one partner, of young people who know monogamy protects from AIDS (prompted)				
15-24	NA	7 (1373)	5 (2551)	7 (1193)
15-19		8 (626)	5 (1184)	5 (589)
20-24		7 (747)	5 (1367)	8 (604)
Sex with more than one partner, of young people who know monogamy protects from AIDS (prompted)				
Urban	NA	10 (467)	7 (808)	8 (499)
Rural		6 (906)	4 (1743)	6 (694)
Some recent unprotected non-marital sex, of those who know condoms protects from AIDS (prompted)				
15-24	NA	12 (1063)	14 (2119)	16 (1088)
15-19		15 (449)	19 (901)	21 (509)
20-24		9 (614)	12 (1218)	12 (579)
Some recent unprotected non-marital sex, of those who know condoms protects from AIDS (prompted)				
Urban	NA	13 (391)	15 (719)	17 (474)
Rural		11 (672)	15 (1400)	15 (614)

¹ The actual question was "Can people protect themselves from getting the AIDS virus by abstaining completely from sex?"

Table F.2. Trends in Knowledge behavior mismatch among young MEN from 1991-1999

	1991	1994	1996	1999
Ever had sex, of singles who know that virginity ¹ protects from AIDS (prompted)				
15-24	NA	NA	NA	59 (880)
15-19				50 (545)
20-24				74 (335)
Ever had sex, of singles who know that virginity protects from AIDS (prompted)				
Urban	NA	NA	NA	64 (371)
Rural				56 (509)
Sex in the last year, of singles who know that virginity protects from AIDS				
15-24	NA	NA	NA	52 (880)
15-19				44 (545)
20-24				65 (335)
Sex in the last year, of singles who know that virginity protects from AIDS				
Urban	NA	NA	NA	64 (371)
Rural				56 (509)
Sex with more than one partner, of young people who know monogamy protects from AIDS (prompted)				
15-24	NA	23 (603)	55 (684)	24 (1068)
15-19		17 (329)	67 (357)	18 (578)
20-24		29 (274)	43 (327)	30 (490)
Sex with more than one partner, of young people who know monogamy protects from AIDS (prompted)				
Urban	NA	21 (213)	54 (216)	24 (420)
Rural		24 (390)	56 (468)	23 (648)
Some recent unprotected non-marital sex, of those who know condoms protects from AIDS (prompted)				
15-24	NA	34 (553)	23 (616)	29 (1047)
15-19		34 (300)	23 (326)	30 (543)
20-24		33 (253)	22 (290)	28 (504)
Some recent unprotected non-marital sex, of those who know condoms protects from AIDS (prompted)				
Urban	NA	31 (207)	19 (210)	21 (420)
Rural		35 (346)	25 (406)	34 (627)

¹ The actual question was "Can people protect themselves from getting the AIDS virus by abstaining completely from sex?"

