ZAMBIA
SEXUAL BEHAVIOUR SURVEY 1998

with Selected Findings from the Quality of STD Services Assessment

Central Statistical Office
Ministry of Health
Project Concern International (Zambia)

MEASURE Evaluation
University of North Carolina at Chapel Hill

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PREFACE

In 1998, the Central Statistical Office, Lusaka, Zambia was given a responsibility to carry out the Zambia Sexual Behaviour Survey (SBS) with technical support from the University of Zambia, Demographic Division; financial and technical assistance from USAID's MEASURE *Evaluation* Project, based at University of North Carolina at Chapel Hill (UNC); and technical and logistical support from Project Concern International (PCI). This survey was a nationally representative sample survey with separate estimates for rural and urban areas. The target population was men and women of reproductive age (15-49 years). It was designed to provide information on background characteristics; knowledge of HIV/AIDS; condom knowledge, use and access; marriage and cohabitation. Also collected was information on sexual behaviour and attitudes toward gender, sex, STDs and AIDS. Information on childbearing and antenatal care was also collected to support information for the sentinel surveillance. This report presents results of the SBS of 1998. The data in this report will be useful to researchers, planners, policymakers and the community at large.

The objectives of the SBS included the following:

- To assess knowledge of preventive practices and attitudes relating to HIV/STD among the general adult population (15-49 years)
- To obtain data on sexual behaviour among adults using a population-based sample for monitoring and evaluation of the epidemic and HIV/STD prevention programs
- To complement HIV/STD surveillance data obtained from antenatal clinics with data on sexual behaviour
- To identify the incidence of reported urethritis in men and treatment patterns among men and women with STD complaints

This survey is the first of its kind in Zambia. It was conceived and developed by a national steering committee which included representatives of the Central Statistical Office, Ministry of Health, PCI, Tropical Disease Research Centre (Ndola) and MEASURE *Evaluation*. Preparatory activities for the SBS began in April, 1998 and the mapping exercise was carried out concurrently with the pre-test exercise in July of the same year. Fieldwork training took place from August 17 to 29, 1998; fieldwork began on September 4 and ended on September 26. Questionnaire editing, data entry and tabulation then followed and were completed by November 6, 1998.

The support and involvement of various individuals contributed largely to the success of this survey. Among those whose efforts were instrumental in the successful implementation of this survey and finalization of this report are the Assistant Director in charge of Social Statistics, Mr. Emmanual M. Silanda, and the Project Coordinator, Reverend Charles Banda. Also instrumental were Ms. Margaret Tembo Mwanamwenge, Ms. Batistta Chilopa, Mr. William Mayaka, Ms. Gloria Songolo Nzovu (University of Zambia), Ms. Samantha Mulendema, Mr. George Namasiku, Mr. Makoselo C. Bowa, the Provincial Statistical Officers and other field staff. I extend my thanks to staff at PCI, in particular to Mr. Masauso Nzima and Mr. Perry Mwangala for the support they rendered towards the success of this survey.

My sincere appreciation also goes to Dr. Amy Tsui, Dr. Ties Boerma, Mr. Phil Bardsley, Ms. Amy Cunningham, Mr. Dominic Mancini, Dr. F. Mburu, Mr. Phill Lyons, and all MEASURE *Evaluation* staff at UNC for their technical support and advice in the successful implementation and finalization of the survey. Thanks also to USAID for funding the survey.

Finally, thanks go to the trainers and supervisors of the fieldwork as well as to the authors of this report.

David S. Diangamo
Director of Census and Statistics

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EXECUTIVE SUMMARY

The Zambia Sexual Behaviour Survey (SBS 1998) aimed to collect information on a set of key indicators of knowledge, attitude and sexual behaviour in association with the HIV/AIDS/ STD epidemic. The population-based survey consisted of a national sample of 1943 households and was in the field during September-October 1998. The household response was 97%. The individual response rates among eligible men and women (15-49 years of age) were 92% and 96% respectively: 1,655 interviews with men and 2,040 interviews with women.

Knowledge

Virtually all respondents in rural and urban areas had heard of AIDS, and 86% of men and 78% of women thought that HIV infection can be avoided. Also, 88% of men and 82% of women knew that a healthy person could have HIV infection. Misconceptions were also quite prevalent: 29% of respondents thought that HIV can be transmitted by mosquitoes; 30% of respondents thought that HIV can be transmitted by witchcraft.

> ***Most Zambians know about HIV, but many people have misconceptions about transmission.***

Respondents were asked to list ways to protect against HIV/AIDS. Sixty-five percent of men and 44% of women spontaneously mentioned condom use. This is an increase compared to the Demographic and Health Survey (DHS) 1996, in which 49% of men and 37% of women spontaneously mentioned condom use. In addition, 35% of men and 30% of women spontaneously mentioned that 'having one faithful partner' can protect one from HIV/AIDS. This is a decrease compared to the DHS 1996 (from 48% of men and 45% of women).

The respondents of SBS 1998 were also prompted on questions about ways to protect. Abstinence, one faithful partner and no casual sex were the most frequent responses. Sixty-seven percent of men and 57% of women agreed that condom use was an effective method to prevent HIV.

> ***More than half of respondents did not think condoms fully protect against HIV, but most agree that having one faithful partner will protect.***

However, when asked specifically whether a man who uses a condom during sex with an HIV infected women was fully protected, 57% of respondents thought that he was not fully protected against HIV. Only 27% of men and 28% of women agreed that reducing the number of sexual partners was sufficient for preventing HIV, but 83% of men and 82% of women agreed that having one faithful partner was effective.

Attitudes

With regard to attitudes concerning sexual behaviour, only 7% of respondents thought it was acceptable for a married man to have extramarital sexual relations; 19% of men and 29% of women thought a man could not be sexually satisfied with one partner.

> ***The majority of Zambians disapprove of extramarital sex, but one-third of women do not think men can be satisfied with only one partner.***

More men than women considered it acceptable for an unmarried woman to buy condoms: 57% of men and 42% of women. Even though 72% of men and 77% of women agreed that a woman can refuse sex during her menstrual period, only 25% of men and 30% of women agreed that a married woman can protect herself against HIV/STD if she suspects her husband is infected.

Exposure to HIV and stigma

Adult deaths associated with AIDS are now common in most parts of Zambia. Seventy percent of respondents knew someone who had died of HIV/AIDS, but only 42% of respondents knew someone living with HIV infection. Only 8% of respondents said they had been tested for HIV and about 6% knew their HIV status.

> ***One in five adults were estimated to be HIV infected by 1995; few people know their HIV status and many hold negative attitudes about HIV infected people.***

The majority of respondents said they would be willing to care for a family member with AIDS (85%). Fifty-four percent of respondents were of the opinion that a nurse with HIV infection should not be allowed to continue working; 14% responded as such because of concerns about the nurse's own health, and 39% because they were concerned about becoming infected themselves.

Sexual Behaviour

Comparing marital and sexual behaviour between the DHS 1996 and the SBS 1998, most indicators have remained largely unchanged and there is remarkable consistency between the data from both surveys. The main changes are an increase in the proportion of men who reported themselves as married (or cohabiting) and a decrease in the proportion of unmarried men who reported two or more partners in the last year. The proportion of men with extra-marital partners did not change significantly. Among women, self-reported data on partnerships did not show marked changes between 1996 and 1998.

> ***Sexual behaviour has not changed drastically from 1996 to 1998, although unmarried men are reporting fewer partners.***

WHO prevention indicator number 4 (the proportion of sexually active men and women with a non-regular partner in the last 12 months) was 39% for men and 17% for women, with almost no difference between the urban and rural areas.

Although the DHS 1996 does not allow for direct calculation of prevention indicator 4, adjusted data suggest that no reduction in this indicator has taken place between 1996 and 1998.

> ***Close to one-third of men report using condoms in non-marital partnerships, a slight decrease from 1996.***

Condom use within marriage remained at the same level as in 1996. In 1998, 6% of men and 4% of women said they had used a condom during the last sexual intercourse. These figures are slightly lower than in the DHS 1996. Most use is among the recently married and, according to the DHS 1996, appears to be for family planning purposes, although this question was not included in the SBS 1998.

In non-marital partnerships, 30% of men and 18% of women reported condom use during the last sexual act. Condom use was higher in urban areas than in rural areas: 37% and 23% in urban men and women and 27% and 17% in rural men and women respectively. In the DHS 1996, 35% of men and 21% of women reported condom use during the last non-marital sexual act. WHO/GPA prevention indicator 5 is defined as the respondents who used a condom during their last sexual act with a non-regular partner. In Zambia, 33% of men and 26% of women used a condom during the last sexual act in this type of partnership.

Women in non-marital partnerships are generally less than five years younger than their partners; half of the partners come from another area; transactions in cash or kind are common.

Data on partner characteristics showed that one-quarter of non-marital relationships reported by men for the last year lasted less than one week. At the other end, 38% of such relationships reported by women had lasted at least one year. About half of the partners were living in another village or neighbourhood, suggesting considerable 'spatial' mixing. Fourteen percent of men and 36% of women in non-marital relationships had a partner who was married. The median age difference between men and women in non-regular relationships was about 4 years (men being older), which is about two years less than the age difference within marital relationships. The coital frequency in non-marital partnerships was low, with about half of the ongoing partnerships having no sex or having sex only once in the last three months. Payments were common during non-marital sexual acts. Forty percent of men and 57% of women reported a transaction in cash or kind during the last sexual intercourse. Four percent of men and 18% of women said the last sexual act with a non-marital partner involved 'dry sex' in which the woman applies substances or water to make the vagina drier or tighter. Within marriage, 2% of men and 11% of women said they had 'dry sex' during the last sexual act.

Adolescents

Adolescents (15-19 years of age) had lower levels of knowledge about ways to avoid HIV than respondents in their early twenties. When prompted, about half of the adolescents did not think consistent condoms use is a way to avoid AIDS; 17% of adolescent men and 45% of adolescent women did not know a source of condoms. Sixty-two percent of adolescent men and 59% of adolescent women said they ever had sex.

Although the majority of Zambian adolescents (15-19 years) are sexually active, knowledge about HIV/AIDS and condom use is lower than among older respondents.

The median age at first sex is about 16-17 years for boys and girls and there is no evidence of changes in sexual activity of teenagers between the DHS 1996 and the SBS 1998. Almost one-fourth of adolescent women were currently married and 26% had given birth. In non-marital partnerships, the median age difference between the adolescent woman and the male partner was 3.3 years, and 3% of non-marital relationships involved a male partner who was at least 10 years older. A condom was used during the most recent act in 16% of the partnerships.

Sexually Transmitted Diseases

About one-third of respondents could not list a symptom of an STD. Five percent of men and 3% of women reported that they had a genital ulcer or genital discharge during the last year. Among those, 80% of men and 67% of women said they had visited a health facility. Thirty percent of respondents had gone to a traditional healer, while about one-fourth had bought drugs themselves. An assessment of the quality of STD services in 41 health facilities in Zambia showed that most patients do not receive adequate treatment due to shortages of drugs or incorrect treatment practices.

Zambian respondents reporting signs of an STD most frequently visit a health facility, but many see traditional healers or buy drugs informally.

In addition, a health facility survey was carried out to assess STD treatment practices using a standard WHO protocol. The sample included 41 health facilities that provide STD services in urban and rural Zambia. Based on 117 observations of providers and STD patients at the health facilities, the following was found: correct history taking - 89%; correct physical examination - 79%; correct treatment - 20%.

These three results can be used to calculate WHO/GPA prevention indicator 6 (percent of STD patients correctly examined and treated) as 16%. In addition, 56% of STD patients were given appropriate advice on condom use and 74% were told to notify their partner(s).

> ***Many Zambians visiting a health facility for an STD receive incorrect treatment or do not receive drugs due to shortages.***

These two results can be used to compute WHO/GPA prevention indicator 7 (percent of STD patients given appropriate advice on condom use and partner notification) as 45%.

Comparing the scores on prevention indicator 6 (PI 6) and prevention indicator 7 (PI 7) by whether the health workers had been trained showed a modest positive effect of training. For PI 6, the scores among trained versus non-trained health workers were 20% and 13% respectively, while for PI 7 the scores were 61% and 35% respectively.

> ***Antibiotics are easily available without prescription at pharmacies, drug stores and even street vendors outside the formal health system.***

Mystery STD patients visited 77 establishments in Lusaka and the Copperbelt, including 36 chemists. In almost all cases drugs were dispensed, and in 41% of the chemist visits an injection was offered. In pharmacies or chemists some history taking was done, but not at other outlets. Treatments given were usually not adequate and dosages varied according to the amount of money available. Advice on condom use or partner notification was seldom given.

1 INTRODUCTION AND BACKGROUND CHARACTERISTICS

1.1 The Zambian context

Zambia is a landlocked country covering an area of 752,612 square kilometres, about .25% of the African continent. Zambia shares borders with the Democratic Republic of the Congo (Zaire) and Tanzania to the north; Malawi and Mozambique to the east; Zimbabwe and Botswana to the south; Namibia to the southwest and Angola to the west. Administratively, Zambia is divided into nine provinces and 67 districts. Four of ten Zambians live in urban areas, mostly located along the line of rail.

The 1969, 1980 and 1990 national censuses reported total populations of 4.0, 5.7 and 7.8 million, respectively. The annual growth rate in 1990 was 2.7%. Growth rates varied markedly by province from 1.5% in Copperbelt Province to 4.2% and 4.4% in Central and Eastern Provinces, respectively, during the 1980-90 intercensal period. The average density in 1990 ranged from 50 people or more per square kilometre in Lusaka and Copperbelt Provinces to fewer people per kilometre in Western and Northwestern Provinces. In addition to being the most densely populated provinces, Lusaka and Copperbelt are also the most urbanized. The urban population has grown from 29% in 1969 to nearly 40% in 1990. Urbanization slowed considerably during the 1980-90 period as compared to earlier periods.

Zambia has a mixed economy of a modern and urban-oriented sector paralleling the line of rail, and a rural agricultural sector. For many years, copper accounted for 95% of export earnings and has contributed 45% of the national revenue. Poor economic performance since the mid-1970s consequently led to lower GDP. Sharp decline of copper demand and prices in the world market at the time of high oil prices in the 1980s further depressed the Zambian economic growth. GDP per capita (in constant 1977 prices) declined from $350 in 1980 to $264 in 1994, representing an average annual decline of 2%.

1.2 The HIV/AIDS situation in Zambia[1]

HIV/AIDS became a visible public health problem when the first AIDS case was reported in 1984. The HIV/AIDS epidemic was initially an urban phenomenon, but it soon became obvious that all parts of the country were affected. A national response began with the establishment of the National AIDS Surveillance Committee in 1986 and the establishment of national management structures to spearhead effective responses to the HIV/AIDS challenge. The government established a National AIDS Control Programme with assistance from WHO/GPA. After the introduction of an initial short-term plan for blood safety, general mid-term plans were developed for 1988-92 and 1993-98. In 1992, a review of the mid-term plan of the HIV/AIDS programme recommended broadening participation in the response to the epidemic to include all sectors of the society. A multisectoral approach to STD prevention, HIV prevention and AIDS care programmes was adopted.

A mix of interventions, including promotion of safer sexual behaviour, blood screening and STD control, has been implemented. A condom social marketing programme was launched in 1992 and a network of 62 STD clinics (mostly part of district hospitals or other government health facilities) in different districts was established. The STD, tuberculosis and leprosy programmes have been combined with the AIDS programme into the National AIDS, STD, TB and Leprosy programme (NASTLP).

In the context of the recent health sector reforms in Zambia, many responsibilities are now delegated to the districts. The national AIDS programme developed a core epidemiological surveillance and research system which includes national sentinel surveillance in antenatal clinics, local population-based surveys (with saliva-

[1] Summarized from Sichone M, Mulenge D. A review of monitoring and evaluation practices in Zambia. Paper prepared for UNAIDS/WHO/USAID/MEASURE *Evaluation* workshop, Nairobi, November 7-11 1998.

based HIV testing), hospital notification of AIDS cases and small-scale research studies. Twenty-two antenatal clinics are involved in the HIV monitoring system, although HIV prevalence estimates at different points in time are available for only 10 clinics. In 1994, a large national survey of antenatal women was carried out. Based on this study and data generated from a population-based survey in Lusaka and the Kapiri Mposhi district, the national HIV prevalence is estimated at 20%, with urban areas having two times higher prevalence than rural areas (25 and 13% respectively)[2].

Self-reported data on sexual behaviour and condom use are available from the national 1996 DHS and a number of local surveys, some of which have been large. In 1991, a prevention indicator survey was completed in Lusaka. Comparison of the 1991 data to those from 1995 and 1996 surveys in Lusaka suggests changes in self-reported sexual behaviour, including increased condom use, although results from the two follow-up surveys are not consistent. Medical stores monitor national condom distribution. Since 1996 about 25 million condoms have been distributed.

STD prevalence data are obtained from outpatient clinics. No national data are readily available, although some data on syphilis prevalence among pregnant women are available from HIV monitoring sites.

1.3 Objectives and organization of the survey

The main objective of the 1998 SBS was to obtain national estimates of key indicators related to HIV/STD prevention and AIDS care for the national programme, and for the USAID monitoring process. The indicators cover knowledge, attitudes and sexual behaviour.

The Central Statistical Office conducted the survey in association with the University of Zambia, Demography Division. Technical assistance was provided by the USAID-funded MEASURE *Evaluation* Project of the Carolina Population Center, University of North Carolina at Chapel Hill. Project Concern International (PCI) provided technical and logistical assistance. The survey was funded by USAID Zambia and USAID Africa Bureau/SD in Washington, D.C.

1.4 Sample and questionnaire

The sample design for the survey called for a probability sample of about 2,000 households in which all individuals aged 15-49 years were to be interviewed. The final sample consisted of 1,943 households selected randomly countrywide in every province and by rural/urban residence. The sample is nationally representative and aimed at producing national, urban and rural estimates.

The SBS used the sampling frame of the 1996 DHS[3] which used the 1990 Census of Population, Housing and Agriculture as the sampling frame. In total, 312 primary sampling units, corresponding to the Census Supervisory Areas (CSAs), were selected from the frame. The 312 CSAs formed the frame for the Zambia SBS, and provided the unit from which 80 CSAs were randomly selected. Two months prior to the main fieldwork all household listings in each were updated and a sample of 20 households in urban clusters and 30 households in rural clusters was selected.

Two types of questionnaires were administered, a household and an individual. The main purpose of the household questionnaire was to identify and list all eligible women and men for the individual interview. All men and women aged 15-49 years who were resident or had slept in the household the night before the interview were eligible for the individual interview. The individual questionnaire was based on an expanded version of the original WHO/GPA prevention indicators questionnaire and the Family Health International (FHI) general population behavioral surveillance questionnaire and included a section with questions about characteristics of the partners of the respondent. Additions and changes were made to the question-

[2] Fylkesnes K, Ndhlovun Z, Musonda R, Sichone M. Studying dynamics of HIV epidemic: population-based data compared with sentinel surveillance in Zambia. *AIDS* 1998, 12: 1227-34

[3] Central Statistical Office [Zambia], Ministry of Health and Macro International Inc. 1997. *Zambia Demographic and Health Survey*, 1996. Calverton, Maryland: Central Statistical Office and Macro International Inc.

naire to suit the Zambian population. The individual questionnaire was translated into the seven major languages (Bemba, Nyanja, Tonga, Lozi, Lunda, Luvale and Kaonde) and addressed background characteristics (education, religion, etc.), sexual relationships and behaviour, sexually transmitted diseases, knowledge and attitudes about AIDS and a recent child bearing history.

A one-week pilot test of the questionnaire was carried out in urban and rural communities near Lusaka one month prior to fieldwork. The main training lasted one week. Fieldworkers were divided among provincial teams, each with one supervisor. Data collection began immediately after training ended and was completed in four weeks. A team based in Lusaka was responsible for data editing, consistency checks and cleaning.

1.5 Response rates

Table 1.1 presents a summary of response rates for the household and individual interviews. Of the total sample of 1,981 households, 1,914 households were occupied and 1,913 (97%) households were successfully interviewed. The shortfall is due to dwellings being vacant at the time of the survey. Of the 2,138 women and 1,803 men eligible, 2,040 women (95%) and 1,655 men (92%) were successfully interviewed.

1.6 Characteristics of the household

The distribution of the household population is shown in Table A.1.1 by five-year age groups and summarized in Table 1.2. The population of Zambia is relatively young. Nearly 49% of the rural and total population is below 15 years of age while 46% of the urban segment is below 15 years. The dependency ratio is high with at least one dependent per adult person between 15 and 64 years of age.

Table 1.1
Results of the household and individual interviews, SBS 1998.

Results	Residence		Total
	Urban	Rural	
Household Interviews			
Households sampled	606	1375	1981
Households occupied	600	1314	1914
Households interviewed	591	1322	1913
Household response rate	***97.6***	***96.1***	***96.6***
Individual Interviews			
Number of eligible women	803	1335	2138
- eligible women interviewed	755	1285	2040
Number of eligible men	716	1087	1803
- Eligible men interviewed	649	1006	1655
Eligible woman response	***94.0***	***96.3***	***95.4***
Eligible man response rate	***90.6***	***92.5***	***91.8***

Table 1.2
Percent distribution of household population by age in SBS 1998 and in censuses and DHS 1996.

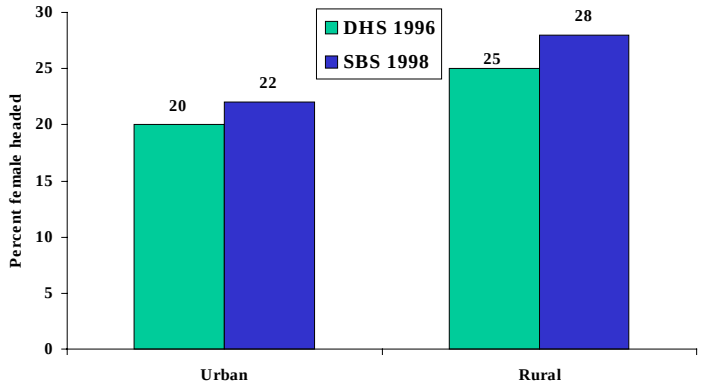
Age group	1980 census	1990 census	1992 DHS	1996 DHS	1998 SBS
<15	49.8	46.2	46.7	46.8	48.3
15 - 64	47.4	51.9	50.6	50.5	48.3
65+	2.8	2.9	2.6	2.7	2.4
Missing	0.0	0.0	0.1	0.0	1.1
Total	100.0	100.0	100.0	100.0	100.0
Median age	15.3	16.8	16.3	16.4	15.0
Dependency Ratio	1.11	0.92	0.98	0.98	1.05

Source: Central Statistical Office, 1980 Population and Housing Census of Zambia. Final Report., Lusaka. 1985. Central Statistical Office, Ministry of Health and Macro International Inc. Zambia Demographic Health Survey 1996. Calverton, Maryland: CSO and Macro International Inc. 1997.

Results from the SBS 1998 show that at 5.8 persons, the average urban household size is markedly larger than the rural household, with an average of 4.7 persons. Figure 1.1 shows that about one-quarter of households are headed by females. This is higher than in the DHS 1996 (16% were female-headed households). In both surveys, female-headed households are more common in rural than urban areas (28 vs. 22% in the SBS 1998).

The majority of respondents are Protestant. This includes 57% Orthodox Protestants and 11% Pentecostal church followers. Twenty-four percent of respondents are Roman Catholic.

Figure 1.1
Female-headed households, DHS 1996 and SBS 1998



1.7 Education and media

The educational system in Zambia has a three-tiered structure. Primary education consists of seven years of schooling and secondary education an additional five years. Post-secondary schooling is available but limited. In Zambia, 83% of women and 93% of men have had at least primary education (Table A.1.2). Among rural women 23% have no education. Forty-four percent of men and one-fourth of women have some secondary education. The proportions of men and women with secondary education were about twice as high in the urban areas compared to the rural areas.

Respondents were asked if they read a newspaper, listen to the radio or watch television. Nearly 22% of women and 15% of men never use any of the three forms of mass media. Figure 1.2 shows the results of weekly use by urban-rural residence. Urban men, followed by urban women and then rural men, use mass media most often. Overall, 16% of men read a newspaper at least once a week, 45% listen to a radio at least once a week and 26% watch television at least once a week. Only 5% of women read the newspaper weekly although 30% listen to the radio and 20% watch television at least once a week (Table A.1.3).

Figure 1.2
Access to media at least once per week, SBS 1998

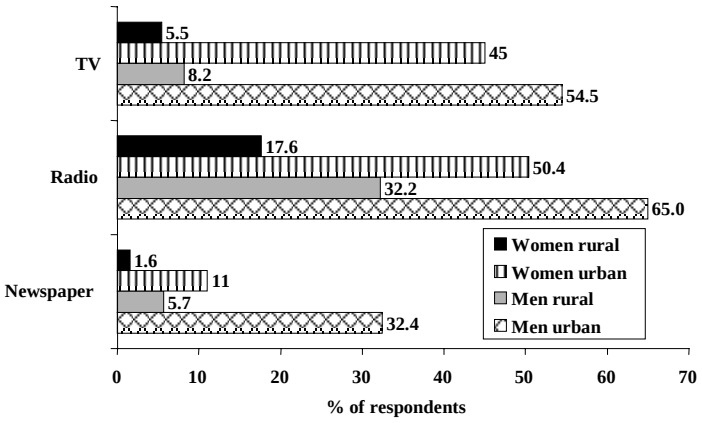


Table 1.3
Duration of stay in current location by sex and residence (percentages), SBS 1998

	N	Less than 1 year	Less than 5 years
All Men	1655	8.3	35.1
Urban men	649	9.9	36.5
Rural men	1006	7.3	34.1
All women	2040	11.7	39.6
Urban women	755	14.8	43.9
Rural women	1285	9.8	37.1

1.8 Mobility

Respondents were asked how long they had lived in their present community, neighbourhood or village. Respondents were also asked how many nights during the last month they had slept in a location other than the household in which they were interviewed. The results indicate that Zambian men and women have a fairly high level of mobility.

Ten percent of respondents had lived for less than one year in the present location, and this was more common among women than among men and more common in urban areas than in rural areas (Table 1.3). Thirty-eight percent of respondents had lived less than five years in the current location. The proportion that had moved in the last five years was somewhat higher among women than men and among urban residents.

About three out of 10 respondents had slept in another location during the last month; 9.6% of men and 6.1% of women had slept seven or more nights in another location during the last month. The mean number of nights slept elsewhere in the last month was 2.4 for men and 1.9 for women. There were no differences between urban and rural respondents.

1.9 Antenatal care use

Antenatal women are the main source of HIV surveillance data in Zambia. Antenatal care attendance was high in the SBS 1998. Of the 747 women who gave birth in the two years preceding the survey, 92.3% used an antenatal clinic. In the urban areas, 97.8% visited an antenatal clinic. In rural Zambia, nine out of 10 women who gave birth in the last two years used antenatal services (89.8%). Government and mission clinics provided the majority of antenatal services (84.7% and 12.6% of antenatal visits respectively).

1.10 STD facility survey

In addition to the population-based SBS 1998, a health facility survey was carried out to assess the quality of STD services in Zambia. The syndromic approach was introduced several years ago, and the national programme, donors and NGOs have put resources into strengthening STD control. The WHO/GPA protocol for assessment of the quality of STD services was used to assess the current quality of services. The facility survey was implemented by Project Concern International (PCI) and the University Teaching Hospital in Lusaka, with technical and financial support from the MEASURE *Evaluation* Project at the University of North Carolina

at Chapel Hill, through USAID funding. A full report of this survey can be found elsewhere[4].

The STD facility survey included 41 health facilities, 43 interviews with health workers and 117 observations of interactions between a health care provider and STD patient. The 43 health facilities were selected as follows. In the first step, districts were selected with a probability proportional to size. In the second step, an urban and a rural health facility were selected in each district (except in urban districts where only one urban facility was selected, and in districts with very small urban populations where only one rural facility was selected). The selection of health facilities was limited to facilities caring for a significant number of STD cases in one week. As no data on STD cases were available from the National Health Information System, a meeting with the appropriate district officials was held prior to commencing the fieldwork. A list of health facilities that commonly manage a significant number of STD cases was compiled. From this list, three urban and three rural health facilities with the highest STD caseloads were selected and then one was randomly selected from each stratum.

A list of all personnel at each of the 41 selected health facilities was generated, and health care providers who see and manage STD cases were listed for observation and interviews. Other requirements were implemented in accordance with the guidelines for the survey protocol. Where one or two health care providers managed STD cases, an observation and interview was conducted for either one or both of them. No health facility had more than two health care providers managing STDs.

1.11 Other drug outlets: mystery STD patients.

The main aim of the mystery STD patient study was to solicit information on STD management by private practitioners who dispense pharmaceuticals, using mystery clients similar to the simulated client method used in a study in Nepal.[5] This exercise was limited to Lusaka and the Copperbelt, the two major urban sites in Zambia, which account for close to half the population of Zambia. A total of 77 outlets (pharmacies, chemists, drugstores) were visited: 31 in Lusaka and 46 in the Copperbelt. From the outlets listed by key informants, 77 were chosen for visits by mystery clients.

Eight mystery clients were chosen from highly skilled and experienced interviewers. The training included details of confidentiality, body language, dress code and expectations by socio-economic status of respective location of the providers' outlets.

Each study site was visited by four mystery clients. After morning and afternoon encounters, the supervisor assigned to the site interviewed the mystery clients using a semi-structured questionnaire. Information gathered included type of provider spoken with, amount of time spent at the facility, drugs dispensed, degree of privacy, whether a prescription was requested, whether a doctor's consultation was suggested, whether a condom was sold, providers' communication regarding condom promotion, and partner treatment.

Data were collected for the facility survey and the mystery STD patient study during July and August 1998.

[4] Matondo P, Nzima M, Mwangala P . Report of the Zambia STD facility survey. Project Concern International, Lusaka, 1999.

[5] Tuladhar SM, Mills S, Acharya S, et al., The role of pharmacists in HIV/STD prevention: evaluation of an STD syndromic management intervention in Nepal. *AIDS* 12 (suppl. 2): 581-588.

2 KNOWLEDGE AND ATTITUDES

When HIV/AIDS was recognized in the mid-eighties as a major health problem in Zambia, the Ministry of Health undertook numerous programs to inform the general population about HIV and other STDs. Such programs aim to increase knowledge about HIV/AIDS, decrease risky sexual behavior and influence attitudes about gender, sex and people living with HIV/AIDS. Information, education and communication (IEC) messages present information on STDs and HIV to the general population, and strategies spearheaded by the Ministry of Health continue to address various facets of the epidemic. The population's general knowledge of HIV/AIDS may reflect the degree of program infiltration. It is expected that increased level of accurate knowledge about how to avoid infection will translate to fewer new infections. Personal experience with HIV-infected family members or acquaintances may also increase knowledge of the disease and influence attitudes. This chapter addresses general knowledge of HIV/AIDS, prevention methods and misconceptions, condom use, attitudes toward sexual behaviour and gender roles, and stigma surrounding HIV/AIDS. Each variable was stratified by sex and urban/rural residence.

2.1 General knowledge

In Zambia, as in many other countries where the epidemic is well established, knowledge about AIDS is very high. Ninety-nine percent of men and women had heard of AIDS (Table A.2.1). Respondents were asked if there is anything a person can do to avoid getting HIV, the virus that causes AIDS (Figure 2.1 and Table A.2.1). Overall, 82% of respondents believed that HIV can be avoided, 11% did not think HIV can be avoided and 10% did not know. Urban men were most likely to believe that HIV can be avoided (90%) and rural women were least likely to think so (73%).

Respondents were asked if a healthy person could be infected with HIV (Table A.2.1). Over 90% of urban respondents believed a healthy person can have HIV, and slightly fewer rural residents had this perception (82% of men and 77% of women). Figure 2.2 compares results from the DHS 1996 and the SBS 1998. The proportion of men and women who knew that a healthy person can be HIV infected remained the same.

Figure 2.1
Percent of respondents who know HIV can be avoided, SBS 1998

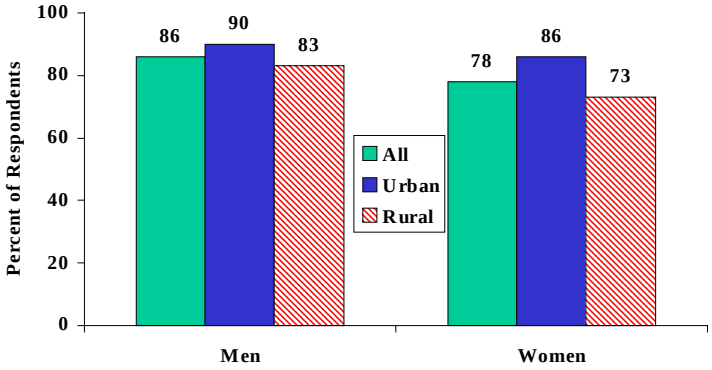
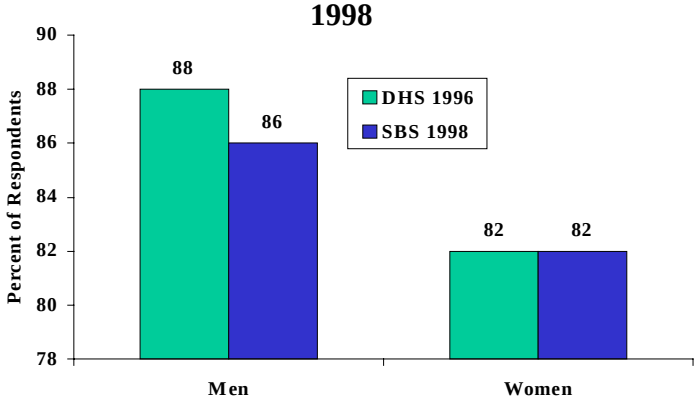


Figure 2.2
Percent of respondents 15-49 who think that a healthy person can have HIV, DHS 1996 and SBS 1998



2.2 Knowledge of ways to protect

The SBS 1998 used both the spontaneous and the prompted response methods to assess knowledge of prevention methods. Although not an evaluation, this study can give some insight into how well information about HIV has been received in Zambia. If a respondent believed there are ways to protect against HIV, he/she was asked to list them without prompting by the interviewer. The respondent was then asked if a person could protect from HIV infection by using a condom at each sexual encounter, having fewer sexual partners, having one partner who also has no other partners, not having casual sex and abstaining completely from sex.

Spontaneous and prompted responses on the ways to avoid HIV/AIDS differ markedly (Table A.2.2 and Figures 2.3 and 2.4). Almost no respondent spontaneously cited having fewer sexual partners as a way to avoid HIV, but when prompted, more than one-fourth agreed. Staying with one faithful partner was mentioned spontaneously by one-third of respondents; after prompting, more than 80% of respondents agreed. Similarly, large differences are seen between spontaneous and prompted responses for abstaining from sex and not having casual sex. Much smaller differences between spontaneous and prompted answers are observed for consistent condom use. Eight percent of respondents said they did not know any ways to protect. Although the spontaneous responses may be less affected by a respondent's inclination to give a 'desirable' or 'correct' response, the comparison of results using spontaneous listings and prompting suggests that it may be better to rely on prompted data for the assessment of trends. The degree to which responses are given spontaneously by respondents, solicited by the interviewer and recorded correctly by the interviewer is bound to vary more between surveys than prompted answers.

Consistent condom use to avoid HIV was most frequently mentioned spontaneously by men (65%) and women (44%), followed by not having casual sex, having only one faithful partner and abstaining from sex. Urban residents generally cited more ways to avoid HIV than rural residents. Some respondents mentioned non-sexual modes of transmission such as avoidance of contaminated needles (6%) or blood transfusion (3%).

Figure 2.3
Percent of men who mentioned selected ways to avoid HIV, SBS 1998

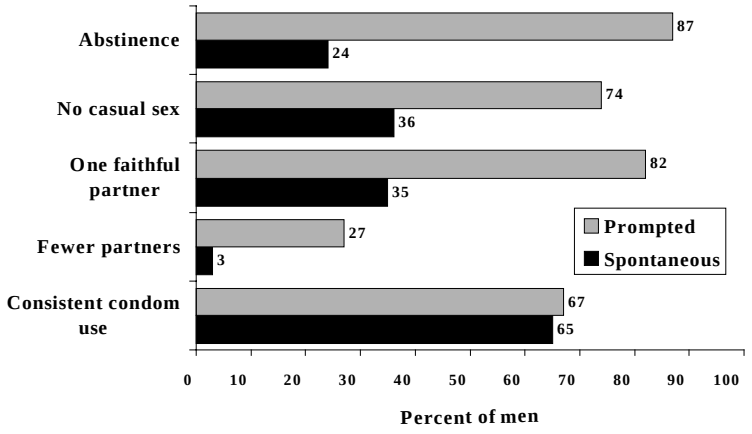
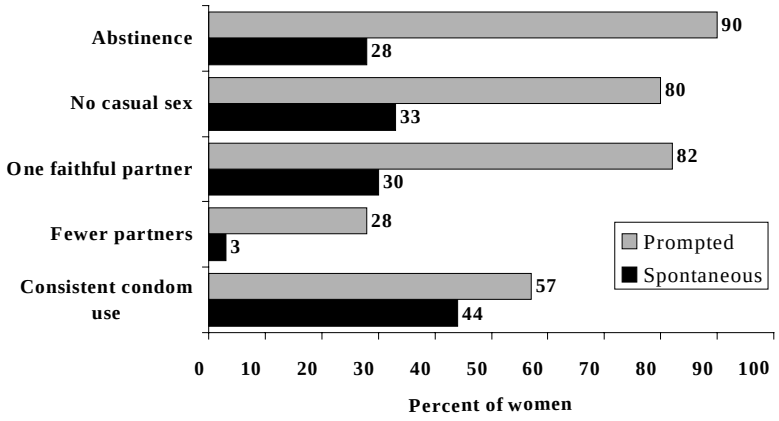


Figure 2.4
Percent of women who mentioned selected ways to avoid HIV, SBS 1998

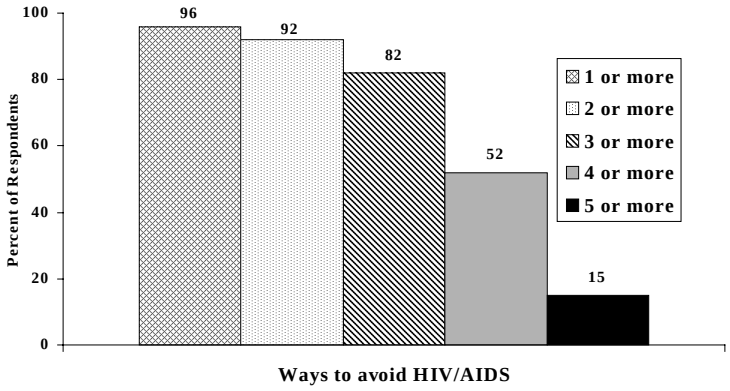


Prompted questions concerning sexual behaviour elicited higher positive response rates than spontaneous for all prevention methods. Respondents most commonly cited abstaining from sex as a way to avoid HIV (87% of men and 90% of women), followed by having one faithful sexual partner (82% of men and women), not having casual sex (74% of men and 80% of women), consistent condom use (67% of men and 57% of women) and having fewer sexual partners (27% of men and 28% of women). Prompted responses differed little by residence between men and women, except that urban dwellers were less likely than rural residents to consider having fewer sexual partners as an effective method.

The DHS 1996 questions on knowledge of preventive practices are spontaneously generated responses. Two questions about knowledge were asked. The first question asked how a person gets AIDS; the second what a person can do to avoid getting AIDS. Both were asked only of people who have heard of AIDS and know that there are ways to protect from HIV. The coding categories are different from those used in the SBS 1998. The only response category that is directly comparable between the DHS and the SBS is use of condoms as a way to prevent HIV/AIDS. A higher proportion of men and women mentioned condom use in the SBS 1998 compared to the DHS 1996: among men the proportion increased from 49% to 67% and among women from 38% to 57%.

The Prevention Indicator 1 (PI 1) (the percentage of respondents aged 15-49 who cite at least two acceptable ways to protect against HIV) from the WHO/GPA methodology[6] can be constructed from the Zambia SBS 1998 data. The WHO/GPA methodology constructs PI 1 by asking a series of questions offering both incorrect and correct methods of protection. The two main practices considered correct are condom use and no casual sex (derived from a positive reply to having one faithful partner). In the SBS 1998 PI 1 was calculated from the five prompted questions regarding HIV protection on (1) consistent condom use, (2) having fewer sexual partners, (3) having one faithful partner, (4) not having casual sex, and (5) abstaining completely from sex. Figure 2.5 shows that 15% of respondents, answering prompted questions, thought all five ways could protect from HIV; 52% knew at least four ways, 82% at least three, 92% at least two and 96% cited only one correct way to protect from HIV. In other words, 4% of respondents did not agree that any of the five correct methods mentioned were ways of protecting from HIV.

Figure 2.5
Percent of respondents by number of ways to avoid HIV, prompted responses, SBS 1998



The PI 1 score varies by the calculation method used. Using the WHO/GPA methodology, PI 1 shows that approximately 50% of respondents agreed that people can protect themselves from HIV by using a condom all the time and by having one faithful partner. When calculating PI 1 by counting those respondents who replied in the affirmative to at least one of the other four prompted questions regarding sexual behaviour, and who also agreed that people can protect from HIV by using a condom all the time, the PI score increases to 60%. The proportion who believed condom use can prevent HIV is the main factor contributing to the result on PI 1.

[6] World Health Organisation Global Programme on AIDS. *Evaluation of a national AIDS programme: a methods package.* World Health Organisation. Geneva, 1994

Figure 2.6
Percent of respondents with misconceptions about HIV transmission, SBS 1998

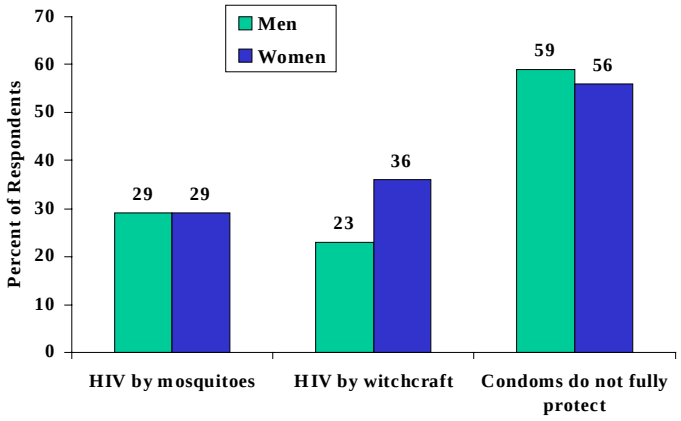


Figure 2.7
Percent of respondents knowing someone living with HIV or someone who had died of AIDS, SBS 1998

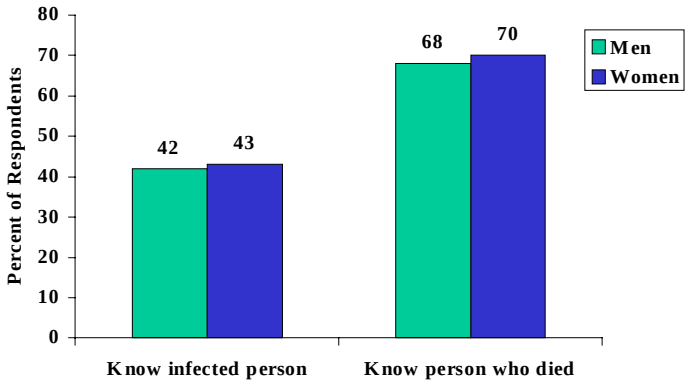
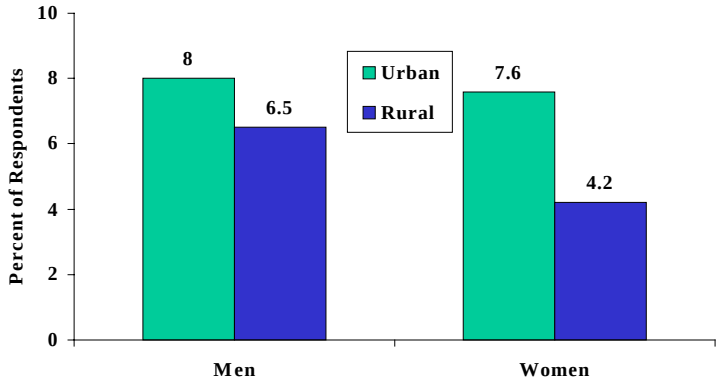


Figure 2.8
Percent of respondents 15-49 who have had an HIV test and know the results, SBS 1998



2.3 Misconceptions about HIV transmission

The SBS 1998 asked several questions to uncover misconceptions regarding HIV transmission: whether HIV can be transmitted by mosquitoes or witchcraft, and whether a condom can fully protect one from HIV infection. A substantial minority of respondents cited misconceptions about HIV transmission. (Figure 2.6 and Table A.2.3). Slightly more than one-fourth of respondents thought that HIV could be transmitted by mosquitoes, and 23% of men and 36% of women thought it could be transmitted by witchcraft. More rural respondents than urban thought that HIV could be transmitted through these avenues. More than half of the respondents thought that condoms do not fully protect against HIV. However, this response cannot be entirely attributed to 'misconception'. Incorrect condom use would not 'fully protect' one from HIV; thus, this question actually captures those who think condoms do not protect, as well as those who know that incorrect, inconsistent use does not protect.

2.4 Exposure to people with HIV/AIDS and HIV testing

Information about population knowledge of people living with HIV/AIDS and deaths associated with AIDS can provide an idea of the awareness of the epidemic, the level of stigma in a society, and the extent to which increased AIDS mortality may modify behaviour. Even though antenatal clinic data suggest that about one in five adult women of reproductive age in Zambia are HIV infected, only 42% of respondents said they knew someone living with HIV (Figure 2.7 and Table A.2.4). A larger proportion of respondents (70%) reported knowing someone who had HIV and died, although there is no information on whether they knew the person had HIV before the HIV-infected person died. As the epidemic matures and mortality increases, one would expect a higher proportion of respondents who know someone who died of AIDS than two years ago. This is barely the case; in the DHS 1996, 67% of women and 70% of men responded that they knew someone who was living with AIDS or had died of AIDS.

Only 9% of men and 7% of women had taken an HIV test. Of these, not all received test results. Just 7% of men and 5% of women had an HIV test and knew their serological status. There were only minor differences between urban and rural respondents (Table A.2.5 and Figure 2.8).

These data suggest that Zambian respondents have limited knowledge of their own HIV status as verified by a serological test. The low level of testing may suggest lack of access to testing sites, financial or other barriers, or lack of knowledge about a need for HIV testing. Additionally, given high prevalence rates in Zambia, and a lack of curative measures, it may not be desirable for people to know their HIV status. There also may be considerable stigma surrounding HIV and testing, thus inhibiting people from taking HIV tests or from reporting any information about their sero-status to an interviewer.

2.5 Willingness to care for HIV infected family members

Most respondents (85%) expressed a willingness to care for a family member with HIV (Table A.2.6). There were no differences between urban and rural respondents. A much lower percentage (46%) thought that a nurse with HIV, but not sick, should be allowed to work (Figure 2.9). Overall, 42% of men and 35% of women thought that the nurse should stop working because of the risk of transmitting infection to patients. This proportion was highest among rural men (47%). Eleven percent of men and 16% of women thought a nurse should stop working because of the strain on the nurse's own health.

2.6 Attitudes on sexual behaviour and gender

Respondents were asked a series of questions to ascertain the level of acceptability of certain practices or behaviours related to sexual behaviour and gender. Sexual negotiation was addressed through questions on whether women can refuse sex during the menstrual period or if a woman can protect herself from HIV/STDs if her husband is infected.

2.6.1 Acceptability of multiple partnerships

Most respondents (91%) thought it was unacceptable for a married man to have extramarital sexual relations (Figure 2.10 and Table A.2.7). Little difference was found between urban and rural areas except that rural women are the least likely to approve of extramarital affairs (9%). Responses by married and unmarried respondents differed little.

Figure 2.9
Percent of respondents by opinion about whether a nurse with HIV should work, SBS 1998

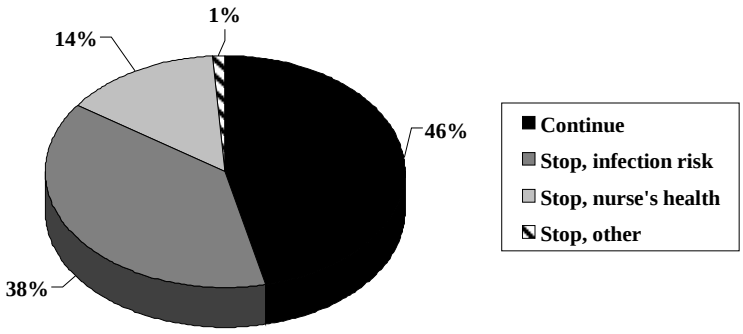
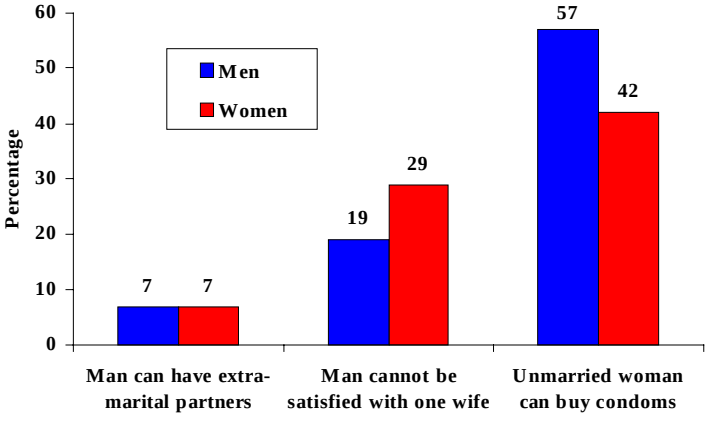


Figure 2.10
Proportion of men and women who accept certain behaviours, SBS 1998



More men (81%) than women (71%) believed a man could be sexually satisfied with one wife and no other sexual affairs (Figure 2.10 and Table A.2.7). Thus, close to one-third of women did not think a man could be sexually faithful to one wife. Urban men and women were slightly more likely than rural residents to believe a mutually exclusive sexual relationship is possible. Married and cohabiting respondents were slightly more likely than unmarried ones to think a man could be satisfied by only one wife (88% of men and 78% of women).

Men and women responded differently when asked if it is acceptable for an unmarried woman to purchase condoms. More urban men (64%) than urban women (46%), and more rural men (52%) than rural women (40%), believed unmarried women should be able to purchase condoms. In other words, more men (57%) than women (42%) found condom purchase by unmarried women acceptable. This may suggest a greater degree of resistance among women to changes in sexual behaviour and self-protective actions.

2.6.2 Sexual negotiation

The ability for women to negotiate decisions about engaging or not engaging in sexual activity has important implications for HIV transmission and whether women can protect themselves from disease. Respondents were asked if a woman could refuse sex during her menstrual period and if a woman could protect herself from an STD if her husband had one. Seventy-one percent of men and 76% of women agreed that a woman can refuse sex during menstruation (Figure 2.11 and Table A.2.8). By residence, urban men (80%) and women (85%) were more likely to agree than rural men and women (66% and 71%, respectively).

In contrast, far fewer respondents thought a woman can negotiate sexual behaviour if her husband had an STD (Figure 2.12 and Table A.2.9). Only 26% of men and 30% of women felt that a woman can protect herself from getting an STD if her husband has one. Ten percent more urban than rural residents believed women can avoid getting an STD from their partners. Thirty-eight percent of urban women, but only 22% of rural men, thought a woman can protect herself.

Figure 2.11
Percentage of respondents who believe that women can refuse sex during menstruation, SBS 1998

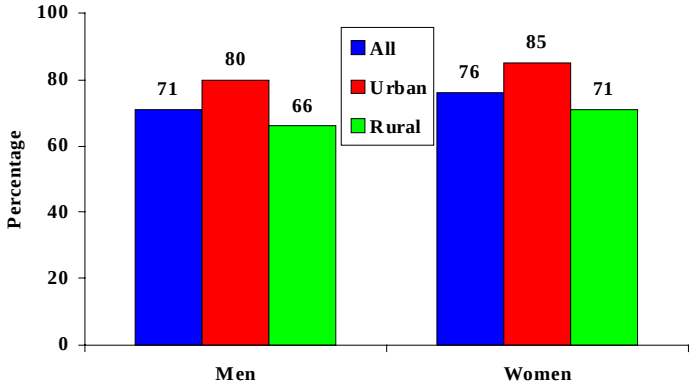
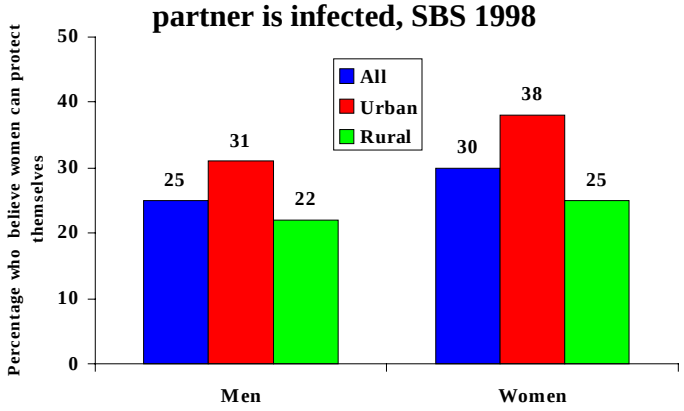


Figure 2.12
Percentage of respondents who believe that women can protect themselves from an STD or HIV if partner is infected, SBS 1998



Those who thought a woman can protect herself from an STD if her husband was infected were queried about modes of protection. Respondents spontaneously identified three main actions: refusing sex, insisting on condom use and taking medications. As previously noted, 74% of men and 70% of women felt that nothing can be done. Eighteen percent of men and 23% of women noted refusing sex (Figure 2.13); 14% of men and 11% of women mentioned condom use; 4% of men and 9% of women identified taking medications (Figure 2.13 and Table A.2.7). Refusing sex and insisting upon condom use were more common responses among urban residents than rural residents; only 7% of rural women noted insisting upon condom use, compared to 17% of urban women.

2.7 Traditional practices with implications for HIV/STD

The SBS 1998 asked several exploratory questions about the traditional practices of cleansing, inheritance and circumcision that may have implications for the HIV/STD epidemic. When a married man dies, a widow may be subjected to cleansing or purification, which prescribes sexual intercourse between a widow and one of her late husband's brothers (or other male relatives) to "cleanse" her of her husband's spirit. Or, she may be subjected to inheritance, which prescribes marriage between the widow and a relative of the dead spouse.

Most respondents (71% of men and 76% of women) had heard of the practice of cleansing, but only 44% of men and 51% of women knew a person who had been cleansed (Table A.2.10 and Figure 2.14). No time period for knowledge (e.g., last five years) was specified in the survey, thereby making it difficult to ascertain the extent to which such traditional practices are ongoing. Urban residents were more likely than rural residents to have heard of cleansing, but rural men and women were more likely than urban residents to know a person who had been cleansed. Knowledge of the practice of someone who had been cleansed increases with respondent's age. In the under 30 age group, 64% of men and 70% of women had heard of cleansing and 45% knew someone who had been cleansed. Slightly more (82%) of the over 30 age group had heard of cleansing and 55% knew someone who had been cleansed.

Most (82%) respondents had also heard of widow or widower inheritance (Table A.2.11), defined in the survey as the practice when a wife/husband must be married to a relative of the dead spouse. In levirate or patrilineal groups, she may be inherited by one of the husband's relatives; if she were part of a matrilineal group she would return to her family of origin. For widowers, a similar practice of marrying or being 'inherited' by the wife's relatives might take place. The SBS 1998 queried about this practice because of the implications for HIV infection if sex is involved in inheritance.

Figure 2.13
Ways in which women can protect themselves from STD/HIV, SBS 1998

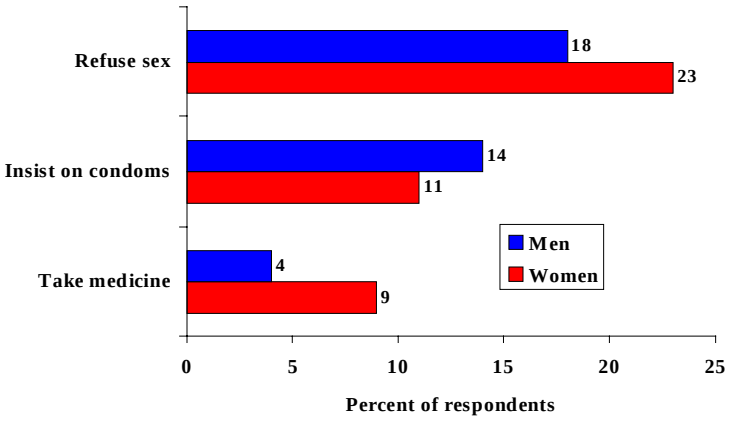
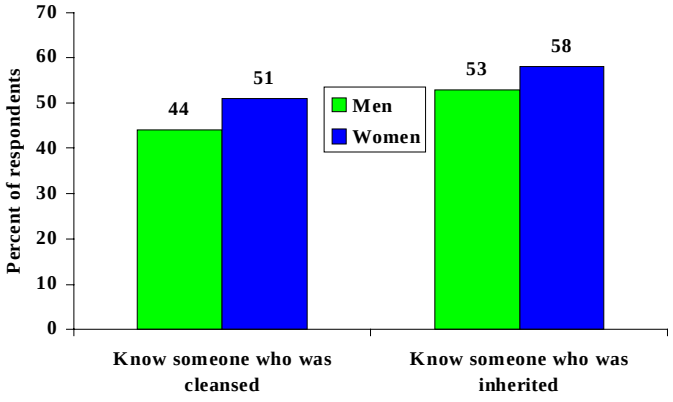


Figure 2.14
Knowledge of traditional practices, SBS 1998



Fifty-three percent of men and 58% of women knew someone who had been inherited (Figure 2.14 and Table A.2.11). By age, 78% in the under 30 age group had heard of inheritance as compared to 89% of the over 30 group. Only 53% of the under 30 group knew someone who had been inherited as compared to 64% of the over 30 group. As age increased (i.e., to the 45-49 age group) respondents were more likely to know someone who had been inherited.

Although it is generally thought that circumcision is not widely practiced in Zambia (with the exception of ethnic groups in the northwestern part of the country), a relatively large proportion of men and women reported themselves as circumcised (Figure 2.15 and Table A.2.12). Overall, 14% of men and 4.5% of women said they had been circumcised and there was little variation between urban and rural residents.

Male circumcision rates exceeded 10% in four provinces, which accounted for about one-third of circumcised men from the SBS 1998 data. Sixteen percent of men in Lusaka province, 15% in Luapula and 14% in Western Province, reported they were circumcised. In Northwestern Province, where a number of ethnic groups traditionally circumcise, 57% of men were circumcised.

Women who reported being circumcised reside in all provinces; the highest percentages being in the Copperbelt (9%) and Eastern (6%) provinces. Numbers are small for an analysis by ethnic groups, but a few women reported themselves as circumcised in almost every ethnic group. It is not clear if the women are indeed reporting female circumcision or confuse the question with something else, e.g. labia elongation. Further research on this topic is needed.

2.8 Knowledge about condoms

Respondents with knowledge of the male or the female condom were asked if they knew where to obtain condoms and if they or their partners had ever used either type of condom. Most men (96%) and women (92%) had heard of the male condom (Figure 2.16 and Table A.2.13), and the majority of all respondents knew where to obtain condoms (87% of men and 69% of women). Only 40% of all men and 19% of all women said they had used a male condom (Figure 2.17).

Figure 2.15
Percentage of respondents reporting to have been circumcised, SBS 1998

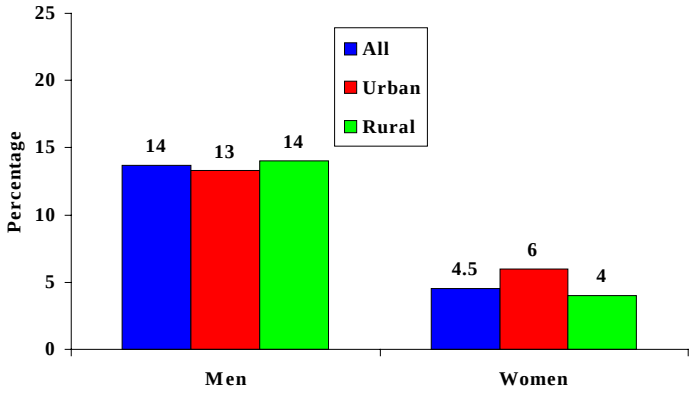
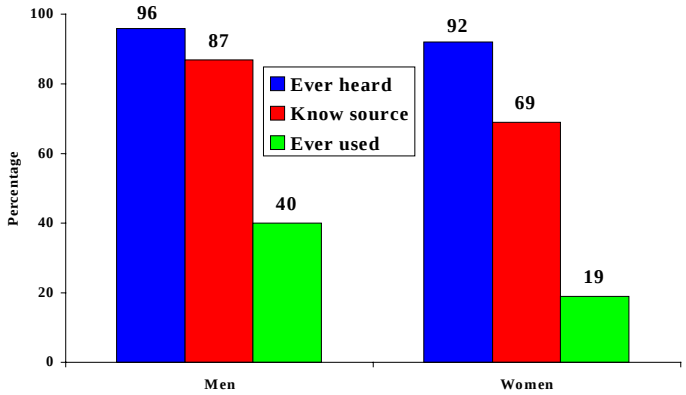


Figure 2.16
Percentage of respondents who have ever heard, know a source and ever used male condoms, SBS 1998



"Ever use" rates were lower than those reported in the DHS 1996, when 55% of men and 27% of women had ever used a condom. The differences may be associated with the way in which the questions were phrased or the data were analysed. Ever use data from DHS 1996 combined use for family planning purposes and for avoidance of STDs, which was asked separately, while the SBS 1998 only had a general question. Ever use to avoid STDs in the DHS 1996 was 49% among men and 16% among women.

Urban residents most commonly cited a shop as the predominant source for male condoms, followed by health facilities and pharmacies (Figure 2.18). For rural residents, the health facility was most frequently mentioned as the main source.

Some Zambian IEC campaigns provide information about the female condom and it has been available with limited distribution for the past few years. Almost one-half (47%) of men and women had heard of the female condom which was described in the survey as "a kind of plastic condom that a woman can put in her vagina before having sex and remove it after sex" (Figure 2.19 and Table A.2.14). Knowledge was higher in the urban areas (60% of men and 56% of women) than in rural areas (38% of men and 41% of women). Slightly less than one-half of those who had heard of the female condom knew where to obtain one (22% of all men and women). Ever use was much lower: 2.1% of men and 0.5% of women said they had used a female condom. The main sources for female condoms among those who knew a source were the health facility and family planning clinic (Figure 2.20). It is possible that some of the reported knowledge and use of female condoms is actually related to other contraceptive methods, such as the diaphragm.

Figure 2.17
Percentage of respondents who have ever used a male condom, SBS 1998 and DHS 1996

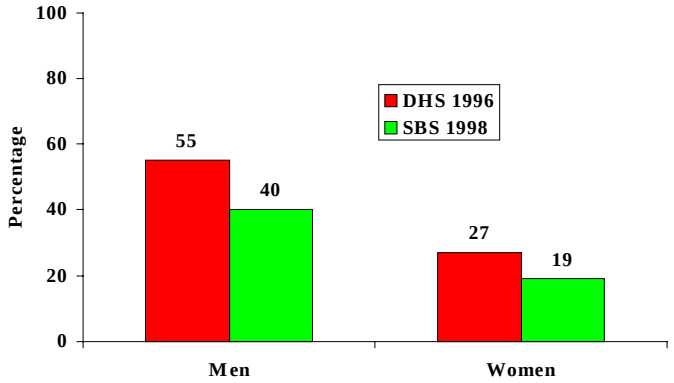


Figure 2.18
Proportion of respondents mentioning specific sources of male condoms among those who knew a source, SBS 1998

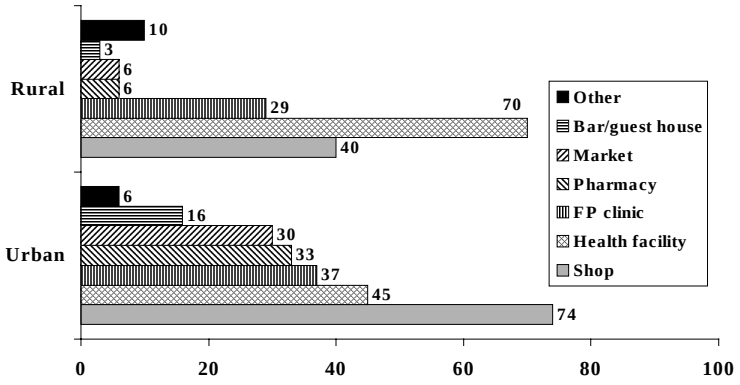


Figure 2.19
Percentage of respondents who have ever heard, know a source and ever used female condoms, SBS 1998

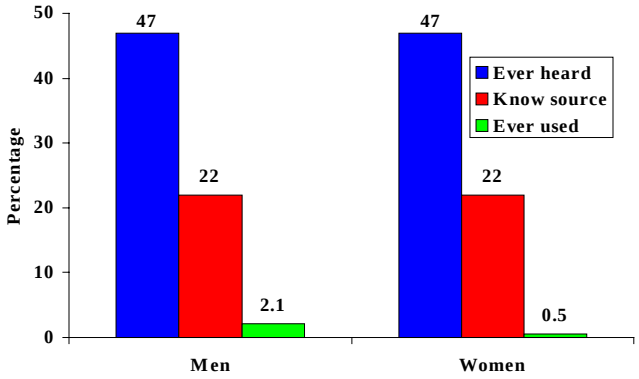
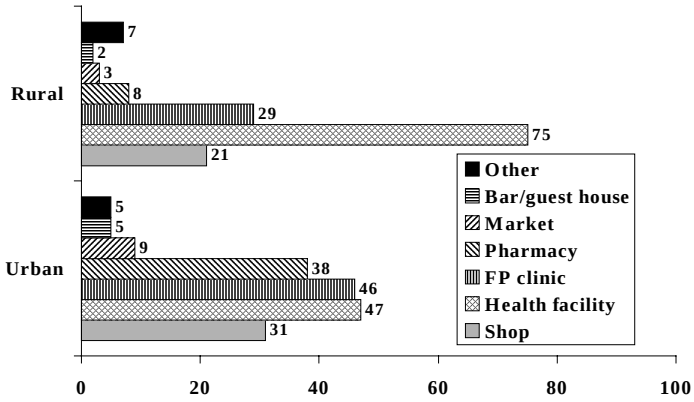


Figure 2.20
Proportion of respondents mentioning specific sources of female condoms among those who knew a source, SBS 1998



3 SEXUAL BEHAVIOUR

Because HIV and other STDs are transmitted primarily by way of heterosexual penetrative sex, prevention programs at the national level need information on the levels, patterns and trends over time in sexual behaviour. The main HIV prevention efforts have involved promotion of condom use, delay of age at first sex, and encouragement of mutual faithfulness. Education efforts assume that increased knowledge about the risks will eventually translate to reductions in risky sexual behaviour. In addition, AIDS has become more visible to the general population in Zambia, as the epidemic matures and HIV-associated mortality is on the rise. This chapter presents results from questions asked of respondents about their own sexual behaviour, including information from the last five marital and/or non-marital partnerships. Questions are also asked on duration of partnership, age difference, frequency of sex, marital status of non-marital or non-cohabiting partner, residence of non-marital partner, use of drying agents and condom use. Information on non-marital, non-cohabiting partnerships, is of crucial importance in understanding the dynamics of the epidemic. This chapter provides some insight into sexual mixing patterns in Zambia during 1998. Individual sexual behaviour indicators from the SBS 1998 are compared with results from the DHS 1996 to ascertain trends.

3.1 Age at first sex and first marriage

In cross-sectional surveys there are different ways to measure age at first sex. Based on recalled data of age at first sex (asked of all those who have had sex), the median age at first sex was 16.3 years among women 20-49 years, with rural women reporting a slightly earlier start than urban women (16.2 and 16.6 years, respectively) (Table A.3.1). Among men 20-49 years the median age at first sex was almost the same (16.4 years), again with rural respondents beginning sexual activity slightly earlier than urban respondents (16.7 and 16.3 years respectively). Limitations to this method include inability to record recent changes in age at first sex. In Chapter 5 on young people, current sexual activity status data are used to obtain a more recent estimate of age at first sex.

The median age at first marriage was 18.0 years for women 20-49 years and 23.1 years for men 25-49 years. The DHS reported 18.0 years for men and 23.8 years for women in the same age groups.

3.2 Sexual behaviour within marriage

3.2.1 Marriage

When the SBS 1998 was conducted, a large proportion of men and women 15-49 were neither in a married nor a cohabiting union (Table 3.1). Among men 41% had never married, 5% were divorced or widowed. An additional 3% were married but not living with their wives. Among women 25% had not been married, 15% were divorced or widowed and 3% were married but not living with a husband. Less than 2% of respondents were cohabiting but not married. These percentages are comparable to those reported in the DHS 1996.

Table 3.1
Marital status among men and women, SBS, 1998

Marital status	Men	Women
Single, never married	40.5	25.2
Cohabiting	0.7	1.7
Married and living together	46.4	47.1
Married and living separately	2.7	2.6
Polygamous marriage	4.6	8.5
Divorced/ widowed	4.9	14.9
Missing	0.2	0.1
Total	100.0	100.0
N	1655	2040

Five percent of all men (8.6% of married men) and almost 9% of all women (14.6% of married women) were in a polygamous marriage. In 1996, the DHS reported that 8.7% of married men and 17.1% of married women were in a polygynous union.

3.2.2 Characteristics of spouses: age

Each respondent in union (married or cohabiting) was asked about his/her partner's age and about coital frequency, condom use and the practice of 'dry sex' with his or her spouse(s). There were 1871 monogamous and 318 polygynous partnerships available for analysis. Most men (97%) and women (90%) reported their spouses' age. The median age difference between spouses was 5.3 years (men's reports) and 5.7 years (women's reports), with husbands older than wives (Table A.3.2). In polygynous unions reported by male respondents, the median age difference was 6.4 years. One-third (33%) of polygynous men reported to be at least 10 years older than their wives; only 15% of monogamous men said they were more than 10 years older. Close to 30% of women reported their husbands were at least 10 years older (Figure 3.1). There were virtually no differences in age difference of partners between rural and urban respondents.

3.2.3 Marital sexual behaviour

Each respondent in a union was asked the number of times he/she had sexual intercourse with his/her spouse(s) or cohabiting partner in the last four weeks and in the last week (Figure 3.2 and Table A.3.3). Only a small proportion of men and women reported that they had sex more than 12 times in the last month. On average, men reported having sexual intercourse with their spouse(s) 6.3 times during the last month; women reported a mean of 5.8 times. Mean reported frequency of sexual intercourse in the past week was 1.7 for men (which corresponds with about 6.8 times per month); for women, it was 1.6 per week or 6.3 times per month. There is virtually no difference in coital frequency between urban and rural Zambia.

Figure 3.1
Proportion of marriages in which the husband is at least 10 years older than the wife (reported by women), SBS 1998

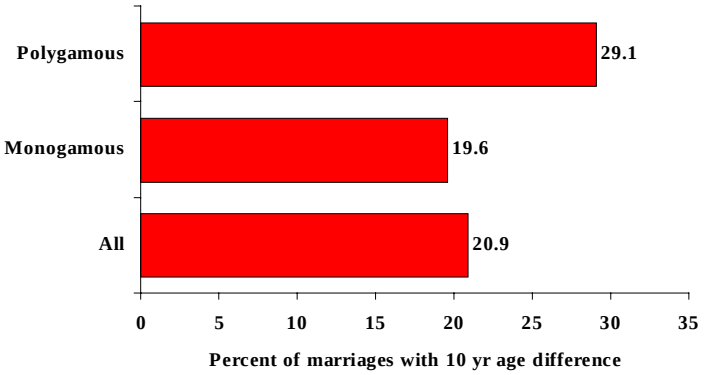
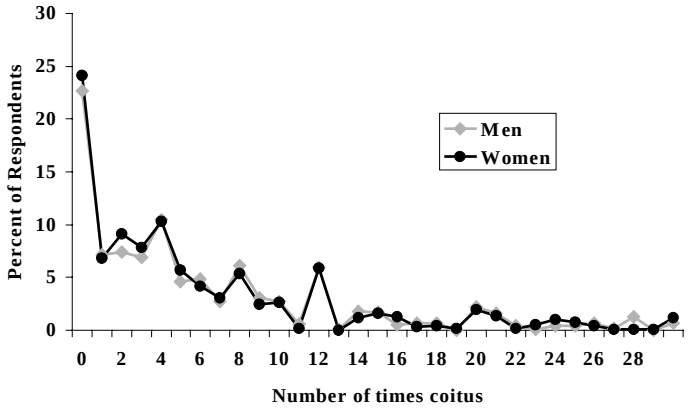


Figure 3.2
Coital frequency within married couples during the last month by sex of the respondent, SBS 1998



Very few respondents in a union (6% of men and 4% of women) reported condom use during the last sexual act with their spouses or cohabiting partners (Figure 3.3). Reported condom use during the last sexual act with a spouse or cohabiting partner was slightly lower than reported in the DHS where 8.0% of men and 5.1% of women had used a condom during the last intercourse (Figure 3.4).

The proportion of respondents who used a condom during the last intercourse with a spouse or cohabiting partner was slightly higher for rural men (6.4%) than for other respondents (Table A.3.4). In new marriages (less than three years), 11% of men and 7% of women said they used a condom during the last act compared to 5% of men and 3% of women in a union lasting more than three years. In addition, women with an extra-marital partner during the last 12 months reported condom use with their spouse more frequently (8%) than other women (4%), although the number of women with an extra-marital partner was small. Among men, however, reporting of an extra-marital partner made no difference in reported condom use at last sex with a marital or cohabiting partner. Condom use with a spouse was also not higher among respondents who had reported an STD in the last year or among men who had reported an extra-marital partner during the last year. Unfortunately, a question about the main reason for condom use within marriage was not asked.

Based on the DHS 1996 it can be assumed that the majority of men and women used condoms within marriage to prevent pregnancy. In 1996, 7.7% of men and 3.5% of women used condoms as a contraceptive.

The mean frequency of sexual intercourse within unions was lower among respondents who reported condom use during the last sex within a union than among those who did not use a condom: 4.3 for male condom users compared to 6.5 for male non-users and 3.5 for female condom users compared to 5.9 for female non-users (Figure 3.5).

Figure 3.3
Condom use during last sexual intercourse within marriage, SBS 1998

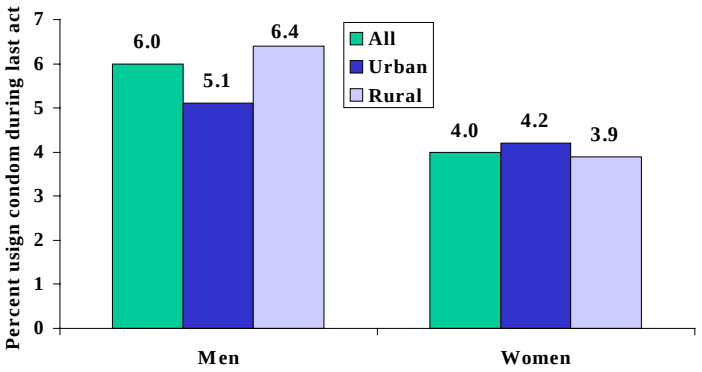


Figure 3.4
Percent of men and women who used a condom in their most recent marital sexual act, DHS 1996 and SBS 1998

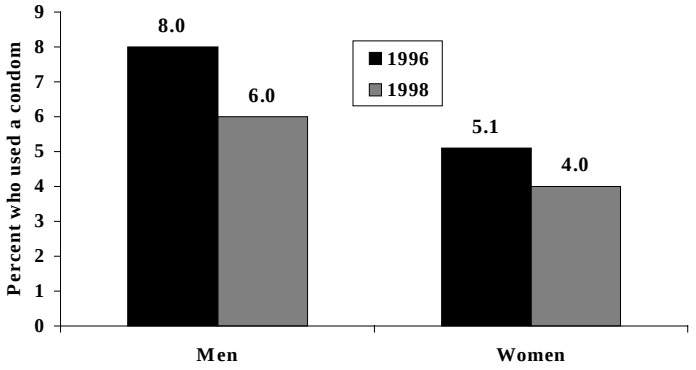
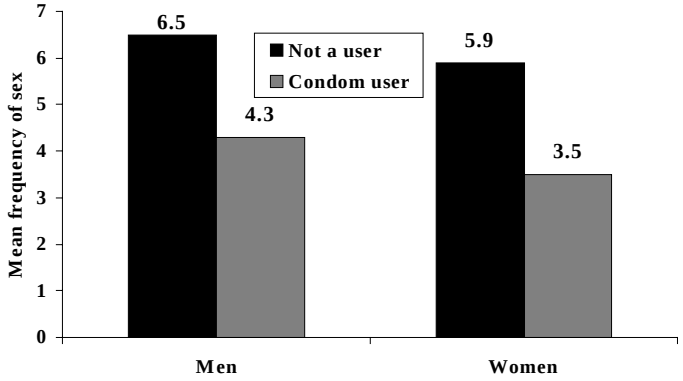
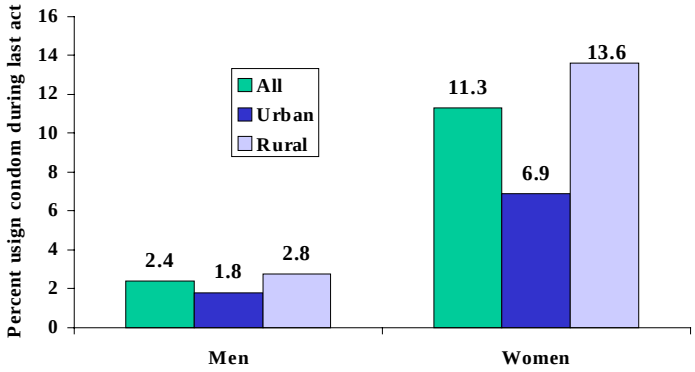


Figure 3.5
Mean frequency of sex within marriage during the last month by condom use at last sex, SBS 1998



Women may apply certain substances (such as herbs, creams, hot or cold water with herbal solution) prior to sexual intercourse to make the vagina tighter or drier during intercourse. Women more frequently reported this practice than men, probably because men do not know whether women have taken such measures (Figure 3.6 and Table A.3.5). Two percent of married men and 11 percent of married women reported they had "dry sex" during the last in-union sexual intercourse. Dry sex is more common in rural than in the urban areas.

Figure 3.6
Use of 'dry sex' during last sexual intercourse within marriage, SBS 1998



3.3 Multiple partnerships

Because of the link between HIV infection and multiple partners, respondents were asked for information and characteristics of the last five non-marital/non-cohabiting partnerships. The terms 'partnership' and 'relationship' are used interchangeably. Results are presented by residence and sex of the respondent.

3.3.1 Non-marital partnerships

As many as 46% of men 15-49 years were not in a marital or cohabiting partnerships (Table 3.2). Half of urban men 15-49 years were neither married nor cohabiting (50%); the proportion was substantially lower (43%) for rural men. Among married men, 21% reported an extra-marital partner in the last year. Among men not in a union 21% reported two or more sexual partners in the last year.

Figure 3.7
Marriage and sexual behaviour among urban men, SBS 1998 and DHS 1996

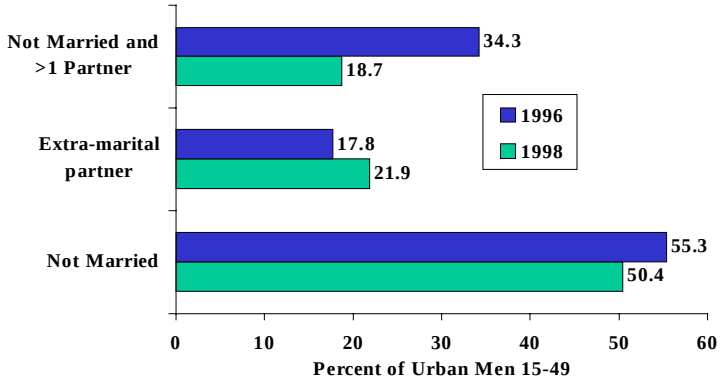


Table 3.2
Partnership among men and women by urban rural residence, SBS, 1998

	All		Urban		Rural	
MEN	N	%	N	%	N	%
Not married	1655	45.6	647	50.4	1006	42.5
Extramarital partner	897	20.6	320	21.9	577	19.9
Not married and >=2 partners	755	20.8	327	18.7	428	22.4
WOMEN						
Not married	2040	40.2	755	45.2	1285	37.2
Extramarital partner	1214	3.5	408	2.6	806	3.6
Not married and >=2 partners	819	6.0	341	5.6	478	6.3

Among women 40% were neither married nor cohabiting; fewer rural (37%) than urban women (45%). About one in 30 married women reported an extra-marital partner (3.5%), and 6% of women not in union had at least two sexual partners during the last 12 months.

Indicators of proportion not married or cohabiting, having an extramarital partner (for married respondents) and having two or more partners (among not married, not cohabiting respondents) can be compared with the DHS 1996 (Figures 3.7 and 3.8). In 1998, fewer urban men (55%) than rural men (51%) were not married or cohabiting than in 1996. In rural areas, the proportion of men not married/cohabiting also decreased from 49% in 1996 to 42% in 1998. The proportion of married men with an extramarital partner increased in the urban areas (from 18% in 1996 to 21% in 1998) and decreased in the rural areas (23% to 20%) but neither change was substantial. The proportion of unmarried men with at least two sexual partners in the last year decreased substantially from 33% in 1996 to 21% in 1998 in both the urban and rural areas. The proportion of unmarried men with two or three partners decreased from 22% to 14%.

With regard to the number of extra-marital partners there is little change between 1996 and 1998 (Figure 3.9 and Table A.3.6). Among married men in 1998, 79% had no extra-marital partner, 13% had one, 5% had two to three and 2% had four or more partners in the last 12 months. Among women 3.6% reported an extra-marital partner, up from 1.6% in 1996.

Among unmarried men there was some change between 1996 and 1998 in total number of partners (Figure 3.10 and Table A.3.6). A larger proportion of unmarried men said they had no sexual partner in the last year: 52% in 1998 and 39% in 1996. Also the number of unmarried men reporting two or more partners declined from 33% to 21%. Among women there was almost no change. In 1998, 6% of unmarried women reported two or more partners in the last 12 months, very similar to 1996 when 7% did so.

Figure 3.8
Marriage and sexual behaviour among rural men, SBS 1998 and DHS 1996

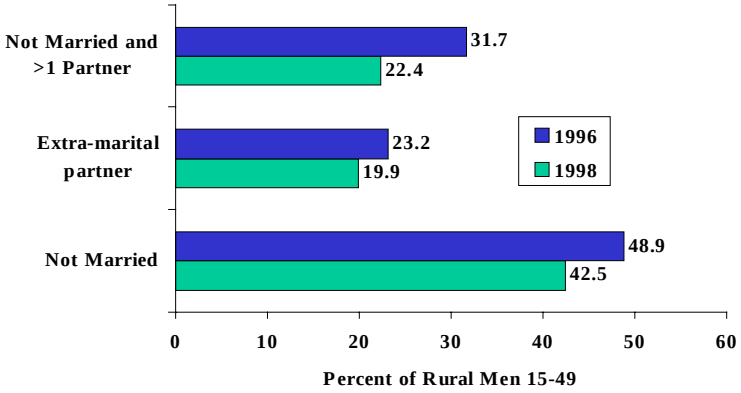


Figure 3.9
Number of extra-marital partners, SBS 1998 and DHS 1996

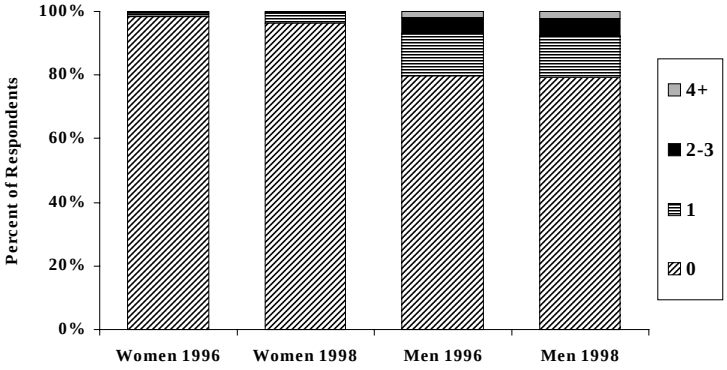


Figure 3.10
Number of partners among unmarried men and women, SBS 1998 and DHS 1996

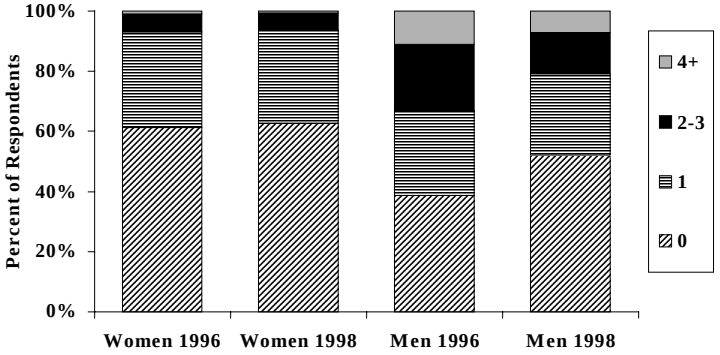


Table 3.3
Proportion of respondents with non-regular partner in the last 12 months among all respondents and among all respondents who were sexually active in the last 12 months by gender and residence, Zambia SBS 1998

		N (all)	% with non-regular partner	N (sexually active only)	% with non-regular partner
Men	Urban	649	28.8	459	40.6
	Rural	1006	30.5	799	38.3
	Total	1655	29.8	1258	39.1
Women	Urban	755	12.4	535	17.6
	Rural	1285	12.4	992	16.1
	Total	2040	12.4	1527	16.6

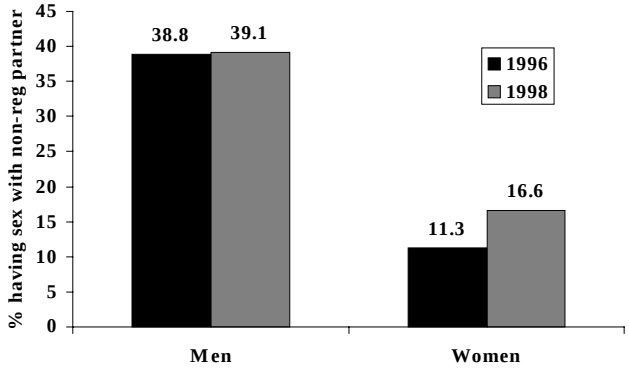
3.3.2 Non-regular partnerships (WHO/GPA prevention indicator 4)

The WHO/GPA prevention indicator 4 (PI 4) is defined as the proportion of respondents aged 15-49 who report having had at least one 'non-regular' sexual partner in the last 12 months, among those who had sex in the last 12 months. A regular partnership is defined by WHO/GPA protocol solely in terms of duration. Any sexual relationship that lasts for at least 12 months is classified as regular. All other sexual relationships are classified as non-regular. By default, non-regular sex is also defined as any sexual contact that does not take place within marriage or within a regular partnership. A non-regular partnership in this context is any sexual relationship that is not marital and lasted less than 12 months.

Non-regular partnerships are common among sexually active respondents in Zambia (Table 3.3). Thirty-nine percent of men and 17% of women had at least one non-regular partnership in the last 12 months. There are no differences between the urban and rural areas. Among all respondents whether sexually active or not, 30% of men and 12% of women reported having a non-regular partnership in the last 12 months.

Because questions in the DHS 1996 differed, results cannot be directly compared with those from the SBS 1998. Notably, the Zambia DHS did not include a question on the duration of the relationship. In the SBS 1998 a substantial proportion of the non-marital relationships were classified as regular because the relationships had lasted more than 12 months and were still continuing. By using the same adjustment factor for the DHS 1996 data (that is by subtracting the same proportion of presumed regular partnerships from all non-marital partnerships) the proportion of men and women in non-regular partnerships in the last 12 months can be estimated at 11.3% and 38.8% for women and men respectively. This would present no change for men and an increase in non-regular partnerships among women. Figure 3.11 summarizes the results for prevention indicator 4 in the two surveys.

Figure 3.11
Percent of men and women with a non-regular partnership in the last year, SBS 1998 and DHS 1996



3.3.3 Characteristics of non-marital and non-cohabiting partners

Respondents were asked about the number of non-marital and non-cohabiting partners in the last month and in the last 12 months. Questions were also asked about characteristics of the partner and sexual behavior. These data were collected for the five most recent partnerships. Overall, 1405 non-marital/non-cohabiting sexual relationships were reported, including 973 reported by 544 men and 432 reported by 355 women. Almost one-half (48%) of these non-marital/non-cohabiting partnerships lasted less than one month (Figure 3.13). About one in nine sexual partnerships reported by men are one-time sexual encounters. Women report more non-marital/non-cohabiting partnerships that last longer than 12 months than men (38% and 19% respectively). Duration of non-marital/non-cohabiting partnerships differed little by respondent's marital status.

Non-marital/non-cohabiting partnerships lasting longer than 12 months are considered regular partnerships by the WHO/GPA PI 4 criteria. In the SBS 1998, such partnerships account for 19% of men's and 38% of women's non-marital sexual partnerships. Although the longer duration of the relationship may be indicative of some degree of stability within the relationship, a relatively large proportion of these partnerships (49% of those reported by men and 32% by women) were no longer ongoing at the time of the survey.

Data were collected for the five most recent non-marital/non-cohabiting partnership occurring in the last 12 months (up to five in the past year). Respondents were asked questions about characteristics of the partner, including age, marital status and residence of the partner. Although the interviewers had been instructed to obtain rough approximations of age if possible, 19% of men and 25% of women could not recall the age of at least one partner. Overall, men were a median of 3.7 years older than women in all non-marital/non-cohabiting partnerships. The median age difference between married men and their extra-marital partners was 6.0 years (Table A.3.7). For 27% of married men, the non-marital partner was at least ten years younger (Figure 3.14). The median age differences between the non-marital partners are about two years less than the age differences between marital partners (section 3.2.2). This difference is largely due to partnerships reported by younger non-marital respondents.

Figure 3.12
Percent of sexually active men and women in non-regular partnerships by age, SBS 1998

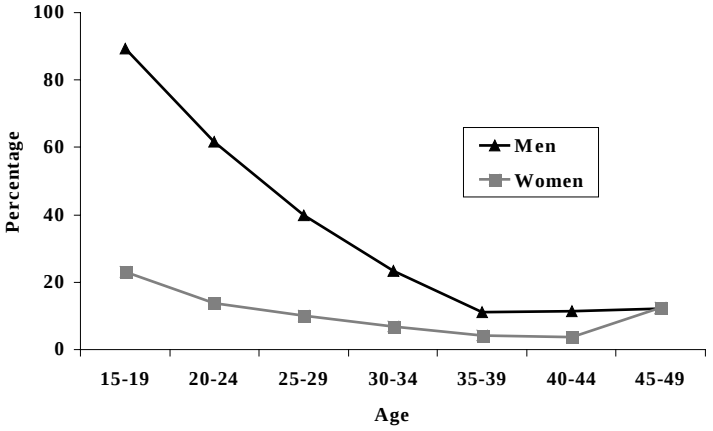
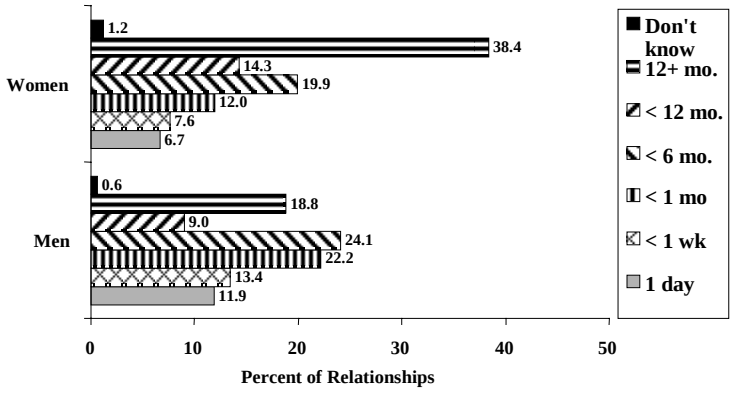


Figure 3.13
Percent distribution of duration of non-marital sexual relationships, SBS 1998



In 14% of the relationships reported by men the partner was married (Figure 3.15 and Table A.3.8). Women more commonly reported having a sexual relationship with a married man (36%). Married respondents more frequently had partnerships with married partners (other than their own) than unmarried respondents. Among men there was no association between the duration of the partnership and the marital status of the partner. Among women partnerships of longer duration more frequently tended to involve married men.

About half of the partners were living in the same area (Table A.3.8). This was about the same for men and women, and no differences can be discerned by any of the background characteristics. Also, there was no difference between urban and rural areas.

Coital frequency for each non-marital or non-cohabiting relationship ongoing during the three months prior to the survey was determined. If a relationship had ended prior to the last three months, it was not considered in the analysis (Figure 3.16 and Table A.3.9). No sexual activity took place in the last three months in 30% of non-marital/non-cohabiting relationships reported by men and 22% had only one sexual contact. About 20% of men had sexual intercourse at least five times in the last three months in reported non-marital/non-cohabiting relationships. Among men in long-term relationships and among unmarried men the proportion was slightly higher. Among women in ongoing non-marital/non-cohabiting relationships, 33% reported no sexual intercourse during the last three months and 17% reported intercourse only once. There were no major differences by residence.

Figure 3.17 and Table A.3.10 present results on condom use, dry sex use, alcohol use and payment during the last sexual act for each non-marital partnership. Condom use at last sex was reported by men in 30% of partnerships and by women in 18% of partnerships. Men 25-34 years and women 15-24 years were most likely to have used a condom at last sex with non-marital partner. In the DHS 1996, 35% of men (48% urban and 24% rural) and 21% of women (30% urban and 12% rural) reported using a condom at last sexual intercourse with a non-marital/non-cohabiting partners. The SBS 1998 figures are

Figure 3.14
Percent of men and women who reported a non-marital partner with at least 10 years age difference, SBS 1998

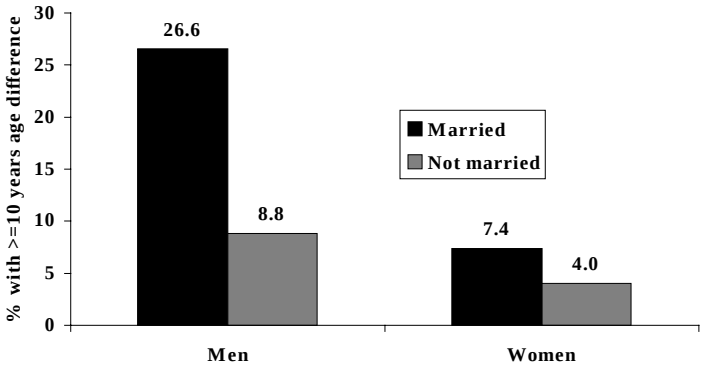


Figure 3.15
Marital status and residence of non-regular sexual partners, SBS 1998

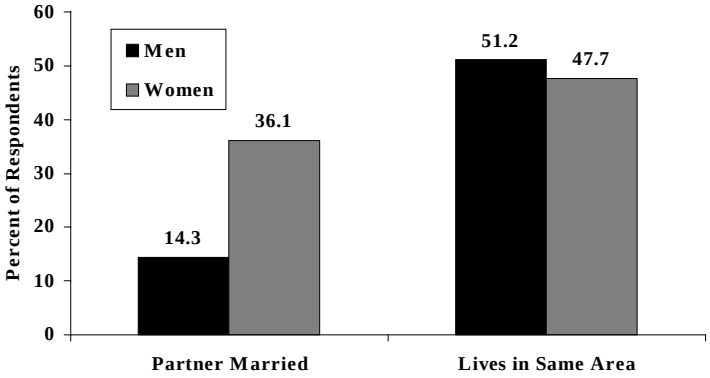
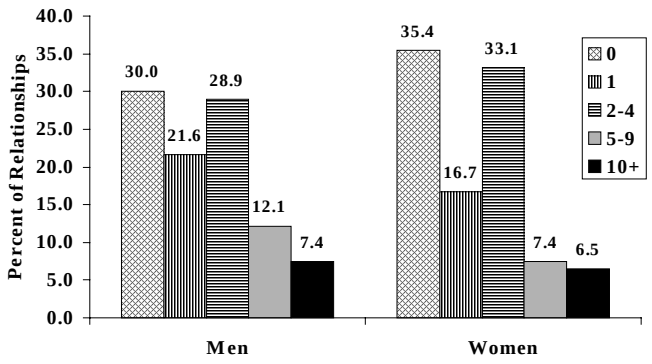


Figure 3.16
Percent distribution of frequency of sex during the last 3 months in non-marital relationships, SBS 1998



slightly lower, but in the same order of magnitude.

3.3.4 WHO/GPA Prevention Indicator 5: condom use at last sex with non-regular partner

To adhere strictly to the WHO/GPA definition of prevention indicator 5, condom use during the last act with a non-regular partner should only refer to those sexual relationships that had lasted 12 months or less. Among sexually active respondents, 33% of men and 24% of women had used a condom at last sex with a non-regular partner (Figure 3.18). In urban areas condom use rates with last 'non-regular' partner was substantially higher than in rural areas. Urban men (36%) reported having used a condom during last sex with a non-regular partner more than rural men (27%). Among women, 23% of urban women and 17% or rural women reported condom use at last sex with a non-regular partner.

Condom use was more frequently reported for relationships with lower frequency of sexual intercourse (Table A.3.11). The mean frequency of sex was 2.4 in the last three months among men who had used a condom during the last act. Among men who had not used a condom the mean frequency was 3.5. The corresponding means for women were 2.2 and 3.4 respectively.

As within marriage, dry sex was much more commonly reported by women than men. The practice of dry sex was less common among younger women than among older women. This may be due to a greater perceived need for applying tightening substances (as the vagina may have become wider after multiple child births) or a reduction in the popularity of the practice among younger women.

Drinking alcoholic beverages prior to having sex with the non-marital partner was reported by 19% of men and 23% of women. Older men and women more frequently reported drinking alcohol. Payments in cash or kind are common: 40% of men and 57% of women reported that some type of payment was made during the last sexual intercourse, and was more frequently reported by younger women. The median payment reported by men was ZKwacha 4,000 and median payment reported by women was ZKwacha 9,800 (1 US$=ZKwacha 1,900). The reasons for this discrepancy are not immediately clear.

Figure 3.17
Characteristics of the last sexual act in non-regular partnerships, SBS 1998

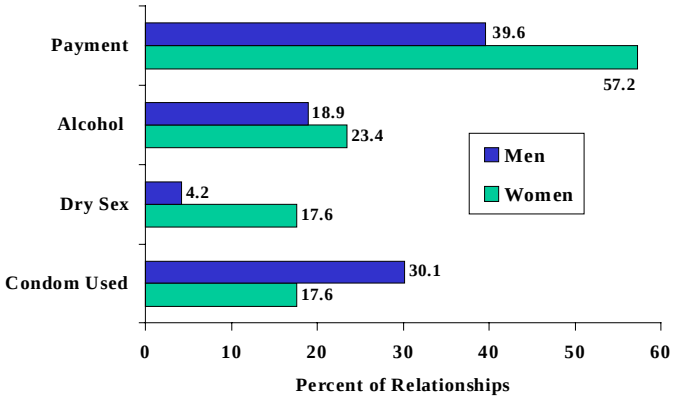
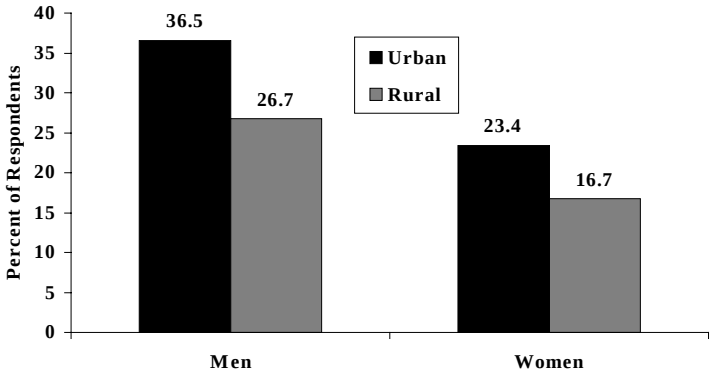


Figure 3.18
Condom use during the last sexual act with non-regular partner by residence (PI5), SBS 1998



4 SEXUALLY TRANSMITTED DISEASES

This chapter describes the results on sexually transmitted diseases (STDs) other than HIV/ AIDS from the household survey. In addition, results are summarized from an assessment of STD services provided at 41 health facilities and visits by mystery clients with STD complaints to 77 providers.

4.1 Knowledge of STD symptoms

Respondents in the household survey were asked three questions to assess their knowledge of STDs. First, respondents were asked whether they had ever heard of diseases transmitted through sexual intercourse; those who had heard of STDs were then asked to describe symptoms of STDs in women and men. Correct STD symptoms for men and women were considered to be abdominal pain, discharge from the vagina or penis, itching in the genital area, burning pain with urination, pelvic pain during sex, genital ulcers or open sores, swellings in the genital area, and inability to conceive.

Most respondents had heard of STDs (89% of men and 90% of women) (Figures 4.1 and 4.2 and Table A.4.1). The proportion who had heard of STDs was slightly higher in the urban areas. When asked about STD symptoms in women, 58% of men and 70% of women could list at least one correct symptom (Figure 4.2 and Table A.4.1). For STD symptoms in men, 72% of men and 64% of women could recall at least one (correct) symptom.

On average, men correctly listed 1.7 symptoms of STDs in men and 1.4 symptoms of STDs in women. Women correctly listed 1.4 symptoms of STDs in men and 1.5 symptoms of STDs in women. While the differences by sex are in the expected direction (knowing more about STD symptoms in the same sex), the differences are fairly small.

Figure 4.1
Knowledge of men and women about symptoms and signs of other STDs in men, SBS 1998

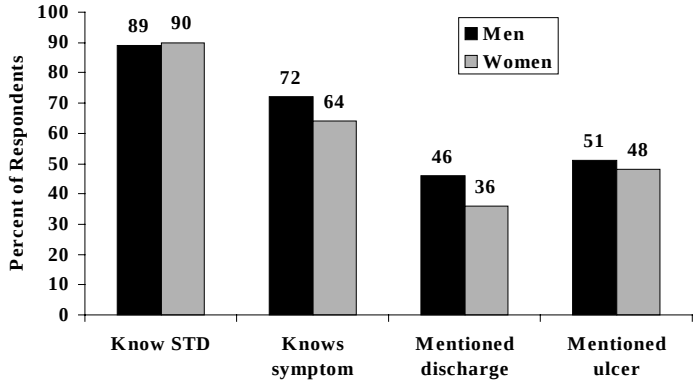
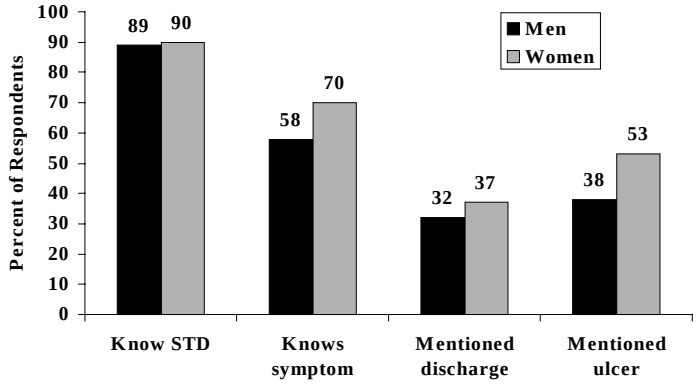


Figure 4.2
Knowledge of men and women about symptoms and signs of other STDs in women, SBS 1998



The two most commonly recalled symptoms were genital ulcers and genital discharge (Table A.4.2). However, a significant proportion of respondents did not list genital ulcers or genital discharge as a symptom of an STD. Overall, 46% of men said genital discharge was a symptom of STD in men, while 36% of women said so. Only 32% of men and 37% of women said genital discharge was a symptom of an STD in women. Genital ulcers were more frequently listed as a symptom of an STD. For example, 51% of men and 48% of women said ulcers were a symptom of STDs in men. Fewer respondents mentioned STD symptoms of abdominal pain, swelling of the genitalia and burning urination. Weight loss, a symptom that is generally not considered part of an STD (excluding HIV), was mentioned by 14% of respondents.

Questions on STD symptoms asked in the DHS 1996 were different than those in the SBS 1998, making results not directly comparable. DHS 1996 asked about specific diseases rather than symptoms of STDs. In DHS 1996, 72% of men and 82% of women spontaneously mentioned syphilis and gonorrhea when asked which STDs they knew of.

4.2 STD occurrence

Respondents who had heard of STDs were directly asked about genital ulcers or discharge in the last 12 months. Five percent of men and 3% of women reported they had had a genital ulcer or a genital discharge (Figure 4.3 and Table A.4.3). Among both sexes, ulcers were more commonly reported than genital discharge. There were only minor differences between urban and rural areas. Respondents who had not heard of STDs were not questioned about genital ulcers or discharge, and are considered not to have had an STD in the past year in this analysis.

The WHO/GPA prevention indicator 9 (PI 9) is the proportion of men 15-49 who reported a genital ulcer in the last 12 months. PI 9 is calculated from the SBS 1998 at 3.5% overall for Zambia (2.6% urban and 4.1% rural).

DHS 1996 included a question asked only of men about genital discharge and genital ulcers. Using the same methodology to compare with the SBS 1998, the proportion of men 15-49 years reporting genital discharge remains about the same (4.1% in 1996), but more men reported a genital ulcer in 1998 than in 1996 (3.2% in 1996 and 5.1% in 1998) (Figure 4.4).

Figure 4.3
Proportion of men and women reporting to have had an STD in the last year, SBS 1998

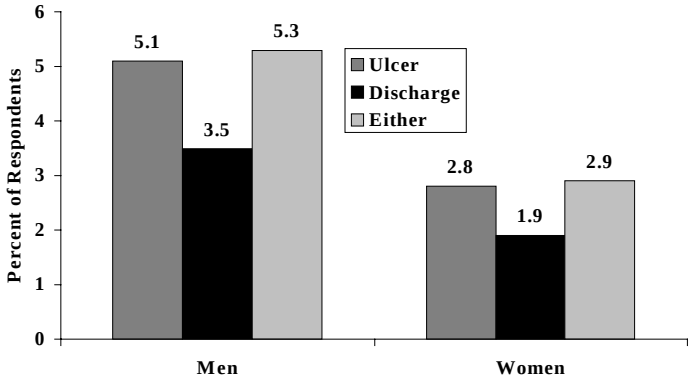
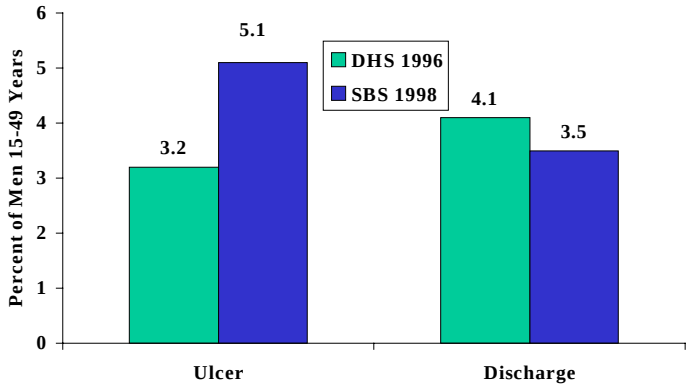


Figure 4.4
Proportion of men 15-49 reporting to have had an STD in the last year, SBS 1998 and DHS 1996



4.3 Treatment seeking behaviour

Respondents who reported either a genital ulcer or discharge in the last 12 months were asked seven questions about their treatment seeking and sexual behaviour in association with the STD. Of the 145 respondents reporting an STD complaint during the last year, 135 answered the questions on treatment seeking behaviour.

Among men reporting an STD, 80% visited a health facility, 30% went to a traditional healer, 28% bought drugs themselves and 5% did not use any of these three sources (Table 4.1). Although having an STD may be considered embarrassing or shameful, results show that 60% of respondents asked friends or relatives for advice. No difference is seen for men in urban and rural areas. For women reporting an STD, 67% visited a health facility, 30% saw a traditional healer and 22% bought drugs themselves and 13% did none of these things. Although 86% of urban women reported they had visited a health facility, only 53% or rural women had done so. More rural women (41%) visited a traditional healer than urban women (14%) perhaps reflecting lack of services or opportunities for rural women to access treatment.

4.4 Behaviour during STD

Respondents reporting a STD symptom in the last 12 months were asked if they told their partner about the symptoms, stopped having sex when they had the symptoms or used a condom when having sex when symptoms were present (Figure 4.5). Nearly three-quarters (73%) of respondents informed their sexual partner(s) about the STD and 82% stopped having sex while symptoms of the STD were present. Of the 16% of men and 20% of women who continued to have sex, 46% of men (n=13) and 36% of women (n=11) said they used condoms. Overall, 9% of men and 13% of women continued to have unprotected sex when they had an STD symptom in the last year.

Figure 4.5
Proportion of men and women with specified behaviours during STD in the last year, SBS 1998

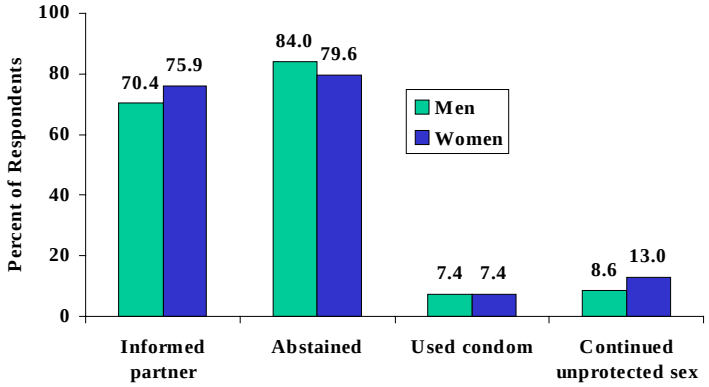


Table 4.1
Treatment seeking behaviour among men and women with an STD in the last year, SBS 1998

	N	Used no source	Visited health facility	Visited traditional healer	Bought drugs in shop	Asked friends/relatives for advice
MEN						
All	81	4.9	80.0	29.6	28.4	59.5
Urban	31	3.2	77.4	29.0	35.5	45.2
Rural	50	6.0	81.6	30.0	28.4	59.5
WOMEN						
All	54	13.0	66.7	29.6	22.2	59.3
Urban	22	9.1	86.4	13.6	27.3	54.6
Rural	32	15.6	53.1	40.6	18.8	62.5

4.5 Quality of STD care: the facility survey

An STD health facility survey was carried out in a sample of 41 facilities, 22 urban and 19 rural clinics (for methods see section 1.10). In all, 43 health providers were interviewed (24 urban and 19 rural providers) and 117 observations of provider-STD patient interactions were made. Providers interviewed were either clinical officers (84%) or nurses (16%). During the study period, 66 men and 51 women presented with complaints of genital discharge (29 men and 27 women) or genital ulcer (37 men and 24 women). All were included in the observation study.

WHO/GPA prevention indicator 6 (PI 6) is defined as the proportion of individuals presenting with an STD in health facilities who are assessed and treated in an appropriate way (according to national standards) and is based on interviews and observation of interactions between provider and client. Three aspects of STD treatment are assessed: history taking (nature and duration of symptoms, recent sexual contacts), physical examination (exposure of genitalia, retraction of the foreskin or spreading of the labia for inspection) and treatment (in accordance with national guidelines, either based on syndromic or etiologic approach).

In the Zambia health facility survey, only 16% of the STD patients were diagnosed and treated correctly, although correct history was taken in 89% of cases and correct physical examination was completed in 79% of observations (Figure 4.6 and Table 4.2).

The low overall score of 16% on PI 6 was due primarily to the low score on appropriate treatment (20%). Incorrect knowledge or practices of the health worker contribute to the low score, but poor availability of essential drugs is also a factor. Over 95% of providers reported shortages of essential STD drugs at some point during the last year and most facilities were stocked out of at least one necessary drug at the time of interview. More than half of the providers (53%) had not seen any national guidelines for STD case management; more rural providers (63%) had seen guidelines than urban providers (46%). Among those who had received guidelines, five different types were mentioned by health workers, including the Ministry of Health national guidelines (44%), WHO guidelines (16%), Johns Hopkins University guidelines (7%), Morehouse School of Medicine guidelines (5%) and Central Board of Health integrated guidelines (2%).

Figure 4.6
Appropriate treatment practices for STD patients in health facilities, SBS 1998

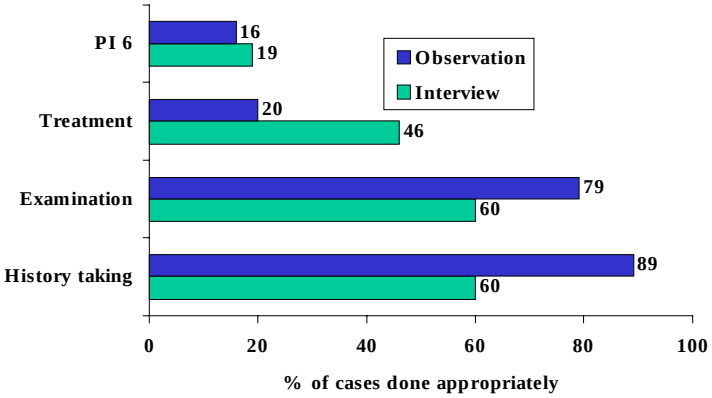
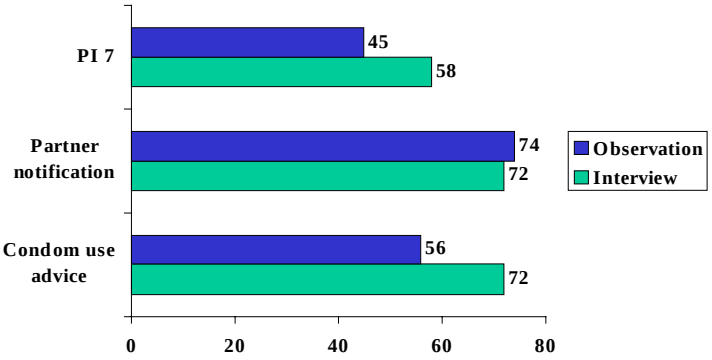


Figure 4.7
Appropriate advice given to STD patients in health facilities, SBS 1998



WHO/GPA prevention indicator 7 (PI 7) is defined as the proportion of individuals presenting for STD care in health facilities who received appropriate advice on condom use and on partner notification and is based on both interview and observation. The overall score on PI 7 in this study was 47%, including 56% appropriate advice on condoms and 74% advising on partner notification (Figure 4.7 and Table 4.2).

Table 4.2
Prevention indicators 6 and 7, based on observations of STD patients and on interviews with health workers (percentages)

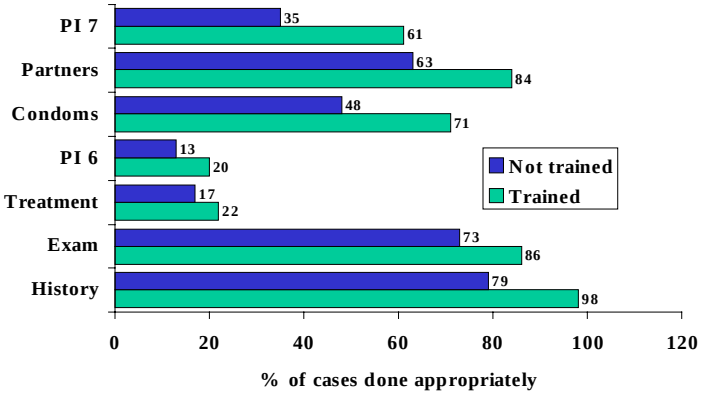
		Observation	Interview
PI 6	Overall	16	19
	History	89	60
	Examination	79	60
	Treatment	20	46
PI7	Overall	45	58
	Condoms	56	72
	Partners	74	72
N		117	43

The scores based on interviews for PI 6 and PI 7 differ from the more objective scores based on observations (Table 4.2). The differences, however, go in both directions and the overall result on PI 6 based on interview data is in the same order of magnitude as that based on observations. Interview data reflect a more objective reporting of events. PI 7 interview-based data would result in a score of 58% compared to 45% based on observations. The PI 7 score based on interviews is higher (58%), because more health workers said they would advise on condom use than actually did during the observations. This may partly be due to lack of availability of condoms during the day of observations. Only one-third of observed STD patients were given or sold condoms.

The results on the prevention indicators and other elements of STD care by residence are shown in Table A.4.4. Urban health care providers score better on PI 6 than rural providers: 23% and 7% respectively. The main reason for the rural-urban differences was the very low score on appropriate treatment (PI 6 observation) in rural areas (7% versus 28% in urban areas). With regard to PI 7 however, rural providers scored higher than urban providers: 51% and 42%, respectively.

Figure 4.8 and Table A.4.5 present a comparison of the scores on PI 6 and PI 7 based on the observations by level of STD training. There were 49 observations among trained providers and 52 observations among providers who had no specific STD management training. There were no major differences between urban and rural providers in terms of STD management training. The trained providers scored better on both PI 6 and PI 7 and on all components of both indicators. The relatively small difference in PI 6 is caused by the low score on treatment practices among trained providers, which appears to be the main area in need of improvement.

Figure 4.8
STD treatment practices by training status of provider: observation results, SBS 998



4.6 Other outlets of STD drugs

The mystery STD patients (adult males with complaints about a genital discharge and discomfort) visited 77 sites in Lusaka and the Copperbelt, including 36 chemists, 15 drug stores, 17 kiosks and nine street vendors. In Zambia, a chemist (also known as a pharmacy) is the legal outlet for prescription drugs. A drug store should legally stock and dispense only non-prescription drugs. However, it is not uncommon to find drug stores dispensing prescription drugs. Likewise, a chemist might stock and sell non-prescription drugs.

Twenty-one of the 36 encounters at chemists/pharmacies were with a chemist and 14 were with the shop attendant. Normally the shop attendant is the point of entry. After assessing the complaint, the shop attendant may then refer the client to the chemist/pharmacist on site. In 28% of the 77 encounters the mystery client was asked about symptoms in detail; these instances mostly involved consultation with the pharmacist or chemist.

Almost half of the visits lasted less than five minutes and most encounters did not take place in a setting with any privacy. Almost all outlets suggested and provided drug treatment for the presumed STD (97% of pharmacies and 100% of drug stores). This included treatment by injection, which was given in 47% of the pharmacies or chemists (but not in drug stores). The majority of the drug providers scored very poorly on requirements for proper treatment as stipulated in the guidelines used for the formal health facility assessment. None of the market stalls/vendors or the drug stores adhered to any form of protocol or gave the correct treatment. Eleven percent of the pharmacists/chemists suggested that their clients consult a physician. In all cases, the clients were offered dosages equivalent to the money available without regard to specific instructions about full dosage or correct length of time to continue medication.

The dispensing of drugs was accompanied by very little or no discussion on precautions to take during treatment. Twenty-two percent of workers at pharmacies discussed or recommended condoms, none of the vendors at drug stores discussed condoms, and only one vendor was reported to have raised the subject. Similarly, only two providers sold condoms to the clients in the study. Only one-fourth of the pharmacies advised abstinence during treatment. A similar result was recorded for the proportion of the providers who discussed partner notification and treatment.

The median price of drugs sold to the mystery clients was similar across the three provider categories: ZKwacha 6,250, 6,500 and 6,600 in pharmacies, drug stores and other street vendor/market providers, respectively.

In sum, the results from the mystery patients show that drugs, including antibiotics, are easily available without prescription at pharmacies or chemists, drug stores and other outlets. Injections can be obtained quite easily as well at pharmacies. Some history taking may be done in the pharmacies, but it is not done at any of the other outlets. The treatment given to the client is usually not adequate, and dosages vary according to the amount of money available. Advice on condom use or partner notification was given in 22% of the pharmacies, none of the drug stores and 4% of the vendors.

Table 4.3
Management of STD by private drug provider of mystery clients by type of provider (column percentages).

	Pharmacy/Chemist	Drug Store	Kiosk/street vendor
Medication suggested	83	73	77
Drugs dispensed	97	100	100
Physician consult suggested	11	0	4
Condoms discussed	22	0	4
Condoms sold	3	0	4
Sex during treatment discussed	25	0	4
Partner treatment suggested	25	0	4
Treatment correct	15	0	0
Number of observations	36	15	26

5 ADOLESCENTS

Adolescents play a key role in the HIV/AIDS epidemic for several reasons. HIV incidence is often highest in the youngest age groups. HIV prevention efforts are thus likely to have a large effect on the spread of HIV if successful in the youngest age groups. Young people may also be more likely to change their sexual behaviour, particularly those who have not yet started to have sex. Furthermore, the youngest age groups form a relatively large proportion of the adult population in Zambia, thus they have a key role in potential growth of the epidemic.

The SBS 1998 was not specifically designed to measure knowledge, attitudes and sexual behaviour among young people, but the number of respondents in the youngest age group is sufficiently large enough for a descriptive analysis. There were 381 men and 485 women aged 15 to 19 years available for analysis. In this chapter the nationally representative sample of respondents aged 15-19 are referred to as adolescents.

5.1 Knowledge

Virtually all respondents had heard of AIDS (Table A.5.1), but a large proportion of young people did not think a person could do anything to avoid AIDS. One-fourth of men and 29% of women aged 15-19 thought that HIV could not be avoided (Figure 5.1). In addition, 77% of men 15-19 and 74% of women 15-19 thought that a healthy person could be infected with HIV (Figure 5.2). For all three indicators, levels of knowledge were lower among respondents 15-19 years than among those aged 20-24 and 25-49 years.

The SBS 1998 used both the spontaneous and the prompted response methods to assess knowledge of prevention methods (see also section 2.2). In this section only the results based on the prompted responses are presented (Figure 5.3 and Table A.5.2). Respondents 15-19 years most commonly cited abstaining from sex as a way to avoid HIV (81% of men and 85% of women), followed by having one faithful sexual partner (76% of men and 72% of women), not having casual sex (69% of men and 70% of women), consistent condom use (71% of men and 51% of women) and having fewer sexual partners (27% of men and 22% of women). Notable is that half of the women 15-19 did not think consistent condom use is a way to avoid AIDS. Levels of correct knowledge were higher among respondents 20-24 years compared to the youngest age group.

Figure 5.1
Percent of respondents by age who know HIV can be avoided, SBS 1998

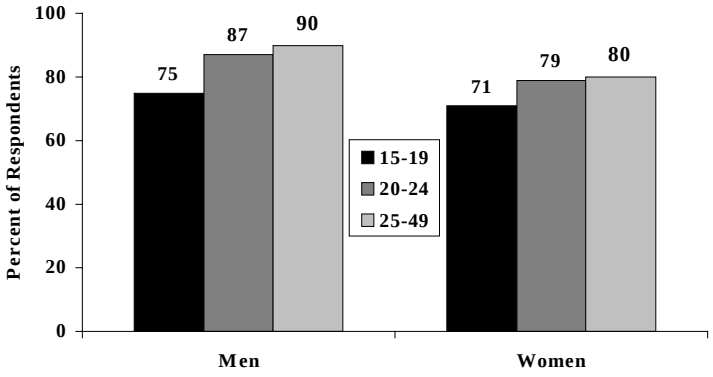
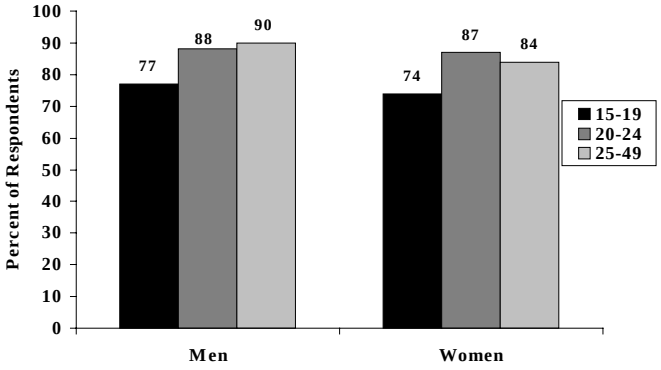


Figure 5.2
Percent of respondents by age who think that a healthy person can have HIV, SBS 1998



With regard to misconceptions, 33% of men and 26% of women 15-19 said that HIV could be transmitted by mosquitoes (Table A.5.3). Also, 22% of adolescent men and 26% of adolescent women thought it could be transmitted by witchcraft. These proportions are slightly lower than for older respondents. About half of the respondents thought that condoms do not fully protect against HIV (53% of men and 50% of women 15-19 years). As noted in Chapter 2, this question may also be reflecting knowledge that inconsistent or incorrect condom use is not efficacious for protection from HIV.

Most adolescent men had heard of the male condom (92%) and knew a source (75%) (Figure 5.4 and Table A.5.4). Adolescent women had much lower levels of knowledge: 83% had heard of the male condom, but only 55% could mention a source.

5.2 Attitudes

Several questions can be used to assess attitudes towards multiple partnerships and sexual negotiation. Most adolescents (94%) thought it was unacceptable for a married man to have extramarital sexual relations. However, 30% of adolescent men and 34% of adolescent women thought that a man could not be sexually satisfied with one wife and no other sexual affairs (Figure 5.5 and Table A.5.5). These proportions were higher among adolescents than among older respondents, especially for men. Fourteen percent of men 25-49 thought that a man could not be sexually satisfied with one wife. Half of adolescent men and 35% of adolescent women thought it is acceptable for an unmarried woman to purchase condoms. More older respondents than adolescents considered this acceptable.

The ability for women to negotiate decisions about engaging or not engaging in sexual activity has important implications for HIV transmission and whether women can protect themselves from disease. In general, answers from adolescent respondents indicate that young women are less likely to think that women can negotiate sexual behaviour than older women. For instance, 54% of adolescent men and 69% of adolescent women thought it was acceptable for women to refuse sex during menstruation, compared to 79% of respondents of both sexes aged

Figure 5.3
Percent of respondents 15-19 years who know ways to avoid HIV when prompted, SBS 1998

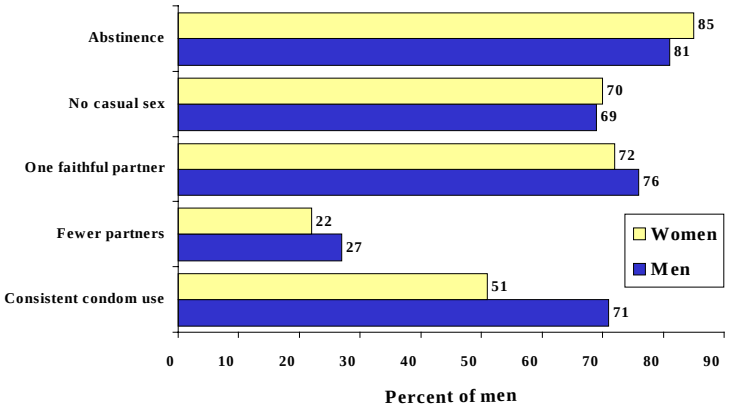


Figure 5.4
Percent of respondents 15-19 who have ever heard of male condoms and who know a source, SBS 1998

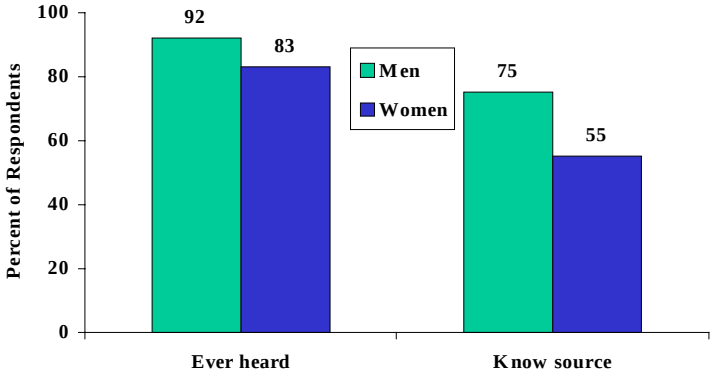
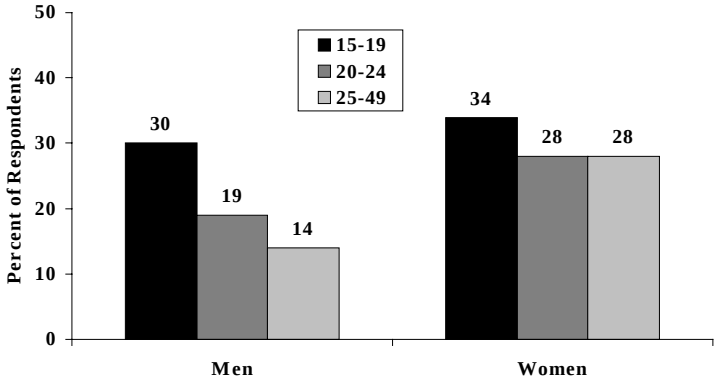


Figure 5.5
Percent of respondents by age who think a man cannot be satisfied with one wife, SBS 1998



25-49 years (Table A.5.6). A much lower proportion of respondents aged 15-19 thought a woman could negotiate sexual behaviour if her husband had an STD (Figure 5.6). Only 16% of adolescent men and 26% of adolescent women felt that a woman could protect herself from getting an STD if her husband had one.

5.3 Stigma

Questions were asked to uncover areas in which stigma exists toward HIV testing or people living with HIV/AIDS. The proportion of respondents who know their HIV status is a reflection of access to testing sites, knowledge about a need for HIV testing, attitude to HIV/AIDS and level of stigma associated with HIV/AIDS. Only 3% of adolescent men and 6% of adolescent women had taken an HIV test. Of these, not all received test results. Only 2% of men 15-19 and 4% of women 15-19 had an HIV test and knew their serological status (Figure 5.7 and Table A.5.7). The proportion of adolescents who have ever been tested for HIV is lower than among the older age groups.

Willingness to care for a family member and attitudes toward HIV-positive people working with others openly reflect both knowledge about infection methods and stigma or discrimination toward people living with AIDS. Close to three-quarters of adolescents would be willing to care for a family member with HIV or AIDS (70% of men and 74% of women) (Figure 5.8 and Table A.5.8). These proportions are lower than among older respondents.

Of those respondents who thought a nurse with HIV (but not sick) should stop work, 37% of men and women aged 15-19 thought the nurse should stop because of the risk of infecting others; 12% of adolescent men and 16% of adolescent women thought the nurse should stop because of his/her own health risk. Among adolescent men, 45% thought the nurse should continue working; 42% of adolescent women agreed. Women 15-19 years were slightly less likely to think a nurse should work than older groups. With the exception of being willing to care for a sick family member, none of the indicators differ markedly from older age groups.

Figure 5.6
Percent of respondents by age who think a woman can protect herself if her husband has an STD, SBS 1998

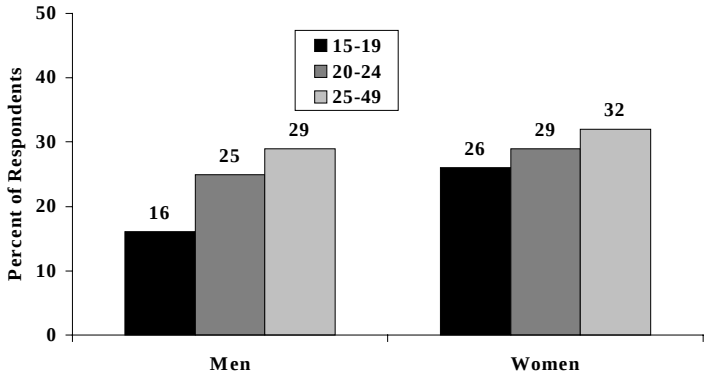


Figure 5.7
Percent of respondents 15-19 who have had an HIV test and know the results, SBS 1998

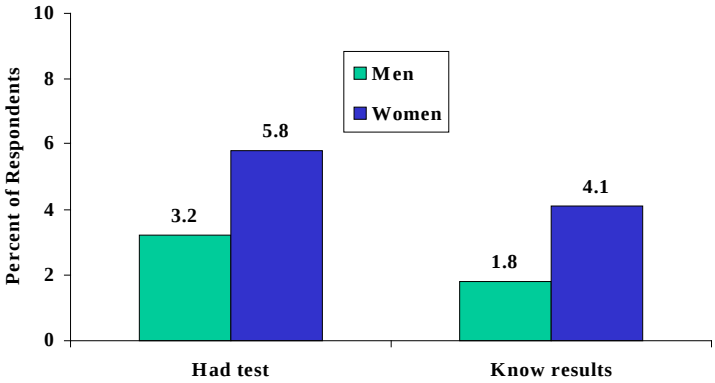
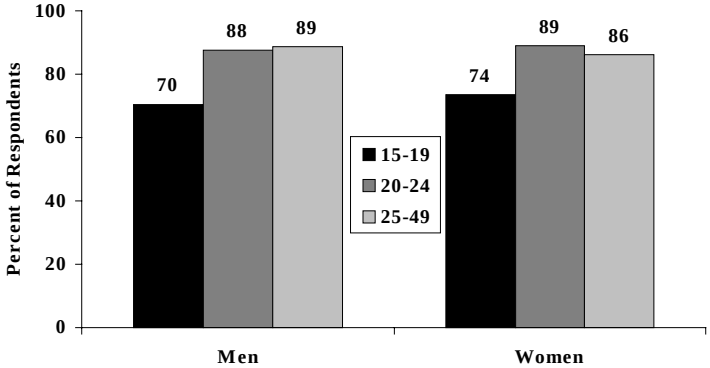


Figure 5.8
Percent of respondents by age willing to care for family member with AIDS, SBS 1998



5.4 Sexual behaviour

Among respondents 15-19 years of age, 62% of men and 59% of women said they had ever had sex. Based on the proportion of adolescents who ever had sex (by age in single years) the median age at first sex was 17.2 years for boys and 16.3 years for girls (Table A.5.9). In comparison to the DHS 1996 there has been virtually no change in age at onset of sexual intercourse (Figures 5.9 and 5.10). Among both adolescent women and men the proportion of respondents who said they had started to have sex rapidly increased with age, but shows the same pattern in 1996 and 1998.

Marriage under the age of 20 is not very common among men in Zambia. Only 1.6% of men 15-19 were married at the time of the survey, and 1.1% were divorced, separated or widowed. Almost one-fourth of adolescent women (23.9%) were currently married, while 4.3% were divorced, separated or widowed.

Overall, 26% of all adolescent women had ever given birth. Of the 286 adolescent women who ever had sexual intercourse, 44% had ever been pregnant. Among the 127 adolescent women who had ever been pregnant, 29% had never been married.

The majority of adolescent men (42%) who had ever had sex reported one sexual partner during the last year (Table A.5.10). One-third of these men did not have any partner during the last year, while 24% had two or more partners. Among unmarried women, again only including those who had started having sex, 26% had no partner in the last year, 60% had one partner and 14% reported at least two partners. Among married women aged 15-19, 91% had no other partners outside marriage; 7% reported one partner and 2% had 2-3 partners in the last year.

Marital partnerships

Married adolescent women provided information on 116 marital partnerships, including five partnerships in a polygynous union. Among the marital partnerships, 84% could recall the age of the husband. The median age difference between husband and wife was 6.2 years, but no union had an age difference exceeding 10 years. On average, adolescent women reported having sex

Figure 5.9
Onset sexual intercourse among adolescent men: SBS 1998 and DHS 1996

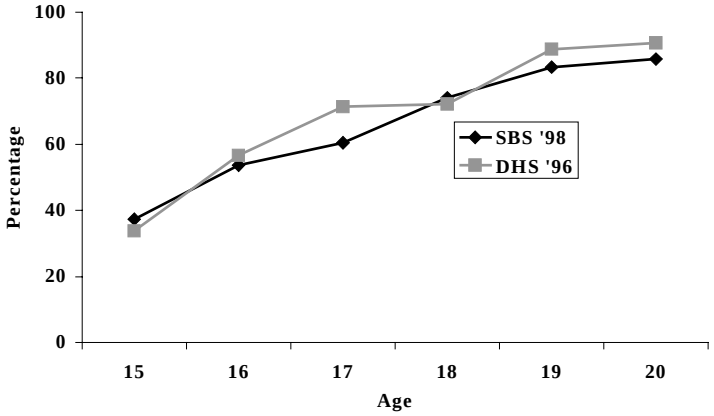


Figure 5.10
Onset sexual intercourse among adolescent women: SBS 1998 and DHS 1996

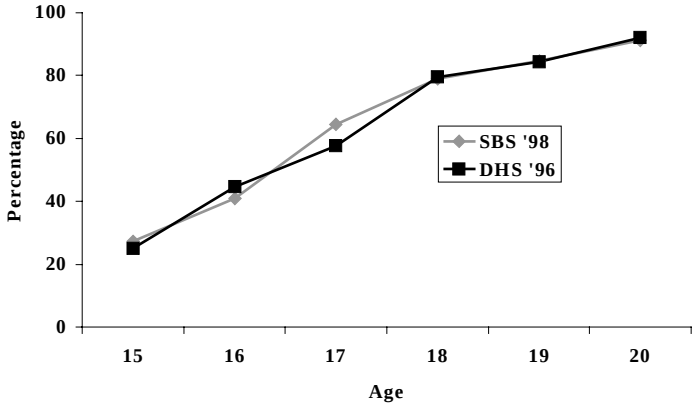
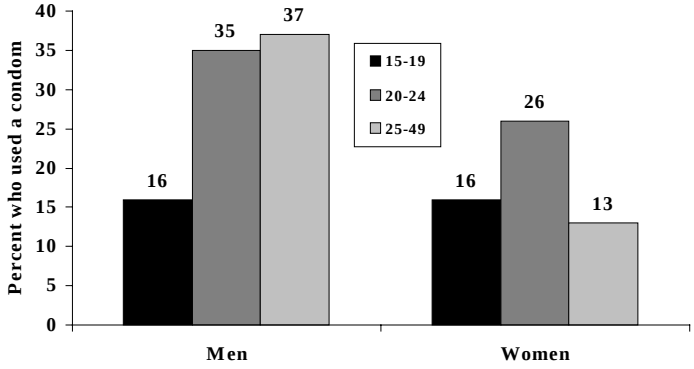


Figure 5.11
Percent of partnerships by age and sex of the respondents in which a condom was used in the most recent sexual act, SBS 1998



with their husband 7.2 times during the last month. A condom was used during the most recent act by 7.8%, while 12.9% of adolescent women said they had 'dry sex' with their husband during the last act.

Non-marital partnerships

Data were collected for the five most recent non-marital/non-cohabiting partnership occurring in the last 12 months (up to five in the past year). Adolescent men reported 271 partnerships and adolescent women reported 140. Eighteen percent of partnerships reported by men and 13% of partnerships reported by women were one-time sexual contacts (Table A.5.11). At the other end of the spectrum, 7% and 24% of partnerships reported by men and women, respectively, had lasted at least one year.

For slightly over one-fifth of the partnerships the respondent was not able to recall the age of the partner (21% and 25% of partnerships reported by men and women respectively). Among those with reported ages the median age difference was 1.2 years in partnerships reported by adolescent men and 3.3 years in those reported by adolescent women. In only 3.1% of partnerships reported by women was the non-marital partner at least 10 years older. These data suggest that most non-marital partnerships among adolescents involve sexual partners of their own age group.

Some of the non-marital partnerships are with a married partner. Nine percent of adolescent men reported that their female partner was married, while 12% of adolescent women said their male partner was married. There is also considerable 'spatial' mixing of partners. About half of the partnerships are with a person living in another village or neighbourhood (56% of partnerships reported by both men and women).

A condom was used during the most recent act in 16% of the partnerships reported by men and by women (Figure 5.11 and Table A.5.12). This is considerably lower than among older age groups, especially in partnerships reported by adolescent men.

Dry sex was reported by 1.5% of adolescent men and 15% of adolescent women. Seven percent of men 15-19 and 12% of women 15-19 said that at least one of the partners drank alcohol at the time of the last sexual intercourse. In addition, 38% of men and 63% of women said that some transaction in cash or kind was associated with the most recent act. Most of these figures do not differ significantly from those among older age groups. Only alcohol use was somewhat lower among adolescents.

5.5 Other STDs

Adolescents were less knowledgeable about other STDs than older respondents (Table A.5.13). Among adolescent men and women 72% and 79%, respectively, had heard of STDs, compared to more than 90% in the older age groups. Only 45% of men and 43% of women could mention at least one correct symptom of an STD in men; 33% of men and 48% of women could mention at least one correct symptom of an STD in women.

Overall, 1.8% of men 15-19 and 1.4% of women 15-19 said they had a genital ulcer or genital discharge in the last 12 months. Excluding those who never had sex, 4.2% of adolescent men and 3.5% of adolescent women had had an ulcer or discharge in the last 12 months. Numbers are too small to analyse treatment patterns following the occurrence of such symptoms.

APPENDIX A

Tables

Table A.1.1
Percentage distribution of the de jure population by five year intervals, SBS 1998

	URBAN (%)			RURAL (%)			TOTAL (%)		
AGE	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
0-4	15.3	13.8	14.6	18.9	18.3	18.7	17.6	16.8	17.2
5-9	16.9	16.3	16.6	17.6	15.5	16.5	17.3	15.8	16.5
10-14	15.4	15.4	15.4	16.3	13.5	14.9	16.0	14.2	15.1
15-19	10.4	11.7	11.1	8.0	9.2	8.6	8.9	10.1	9.5
20-24	9.0	11.9	10.5	7.8	9.8	8.8	8.2	10.5	9.4
25-29	6.8	7.6	7.2	6.6	7.2	6.9	6.7	7.3	7.0
30-34	7.0	6.5	6.8	4.9	5.4	5.2	5.7	5.8	5.7
35-39	5.5	4.4	4.9	4.1	3.8	3.9	4.6	4.0	4.3
40-44	3.6	4.0	3.8	2.7	3.2	3.0	3.0	3.5	3.3
45-49	2.5	2.0	2.2	2.3	2.4	2.4	2.4	2.3	2.3
50-54	4.0	2.8	3.4	3.4	4.5	4.0	3.6	3.9	3.8
55-59	1.5	1.7	1.6	2.1	2.2	2.2	1.9	2.0	2.0
60-64	0.8	0.8	0.8	2.0	2.1	2.1	1.6	1.6	1.6
65-69	0.6	0.8	0.7	1.4	1.0	1.2	1.1	0.9	1.0
70-74	0.2	0.2	0.2	0.9	0.9	0.9	0.6	0.6	0.6
75-79	0.2	0.1	0.1	0.5	0.6	0.5	0.4	0.4	0.4
80+	0.3	0.2	0.2	0.6	0.3	0.4	0.5	0.2	0.3

Table A.1.2
Levels of education in Zambia by residence and sex and schooling, SBS 1998 (percent of respondents)

		n	No school	Primary	Secondary	Higher
Men	Total	1655	7.1	49.2	39.9	3.8
	Urban	649	1.7	33.6	57.8	6.9
	Rural	1007	10.5	59.3	28.4	1.7
Women	Total	2040	16.7	58.2	23.2	1.9
	Urban	755	6.0	52.1	37.5	4.5
	Rural	1285	23.0	61.9	14.8	0.3

Table A.1.3
Percent of respondents who, at least once a week, read a newspaper, listen to the radio or watch television, SBS 1998

		N	Reads newspaper	Listens to radio	Watches television
MEN	Total	1655	16.1	45.1	26.3
	Urban	649	32.4	65.0	54.5
	Rural	1006	5.7	32.2	8.2
WOMEN	Total	2040	5.1	29.7	20.1
	Urban	755	11.0	50.4	45.0
	Rural	1285	1.6	17.6	5.5

Table A.2.1
General knowledge of HIV/AIDS, 1998 SBS (percent of respondents)

	N	Ever heard of AIDS	Knows HIV/AIDS can be avoided	Knows healthy person can have HIV
MEN				
Total	1655	98.8	86.0	86.4
Urban	649	99.5	90.0	93.4
Rural	1006	98.3	83.4	81.9
WOMEN				
Total	2040	99.0	77.9	82.1
Urban	755	99.9	85.8	90.4
Rural	1285	98.4	73.3	77.2

Table A.2.2
Knowledge of ways to avoid HIV/AIDS: spontaneous and prompted responses, SBS 1998 (percent of respondents)

	N	Consistent condom use		Fewer sexual partners		One faithful partner		No casual sex		Abstaining from sex	
		SP	PR	SP	PR	SP	PR	SP	PR	SP	PR
MEN											
Total	1655	64.6	66.5	2.5	26.5	35.0	81.9	35.8	74.4	24.3	87.1
Urban	649	70.4	70.0	2.0	19.7	42.8	87.4	35.8	70.0	28.5	93.8
Rural	1006	60.6	64.3	2.8	30.9	30.0	78.4	35.7	77.2	21.6	82.8
WOMEN											
Total	2040	46.4	56.9	2.5	27.5	30.3	81.8	33.4	79.8	27.9	90.3
Urban	755	55.0	60.3	2.3	19.5	34.3	83.6	40.5	77.9	30.1	90.1
Rural	1285	41.4	54.9	2.6	32.1	27.9	80.8	29.3	80.9	26.7	90.4

SP = spontaneous; PR = prompted

Table A.2.3
Misconceptions about HIV transmission by urban/rural residence, SBS 1998 (percent of respondents)

	N	HIV transmitted by mosquitoes	HIV transmitted by witchcraft	Condoms do not fully protect against HIV
Men				
Total	1655	27.9	22.5	59.2
Urban	649	21.1	14.0	63.5
Rural	1006	32.3	27.9	56.5
WOMEN				
Total	2040	29.0	35.7	56.3
Urban	755	25.2	28.5	59.7
Rural	1285	31.2	39.9	54.2

Table A.2.4
Percent of respondents who know someone living with HIV, know someone who died of HIV/AIDS and have a relative who died of HIV/AIDS, SBS 1998

		N	Knows person with HIV	Knows someone who died	Has or had relative with HIV/AIDS
Men	Total	1655	41.9	68.4	42.2
	Urban	649	38.1	68.9	44.4
	Rural	1006	44.3	68.1	40.8
Women	Total	2040	42.9	69.5	46.0
	Urban	755	42.7	66.6	47.0
	Rural	1285	43.1	71.1	45.4

Table A.2.5
Percent of respondents who have taken an HIV test and know the results, SBS 1998

		N	Had test	Know results
Men	Total	1655	9.2	7.1
	Urban	649	10.5	8.0
	Rural	1006	8.4	6.5
Women	Total	2040	6.8	5.4
	Urban	755	8.9	7.6
	Rural	1285	5.6	4.2

Table A.2.6
Willingness to care for family member with AIDS and attitude to HIV-infected (but not sick) nurse continuing to work, SBS 1998 (percent of respondents)

		N	Willingness to care for AIDS patient	Nurse to stop: infection risk	Nurse to stop: own health	Nurse to stop: other	Nurse to continue
Men	Total	1655	84.3	41.5	11.0	2.0	43.7
	Urban	649	89.8	33.1	9.6	2.6	53.9
	Rural	1006	80.7	46.9	11.9	1.6	37.1
Women	Total	2040	86.1	35.2	16.2	0.8	46.5
	Urban	755	88.3	35.6	17.6	1.1	45.2
	Rural	1285	84.8	34.9	15.4	0.7	47.2

Table A.2.7
Percent of respondents who think it is acceptable for men to have extramarital sex, whether men can be sexually satisfied by one wife, and whether condom purchase by unmarried women is acceptable, SBS 1998

		N	Extramarital sex for men acceptable	Men cannot be satisfied by one wife	Condom purchase by unmarried women acceptable
Men	Total	1655	6.7	18.6	56.7
	Urban	649	6.6	14.2	63.8
	Rural	1006	6.8	21.5	52.1
Women	Total	2040	7.4	29.4	41.7
	Urban	755	4.9	26.2	46.4
	Rural	1285	8.9	31.2	39.2

Table A.2.8
Percent of respondents who think it is acceptable for women to refuse sex during menstruation and who think a woman can protect herself from STD/HIV if husband is infected, SBS 1998

		N	Acceptable for women to refuse sex during period	Women can protect from HIV if husband has STD/HIV
Men	Total	1655	71.5	25.2
	Urban	649	80.3	30.5
	Rural	1006	65.8	21.8
Women	Total	2040	76.2	30.1
	Urban	755	85.2	38.2
	Rural	1285	70.9	25.3

Table A.2.9
Ways in which women can protect themselves from STD if partner is infected, SBS 1998 (percent of respondents)

		N	Refuse Sex	Insist on condom use	Take medicines
Men	Total	1655	17.8	13.5	4.2
	Urban	649	21.6	19.0	5.2
	Rural	1006	15.4	10.0	3.6
Women	Total	2040	22.8	11.0	8.7
	Urban	755	28.6	17.2	10.6
	Rural	1285	19.3	7.4	7.6

Table A.2.10
Percent of respondents who know someone who has been cleansed, SBS 1998

		N	Know a person who has been cleansed	Do not know a person who has been cleansed	Do not know about the practice of cleansing
Men	Total	1655	43.6	27.2	29.2
	Urban	649	37.8	38.5	23.7
	Rural	1006	47.3	19.9	32.8
Women	Total	2040	51.4	22.9	25.7
	Urban	755	49.5	30.6	19.9
	Rural	1285	52.5	18.4	29.1

Table A.2.11
Proportion of respondents who know someone who has been inherited, SBS 1998

		N	Know a person who has been inherited	Do not know a person who has been inherited	Do not know about the practice of inheritance
Men	Total	1655	53.2	25.4	21.3
	Urban	649	48.2	33.9	17.9
	Rural	1006	56.5	20.0	23.6
Women	Total	2040	58.4	26.0	15.6
	Urban	755	55.4	31.9	12.7
	Rural	1285	60.2	22.6	17.3

Table A.2.12
Percent of respondents who have been circumcised, SBS 1998

		N	Circumcised
Men	Total	1655	13.7
	Urban	649	13.3
	Rural	1006	14.0
Women	Total	2040	4.5
	Urban	755	6.0
	Rural	1285	4.0

Table A.2.13
Percent of respondents who know of the male condom, know a source for the male condom and have ever used the male condom, SBS 1998

		N	Know of male condom	Know a source	Ever used
Men	Total	1655	96.3	86.5	39.9
	Urban	649	98.2	91.1	46.8
	Rural	1006	95.1	83.5	35.4
Women	Total	2040	91.9	68.9	18.6
	Urban	755	95.5	74.2	25.2
	Rural	1285	89.8	65.7	14.7

Table A.2.14
Percent of respondents who know of the female condom, know a source for the female condom and have ever used the female condom, SBS 1998

		N	Know of female condom	Know a source	Ever used
Men	Total	1655	46.6	21.8	2.1
	Urban	649	59.6	30.1	2.2
	Rural	1006	38.2	16.5	2.1
Women	Total	2040	46.6	22.1	0.5
	Urban	755	56.0	30.5	0.8
	Rural	1285	41.1	17.2	0.3

Table A.3.1
Median age at first sex (years), SBS 1998

	Men		Women	
	N	Median	N	Median
20-29	546	16.0	751	16.4
30-39	375	16.4	424	16.3
40-49	196	18.1	244	16.4
All	1117	16.4	1419	16.3
Urban	456	16.7	531	16.6
Rural	661	16.3	888	16.2

Table A.3.2
Age differences between the spouses by selected background characteristics, SBS 1998*

Category	N	Median age difference (yr)	% with at least 10 yr difference	Missing (%)
Reported by men				
All	987	5.3	17.8	2.6
Urban	327	5.7	17.5	1.5
Rural	634	5.0	18.0	3.2
Monogamous	820	5.1	14.8	2.2
Polygamous	167	6.4	32.9	4.8
Reported by women				
All	1202	5.7	20.8	9.8
Urban	406	5.7	20.0	5.9
Rural	796	5.5	21.2	11.8
Monogamous	1052	5.5	19.6	9.0
Polygamous	151	6.1	29.1	15.2

*Men older than women.

Table A.3.3
Sexual activity within marriage: proportion of partnerships reported by men and women with no sex and with missing values and mean number of times sexual intercourse during the last month, SBS 1998

	N	No Sex (%)	Missing (%)	Mean
Men				
All	987	21.8	3.9	6.3
Urban	332	16.7	3.3	6.2
Rural	655	24.3	4.1	6.4
WOMEN				
All	1202	22.0	8.8	5.8
Urban	406	19.2	11.3	5.7
Rural	796	23.4	7.5	5.9

Table A.3.4
Condom use during the last sexual intercourse within marital partnerships, SBS 1998 (percent of partnerships)

Variable	Category	Men		Women	
		N	% use	N	% use
All		987	6.0	1202	4.0
Residence	Urban	332	5.1	406	4.2
	Rural	655	6.4	796	3.9
Duration of marriage	< 3 yr	196	11.2	249	7.2
	3+ yr	781	4.6	932	3.2
Extramarital partner	Yes	203	5.9	360	8.3
	No	774	6.1	1147	3.9
STD in last yr	Yes	59	5.9	33	6.1
	No	921	6.0	1157	4.0

Table A.3.5
Percent of partnerships reported by men and women with dry sex during the last intercourse, SBS 1998

	N	Dry Sex (%)
Men		
All	987	2.4
Urban	332	1.8
Rural	655	2.8
Women		
All	1202	11.3
Urban	406	6.9
Rural	796	13.6

Table A.3.6: Non-marital partnerships
Percent of men and women with non-marital partners in the last year by marital status, SBS 1998 and DHS 1996

	Survey	None	1	2-3	4+	N
All Men	SBS	67.1	19.5	9.0	2.0	1655
	DHS	58.2	21.0	14.1	6.7	1727
Married men	SBS	79.4	13.4	5.0	2.0	897
	DHS	79.1	13.2	5.5	2.2	832
Unmarried men	SBS	52.5	26.8	13.6	7.2	755
	DHS	38.7	28.2	22.1	11.0	895
All Women	SBS	82.6	14.5	2.7	0.2	2040
	DHS	83.6	12.9	2.5	0.4	8021
Married women	SBS	96.5	2.9	0.7	0.0	1214
	DHS	98.4	1.1	0.4	0.1	4902
Unmarried women	SBS	61.9	32.1	5.5	0.5	819
	DHS	60.4	31.4	5.9	0.8	3119

Table A.3.7
Median age difference between the partners, percent with 10 or more years of age difference and percent with missing data on age of the partner by marital status and sex of the respondents with non-marital relationships, SBS 1998

	Category	N	Median age Difference (yr)	% with at least 10 yr difference	Missing (%)
Men	ALL	973	3.7	14.3	19.2
	Married	683	6.0	26.6	20.2
	Not married	290	2.9	8.8	16.9
Women	ALL	432	3.7	7.1	25.0
	Married	390	3.6	7.4	23.3
	Not married	42	3.8	4.0	40.4

Table A.3.8
Marital status and residence of the sexual partners by marital status of the respondents and duration of the partnership, SBS 1998 (percent of respondents)

Variable	Category	Men			Women		
		N	Partner married	Lives in same area	N	Partner married	Lives in same area
All		973	14.3	51.2	432	36.1	47.7
Marital	Married	683	24.5	50.5	42	61.9	48.7
Status	Not married	290	10.0	52.8	390	33.3	38.1
Duration	Short	462	12.6	51.1	114	23.7	45.6
Relation	Medium	322	16.2	52.5	148	50.0	50.0
	Long	183	18.3	48.6	165	43.0	47.3
Residence	Urban	359	12.8	58.5	175	29.7	48.0
	Rural	614	15.2	46.9	257	40.5	47.5

Missing data on marital status of partners from 31 male respondent partnerships and 7 female respondent partnerships. Missing data on residence of partners from 3 male respondent partnerships and 8 female respondent partnerships.

Table A.3.9
Frequency of sexual intercourse in the last 3 months by marital status of respondent and duration of partnership among partnerships that were ongoing in the last month, SBS 1998 (percent distribution of partnerships)

		N	0	1	2-4	5-9	10+	DK	Tot
MEN									
All		933	30.0	21.6	28.9	12.1	7.4	0.0	100
Marital Status	Married	683	37.9	20.7	26.2	10.3	4.8	0.0	100
	Not married	290	26.7	22.0	30.0	12.9	8.5	0.0	100
Duration of Partnership	Short	462	25.5	28.8	28.1	11.5	6.0	0.0	100
	Mid	322	35.1	14.0	31.7	11.2	8.1	0.0	100
	Long	183	33.3	16.4	25.1	15.3	9.8	0.0	100
WOMEN									
All		432	35.4	16.7	33.1	7.4	6.5	0.9	100
Marital status	Married	42	54.8	14.3	26.2	0.0	4.8	0.0	100
	Not Married	390	33.3	16.9	33.9	8.2	6.7	1.0	100
Duration of Partnership	Short	114	25.4	24.6	37.7	8.8	3.5	0.0	100
	Mid	148	33.8	13.5	35.1	7.4	9.5	0.7	100
	Long	165	43.6	14.6	27.3	6.7	6.1	1.8	100

Table A.3.10
Specific characteristics during the last sexual act with a non-marital partner by marital status of the respondent, age of the respondent and duration of partnership, SBS 1998: condom use, use of dry sex, use of alcohol, and payment in cash or kind (percent of partnerships)

Variable	Category	N	Condom use	Dry sex	Alcohol use	Payment
MEN						
All		973	30.1	4.2	18.9	39.6
Marital Status	Married	683	32.4	7.2	29.3	36.9
	Not married	290	29.1	2.9	14.5	40.7
Duration of relationship	Short	462	30.5	3.9	17.3	37.9
	Mid	322	29.8	4.0	19.6	39.8
	Long	183	29.5	4.4	21.3	42.6
Residence	Urban	359	35.6	5.6	25.1	38.7
	Rural	183	26.9	3.4	15.3	40.1
WOMEN						
All		432	17.6	17.6	23.4	57.2
Marital status	Married	42	14.3	28.6	23.8	69.1
	Not married	390	18.0	16.4	23.3	55.9
Duration of	Short	114	15.8	17.5	14.9	63.2
relationship	Mid	148	21.6	16.2	27.0	56.8
	Long	165	14.6	18.1	26.6	53.9
Residence	Urban	175	21.0	16.5	26.9	49.7
	Rural	257	15.2	18.3	21.1	62.3

Table A.3.11
Mean frequency of sex in the last three months by condom use during the last act in non-marital partnerships, SBS 1998

	Last act	N	Mean	SD
Men	Condom used	293	2.4	4.2
	Not used	678	3.5	6.1
Women	Condom used	75	2.2	4.1
	Not used	349	3.4	7.9

N is number of non-marital partnerships; SD is standard deviation.

Table A.4.1
Percent of respondents who have ever heard of STDs and who know at least one correct symptom in men and in women, by residence and sex of the respondents, SBS 1998

		N	Ever heard of STD	Knows symptom in men	Knows symptom in women
Men	All	1655	88.8	72.0	57.8
	Urban	649	92.1	77.2	59.0
	Rural	1006	86.7	68.7	57.0
Women	All	2040	90.4	63.8	70.3
	Urban	755	93.8	68.3	73.5
	Rural	1285	88.4	61.2	68.4

Table A.4.2
Symptoms and signs of STDs in men and women as spontaneously listed by male and female respondents, SBS 1998 (percentage of respondents)

	STD in Men		STD in Women	
Respondents:	Men	Women	Men	Women
Genital ulcer	51.3	48.0	38.3	53.1
Genital discharge	45.7	35.9	31.8	36.8
Swelling in genital area	22.2	19.7	13.7	19.0
Abdominal pain	13.9	15.6	18.4	22.8
Burning urination	17.3	10.9	9.9	10.5
Itching in genital area	10.9	5.6	8.5	9.3
Pain during sex	3.9	2.3	3.8	1.5
Infertility	-	-	1.7	1.3
Failure to pass urine	5.9	2.3	3.1	1.9
Weight loss	14.3	13.1	14.8	15.5
Blood in urine	9.1	5.0	6.3	5.0
Male impotence	0.7	1.1	-	-
Other	8.8	12.2	10.2	16.1
Number of observations	1655	2040	1655	2040

Table A.4.3
Percent of men and women who reported having had a genital ulcer or genital discharge during the 12 months preceding the survey, SBS 1998

		N	Had ulcer	Had discharge	Had either
Men	All	1655	5.1	3.5	5.3
	Urban	649	4.8	2.6	4.9
	Rural	1006	5.3	4.1	5.5
Women	All	2040	2.8	1.9	2.9
	Urban	755	3.0	2.0	3.2
	Rural	1285	2.6	1.9	2.7

Table A.4.4
Prevention indicators 6 and 7, based on observations of STD patients, and various health facility statistics based on interviews with health workers (percentages)

	All	Urban	Rural
N	43	24	19
PI 6 (observation)	16	23	7
PI7 (observation)	47	42	51
Condoms out of stock	14	25	0
Received national guidelines	47	54	37
Staff works in both private and public facilities	12	13	11
Trained in STD management	37	38	37
Use etiologic approach	70	75	63
Use syndromic approach	74	75	74
Problems with drug supply	100	100	100
Have microscope	51	63	37
Perform Gram stain	47	54	37
Routine RPR	52	67	32

Table A.4.5
Scores on PI 6 and PI 7 based on observation results by training status of the health worker (percentages)

Indicator	Component	Trained	Not trained
PI 6	Overall	20	13
	History	98	89
	Examination	86	73
	Treatment	22	17
PI7	Overall	61	35
	Condoms	71	48
	Partners	84	63
N		49	52

Table A.5.1
Knowledge of HIV/AIDS among respondents by age groups, SBS 1998 (percent of respondents)

	Age	N	Ever heard of AIDS	Knows HIV/AIDS can be avoided	Knows healthy person can have HIV
Men	15-19	381	95.8	74.8	77.4
	20-24	346	99.4	87.3	87.6
	25-49	928	99.6	90.1	89.7
Women	15-19	485	96.7	71.3	74.2
	20-24	488	99.8	79.3	86.5
	25-49	1067	99.6	80.3	83.7

Table A.5.2
Knowledge of ways to avoid HIV/AIDS of age group by prompted responses, SBS 1998 (percent of respondents)

		N	Consistent condom use	Fewer sexual partners	One faithful partner	No casual sex	Abstaining from sex
Men	15-19	381	70.9	27.0	76.4	68.5	81.4
	20-24	346	72.5	26.0	85.3	76.0	87.3
	25-49	928	62.5	26.5	83.0	76.2	89.4
Women	15-19	485	50.9	22.1	71.8	70.3	84.7
	20-24	488	63.1	29.5	86.5	81.8	91.8
	25-49	1067	56.7	29.0	84.3	83.2	92.1

Table A.5.3
Misconceptions about HIV transmission by age group, SBS 1998 (percent of respondents)

	Age	N	HIV transmitted by mosquitoes	HIV transmitted by witchcraft	Condoms do not fully protect against HIV
Men	15-19	381	33.3	21.3	52.5
	20-24	346	25.7	21.7	58.4
	25-49	928	26.5	23.3	62.3
Women	15-19	485	26.6	26.0	49.5
	20-24	488	28.5	36.5	57.2
	25-49	1067	30.3	39.7	59.0

Table A.5.4
Knowledge of male condom: ever heard of condoms and knowledge of source of condoms by age group, SBS 1998 (percent of respondents)

	Age	N	Ever heard	Knows source
Men	15-19	381	91.9	74.8
	20-24	346	98.0	93.6
	25-49	928	97.5	88.6
Women	15-19	485	82.7	54.6
	20-24	488	96.1	77.1
	25-49	1067	94.1	71.7

Table A.5.5
Percent of respondents by age who think it is acceptable for men to have extramarital sex, whether men can be sexually satisfied by one wife, and whether condom purchase by unmarried women is acceptable by age group, SBS 1998

		N	Extramarital sex for men acceptable	Men cannot be satisfied by one wife	Condom purchase by unmarried women acceptable
Men	15-19	381	6.6	29.9	49.9
	20-24	346	7.5	18.5	59.5
	25-49	928	6.5	14.0	58.5
Women	15-19	485	5.8	33.6	35.3
	20-24	488	6.2	28.3	46.1
	25-49	1067	8.7	27.9	42.9

Table A.5.6
Percent who think is acceptable for women to refuse sex during menstruation and who think a woman can protect herself from STD/HIV if husband is infected by age group, SBS 1998

		N	Acceptable for women to refuse sex during period	Women can protect from HIV if husband has STD/HIV
Men	15-19	381	53.8	15.8
	20-24	346	70.2	24.9
	25-49	928	79.2	29.2
Women	15-19	485	68.5	26.4
	20-24	488	77.3	29.3
	25-49	1067	79.2	32.1

Table A.5.7
Percent of respondents by age group who have been tested for HIV and know results, SBS 1998

	Age	N	Had test	Know results
Men	15-19	381	3.2	1.8
	20-24	346	10.5	6.9
	25-49	928	11.3	9.3
Women	15-19	485	5.8	4.1
	20-24	488	7.0	5.7
	25-49	1067	7.2	5.9

Table A.5.8
Percent of respondents by age group willing to care for family member with AIDS and attitude to HIV-infected (but not sick) nurse continuing to work, SBS 1998

		N	Willingness to care for AIDS patient	Nurse to stop: infection risk	Nurse to stop: own health	Nurse to stop: other	Nurse to continue
Men	15-19	381	70.3	37.0	11.6	1.8	45.1
	20-24	346	87.6	46.2	9.8	1.2	41.6
	25-49	928	88.8	41.6	11.2	2.4	43.9
Women	15-19	485	73.6	37.3	16.3	1.0	41.6
	20-24	488	89.1	36.7	14.1	0.8	47.9
	25-49	1067	86.1	33.5	17.1	0.7	48.8

Table A.5.9
Ever had sex by age of the respondent, SBS 1998 and DHS 1996

Adolescent women, SBS 1998 and DHS 1996

	SBS 1998		DHS 1996	
	N	% had sex	N	% had sex
15	92	27.2	398	24.9
16	105	41.0	419	44.5
17	96	64.6	379	57.7
18	115	79.1	406	79.5
19	78	84.6	401	84.3
20	103	91.3	403	92.0

Adolescent men, SBS 1998 and DHS 1996

	SBS 1998		DHS 1996	
	N	% had sex	N	% had sex
15	67	37.3	80	33.8
16	93	53.8	118	56.7
17	66	60.6	81	71.3
18	89	74.2	90	72.2
19	66	83.3	91	88.7
20	64	85.9	87	90.8

Table A.5.10
Percent of men and women 15-19 (all and excluding those who never had sex) with non-marital partners in the last year by marital status, SBS 1998

		N	None*	1	2-3	4+
All Men	Married	6				
	Not married	375	59.2	25.9	9.3	5.6
Men: Ever had sex	Married	6				
	Not married	230	33.5	42.2	15.2	9.1
All Women	Married	116	91.3	6.9	1.7	
	Not married	369	65.9	27.6	6.0	0.5
Women: Ever had sex	Married	116	91.3	6.9	1.7	
	Not married	171	26.3	59.7	12.9	1.2

*For partners who are married, none refers to no extramarital; for those who are not married, none refers to no partner.

Table A.5.11
Duration of non-marital partnerships in the last year
Percent distribution of partnerships by duration and respondent's sex, respondents 15-19 years, SBS 1998

Duration	Men	Women
Once	17.7	12.9
< 1 week	16.2	11.8
< 1 month	23.6	18.2
< 1 year	28.0	31.8
One year or longer	6.6	24.18
Don't know	1.1	1.2
Total	100.0	100.0
Number	271	140

Table A.5.12
Percent of non-marital non-cohabiting partnerships by respondent's age group who used a condom during the last sexual intercourse, SBS 1998

	Age	N	Used condom
Men	15-19	270	15.9
	20-24	318	34.6
	25-49	333	36.6
Women	15-19	167	16.2
	20-24	121	25.6
	25-49	139	13.0

Table A.5.13
Percent of respondents by age group who know about STDs and could mention at least one correct symptom of STD in men and in women, SBS 1998

	Age	N	Ever heard of STD	Knows symptom in men	Knows symptom in women
Men	15-19	381	72.4	45.1	33.3
	20-24	346	91.9	72.3	59.9
	25-49	928	94.4	83.0	67.0
Women	15-19	485	78.8	43.1	48.4
	20-24	488	92.8	63.3	71.3
	25-49	1067	94.6	73.5	79.8

APPENDIX B

Persons Involved in the 1998 Zambia Sexual Behaviour Survey

COORDINATOR OF THE PROJECT

Reverend Charles Banda

CENTRAL PROVINCE

Field Supervisor	Mary Sichinga Tembo
Enumerators	Edith Mphukani
	Agness Simoonga
	Winter Njapu
	Muchima Ngosa
Driver	Sikazwe

COOPERBELT PROVINCE

Field Supervisor	Leonard Kankato
Enumerators	Evans Mwiya
	Catherine Matongo
	Mary Njobvu
	Robby Chisulo
Driver	Jackson Mpatisha

LUSAKA PROVINCE

Field Supervisor	Paul.C. Chense
Enumerators	Robert Mwanza
	Moses Nyerenda
	Dorothy Tembo
	Chilala Munkombwe
	Catherine Ngandu
Driver	Edison Phiri

NORTHERN PROVINCE

Field Supervisor	Chisamu Norrias
Enumerators	Sage Banda
	Judy M. Mulenga
	Petronella Ngona
	Mercy Nachande
Driver	Godfrey Chola

LUAPULA PROVINCE

Field supervisor	Bupe Musonda
Enumerators	John B. Chirwa
	Mwansa Kapoka
	Jane Mundia
	Chonde Namutowe
Driver	Thomus Shula

EASTERN PROVINCE

Field Supervisor	Daniel Daka
Enumerators	Josphat Ndhlovu
	Ollings Chihana
	Maurice Zulu
	Frank Moyo
	Carol Zulu
	Goretti Mtonga
Driver	Christopher Kangwa

NORTHWESTERN PROVINCE

Field Supervisor	Abiun Machona
Enumerators	Christopher Makiko
	Fred Chibanda
	Mildred Bweupe
	Christine Sandu

SOUTHERN PROVINCE

Field Supervisor	Elijah Malumo
Enumerators	Mweetwa Mwaka
	Chinyama Joseph
	Mapanza Joyce
	Lwiindi Hamoonga
	Kabika Mercy
Driver	Kasama Manfred

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Rev. Charles Banda
In'gutu N. Songolo

SAMPLERS

William C. Mayaka
Batista Chilopa

APPENDIX C

Questionnaire

STRICTLY CONFIDENTIAL HOUSEHOLD SCHEDULE SERIAL NO: [__|__|__|__]

REPUBLIC OF ZAMBIA

CENTRAL STATISTICAL OFFICE

POPULATION BASED SURVEY ON SEXUAL BEHAVIOUR AND HIV/STD

Household identification

H01 Province_____ [___]

H02 District_____ [___|___]

H03 CSA [___|___|___]

H04 SEA [___]

H05 Urban = 1
Rural = 2
Roadside settlement = 3 [_____]

H06 Cluster Number [__|__]

H07 Household Structure number [___|___|___]

H08 Household serial number [___|___|___]

H09 Interviewer visit

	Visit 1	Visit 2	Visit 3
Date			
Interviewer name			
Result*			

***Result codes**

Completed	1	Dwelling vacant or address not a household	5
No one at home	2	Dwelling not found/destroyed	6
Refused	3	Postponed	7
Household Away for duration of survey	4	Other(specify)_____	8

HOUSEHOLD ROSTER AND SELECTION OF INDIVIDUALS

Now I would like to ask some questions about the persons who are living here now. First what is the name of the head of the household? [RECORD NAMES]

LIST HOUSEHOLD COMPOSITION STARTING WITH THE HEAD, PROBE FOR EVERYONE IN THE HOUSEHOLD NOT JUST FAMILY MEMBERS E.G SERVANTS, LODGERS ETC. ASK EACH QUESTION FOR THE HEAD OF HOUSEHOLD FROM COLUMNS 3 THROUGH 9 , THEN REPEAT THE QUESTIONS FOR EACH PERSON WHO IS LIVING THERE NOW.

1	2	3	4	5	6	7	8	9
LINE NUMBER	GIVEN NAME	SEX	How old is [NAME]	What is [NAME S] marital status*** (IF AGED 12 & OVER)	What is [NAME S] relation ship to head**	Is [NAME] a usual member of the HH	How long has [NAME] lived here RECORD IN MONTHS (00-12+)	ELIGIBILITY *(TICK) (15-49)years only
01		M F 1 2	[__|__]	[__]	[__|__]	Yes No 1 2	[__|__]	[__]
02		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
03		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
04		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
05		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
06		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
07		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
08		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
09		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
10		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
11		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
12		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
13		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
14		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
15		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
16		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
17		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
18		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]
19		1 2	[__|__]	[__]	[__|__]	1 2	[__|__]	[__]

* Eligible are all individuals aged 15-49 years.

** CODES FOR RELATIONSHIP TO HEAD OF HOUSEHOLD

01= HEAD
02= WIFE/HUSBAND
03= SON/DAUGHTER
04= BROTHER /SISTER
05= FATHER/MOTHER
06= SON-IN-LAW/ DAUGHTER-IN-LAW
07= GRANDCHILD
08= FATHER/MOTHER INLAW
09= CO-WIFE
10= ADOPTED/FOSTER/STEP CHILD
11=OTHER RELATIVE
12=NOT RELATED

*** CODES FOR MARITAL STATUS

1= MARRIED
2= LIVING TOGETHER
3= SEPARATED
4= DIVORCED
5= WIDOWED
6= NEVER MARRIED

STRICTLY CONFIDENTIAL **QUESTIONNAIRE SERIAL NO:[__|__|__|__]**

REPUBLIC OF ZAMBIA

CENTRAL STATISTICAL OFFICE

POPULATION BASED SURVEY ON SEXUAL BEHAVIOUR AND HIV/STD

INDIVIDUAL QUESTIONNAIRE
(For all adults aged 15-49 years)

Q001 Province_____ [___]
Q002 District_____ [___|___]
Q003 CSA [___|___|___]

Q004 SEA [___]

Q005 Urban = 1
Rural = 2
Roadside settlement = 3 [___]

Q006 Cluster number [___|___]

Q007 Household Structure number [___|___|___]

Q008 Household serial number [___|___|___]

Q009 Line number [___|___]

Q010 If spouse interviewed record line number spouse/partner [___|___]

Q011 Interviewer visit

	Visit 1	Visit 2	Visit 3
Date			
Interviewer s name			
Result*			

*Result codes

Completed	1
No one at home	2
Refused	3
Partially completed	4
Other (specify)_____	8

INTERVIEWER: Code [____|____]

DATE INTERVIEW: ___ / ____/ 98

CHECKED BY SUPERVISOR: Signature _____ Date____/_____/98

Section 1: Background characteristics

Now I would like to ask you about your background characteristics.

No.	Questions and filters	Coding categories	Skip to
Q101	CIRCLE SEX OF THE RESPONDENT	MALE 1 FEMALE 2	
Q102	In what month and year were you born?	MONTH. [__|__] DON T KNOW MONTH 98 YEAR. [__|__] DON T KNOW YEAR 98	
Q103	How old were you at your last birth-day? COMPARE AND CORRECT 102 IF NECESSARY	AGE IN COMPLETED YEARS. [__|__]	
Q104	Can you read and understand a letter or newspaper easily, with difficult or not at all?	EASILY..... 1 WITH DIFFICULT.... 2 NOT AT ALL..... 3	→ Q106
Q105	During the last 4 weeks how often have you read a newspaper? Would you say READ OUT	EVERY DAY .. 1 AT LEAST ONCE A WEEK ..2 LESS OFTEN 3 NEVER 4	
Q106	During the last 4 weeks how often have you listened to the radio? Would you say READ OUT	EVERY DAY .. 1 AT LEAST ONCE A WEEK ..2 LESS OFTEN 3 NEVER 4	
Q107	During the last 4 weeks how often have you watched television? Would you say READ OUT	EVERY DAY .. 1 AT LEAST ONCE A WEEK ..2 LESS OFTEN 3 NEVER 4	
Q108	Have you ever attended school?	YES 1 NO 2	→Q111
Q109	What is the highest level of school you attended: primary, secondary or higher?	PRIMARY 1 SECONDARY .2 HIGHER 3	
Q110	How many years of education did you complete at that level?	YEARS COMPLETED. [__|__]	

Q111	How long have you lived here in (NAME OF VILLAGE/TOWN/CITY)? RECORD 00 IF LESS THAN 1 YEAR	YEARS. [__|__]	
Q112	In the last month how many nights in total have you slept in another location than this home?	NUMBER OF NIGHTS SLEPT ELSEWHERE [__|__]	
Q113	What is your religion?	CATHOLIC . 1 PENTECOSTAL . 2 ORTHODOX PROTESTANT .. 3 MUSLIM .. 4 TRADITIONAL .. 5 OTHER (specify)_____6	
Q114	To which ethnic group do you belong?	Specify ethnic group_____ Code [__|__]	
Q115	What is your current employment / source of income?	Specify_____ Code [__|__|__]	

Section 2: Condoms

Now I would like to ask you questions on the knowledge and use of condoms.

No.	Questions and filters	Coding categories	Skip to
Q201	Have you ever heard of a male condom? (I mean a rubber object that a man puts on his penis before sex)	YES 1 NO 2	 →Q205
Q202	Do you know a place or person where you can get male condoms?	YES 1 NO 2	 →Q204
Q203	Where can you get a male condom? Anything else? CIRCLE ALL MENTIONED. MORE THAN ONE ANSWER POSSIBLE DO NOT READ OUT THE SOURCES	SHOP A PHARMACY B MARKET C HEALTH FACILITY D FAMILY PLANNING CLINIC E BAR/GUEST HOUSE/HOTEL F PEER EDUCATOR G FRIEND H OTHER(specify)_____ I	
Q204	Have you or your partner ever used a male condom?	YES 1 NO 2	
Q205	Have you heard of a female condom? (I mean a kind of plastic object that a woman can put in her vagina before having sex and remove it after sex)	YES 1 NO 2	 →301
206	Do you know a place or person where you can get a female condom?	YES 1 NO 2	 →208
207	Where can you get a female condom? Anything else? CIRCLE ALL MENTIONED. MORE THAN ONE ANSWER POSSIBLE DO NOT READ OUT THE SOURCES	SHOP A PHARMACY B MARKET C HEALTH FACILITY D FAMILY PLANNING CLINIC E BAR/GUEST HOUSE/HOTEL F PEER EDUCATOR G FRIEND H OTHER(specify)_____ I	
Q208	Have you or your partner ever used a female condom?	YES 1 NO 2	

Section 3: Marriage & Cohabitation

Now I would like to ask you questions about marriage and cohabitation.

No.	Questions and filters	Coding categories	Skip to
Q301	Have you ever been married or lived together with a man/woman?	YES 1 NO 2	 →Q401
Q302	How old were you when you first married /started living with a partner?	YEARS. [__|__]	
Q303	Are you currently married or living together with a partner?	YES MARRIED 1 YES LIVING TOGETHER....2 NO 3	 →Q305 →Q401
Q304	FOR MARRIED RESPONDENTS ONLY: Does your husband/wife live with you or does he/she live somewhere else?	LIVES WITH ME .....1 LIVES SOMEWHERE ELSE 2	
Q305	How long have you been married / living together? WRITE 00 IF LESS THAN ONE YEAR	NUMBER OF YEARS [__|__] DON T KNOW . 98 NOT LIVING TOGETHER....95	
Q306	MEN: Do you have more than one wife/cohabiting partners? WOMEN: Does your husband have other wives/cohabiting partners?	YES 1 NO 2	 →Q308 for the only spouse/ partner
Q307	MEN: How many wives/cohabiting partners do you have? WOMEN: How many wives/cohabiting partner does your husband have?	NUMBER OF WIVES/PARTNERS [__|__]	

No.	Questions and filters	Spouse/ Partner 1	Spouse/ Partner 2	Spouse/ Partner 3	Spouse/ Partner 4	Spouse/ Partner 5
Q308	NUMBER OF SPOUSES/COHAB. PARTNERS (ASK Q309-312 FOR EACH PARTNER, STARTING WITH THE FIRST,ETC.) What is the first name of your spouse/partner?					
Q309	How old is (NAME)? IF DON T KNOW: RECORD 98	[__|__]	[__|__]	[__|__]	[__|__]	[__|__]
Q310	How many days did you have sex with (NAME) In the last week? In the last month? IF DON T KNOW: RECORD 98	 [__|__] [__|__]	 [__|__] [__|__]	 [__|__] [__|__]	 [__|__] [__|__]	 [__|__] [__|__]
Q311	The last time you had sex with (NAME) did you/your partner use a condom?	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8
Q312	The last time you had sex with (NAME) did you/your partner practice dry sex , that is use methods to tighten the vagina?	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8
Q313	FOR THE FIRST INSTANCE FOR WHICH Q312 IS YES PROBE AND RECORD METHOD USED. What method did you/your partner use?	GO TO NEXT SPOUSE	GO TO NEXT SPOUSE	GO TO NEXT SPOUSE	GO TO NEXT SPOUSE	GO TO Q402

Section 4: Sexual History - Sexual Relationships with Non-marital and Non-cohabiting Partners

Now I would like to ask questions about sexual relationships with non-marital and non-cohabiting partners.

No.	Questions and filters	Coding categories	Skip to
Q401	Have you ever had sexual intercourse?	YES 1 NO 2	 →501
Q402	At what age did you first have sex?	YEARS. [__|__] DON T REMEMBER .. 98	
Q403	CHECK Q303 FOR THE MARRIED ASK: Apart from your spouse(s), with how many partners in total have you had sex during **the last month**? **EXCLUDE SPOUSE(S) OR COHABITING PARTNERS** FOR THE UNMARRIED ASK: With how many partners in total have you had sex during **the last month**?	NUMBER IN LAST MONTH [__|__]	
Q404	CHECK Q303 FOR THE MARRIED ASK Apart from your spouse(s), with how many partners in total have you had sex during the **last 12 months**? **EXCLUDE SPOUSE(S) OR COHABITING PARTNERS** FOR THE UNMARRIED ASK With how many partners in total have you had sex in the last 12 months?	NUMBER IN LAST 12 MONTHS [__|__]	IF NONE →501
	Now I would like to ask you some questions about your sexual partners. I know it may be difficult to remember exactly, but I would like to ask you to answer the questions to the best of your knowledge, as this information is very important for the survey. Please remember that all information is anonymous and cannot be linked to your name or any other person in any way. I would like to start with the most recent partner, that is the partner you had sex with most recently. ALL PARTNERS,CURRENT AND PAST.		

No.	Questions and Filters	Coding categories				
Q405	NUMBER OF NON-COHABITING PARTNERS (ASK Q406-Q416 FOR EACH PARTNER, STARTING WITH THE MOST RECENT) What is the first name of this partner? RECORD INITIAL	**Partner 1**	**Partner 2**	**Partner 3**	**Partner 4**	**Partner 5**
Q406	For how long have you had a sexual relationship with (NAME)?	ONCE ...1 < 1WK..2 < 1MO..3 < 6MO..4 <12 MO..5 12MO+..6 DK ...8	ONCE ...1 < 1WK..2 < 1MO..3 < 6MO..4 <12 MO..5 12MO+..6 DK ...8	ONCE ...1 < 1WK..2 < 1MO..3 < 6MO..4 <12 MO..5 12MO+..6 DK ...8	ONCE ...1 < 1WK..2 < 1MO..3 < 6MO..4 <12 MO..5 12MO+..6 DK ...8	ONCE ...1 < 1WK..2 < 1MO..3 < 6MO..4 <12 MO..5 12MO+..6 DK ...8
Q407	Is this relationship still ongoing or has it ended?	ON....1 END..2	ON....1 END..2	ON....1 END..2	ON....1 END..2	ON....1 END..2
Q408	How old is (NAME)? IF DON T KNOW: RECORD 98	**[__|__]**	**[__|__]**	**[__|__]**	**[__|__]**	**[__|__]**
Q409	Is (NAME) married?	YES 1 NO 2 DK ..8	YES 1 NO 2 DK 8	YES 1 NO 2 DK ..8	YES 1 NO 2 DK ..8	YES 1 NO 2 DK ..8
Q410	Does he/she live in the same village or town/city/ neighbourhood?	YES 1 NO 2 DK.. 8	YES 1 NO 2 DK ..8	YES 1 NO 2 DK ..8	YES 1 NO 2 DK..8	YES 1 NO 2 DK ..8
Q411	How many days did you have sex with (NAME) in the last 3 months? **(IF NONE ENTER 00)**	**[__|__]**	**[__|__]**	**[__|__]**	**[__|__]**	**[__|__]**
Q412	The last time you had sex with (NAME) did you use a condom?	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8
Q413	Did you/your partner practice dry sex , that is methods to tighten the vagina?	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8
Q414	The last time you had sex with (NAME) did you or your partner drink alcohol?	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8	YES 1 NO 2 DK 8
Q415	**The last time you had sex with (NAME), did you give or receive money or anything in return for sex?**	YES 1 NO 2 ↓ 501	YES 1 NO 2 ↓ 501	YES 1 NO 2 ↓ 501	YES 1 NO 2 ↓ 501	YES 1 NO 2 ↓ 501
Q416	How much money/what did you receive or give in kind? RECORD AMOUNT IN ZKWACHA/ ASK THE RESPONDENT TO CONVERT PAYMENT IN KIND INTO CASH	K________ __________ (Specify)	K________ __________ (Specify)	K________ __________ (Specify)	K________ __________ (Specify)	K________ __________ (Specify)
		GO TO NEXT PARTNER	GO TO NEXT PARTNER	GO TO NEXT PARTNER	GO TO NEXT PARTNER	GO TO Q501

Section 5: STD

Now I would like to discuss with you questions relating to circumcision and sexually transmitted diseases.

No.	Questions and filters	Coding categories	Skip to
Q501	Some men or women have been circumcised. Have you been circumcised?	YES 1 NO . 2	
Q502	Have you ever heard of diseases that can be transmitted through sexual intercourse (STD S)?	YES 1 NO 2	→Q601
Q503	Can you describe any symptoms of STDs **in women**? Any other? CIRCLE ALL MENTIONED. MORE THAN ONE ANSWER POSSIBLE DO NOT READ OUT THE SYMPTOMS	ABDOMINAL PAIN .A DISCHARGE FROM VAGINA .B ITCHING IN GENITAL AREA .C BURNING PAIN ON URINATION . D PELVIC PAIN DURING SEX ..E GENITAL ULCERS / OPEN SORES F SWELLINGS IN THE GENITAL AREA .G BLOOD IN URINE . H FAILURE TO PASS URINE I LOSS OF WEIGHT ..J INABILITY TO CONCEIVE. .K OTHER _____L DON T KNOW ANY M	
Q504	Can you describe any symptoms of STDs **in men**? Any other? CIRCLE ALL MENTIONED. MORE THAN ONE ANSWER POSSIBLE DO NOT READ OUT THE SYMPTOMS	ABDOMINAL PAIN .A DISCHARGE FROM PENIS .B ITCHING IN GENITAL AREA .C BURNING PAIN ON URINATION . D PAIN DURING INTERCOURSE .. E GENITAL ULCERS / OPEN SORES F SWELLINGS IN THE GENITAL AREA .G BLOOD IN URINE H FAILURE TO PASS URINE .I LOSS OF WEIGHT ..J IMPOTENCE K OTHER _____L DON T KNOW ANY M	

Q505	Have you had a genital discharge during the past 12 months?	YES 1 NO. 2	
Q506	Have you had a genital ulcer during the past 12 months?	YES 1 NO 2	
Q507	**MARK X IN APPROPRIATE BOX** HAD GENITAL DISCHARGE AND/OR GENITAL ULCER [___] ↓	NO DISCHARGE OR ULCER [__]→	→Q601
Q508	When you had a discharge or genital ulcer, did you do any of the following:		
	Seek advice from a health worker in a clinic or hospital?	YES 1 NO 2	
	Visit a traditional healer?	YES 1 NO 2	
	Buy medicines in a shop or pharmacy?	YES 1 NO 2	
	Ask friends or relatives for advice?	YES 1 NO 2	
Q509	When you had a discharge or genital ulcer, did you:		
	Tell your sexual partner about the symptoms?	YES 1 NO 2	
	Stop having sex when you had the symptoms?	YES 1 NO 2	
	Use a condom when having sex when you had symptoms?	YES 1 NO 2	

Section 6: Knowledge and attitudes about AIDS

Now I would like to ask you some questions on HIV/AIDS.

No.	Questions and filters	Coding categories	Skip to
Q601	Have you ever heard of a disease called AIDS?	YES 1 NO 2	 →Q701
Q602	Is there anything a person can do to avoid getting HIV, the virus that causes AIDS?	YES 1 NO 2 DK . 8	 →Q604 →Q604
Q603	How can people protect themselves from getting infected with HIV? Any other ways? CIRCLE ALL MENTIONED. MORE THAN ONE ANSWER POSSIBLE; DO NOT READ OUT THE WAYS	USE CONDOMS .A HAVE FEWER PARTNERS .B BOTH PARTNERS HAVE NO OTHER PARTNERS .C NO CASUAL SEX . D NO SEX AT ALL E AVOID INJECTIONS WITH CONTAMINATED NEEDLES .F AVOID BLOOD TRANSFUSIONS G OTHER (specify)_____H DON T KNOW ANY I	
Q604	Can people protect themselves from HIV/AIDS by: Using a condom everytime they have sex?..... Having fewer sexual partners?..... Having one partner who also has no other partners?..... Not having casual sex?..... Abstaining completely from sex?.....	 YES 1 NO 2 DO NOT KNOW 8 YES 1 NO 2 DO NOT KNOW 8 YES 1 NO 2 DO NOT KNOW 8 YES 1 NO 2 DO NOT KNOW 8 YES 1 NO 2 DO NOT KNOW 8	

No.	Questions and filters	Coding categories	Skip to
Q605	Do you think that a person who looks healthy could be infected with HIV?	YES 1 NO 2	
Q606	Do you know anyone who is infected with HIV?	YES 1 NO 2	
Q607	Do you know anyone who has died of AIDS?	YES 1 NO 2	
Q608	Do you have a close relative or close friend who is infected with HIV or has died of AIDS?	YES 1 NO 2	
Q609	Have you heard of the practice of cleansing , that is when a wife/husband has to have sex with a relative(s) of his/her deceased spouse?	YES 1 NO . 2	→Q611
Q610	Do you know somebody who has been cleansed ?	YES . 1 NO 2	
Q611	Have you heard of the practice of widow/widower inheritance, that is where a wife/husband has to be married to a relative of her/his deceased spouse?	YES 1 NO . 2	→Q613
Q612	Do you know somebody who has been inherited after the death of her/his spouse?	YES . 1 NO .. 2	
Q613	Have you ever had an HIV test?	YES 1 NO 2	→Q615
Q614	I don t want you to tell me the results of the test, but have you been told?	YES 1 NO 2	
Q615	Would you be willing to care for someone in your family if he or she became sick with AIDS?	YES 1 NO 2 DON T KNOW 8	
Q616	Should a nurse who has HIV but is not sick be allowed to continue to work?	YES 1 NO 2	→Q618
Q617	Why should a nurse with HIV not continue working?	HE/SHE CAN INFECT OTHERS ..1 NOT GOOD FOR HER/HIS HEALTH ..2 OTHER _____3	

No.	Questions and filters	Coding categories	Skip to
Q618	Is it acceptable for a married man to have sexual relations outside marriage?	YES 1 NO 2 DON'T KNOW...8	
Q619	Can a man be sexually satisfied with one wife and no other sexual affairs?	YES 1 NO 2 DON'T KNOW...8	
Q620	Can a woman protect herself from getting an STD if her husband has an STD?	YES 1 NO 2 DON'T KNOW...8	→Q622→Q622
Q621	What can she do to protect herself? Anything else? CIRCLE ALL ANSWERS GIVEN	SHE CAN REFUSE SEX A SHE CAN INSIST ON USING CONDOMS B SHE CAN TAKE MEDICINES C OTHER (specify)_____D DON'T KNOW .. .E	
Q622	Can a woman refuse sex because she has her period?	YES 1 NO 2 DON'T KNOW...8	
Q623	Can HIV be transmitted by mosquitoes?	YES 1 NO 2 DON'T KNOW...8	
Q624	Can HIV be transmitted by witchcraft?	YES 1 NO 2 DON'T KNOW...8	
Q625	Is it acceptable for an **unmarried** woman to buy condoms?	YES 1 NO 2 DON'T KNOW...8	
Q626	Do you think that a man who uses a condom and has sex with a woman who has HIV, is fully protected against HIV?	YES 1 NO 2 DON'T KNOW...8	

IF RESPONDENT IS MALE THANK HIM AND END THE INTERVIEW.

Section 7: Childbearing and Antenatal Care (WOMEN ONLY)

The following set of questions are about all the births you have had during your life.

No.	Questions and filters	Coding categories	Skip to
Q701	Have you ever given birth? INCLUDE LIVE AND STILL BIRTHS	YES 1 NO 2	 →707
Q702	How many times have you given birth (both live and still births?	NUMBER OF BIRTHS. [__|__]	
Q703	When was the last time you gave birth?	MONTH. [__|__] DON T KNOW MONTH 98 YEAR. [__|__] DON T KNOW YEAR 98	
Q704	Did you attend an antenatal clinic during that last pregnancy?	YES 1 NO 2	 →707
Q705	Was this a private clinic or a government or mission clinic?	PRIVATE 1 GOVERNMENT . 2 MISSION ..... 3 OTHER(specify)_____4	
Q706	What is the name of this Health Institution you went to?	NAME_____ CODE [__|__]	
Q707	Are you pregnant now?	YES 1 NO 2	 →END
Q708	Have you gone for antenatal care during this pregnancy?	YES 1 NO 2	

THANK THE RESPONDENT FOR HER COOPERATION