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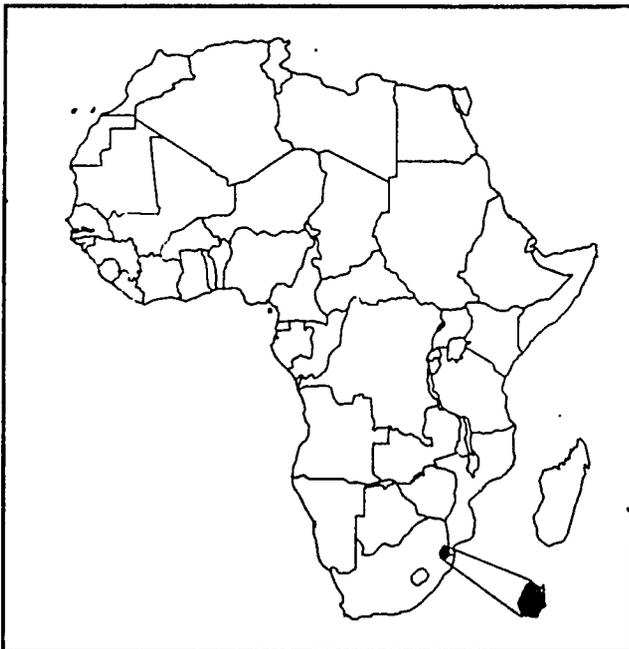
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SWAZILAND

1988 FAMILY HEALTH SURVEY

MARCH 1990

**Swaziland Ministry of Health
FINAL REPORT**



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EXECUTIVE SUMMARY

Introduction

The 1988 Swaziland Family Health Survey (FHS) was conducted by the Swaziland Ministry of Health. Financial, administrative, and logistical support for the survey was provided by the Primary Health Care Project, the Ministry of Health in agreement with the United States Agency for International Development (USAID). Technical assistance for the survey was provided by the Division of Reproductive Health of the Centers for Disease Control (CDC).

The FHS was designed to assess specific health conditions throughout Swaziland related to: reproduction, family planning, infant/child health, maternal morbidity, behavioral risk factors, selected chronic and infectious disease conditions, and health service utilization. Both estimates of prevalence and general attitudes toward most of these factors were included. The survey population included females (aged 15 to 49) and males (aged 15 to 59). The sample size was sufficient to allow estimates for each of the four regions and also to permit urban-rural comparisons. This was the first time a national level survey has been conducted in Swaziland which includes such comprehensive health status and health service information. Results from this survey provide baseline data for many of the primary health and other major program activities to be conducted by the Ministry of Health in years to come.

The fieldwork started on October 1, 1988 and was completed January 6, 1989. Of the 4,350 homesteads sampled (174 Enumeration Areas with 25 Homesteads selected in each EA) 4,312 (99.1 percent) were found. Of the 4,312 homesteads contacted, interviews were completed for 91.9 percent. All eligible females (15 to 49 years of age) in each homestead were interviewed. A total of 4,341 eligible females were identified and 98.2 percent had completed interviews. Only 1 eligible male (15 to 59 years of age) was selected from each homestead for interviewing. A total of 2,393 homesteads had at least 1 eligible male and 94.9 percent of these males had completed interviews.

Determinants of Demographic Change

The survey sought information on two traditional factors (breastfeeding and postpartum abstinence) which can delay pregnancy, depending on the extent and duration they are practiced. Breastfeeding can delay the susceptibility to pregnancy after a birth by inhibiting the resumption of ovulation and menstruation, and susceptibility to pregnancy can be delayed by practicing postpartum sexual abstinence.

Female respondents who gave birth in the five years preceding the survey were asked if they breastfed that child. Breastfeeding is nearly universal in Swaziland (95 percent of the women breastfed their child). The practice was consistently high for babies born to women across a variety of social status factors. There was no difference, statistically, by residence, region, or education groups.

Nearly three-fourths of the women 3-4 months postpartum were amenorrhoeic; this figure was 45 percent of women 11-12 months postpartum, after which it declined steadily until women were 17-18 months postpartum (17 percent). Sexual abstinence was also practiced for an extended period following birth in Swaziland. More than 86 percent of the women were abstaining 2-3 months after delivery, and over 40 percent were still abstaining 5-6 months after delivery.

On average, women breastfeed their children for 18 months. Women in rural areas breastfeed approximately 2 months longer than women in urban areas (18.3 vs 16.3 months, respectively). There is little difference in breastfeeding duration across the regions. The more educated women breastfeed for shorter durations (16.4 months) than the less educated (19.4 months).

On average, menstruation resumed 10.2 months after delivery. This is about 8 months prior to the mean cessation of breastfeeding, and is consistent with early use of supplemental foods in Swaziland, suggesting that the intensity with which women breastfeed their children is likely reduced by the relatively early introduction of supplemental foods. In general, the relationship between duration of breastfeeding and menstruation is consistent across the socio-economic factors. That is, women who breastfeed longer have longer durations of amenorrhoea.

On average, women abstain from sexual intercourse for 6.6 months after delivery. Abstinence is slightly shorter in rural areas than urban Swaziland, and abstinence is shorter in Shiselweni and Lubombo compared to Hhohho and Manzini. The more educated women had the longest duration of abstinence, whereas women with no formal education abstained for the shortest period.

Fertility and Mortality

The estimated total fertility rate (TFR) from the FHS (5.0) was almost identical to that of the 1986 Census (5.1), and the age-specific fertility rates from the FHS and Census have similar patterns. The urban TFR (3.5) was 1.9 children, on average, lower than the rural rate (5.4). The TFR in Manzini region is lowest (4.6), followed by Hhohho (4.9) and Lubombo (5.2) and highest in Shiselweni (5.4). There is a strong inverse association between fertility and education, as those women with no formal schooling have very high fertility (TFR = 5.5) compared to the women with high school education and above (TFR = 3.1).

Because infant mortality is a key indicator of the general health of children, mortality estimates for infancy and early childhood were important objectives of the FHS. Of the 3,207 births reported by the respondents in the 5 years preceding the survey only 30 were identified as having died. Why were so few child deaths reported? Two possibilities have been suggested: (1) Omission of children who died from the birth history. This is a frequent problem encountered in retrospective surveys in developing countries. Generally, this affects both fertility and mortality estimates--with both being lower than expected. However, the TFR calculated from the FHS (5.0) is almost identical to that reported in the 1986 Census (5.1). Therefore, it does not appear that significant omissions of births occurred in the birth history data from the FHS. Using indirect measurement techniques, the Census reported an infant mortality rate of 97 per 1,000 live births. (2) Reluctance to discuss

children who had died. In four major studies that have been conducted in Swaziland since 1976 estimates of infant mortality calculated from data obtained from direct questions asked of the respondents have been unreasonably low. These studies were: 1976 and 1986 Swaziland Census, 1983 National Nutrition Status Survey and the 1988 FHS. In both the 1983 Nutrition study and 1986 Census, infant mortality estimates calculated by indirect techniques on child survival are most reasonable. Therefore, it appears that women in Swaziland may be reluctant to discuss the death of their children. The reason for this phenomenon remains unclear.

Family Planning

Over 80 percent of females and 88 percent of the males have knowledge of at least one effective method (effective methods include: pill, IUD, condom, injection, foaming tablets, female sterilization, and male sterilization). Knowledge was higher in urban areas than rural areas for females (91 percent vs 79 percent) and males (95 percent vs 86 percent).

Over 30 percent of all women have ever used a method of contraception at some time. The most prevalent method ever used was the pill (19 percent) followed by injection (11 percent) and the IUD (5 percent). Ever use of contraception is higher among women living in urban areas (47 percent) than for women living in rural Swaziland (26 percent).

Prior to the FHS, contraceptive prevalence had been estimated at 4 percent in Swaziland (World Bank Population and Health Sector Review, 1985). However, this estimate was based on a small-scale study conducted in a peri-urban area near Manzini. No national survey, prior to the 1988 FHS, had ever been conducted to verify the 4 percent figure. Overall, 17 percent of all women report current use of contraception, with use over twice as prevalent in urban as in rural areas (28 percent vs 13 percent). Thus, overall use in Swaziland is 4 times higher than previously estimated.

The method-mix pattern is similar for females in urban and rural areas, with the pill and injection ranking first and second, followed by female sterilization and the IUD. Thus, in both urban and rural areas, females report use of highly effective methods. Males are more likely to report current use of condoms (7 percent), followed by withdrawal (4 percent) and rhythm (3 percent). A summary of the major findings on current contraceptive use follows: (1) Current contraceptive use is much higher in urban areas than rural areas for each category of the social and demographic variables examined. (2) In both urban and rural areas, current contraceptive use increases across the age groups up to age 30-34, and then declines. (3) There is a very strong positive association between contraceptive use and education in both the urban and rural areas. (4) In both urban and rural areas, Hhohho and Manzini regions have higher contraceptive use than the Shiselweni and Lubombo regions.

The clinic/health centre is the leading source for the pill, injection, IUD and condom. The Family Life Association of Swaziland (FLAS) and hospitals are

also important providers of these methods. Almost all female sterilizations are performed in hospitals. These patterns generally hold in both urban and rural areas, except that in the urban areas private clinics are also an important source for the pill, injection and IUD.

All current non-users were asked if they desired to use contraception either now or in the future. Forty-five percent indicated their future intention to use contraception, and three-fourths of these women know where to obtain family planning services. Urban intention to use is higher than rural (49 versus 44 percent), and knowledge of service providers is higher among these "intending users". A substantial majority of current non-users aged below 30 years indicate their intention to become users. Education, which we have already seen to be the most striking correlate of ever and current use, is also strongly related to future use intentions among nonusers, with a solid majority of women with more than a primary education reporting their intention to use family planning in the future. Knowledge of sources of service among better educated women who desire to use family planning is also high.

Over 40 percent of the women in Swaziland are in need of family planning services; that is, they are at risk of having an unintended pregnancy. Need for services is higher in rural than urban areas (44 percent vs. 35 percent, respectively). In almost all of the urban/rural comparisons, in need of family planning services was lower in urban than rural areas. Need was over 40 percent for all women in the ages 20-44, and those women with less education had much higher unmet need for services (46 percent) than the higher educated (slightly over 30 percent).

Maternal-Child Health

Immunization coverage was assessed for live born children born in the five years prior to the date of the survey. Immunization status was determined for 3,092 children aged under 60 months. This number includes both children for whom a vaccination card was available and children for whom mothers were able to give a vaccination history, but lacked a card. For the key age group of 12-23 months, 476 children had cards, while for all children aged under 60 months, cards were available for 1909. Questions were asked on the number of doses received of each antigen against tuberculosis (BCG), poliomyelitis, diphtheria-pertussis-tetanus (DPT), and measles.

Coverage ranges from 58 percent to 92 percent for all four antigens for the total target population. Since this summary figure refers to all children from birth to 60 months, it is somewhat misleading. A better overview is obtained from the 1-year age breakdowns. Among children in the 12-23 months' age category, 94 percent have had BCG against tuberculosis, 84 percent have had at least the 3 doses of DPT, 78 percent have 3 doses of polio antigen, and 65 percent have already received their measles immunization.

For cross-national comparisons, and comparing only children having health cards, we find that for the East and Southern region of Africa, Botswana reports the highest BCG coverage, at 99 percent, followed by our findings in the Swaziland FHS at 98 percent in 1988. Using the standard 30-cluster WHO survey methodology, Lesotho has 84 percent coverage. Mozambique was able to carry out the standard WHO survey in two areas in 1988, and found 92 percent coverage in both Lichinga and Mai Mai, which are urban areas of the country. Details are

unavailable on the methodology used by UNICEF in Malawi in 1986, but reported findings for the 12-23 month age category show 99 percent coverage. Looking at children less than five years of age, Swaziland had 98 percent coverage, whereas the Botswana study shows 97 percent coverage for the same year.

Looking at coverage for three doses of DPT in this region of Africa, Swaziland shows 93 percent of children 12-23 months of age are protected in 1988. On a national scale, Botswana follows with 86 percent coverage in 1987, with Lesotho reporting 77 percent coverage in 1988. For children aged less than five years, Swaziland reported 92 percent coverage using card verification from a total of 1,909 children. Similar results in these same countries for both age categories are found for 3 doses of polio vaccine. The highest reported coverage is in Botswana at 97 percent for all children under five years of age.

Measles coverage follows similar trends in these countries for 1987 and 1988. In 1988, both Swaziland and Botswana have very high coverage in the 90th percentile. Lesotho follows with 79 percent coverage. The urban areas of Mozambique that completed a coverage survey in 1988 show Lichinga at 54 percent and Mai Mai at 84 percent coverage for children aged 12-23 months.

In Swaziland over 90 percent of women had been immunized against tetanus during their last pregnancy, and this percentage did not vary greatly among age, education, residence, and regional categories. In no categories did immunization fall below 88 percent, nor exceed 95 percent.

For the 3,092 children less than 60 months of age, 12 percent of the mothers reported that the child had had a fever lasting over two days along with rapid or difficult breathing in the previous month. The incidence was slightly higher in the generally more elevated and cooler regions of Hhohho and Manzini (over 13 percent) than in Shiselweni and Lubombo (under 10 percent). Both urban and rural areas reported 12 percent incidence.

General Health Conditions

In this section, we review some key findings on behavioral risk factors for adults. By "behavioral risks" we mean adverse health-related conditions which are entirely, or to a considerable extent, under the control of the individual. Specifically, we are concerned with smoking, drinking of alcoholic beverages, and behaviors related to hypertension and diabetes.

Only 3 percent of women and 2 percent of men have been told more than once that they have high blood pressure. Overall, nearly one-fifth of the women and men reported having had their blood pressure taken within the past year. Smoking is much less prevalent among women than men in Swaziland. Among women, only 3 percent had ever smoked compared to 25 percent of the men. For both males and females, smoking was higher in urban than rural areas. Females were much less likely than males to have ever or recently consumed alcohol, and drinking was not as heavy. Fourteen percent of women had ever consumed alcohol. Consumption was higher in urban than in rural areas (18 versus 13 percent). Among current and past drinkers, 30 percent self-reported "usually drinking excessively."

All female and male respondents were asked a series of questions concerning their experience regarding a select number of adverse health conditions. Males were three times as likely as females to report ever having had a sexually transmitted disease (STD). Almost 30 percent of the urban males reported having ever had an STD. The reported incidence of fever (for more than 2 days duration during the past month) and severe cough during the past month was somewhat lower for females than for males. Also, males were slightly more likely to have ever been treated for TB than females (4 and 3 percent, respectively).

Knowledge about AIDS was high among all groups of respondents. Over 80 percent of women and 91 percent of men knew of AIDS, with urban levels of knowledge somewhat higher than rural. Knowledge of AIDS was strongly related to educational levels, reaching 96 and 99 percent respectively among women and men having a highschool education or higher.

Among respondents who have heard of AIDS, 24 percent of females and 13 percent of males perceive themselves to have either a strong or very strong chance of contracting AIDS. Nearly 50 percent of males and 35 percent of females do not consider themselves as being at risk at all. Regarding personal behavioral responses to avoid AIDS, most respondents who are aware of AIDS claim to be avoiding behavior which would place them at high risk of AIDS. It is not clear how much this represents what may be perceived as "desired" responses to such questions, versus how much this is a reflection of respondents' previous activity and how much it represents actual changes in activity.

Health Care Facilities Utilization

For seven different health concerns, the survey determined where respondents would prefer to go for care. Over 65 percent of both men and women know that immunizations for children are provided at clinics, yet 34 percent of the women and 31 percent of the men believe they can go to a hospital for immunizations. For children's diarrhea, 53 percent of the women prefer to seek hospital treatment, whereas 34 percent of the men indicated the hospital as the preferred place for service. Children's high fever is also an illness where preference is given to clinics rather than hospitals by women (57 percent versus 43 percent). Men also prefer the clinics to the hospitals at 56 percent to 43 percent. Difficulty in becoming pregnant is less of a "western medicine" related condition or problem, as reflected by the 20 percent of the women and 30 percent of the men who state a preference for seeing a traditional healer.

Almost 51 percent of our female respondents report that members of their households used one or more health provider services or facilities in the past year. Rural households were considerably more likely than urban to avail themselves of such facilities (53.0 versus 43.7 percent). Substantial regional differences are also found. Shiselweni, with 63.6 percent use, ranks by far the highest, with the other three all reporting between 45 and 50 percent of households visiting at least one facility.

I. INTRODUCTION

The 1988 Swaziland Family Health Survey (FHS) was conducted by the Swaziland Ministry of Health. Financial, administrative, and logistical support for the survey was provided by the Primary Health Care Project, the Ministry of Health in agreement with the United States Agency for International Development (USAID). Technical assistance for the survey was provided by the Division of Reproductive Health of the Centers for Disease Control (CDC). This report presents findings for each topic included in the study.

The FHS was designed to assess specific health conditions throughout Swaziland related to: reproduction, family planning, infant/child health, maternal morbidity, behavioral risk factors, selected chronic and infectious disease conditions, and health service utilization. Both estimates of prevalence and general attitudes toward most of these factors were included. The survey population included females (aged 15 to 49) and males (aged 15 to 59). The sample size is sufficient to allow estimates for each of the four regions and also to permit urban-rural comparisons. This is the first time a national level survey has been conducted in Swaziland which includes such comprehensive health status and health service information. Results from this survey will provide baseline data for many of the primary health and other major program activities conducted by the Ministry of Health in years to come.

Objectives of the Survey

The main purpose of the FHS was to meet the needs expressed by the Primary Health Care Project for a statistically valid assessment of the general reproductive and maternal-child health conditions of families in Swaziland. The following guiding objectives were stated at the outset:

1. To provide decision-makers in the Ministry of Health with data for informed policy choices related to:
 - (a) Fertility and infant-child mortality. Estimates of current fertility, levels of unintended fertility and estimates of current infant and child mortality will be obtained.
 - (b) Maternal-child health. Estimates of current breast-feeding practices, diarrhea among children and child immunization for BCG, DPT, Polio, and Measles will be made.
 - (c) Family planning. Knowledge of contraception and the level of current contraceptive use will be estimated. Differentials in contraceptive use across regions and by other social/demographic characteristics will be identified in order to assess program impact and indicate who might benefit from special program efforts.

- (d) Communicable diseases. Knowledge and attitudes towards sexually transmitted diseases (STDs) and acquired immunodeficiency syndrome (AIDS) will be assessed and the probable prevalence of Tuberculosis (TB) and acute respiratory illnesses will be estimated.
- (e) Behavioral risks. Estimates will be made of alcohol use (and abuse), hypertension (high blood pressure), diabetes, and smoking.
- (f) Attitudes toward reproduction. General attitudes toward desired family size, birth spacing, breast-feeding, and contraceptive use will be assessed and differences in attitudes between males and females will be examined.
- (g) Health care facilities utilization. The use of various types of health services and facilities will be determined, so that those lacking adequate services can be identified and programs for their benefit established.

2. To develop the skills and resources necessary to conduct high quality homestead/household surveys in the Government of Swaziland.

3. To increase the capability of agencies in the Government of Swaziland to carry out health research, especially the analysis of survey data.

Questionnaires

Three questionnaires were used in the FHS, the Homestead/Household Questionnaire, the Female Questionnaire and the Male Questionnaire. All three

of these questionnaires were designed to provide the information needed by health and family planning program managers and policy-makers.

The Homestead/Household Questionnaire consisted of a cover sheet and a form for listing all members of the homestead along with certain key items of information about each member, such as name, sex and age. The purpose of the Homestead/Household Questionnaire was to identify all women (15 to 49 years of age) and all men (15 to 59 years of age) who were eligible to be interviewed. All women aged 15-49 in each homestead were interviewed. One man aged 15-59 was randomly selected for interview from among all eligible men in each homestead/household.

The Female and Male Questionnaires are the heart of the FHS. The following information was collected in each:

TOPICS INCLUDED IN 1988 SWAZILAND FHS

<u>TOPIC</u>	<u>Included in the Questionnaire</u>	
	<u>Female</u>	<u>Male</u>
I. Homestead Features		
-Water	X	X
-Toilet Facilities	X	X
-Transportation	X	X
II. Respondent's Background		
-Age	X	X
-Education	X	X
-Marital Status	X	X
III. Behavioral Risks		
-Alcohol Use	X	X
-Hypertension	X	X
-Diabetes	X	X
-Smoking	X	X

TOPICS FOR 1988 SWAZILAND FHS (CONTINUED)

<u>TOPIC</u>	<u>Included in the Questionnaire</u>	
	<u>Female</u>	<u>Male</u>
IV. Fertility		
-5 Year Birth History	X	
-Planning Status	X	
-Attitudes Toward Reproduction		
*Desired Family Size	X	X
*Birth Interval	X	X
*Breastfeeding	X	X
*Contraceptive Use	X	X
V. Maternal-Child Health		
-Breastfeeding/Supplemental Feeding	X	
-Diarrhea	X	
-Child Immunization (BCG, DPT, Polio, Measles)	X	
-Growth Monitoring		
-Tetanus Injection During Last Pregnancy	X	
-Assistance During Last Birth	X	
-Antenatal Care	X	
-Child Diseases (TB, Acute Respiratory, Ear Discharge, Malaria, Epilepsy, Bilharzia, Roundworm)	X	
VI. Family Planning		
-Knowledge of Methods	X	X
-Current Use	X	X
-Reasons for Non-Use	X	
-Demand for Services	X	X
VII. Specific Infectious Diseases		
-STDs	X	X
-AIDS (knowledge and behavior)	X	X
-TB	X	X
-Acute Respiratory Infections	X	X
VIII. Health Service Utilization		
-Have They Been Sick?	X	X
-Where They Go for Services?	X	X
-Accessibility and Cost?	X	X

II. SURVEY METHODOLOGY

The 1988 FHS included representative samples of females and males selected throughout Swaziland. The female sample was a self-weighting two-stage cluster sample scheme based on data from the 1986 Census. The male sample consisted of the random selection of one male (15 to 59 years of age) from each homestead included in the female sample. Details of each sample follow.

Female Selection

Stage 1

Enumeration Areas (EAs) were selected from the 1986 Census with probability proportional to size (PPS). A summary of this selection process follows:

Basic Data

- Desired Sample Size	3,500 Females 15-49
- #F 15-49 in Population	142,291 (.21 x 677,576)
- Sample to be Selected (allow 10% nonresponse)	3,850
- Desired Cluster Size	20 Females Interviewed = 22 Selected

Compute

- Sampling Fraction (f)	$f = 3,850/142,291$ $= 1/37$
- # Clusters (EAs) to Select	$3,850/22 = 175$ (a)
- Sampling Interval (I)	$I = M_i/a$ $M_i = \# \text{ Homesteads}$ $= 103,699/175$ $= 593$

Due to the random start, 174 EAs were actually selected from the 1,080 EAs in the 1986 Census (see Fig II-1). EAs with over 145 homesteads were segmented with a desired segment having about 100 homesteads.

Stage 2

For each selected EA, field checking was done to locate all homesteads. In urban Mbabane and urban Manzini households were used rather than homesteads in EAs where the traditional homestead living arrangement does not exist. Where traditional homesteads were found they were used for both urban and rural EAs. Our definitions of homesteads and households followed the 1986 Census definitions, in which a homestead "... refers to a house or collection of houses found in a common yard or home normally in rural areas," while a household "... refers to family units (sharing of meals being paramount criteria...). There could be more than one household in a homestead, but the reverse cannot be true." Maps and aerial photos obtained from the 1986 Census, through the Central Statistical Office, were used as guides. Once field checking and homestead/household listings were completed, a random start was selected as the beginning of a sequential cluster of 25 homesteads/households. A homestead/household questionnaire was completed, initially, in which the eligible females were identified. All females 15 to 49 in the selected homesteads/households were interviewed.

Male Selection

For each selected cluster of homesteads in the chosen EAs, the Homestead/ Household Questionnaire listed all males by age. Of those males aged 15 to 59, only one was chosen for interview, with probability of selection inversely proportional to the number of males in the homestead/household. The following random number table was used to select the male to be interviewed.

INTERVIEWER: SELECTION OF MALE TO BE INTERVIEWED--ORDER OF LISTING OLDEST TO YOUNGEST MALE,

Eligible Males	Name	LAST DIGIT OF QUESTIONNAIRE #									
		0	1	2	3	4	5	6	7	8	9
1		1	1	1	1	1	1	1	1	1	1
2		2	1	2	1	2	1	2	1	2	1
3		3	1	2	3	1	2	3	1	2	X
4		1	2	3	4	1	2	3	4	X	X
5		2	3	4	5	1	2	3	4	5	1
6		5	6	1	2	3	4	X	X	X	X
7		2	3	4	5	6	7	1	X	X	X
8		8	1	2	3	4	5	6	7	X	X

The man in your household that I need to speak with is _____.

Each male record is, therefore, assigned a weight proportional to the number of eligible males in the homestead. All of the tables in Chapters III - VIII have weighted proportions and means for males, with the unweighted number of cases shown.

Fieldwork

The three questionnaires were pretested from August 6-23, 1988. Prior to pretesting, the questionnaires were translated into SiSwati and then independently back into English to check the accuracy of the translation. Six

interviewers (three female and three male) were used. Over 50 female and male interviews were completed in a rural and an urban Enumeration Area not included in the selected sample. After the pretest the SiSwati versions were then revised accordingly, to reflect required modifications.

For the full survey training, 6 team leaders and 45 interviewers (23 females and 22 males) were trained for 5 days, September 26-30, 1988. At the end of the week, six teams were named. Each team included three female and two male interviewers, in addition to a team leader and driver. Two of the remaining trainees were retained as coders. The fieldwork started on October 1, 1988 and was completed January 6, 1989. Two survey coordinators and an administrative assistant coordinated field and headquarters office activities.

Data Processing

Completed questionnaires were collected every week from the six teams by the field coordinator. Coding, data entry, and machine editing with the use of microcomputers went on concurrently at the Ministry of Health in Mbabane as the field work progressed. The CDC data entry/edit software entitled "Survey" was used for this purpose. Both coding and data entry, which were started in October 1988, were completed by mid-January 1989.

Response Rates

Table II-1 summarizes the outcome of the fieldwork. Of the 4,350 homesteads sampled (174 Enumeration Areas with 25 Homesteads selected in each EA) 4,312 (99.1 percent) were found. Those not found were due to the poor quality of

census maps in 3 EAs, plus some movement of homesteads from the selected EAs. Of the 4,312 homesteads contacted, interviews were completed for 91.9 percent. Refusals were very low, at 1.2 percent, while 5.4 percent were vacant units.

All eligible females (15 to 49 years of age) in each homestead were interviewed. A total of 4,341 eligible females were identified and 98.2 percent had completed interviews. The female refusal rate was less than 1 percent. Only 1 eligible male (15 to 59 years of age) was selected from each homestead for interviewing. A total of 2,393 homesteads had at least 1 eligible male and 95.0 percent of these males had completed interviews. Only 1.2 percent of the males refused to be interviewed.

III. GENERAL POPULATION CHARACTERISTICS

This section includes some summary statistics on female and male respondents, which will be used analytically in subsequent sections. Where possible in this section, comparisons are made between the FHS and data from the 1986 Swaziland Census.

Table III-1 shows that over three-fourths of the population is rural. The primary religious affiliations are Protestant or Zionist (over 80 percent of females and two-thirds of the males). Less than 10 percent of males and females identify themselves as Catholics, while 8 percent of females and 14 percent of males indicate "other" religious preferences. The main source of drinking water used in the homesteads is the river or spring (about one-half

of females and males), followed by piped water and public tap (approximately 20 percent each). Nearly 60 percent of the females and males report their homesteads have either a pit latrine or flush toilet facility. The other homesteads use either the bucket or bush.

The age distribution of females and males from the FHS is compared to that of the corresponding age groups in the 1986 Swaziland Census in Table III-2. Sixty-three percent of the females and 55 percent of the males in the FHS are less than age 30. This is very similar to the distribution found in the 1986 Census, in which 62 percent of the females and 55 percent of the males in the respective age groups are below age 30. Within each region, the female and male age distributions are consistent, generally, between the FHS and the 1986 Census.

A comparison between the FHS and Census in terms of the distribution of the population by sex across the regions is shown in Table III-3. The FHS and Census results are consistent for females; however, compared with the Census, proportions of males in the FHS are higher in Hhohho and Shiselweni, and lower in Manzini and Lubombo. The reason for these differences is not clear, but it is perhaps worth noting that the relative proportion of males and females within each region was much closer in the FHS (maximum difference of 1.2 percent) than in the Census (maximum difference 3.8 percent).

Results in Table III-4 show the percent urban in each region. In Hhohho, Manzini and Lubombo between 28 percent and 29 percent of the population live in urban areas. In Hhohho, most live in the city of Mbabane and in Manzini, most live in the city of Manzini, whereas in Lubombo most live in Company Towns (i.e., Lubombo Ranches, Big Bend, etc.). In Shiselweni only 6 percent of the population lives in urban areas.

The racial composition found in the FHS is very similar to that from the 1986 Census (Table III-5). The overwhelming majority of respondents (98 percent) were black Africans, with the remaining 2 percent being white or other ethnic groups.

The education distributions for females and males found in the FHS and the 1986 Census are compared in Table III-6. For both females and males, the FHS had slightly lower levels of "no education" and slightly higher levels of secondary education than the Census. Table III-7 compares the level of education for females and males for each category of religious preference. Catholic and Protestant males and females are similar, generally, in that over one-half of each group has completed at least secondary education. Zionists have much lower education; three-fourths of the females and over 70 percent of the males have less than secondary education and over one-fourth have no education. The "other" category of religion, which consists primarily of those who answered "no religion", have even lower education than the Zionists. Nearly one-half of both females and males in the "other" category reported no education.

The final part of this chapter presents data on marital status. The concepts of marriage and nuptiality in Swaziland, as in almost all of sub-Saharan Africa, are very different from what, for want of a better term, we will refer to as the "Western" system. (See Caldwell, et al., 1989. Caldwell, following Goody, actually prefers the term "Eurasian" to "Western".) In this non-Western mode, several somewhat overlapping stages and categories of sexual relationships exist. These often start with traditional rites of puberty, which may be regarded as legitimizing sexual activities, through initiation of

sexual activity and sometimes several subsequent stages of premarital relations. These may proceed to pregnancy, and the formalization of a fairly stable relationship, functionally equivalent to and culturally accepted as marriage. This final category of marriage may itself have several stages. In Swazi culture, three sequential stages may be identified in "getting married" according to Swazi custom. These are:

- o lobola--the payment of bride wealth
- o kumekeza--weeping of the bride
- o kugcotshiswa libovu--smearing of the bride with red ochre

From her study of marriage patterns in rural Swaziland, Mbatha (1983) concluded, "Getting married is a long process with several stages which do not form any defined pattern . . . The question 'Are you married?' is an ambiguous question needing a lot of probing if one is not to be misled by the answer." Mbatha found that Swazi women are very inconsistent in identifying themselves as married across these three stages. In addition, she found that it appears to be easier for a woman who had had a child to get married than one who had not had a child. Indeed, among those respondents who were married, 85 percent had had a child prior to their marriage.

We will only present limited data on marital status from the FHS because of the problems identified by Mbatha in determining who is married and when someone got married. We will not attempt to calculate singulate mean age at first marriage (SMAM) from the FHS and rather than use the more typical "currently married or in union" category as a control for much of our analysis we will use focus most of our analysis on all women.

Marital status categories from the FHS and Census are compared in Table III-8. One point should be made prior to discussing these results. The FHS information was based on direct questions asked of respondents, whereas the Census information was obtained from any adult in the homestead. Therefore, given the ambiguity concerning the issue of marital status in Swaziland we should not expect the FHS and Census results to be consistent. Overall, females in the FHS reported a higher percent than the Census in the category "married by Swazi custom." The Census reported a higher percent in the "not married, no children" category than the FHS. In both the FHS and Census, nearly 40 percent of the females reported they were "not married but have had a child." Males in the Census were much more likely to report never married than in the FHS.

Results in Table III-9 examine the marital status differences in Swaziland reported by females across a number of social and demographic characteristics. Urban females are more likely than rural females to report they are "never married but have had a child" and less likely to report "married by Swazi custom." In all four regions, approximately one-third of the females report they are "never married but have had a child." Females in Manzini and Shiselweni are less likely than women in the other regions to report they are presently married by Swazi custom. The less educated females are more likely to be married by Swazi custom than the higher educated, yet in each education category nearly one-third of the females report they have never been married but have had a child. The Zionist and the "other" religion category are most likely to report "married by Swazi custom." However, for each religious group, between 30 percent and 36 percent report that they have "never been married but have had a child."

IV. DETERMINANTS OF DEMOGRAPHIC CHANGE

This chapter is concerned primarily with fertility, and factors influencing its level. In particular, we emphasize findings on fertility and breastfeeding from the 1988 FHS. Our main focus will be on females, and most of the reported findings are based on responses to the female questionnaire, but we also present some female/male comparisons. Data from the FHS are compared, where appropriate, with values from the 1986 Census. This chapter will be comprised of four sections: Exposure to Risk of Pregnancy, Fertility, Fertility Preferences, and Mortality.

A. Exposure to Risk of Pregnancy

This section focuses on factors related to risk of pregnancy and factors which can delay fertility (i.e., sexual intercourse, breastfeeding, post partum amenorrhoea, and abstinence).

Over half of the females (52 percent) age 15-19 reported having had sexual intercourse, and in the age group 20-24 the proportion of females reporting having ever had sex was over 95 percent (Table IV-1). There was no substantial difference in the sexual experience reported by urban and rural females, in any of the age groups. In contrast, sexual experience reported by males was much different from that of females. Males below age 25 are much less likely than females to have reported having had sexual intercourse. At age 15-19, less than 40 percent of the males reported being sexually experienced, compared to over one-half of the females. At age 20-24 less than 90 percent of the males reported being sexually experienced, whereas over 95

percent of the females reported they had had sexual intercourse. After age 24, males are almost universally sexually experienced. Average age at first sexual intercourse corresponds to these differences. Females are nearly two years younger, on average, at first sexual intercourse than males (17.3 years vs 19.0 years). Urban females are slightly older than rural females (17.5 years vs 17.2 years), whereas there is no urban-rural differential for males.

In terms of regional differences, females in Hhohho and Manzini (the more urban regions) have their first sexual intercourse at slightly older ages than females in Shiselweni and Lubombo (Table IV-2). In Hhohho and Manzini average age at first sex for females was 17.7 years and 17.4 years, respectively, whereas in Shiselweni and Lubombo the average was 17.0 years. For males, sexual experience begins earlier in Manzini (average age first sex of 18.5 years) than in the other regions (Shiselweni = 18.9 years, Hhohho and Lubombo = 19.4 years).

Knowledge of risk of pregnancy was determined by asking all female and male respondents a question concerning when a woman is most likely to become pregnant during the menstrual cycle ("When, during her monthly menstrual cycle, do you think a woman has the greatest chance of becoming pregnant?"). The results in Table IV-3 show that only 13 percent of the females and 6 percent of the males had correct knowledge of the fertile period (i.e., "in the middle of the cycle"). Nearly one-third of the women and 37 percent of the men had no idea (i.e., "don't know"). Correct knowledge of the fertile period was low for females and males in both urban and rural areas and in all four regions. Male knowledge was especially low in rural areas and in Shiselweni and Lubombo.

The survey sought information on two factors (breastfeeding and postpartum abstinence) which can delay pregnancy, depending on the extent and duration they are practiced. Breastfeeding can delay the susceptibility to pregnancy after a birth by inhibiting the resumption of ovulation and menstruation, and susceptibility to pregnancy can be delayed by practicing postpartum sexual abstinence.

Female respondents who gave birth in the five years preceding the survey were asked if they breastfed that child. Table IV-4 shows that breastfeeding is nearly universal in Swaziland (95 percent of the women breastfed their child). The practice was consistently high for babies born to women across a variety of social status factors. There was no difference, statistically, by residence, region, or education groups.

Women were asked to recall how many months they breastfed, how many months they were amenorrhoeic, and how long they abstained from intercourse after each birth they had in the 5 years prior to the survey. They were also asked about their current status with regard to these variables. Since it may be difficult for respondents to recall accurately the timing of the events, "current status" estimates were used which refer to whether or not the woman was breastfeeding, amenorrhoeic and/or abstaining from intercourse at the time of the survey, rather than her reported durations for these events. In Tables IV-5 and IV-6, all births within two years before the survey are considered.

Duration of breastfeeding is quite long in Swaziland (Table IV-5). Nearly 90 percent of the women are still breastfeeding after 12 months and over 60 percent of the children delivered 17-18 months ago continue to breastfeed. The return of menstruation for most women did not occur until after one year

following delivery. Nearly three-fourths of the women 3-4 months postpartum were amenorrhoeic; this figure was 45 percent of women 11-12 months postpartum, after which it declined steadily until women were 17-18 months postpartum (17 percent).

Sexual abstinence was also practiced for an extended period following birth in Swaziland (Table IV-5). More than 86 percent of the women were abstaining 2-3 months after delivery, and over 40 percent were still abstaining 5-6 months after delivery. Slightly over 10 percent of the women were continuing to abstain from sexual intercourse 11-12 months after delivery.

The proportions of women protected from pregnancy due to either amenorrhoea or abstinence are shown in the column "postpartum insusceptible" (Table IV-5). Three-fourths of women in Swaziland are insusceptible to pregnancy up to 6 months following delivery and over one-half are insusceptible up to one year following delivery. One-fourth of the women are still protected from pregnancy up to 17-18 months after delivery.

The use of supplemental feeding begins early in Swaziland. Nearly one-third of the women are using supplemental foods within 3 months after delivery, over three-fourths by 3-4 months, and supplemental foods are used by almost all women 5-6 months after delivery.

The mean number of months of breastfeeding, postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility by socio-economic characteristics of the mothers are shown in Table IV-6. The prevalence/incidence method for estimating mean duration of an event was used to calculate these durations for births that occurred in the 24 months prior to the date of the survey (Mosley et al., 1982).

On average, women breastfeed their children for 18 months (Table IV-6). Women in rural areas breastfeed approximately 2 months longer than women in urban areas (18.3 vs 16.3 months, respectively). There is little difference in breastfeeding duration across the regions. The more educated women breastfeed for shorter durations (16.4 months) than the less educated (19.4 months).

In addition to information on breastfeeding practices, all females and males were asked about their attitude concerning length of breastfeeding ("How old do you think a child should be before the mother stops breastfeeding him/her?"). Tables IV-7A and IV-7B show the desired length of breastfeeding reported by females and males to be between 21-23 months, approximately 3-5 months longer than the actual. There was little difference in the desired length of breastfeeding for females or males by residence, region or education.

On average, menstruation resumed 10.2 months after delivery. This is about 8 months prior to the mean cessation of breastfeeding (Table IV-6), and is consistent with early use of supplemental foods in Swaziland (Table IV-5), suggesting that the intensity with which women breastfeed their children is likely reduced by the relatively early introduction of supplemental foods. In general, the relationship between duration of breastfeeding and menstruation is consistent across the socio-economic factors. That is, women who breastfeed longer have longer durations of amenorrhoea.

On average, women abstain from sexual intercourse for 6.6 months after delivery. Abstinence is slightly shorter in rural areas than urban Swaziland, and abstinence is shorter in Shiselweni and Lubombo compared to Hhohho and Manzini. The more educated women had the longest duration of abstinence, whereas women with no formal education abstained for the shortest period.

When the overlapping period of amenorrhoea and abstinence are combined, the average number of months a woman is protected from pregnancy following her latest delivery is one year. The insusceptible period averaged between 11-13 months for each socio-economic factor examined.

B. Fertility

Two measures of fertility will be presented: (1) mean number of children ever born, and (2) total fertility rate (TFR). The cohort-period technique (Goldman and Hobcraft, 1982) and a direct measure of births that occurred between January 1984 and December 1988 were used to estimate the TFR from the FHS.

Table IV-8 shows the mean number of children ever born according to the 1988 FHS and the 1986 Census. Focusing first on the 1988 FHS results, mean parity was higher at every age in rural areas than in urban areas, as expected. For women in age groups 40-44 and 45-49 (an estimate of completed fertility), women living in rural Swaziland had over one child more, on average, than women living in urban areas ($5.8 - 4.5 = 1.3$, and $5.6 - 4.5 = 1.1$). Second, comparing mean parity from the FHS and the 1986 Census shows older women in the FHS (age 30+) may have underreported their total number of children ever born. For age groups 30-34 and 35-39 mean parity reported in the Census is higher by about half a child compared to the FHS. For age groups 40-44 and 45-49, mean parity reported in the Census is approximately one child higher, on average, than the FHS. One further indication that older women underreported their fertility in the FHS was the decline or lack of change in mean parity, both urban and rural, between age groups 40-44 and 45-49.

Mean number of children ever born by region, education and religion is shown in Table IV-9. Hhohho and Manzini have the lowest fertility which may be indicative of influences from Mbabame and Manzini. A strong negative association was found between education and fertility. And, Catholics had higher reported fertility than the other religious groups.

The estimated TFR from the FHS (5.0) was almost identical to that of the 1986 Census (5.1) (Table IV-8), and the age-specific fertility rates from the FHS and Census have similar patterns (Figure IV-1).

The urban TFR (3.5) was 1.9 children, on average, lower than the rural rate (5.4) (Figure IV-2). The relationship between fertility and other social-demographic variables is shown in Table IV-10. The TFR in Manzini region is lowest (4.6), followed by Hhohho (4.9) and Lubombo (5.2) and highest in Shiselweni (5.4). There is a strong inverse association between fertility and education, as those women with no formal schooling have very high fertility (TFR = 5.5) compared to the women with high school education and above (TFR = 3.1). Fertility also differs by religious affiliation. Catholics and Protestants have relatively low fertility (TFR = 4.4 and 4.3, respectively) compared to Zionists, who have substantially higher fertility (TFR = 5.7). The "other" religious category, the majority of whom stated no religious affiliation, also have somewhat higher fertility (TFR = 5.2).

C. Fertility Preferences

The FHS included a number of questions related to attitudes toward family size and fertility. Table IV-11 and Figure IV-3 shows the average desired family

size reported by women and men across a variety of socio-demographic factors. Women desire 4.2 children on average, which is nearly 1 child lower than the estimated TFR of 5.0. The urban desired average corresponds to the actual urban TFR (3.5 children), but the rural desired (4.4) is lower by 1 child than the rural TFR (5.4). The desired number of children is lower than the corresponding TFR for each remaining category (region, religion, and education). In most cases the actual rate exceeds the desired level by between one-half and one child, on average. Male desired family size levels are considerably higher than the females for each category examined. In general, the male desired family size averages are much closer than the female averages to the actual TFRs for each category, which leads to the question of how fertility decisions are made, and by whom?

Table IV-12 shows who decides family size issues in Swaziland. Both females and males indicate males have a very influential position in terms of decision making, relative to females. Females indicate the decision is often made jointly with their husbands but 37 percent say "husbands" make the decision. In contrast, over half the men indicate they are the decision makers with one-third indicating the decision is jointly made. This pattern does not vary greatly across the socio-demographic factors examined except for education. The more educated women and men are the most likely to indicate the decision is jointly made (69 percent of females and 55 percent of males) with husbands being important secondary decision makers.

All female and male respondents were also asked their attitude toward ideal length of birth interval ("How old do you think it is best for a child to be before another child is born?"). Results in Table IV-13 show most of the women believe the interval should be approximately 36 months. Females in the

urban area desire a slightly longer interval than women in rural areas (38 months vs 35 months, respectively). Also, the desired birth interval length in Hhohho and Manzini (36-38 months) was slightly longer than the desired length in Shiselweni and Lubombo (34 months). Higher educated women desire a much longer interval (39 months) than the less educated (34 months).

For men, the desired birth interval is slightly less than for women (34 months vs. 36 months, respectively) (Table IV-14). Men in Manzini and Lubombo desired longer birth intervals (35-36 months) than men in Hhohho and Shiselweni (33-34 months). Higher educated men desired slightly longer birth intervals (35 months) than the less educated (34 months).

All women were asked 2 questions concerning the planning status of all of their births that occurred in the 5 years prior to the date of the survey: "When you became pregnant did you want to become pregnant?" If not, "Was it that you wanted no more children, or that you just wanted to wait longer before another pregnancy?" On the basis of responses to these questions, each birth was classified as either "planned", "mistimed", or "unwanted". Planned births were defined as those that were desired; mistimed were classified as those that were desired, but at some time in the future; and unwanted births were those not desired, even at a future time. Using this scheme, the mistimed and unwanted births can be combined as an estimate of unplanned births.

Based on these definitions, two-thirds of the births were planned, 26 percent mistimed, and 8 percent unwanted (Table IV-15). In the urban area, 44 percent of the births were unplanned, including 13 percent that were unwanted, whereas

in rural areas approximately one-third were unplanned with only 8 percent unwanted. Planning status also varied across the regions, as Hhohho and Manzini had higher levels of unwanted and unplanned births than Shiselweni and Luhombo. Also, the more educated women were more likely to report their births as unwanted or unplanned compared to the other education groups.

D. Mortality

Because infant mortality is a key indicator of the general health of children, mortality estimates for infancy and early childhood were important objectives of the FHS. Female respondents were asked a series of questions concerning each of their children born in the 5 years preceding the survey. Included in this series were three questions related to mortality: "Is (name) still alive?"; "IF DEAD: How old was (name) when he/she died?"; and "What illnesses did (name) have when he/she died?" Of the 3,207 births reported by the respondents only 30 were identified as having died. Why were so few child deaths reported? Two possibilities have been suggested:

1. Omission of children who died from the birth history. This is a frequent problem encountered in retrospective surveys in developing countries. Generally, this affects both fertility and mortality estimates--with both being lower than expected. However, the TFR calculated from the FHS (5.0) is almost identical to that reported in the 1986 Census (5.1). The Census reported an infant mortality rate of 97 per 1,000 live births. Therefore, it does not appear that significant omissions of births occurred in the birth history data from the FHS.

2. Reluctance to discuss children who had died. In four major studies that have been conducted in Swaziland since 1976 estimates of infant mortality calculated from data obtained from direct questions asked of the respondents have been unreasonably low. These studies were: 1976 and 1986 Swaziland Census, 1983 National Nutrition Status Survey and the 1988 FHS. In both the 1983 Nutrition study and 1986 Census, infant mortality estimates calculated by indirect techniques on child survival are most reasonable. Therefore, it appears that women in Swaziland may be reluctant to discuss the death of their children. The reason, for this phenomenon remains unclear, though reluctance to discuss deaths among infants is a well recognized cultural trait in Swazi society.

V. FAMILY PLANNING

A. Knowledge of Contraceptive Methods

All women aged 15-49 and all men aged 15-59 were asked if they had ever heard of the different contraceptive methods available in Swaziland. Specifically, they were asked to spontaneously name all the methods they knew, and then were also asked, "Have you ever heard of (Method 'X')?" The local and popular names of each method they had not spontaneously identified were read by the interviewer. In this chapter, knowledge includes both spontaneous and prompted.

Table V-1, shows that 82 percent of females and 88 percent of the males have knowledge of at least one effective method (effective methods include: pill, IUD, condom, injection, foaming tablets, female sterilization, and male sterilization). Knowledge was higher in urban areas than rural areas for females (91 percent vs 79 percent) and males (95 percent vs 86 percent). Females in Manzini had the highest reported knowledge of methods (87 percent) whereas females in the other 3 regions had knowledge near 80 percent. For males knowledge was similar in Hhohho, Manzini, and Lubombo (near 90 percent) and lowest in Shiselweni (83 percent). Males consistently had higher reported knowledge of contraceptive methods than females, both by residence and region.

There was wide variation in knowledge of individual methods for females and males as shown in Table V-2. Eighty percent of females had knowledge of the pill and 75 percent had knowledge of injection. About 6 in 10 females had knowledge of the IUD and condom and 43 percent knew of female sterilization. One in five females had knowledge of withdrawal, rhythm and foaming tablets. Only 10 percent of females knew of male sterilization. Females in urban areas had greater knowledge of each individual method than females in rural areas.

Males were most knowledgeable about condoms (78 percent), the pill (71 percent), and injection (62 percent) (Table V-2). Nearly half of the males also had knowledge of female sterilization (45 percent) and withdrawal (44 percent), but only one-third had knowledge of rhythm (34 percent) or the IUD (30 percent). As for females, males living in urban areas had greater knowledge of each method than males living in rural Swaziland.

A comparison of levels of knowledge for females and males shows: (1) Females had greater knowledge than males of the pill, injection, and IUD; however,

males had greater knowledge than females of condom, female sterilization, withdrawal, rhythm, foaming tablets, and male sterilization. (2) The male/female differential in knowledge of individual methods held in both urban and rural areas. (3) Level of knowledge of each method was greater, for males and females, in urban than in rural areas.

Tables V-3 to V-12 describe the level of knowledge for individual methods for females and males across a variety of social and demographic factors (i.e., region, age, education, marital status and religion). Rather than give detailed discussion to each topic, the highlights of each will be discussed.

Region -- For females, knowledge of modern methods (i.e., pill, injection, IUD, condom and female sterilization) was highest in Manzini (Table V-3). Over three-fourths of the males have knowledge of condoms in each region (Table V-4). Male knowledge of other modern methods was high in Hhohho and Lubombo but relatively low in Shiselweni.

Age -- As a general pattern, especially for modern methods (i.e., pill, injection, IUD and condom) level of knowledge peaks at age 25-29, then gradually declines over the older age groups (Table V-5). Knowledge by women of female sterilization is highest in the 30-39 age groups. Over 80 percent of males between ages 20-44 had knowledge of condoms (Table V-6). Knowledge of the pill and injection peaked at age group 30-34, whereas knowledge of female sterilization was highest at ages 35-49.

Education -- For both females and males, there is a strong positive association between level of knowledge of individual methods and education (Tables V-7 and 8).

Marital Status -- As expected, females in the never married, no children group had the lowest level of knowledge of methods of any of the marital status groups (Table V-9). For males, over three-fourths of each group had knowledge of condoms, including the never married (Table V-10). Males in the "Married Civil Rite" group had the highest level of knowledge of all methods.

Religion -- For both females and males, Zionist and the "other" category (almost all stated "no religion") had lower levels of knowledge of all methods than the Protestant and Catholic groups (Tables V-11 and 12).

As we will see, these socio-demographic variations in overall and method-specific knowledge are reflected quite consistently in our subsequent analyses of differentials in ever and current use of contraception, to which we now turn.

B. Ever Use

As Table V-13 and Figure V-1 shows, 31 percent of all women have ever used a method of contraception at some time. The most prevalent method ever used was the pill (19 percent) followed by injection (11 percent) and the IUD (5 percent). Ever use of contraception is higher among women living in urban areas (47 percent) than for women living in rural Swaziland (26 percent). Nearly one-third of the women in urban areas have used the pill and 17 percent have used injection. In the rural areas, the pill was the most common method

ever used (15 percent), followed by injection (9 percent). For males, condom was the most common method ever used (13 percent), especially in urban areas (22 percent). Ever use, we thus see, is quite substantial, particularly in comparison to reported use levels in most of sub-Saharan Africa. More important than ever use, however, is current use of contraception.

C. Current Use

Prior to the FHS, contraceptive prevalence had been estimated at 4 percent in Swaziland (World Bank Population and Health Sector Review, 1985). However, this estimate was based on a small-scale study conducted in a peri-urban area near Manzini. No national survey, prior to the 1988 FHS, had ever been conducted to verify the 4 percent figure. Table V-14 presents data on current use of contraception for all women (age 15 to 49) and all men (age 15 to 59). Overall, 17 percent of all women report current use of contraception, with use over twice as prevalent in urban as in rural areas (28 percent vs 13 percent), (Figure V-2). Thus, overall use in Swaziland is 4 times higher than previously estimated.

Method-mix distributions are shown in Table V-14 and Figure V-3. For females, use of the pill and injection are the most prevalent (4.8 percent and 4.4 percent, respectively). Female sterilization and IUD use are also moderately high among females in Swaziland (2.4 percent and 1.5 percent, respectively). The method-mix pattern is similar for females in urban and rural areas, with the pill and injection ranking first and second, followed by female sterilization and the IUD. Thus, in both urban and rural areas, females report use of highly effective methods. Males are more likely to report

current use of condoms (7 percent), followed by withdrawal (4 percent) and rhythm (3 percent).

The remaining tables in this section (Tables V-15 to V-22) describe current use for all females age 15-49 for a number of social and demographic factors. Table V-15 shows there are substantial regional differences in the level of use. Hhohho and Manzini have almost twice as high a level of use as Shiselweni (21 and 18 percent, respectively vs 11 percent), with Lubombo midway between (15 percent). For all four regions, the pill and injection are the most prevalent methods used. Further, in Hhohho and Manzini female sterilization is moderately high compared to Shiselweni and Lubombo; and in Hhohho, the IUD and withdrawal have moderate levels of use.

Across age groups of females, contraceptive use increases up to age group 30-34 (23 percent) then declines over the older ages (Table V-16). The method-mix also changes over the ages. Below age 35, the pill and injection are the most prevalent methods used, whereas after age 35 female sterilization is the most prevalent method. By age group 45-49, 10 percent of the women report they have been sterilized.

The level of current contraceptive use across current marital status categories is shown in Table V-17. The highest level of use is among those women who were married by civil rite (36 percent). These women represent only 7 percent of the total female population. The level of contraceptive use among the two largest categories, i.e. women married by Swazi custom or women never married, but with a child (representing together nearly 68 percent of all women in Swaziland) was between 18 and 19 percent. Females who were never

married and had never had a child had the lowest reported level of current use at 6 percent. In terms of method-mix, the Married Civil Rite, Married Swazi Custom and Never Married With Child groups had similar patterns with the pill, injection and female sterilization being the most prevalent methods used.

Current contraceptive use was highest among women with 2 to 4 live births and lowest among those women who had not had a birth (Table V-18). The pill and injection were the most popular methods used by women with fewer than 3 births, whereas the higher parity women also used female sterilization (especially among those women with 5+ births).

A very strong positive association was found between current contraceptive use and education (Table V-19 and Figure V-4). Over one-third of the women with high school or greater education were currently using contraception, compared to barely 10 percent of women with no education. In terms of individual method use, the less educated were most likely to use injection or female sterilization, whereas the higher educated used four effective methods (pill, injection, female sterilization and the IUD).

Those women who were Catholic or Protestant were much more likely to be currently using contraception (22 percent and 20 percent, respectively) than the Zionists and "others" (12 and 17 percent) (Table V-20). Method mix did not appear to be associated as strongly with religion as did overall levels of use. Interestingly, use by Catholics was higher than for other groups for all effective methods combined.

Table V-21 gives a summary of overall use by residence for a variety of social and demographic factors. A number of summary points can be made from this table.

- Current contraceptive use is much higher in urban areas than rural areas for each category of the social and demographic variables examined.
- In both urban and rural areas, contraceptive use increases across the age groups up to age 30-34, and then declines.
- There is a very strong positive association between contraceptive use and education in both the urban and rural areas.
- In both urban and rural areas, Hhohho and Manzini regions have higher contraceptive use than the Shiselweni and Lubombo regions.

Results in Table V-22 and Figure V-5 show how Swaziland compares in terms of contraceptive use to other countries in the Southern African region. The level of use in Swaziland is about half that of Botswana and Zimbabwe (30 percent and 32 percent, respectively) but 3 times higher than that reported for Lesotho at a somewhat earlier date (5 percent). Very effective methods are used in Botswana, Zimbabwe and Swaziland, with the pill the most prevalent method used in each country.

Respondents who had ever used contraception were asked their age at first use. Overall, only 27 percent of the women were less than age 20 at first use, with an average age of 23 years (Table V-23). Sixteen percent were over

age 30 at first use. Women living in urban areas were slightly more likely to begin use earlier than women living in rural areas. Women with secondary or higher education were more likely than the less educated to begin use before age 25. Average age at first use was between 21-23 years for those with secondary or higher education, whereas the average age for women with less education was 24-25 years. Use begins earlier in Hhohho and Manzini than the other regions, with Shiselweni having the highest average age at first use, 25 years.

D. Source of Contraceptive Methods

Respondents were asked where they obtained their current method of contraception. The results in Table V-24 and Figure V-6 show the source for the most prevalent individual methods used in Swaziland. The clinic/health centre is the leading source for the pill, injection, IUD and condom. The Family Life Association of Swaziland (FLAS) and hospitals are also important providers of these methods. Almost all female sterilizations are performed in hospitals. These patterns generally hold in both urban and rural areas, except that in the urban areas private clinics are also an important source for the pill, injection and IUD.

Sources of individual methods are shown by Region in Table V-25. In Hhohho, the clinic/health centre is the leading source for the pill, injection and IUD. Also, in Hhohho the hospital, FLAS and private clinic are important secondary sources for these methods. In Manzini, the clinic/health centre is the leading source for the pill and injection, but FLAS is also a very important source. In Shiselweni and Lubombo, the clinic/health centre is the most important source for the pill and injection.

E. Non-use and Desire to Use

The large gap between current use (17 percent) and ever use (31 percent) suggests that method discontinuation may be substantial among females in Swaziland. Results in Table V-26 shows the most recent method used by women who were not currently using. The pill (55 percent), injection (25 percent) and IUD (9 percent) were the methods used by the previous users. This pattern was consistent across all of the social and demographic categories examined (i.e., residence, region and education).

Table V-27 looks at the reasons previous users gave for stopping use of the method they last used. For the pill, injection and IUD, around 60 percent of previous users report that they discontinued use because of negative side effects. Some former users had discontinued because they wished to become pregnant, while others no longer felt themselves to be at risk, due to menopause or lack of sexual activity. About 11 percent indicated they were too "lazy" to continue.

All current non-users were asked if they desired to use contraception either now or in the future. Forty-five percent indicated their future intention to use contraception, and three-fourths of these women know where to obtain family planning services. Table V-28 summarizes some of the important differentials in "intention to use" family planning among current nonusers. These findings have clear programmatic implications, even though they generally correspond to expected patterns. We highlight the following.

- a) Urban intention to use is higher than rural (49 versus 44 percent), and knowledge of service providers is higher among these "intending users".
- b) A substantial majority of current non-users aged below 30 years indicate their intention to become users.
- c) Education, which we have already seen to be the most striking correlate of ever and current use, is also strongly related to future use intentions among nonusers, with a solid majority of women with more than a primary education reporting their intention to use family planning in the future. Knowledge of sources of service among better educated women who desire to use family planning is also high.

Table V-29 shows the method of choice among non-users who desire to use. Nearly one-half of the women desire to use injection and slightly over one-fourth desire to use the pill. Most of the respondents state that they would obtain their desired method at a public clinic or health centre (69 percent), followed by a hospital (20 percent). In urban areas, FLAS is cited as the likely source of services by 25 percent of these respondents.

Both men and women were asked: "Who should decide whether a person should use a method of contraception?" A number of interesting differences in opinion are found between the sexes in Table V-30 and Table V-31. First, women most likely believe the decision should be made by both the husband and wife (34 percent), followed by the wife only (27 percent), then the husband (26 percent) (Table V-30). In contrast, 38 percent of the men believe the husband should decide, followed by both husband and wife (Table V-31). Only 6 percent

of the men believe the "wife, only" should make the decision. Second, 20 percent of the men, compared with 9 percent of the women, do not believe in using contraception. Third, rural men are the most likely to believe husbands only should make the decision, and they are the most likely to not believe in using contraception. Rural women are not as adamant as rural men in these views, but they follow the same pattern, generally. Fourth, less educated men and women either don't believe in using contraception or believe the husband should make the decision. Nearly one-half of higher educated women and 54 percent of higher educated men believe the decision should be jointly made between husbands and wives. Fifth, for both men and women, those married by Swazi custom and the separated, widowed, and divorced are the most likely not to believe in using contraception and to believe the husband should make the decision.

The data indicate that certain segments of the population have greater need of family planning services than others. A woman was characterized as "in need of services" (or "at risk of an unplanned pregnancy") if she was not currently pregnant, stated that she did not desire to become pregnant, and she was not using any method of contraception for reasons not related to pregnancy, subfecundity, or sexual activity. Thus, the women defined here as "in need of services" are noncontracepting, fecund, sexually active women (regardless of marital status), who were not currently pregnant and did not desire to become pregnant at the time of the interview.

According to the above definition, 42 percent of the women in Swaziland are in need of family planning services (Table V-32). In need of services is higher in rural than urban areas (44 percent vs. 35 percent, respectively). In

almost all of the urban/rural comparisons, in need of family planning services was lower in urban than rural areas. Need was over 40 percent for all women in the ages 20-44, and those women with less education had much higher need for services (46 percent) than the higher educated (slightly over 30 percent). In general, the level of need was similar in the 4 regions, except that urban women in Hhohho had much lower need (29 percent) than any of the other groups. Women married by Swazi custom had higher need for services than women married by Civil Rite. Further, over one-half of the women who had never been married, but had had a child were in need and one-fifth of the never married, with no children were in need.

Only 19 percent of the women who are in need of family planning services have ever used contraception; but 56 percent currently desire to use (Table V-33). This suggests that the level of contraceptive use in Swaziland could increase rapidly. Service programs need to be developed to meet this unmet need. The desire to use contraception among the in need groups is very high in both urban and rural areas, in all 4 regions, and especially among those women with secondary or higher education. Also, two-thirds of women who have never been married but have had a child desire to use contraception.

In summary, the family planning findings can generally be considered to be encouraging, in terms of higher than expected ever and current use. The findings also present a challenge, in terms of what remains to be done to improve knowledge, create further demand and satisfy existing demand for services, particularly among the relatively disadvantaged rural and less educated segments of the population.

VI. MATERNAL-CHILD HEALTH

A. Immunization Coverage

Immunization coverage was assessed for live born children born in the five years prior to the date of the survey. Immunization status was determined for 3,092 children aged under 60 months. This number includes both children for whom a vaccination card was available and children for whom mothers were able to give a vaccination history, but lacked a card. For the key age group of 12-23 months, 476 children had cards, while for all children aged under 60 months, cards were available for 1909. Questions were asked on the number of doses received of each antigen against tuberculosis (BCG), poliomyelitis, diphtheria-tetanus-pertussis (DPT), and measles.

In 1988, the Swaziland Expanded Program for Immunizations (SEPI), issued a revised immunization schedule which follows the WHO (World Health Organization) guidelines to target younger children for immunization. The 1988 Swaziland Family Health Survey collected information on immunization coverage based on the former schedule since not enough time had elapsed to adequately implement the new schedule. Therefore, the number of doses considered for primary immunizations are three doses of polio, three doses of DPT, and one dose each of measles and BCG, ideally given before a child reaches his/her first birthday.

Table VI-1 shows that coverage ranges from 58 percent to 92 percent for all four antigens for the total target population. Since this summary figure refers to all children from birth to 60 months, it is somewhat misleading. A

better overview is obtained from the 1-year age breakdowns also shown in this table. Among children in the 12-23 months' age category, 94 percent have BCG against tuberculosis, 84 percent have had at least the 3 doses of DPT, 78 percent have 3 doses of polio antigen, and 65 percent have already received their measles immunization.

Table VI-1 shows a remarkable similarity between rural and urban coverage. It is common to see higher coverage in the urban areas because of greater availability of services. Rural SEPI campaigns carried out in October 1987 appear to have compensated for the limited number of services available outside the urban centers of the country. The more urban region of Hhohho has lower immunization coverage, especially seen in measles at 48 percent compared to higher coverage at 69 percent in overwhelmingly rural Shiselweni. This high coverage is evidence of the effectiveness of the rural immunization campaign activities carried out in late 1987, as is the pattern of immunization by mothers' educational levels.

Even more revealing is the coverage level seen for children at and above the target ages for immunization. This is shown for each antigen group, both nationally and by region, in Tables VI-2 to VI-5. Particularly worth noting before we look at regional differentials is the age coverage for measles, in

Table VI-5. Here we see that by 9-11 months, 44 percent of the infants have already received the measles immunization, and this is up to 64 percent (with 6 percent "don't know") for the 12-17 month old children. National measles morbidity trends are consistent with the increased emphasis in recent years on immunization against this disease.

As noted, Tables VI-2 through VI-5 give immunization levels for each antigen by age, for the total survey population under 60 months of age. BCG (Table VI-2) remains high at 92 percent for the country although scar verification was not carried out during the survey. Shiselweni and Manzini have the highest level of coverage at 95 percent, followed by Lubombo at 91 percent and Hhohho at 87 percent. The regional difference in immunization levels for DPT3 and Polio3 (Tables VI-3 and VI-4) are similar, ranging between 54 and 59 percent. Again, the most "rural" region, Shiselweni, has the lowest not immunized coverage at 10 percent while the most "urban" population in Hhohho has nearly 20 percent not protected by a least one dose of DPT. Hhohho shows the lowest coverage for measles immunizations (Table VI-5) at 48 percent, with Lubombo at 56 percent, Manzini at 61 percent, and a high in the Shiselweni region at 59 percent. This finding shows 20 percent higher coverage in Shiselweni than in the Hhohho region which is interesting since Hhohho is the region where health care facilities are perceived to be more easily accessible and available. Parents appear to be taking more responsibility for getting their children immunized in the Shiselweni region.

Among the children aged less than 5 years, 55 percent have had three doses of DPT, (Table VI-3), and 53 percent have received three doses of oral polio vaccine, (Table VI-4). Mothers reported 58 percent of their children under five years of age had received a measles injection, (Table VI-5).

The "don't know" response in Table VI-5 is highest in Hhohho at 16 percent whereas all other regions show less than 4 percent of the mothers not knowing whether their children were immunized. This may indirectly reflect the rural campaign's success and contrast the more urban area of Hhohho where coverage relies on the promotion of daily clinic sessions. Campaigns typically go to the population whereas clinic sessions rely on the population knowing where and when to go for immunizations.

Table VI-6 and Figure VI-1 compare immunization coverage for the 12-23 month old age category in the 1988 FHS and the 1987 WHO "standard 30" cluster survey, using health card verification of immunization. These findings suggest that there has been considerable progress in immunization coverage in the recent past, through the rural mass immunization campaigns.

For purposes of comparison, it should be noted that there were 476 children aged 12-23 months in the 1988 FHS whose immunization status was card verified, compared with 214 reported in the 1987 WHO Cluster survey. Coverage among children lacking card verification is much lower. For example, for the FHS, among the 209 children without card verification, their mothers reported only 8 percent had measles immunizations. "Don't know" whether the child had received measles vaccination accounted for another 23 percent.

Table VI-7 shows levels of immunization coverage among several countries in the southern African region. Data collected from Botswana, Lesotho, Mozambique, Malawi, Swaziland, and Zimbabwe are compared, to indicate the levels of protection against the childhood diseases in the 12-23 months age category.

In the East and Southern region of Africa, Botswana reports the highest BCG coverage, at 99 percent, followed by our findings in the Swaziland FHS at 98 percent in 1988. Using the standard 30-cluster WHO survey methodology, Lesotho has 84 percent coverage. Mozambique was able to carry out the standard WHO survey in two areas in 1988, and found 92 percent coverage in both Lichinga and Mai Mai, which are urban areas of the country. Details are unavailable on the methodology used by UNICEF in Malawi in 1986, but reported findings for the 12-23 month age category show 99 percent coverage. Looking at children less than five years of age, Swaziland had 98 percent coverage, whereas the Botswana study shows 97 percent coverage for the same year.

Looking at coverage for three doses of DPT in this region of Africa, Swaziland shows 93 percent of children 12-23 months of age are protected in 1988. On a national scale, Botswana follows with 86 percent coverage in 1987, with Lesotho reporting 77 percent coverage in 1988. For children aged less than five years, Swaziland reported 92 percent coverage using card verification from a total of 1,909 children. Similar results in these same countries for both age categories are found for 3 doses of polio vaccine. The highest reported coverage is in Botswana at 97 percent for all children under five years of age.

Measles coverage follows similar trends in these countries for 1987 and 1988. In 1988, both Swaziland and Botswana have very high coverage in the 90th percentile. Lesotho follows with 79 percent coverage. The urban areas of Mozambique that completed a coverage survey in 1988 show Lichinga at 54 percent and Mai Mai at 84 percent coverage for children aged 12-23 months.

B. Diarrheal Diseases

Diarrhea and resulting dehydration is reported as the leading cause of hospital deaths in children less than five years of age in Swaziland, (CCCD Swaziland 1988 Country Summary.) The case definition for diarrhea used at the time of the Swaziland FHS survey was three or more loose watery stools per day over the course of 24 hours or more. The major mode of transmission is fecal contamination of water and food. Typically, children of weaning age (around 12 months) have a higher incidence of diarrheal disease. Unsanitary food handling, inadequate hygiene, and poor environmental conditions contribute to the spread of infection and resulting diarrheal disease.

Beyond health interventions to ameliorate these situations, a number of other preventive actions can be undertaken to reduce the incidence and severity of diarrhea among children. The promotion of breastfeeding and improved weaning practices (Table IV-4), measles immunizations (Table VI-5), use of plenty of clean water (Table VI-12) and proper use of latrines (Table VI-11), all assist in the prevention of severe diarrhea.

Every mother was asked whether each of her children under five years of age had had diarrhea during the two weeks prior to the interview. Twenty-four percent of the 3,092 children less than five years of age in the survey reported an episode of diarrhea (Table VI-8). Prevalence of diarrhea increases with the number of people living in the homestead. In a homestead with 9 or more members, diarrhea incidence is 25 percent for those children less than five years of age. For those children in households with one or two children the incidence is 20 percent, where socioeconomic standards may be

better than homesteads with 5 or more children. Homesteads with motorcycles, cars or vans, and trucks report slightly lower rate of diarrhea, which follows from a higher socioeconomic standard of living. However, socioeconomic differentials were generally not very pronounced.

When children start crawling and begin weaning around one year of age, diarrhea becomes more common. This is clearly shown in Table VI-9 by the highest prevalence among children aged 13-36 months. Shiselweni has a high of 34 percent, Hhohho reported 31 percent, Lubombo had 26 percent, and Manzini reported 22 percent. The older children (37+ months) have the lowest prevalence in each region, with 9 percent in Manzini, 14 percent in Lubombo, and 19 percent in Hhohho and Shiselweni. These older children are at lower risk of fecal contamination, (Table VI-9). There is not a large difference in prevalence between urban and rural residence.

Ideally, oral rehydration therapy is promoted as treatment of first choice for dehydration due to diarrhea. Selective use of antibiotics and IV's should be reserved for use in severe diarrhea. There has been a steady increase of importation of the standard Oral Rehydration Salts (ORS) into Swaziland since 1986. The Control of Diarrheal Diseases Program (CDD) in Swaziland routinely distributes two packets for outpatient cases. Actual utilization by mothers for episodes of diarrhea reported during the time of the survey remains low. Table VI-10 shows the highest per cent of children using ORS packets for dehydration due to diarrhea is in Shiselweni at 18 percent followed by 15 percent in Manzini, 14 percent in Hhohho, and 13 percent in Lubombo. Table VI-10 shows a home prepared solution consisting of sugar-salt-water to be used in 66 percent of the cases, with Shiselweni again having the highest reported utilization at 70 percent of the reported cases of diarrhea.

Table VI-11 compares type of homestead toilet facility by region and residence for rates of reported prevalence of diarrhea. Mothers with children under 60 months of age were asked whether they used flush, latrine, or bucket and other toilet facilities. Overall, incidence of diarrhea varied only moderately by type of facility. Children in households with access to a flush toilet had the lowest incidence, at 18 percent, compared with levels of 23-24 percent for latrine and "other" facilities. Among the respondents who have access to flush toilets, Lubombo reported the highest prevalence of diarrhea at 23 percent; otherwise, as expected, incidence of diarrhea was lower where flush toilets were accessible. Urban-rural incidence of reported diarrhea are very similar.

Incidence of diarrhea was compared for each homestead water source in Table VI-12. Where households received piped water, the incidence was under 22 percent, compared with 27 percent for well water and 24 percent for "other" sources (i.e. surface and rainwater).

C. General Child Health

The Swaziland Expanded Program for Immunization routinely vaccinates women of childbearing age against tetanus to protect their newborns from neonatal tetanus. Mothers were asked if they received an injection during pregnancy to prevent their baby from getting tetanus or convulsions after birth. Table VI-13 shows that over 92 percent of women had been immunized against tetanus during their last pregnancy, and that this percentage did not vary greatly among age, education, residence, and regional categories. In no categories did immunization fall below 88 percent, nor exceed 95 percent.

To more adequately assess health care needs for children less than five years of age, mothers were asked questions on occurrence of specific health problems in the month before the interview. Findings are presented in Tables VI-14 to VI-20.

Respiratory infections are among the most common causes of death in childhood in the developing world. The high mortality is associated with greater danger of obstructive inflammatory changes in childrens' small air passages.

Respiratory infections have been classified to include colds, tonsillitis sometimes with pharyngitis and otitis media, croup, bronchitis and pneumonia. While there is no direct relationship between low environmental temperature and respiratory infections, there is an indirect association, through increased opportunities for the spread of droplet infections, where inclement weather leads to crowding in poorly ventilated accommodations. Childhood respiratory infections are reported to be a common pediatric condition in Swaziland.

For the 3,092 children less than 60 months of age, Table VI-14 shows that 12 percent of the mothers reported that the child had had a fever lasting over two days along with rapid or difficult breathing in the previous month. The incidence was slightly higher in the generally more elevated and cooler regions of Hhohho and Manzini (over 13 percent) than in Shiselweni and Lubombo (under 10 percent). Both urban and rural areas reported 12 percent incidence.

Table VI-15 looks at the incidence of respiratory infections by age.

Incidence was highest for children aged 6-12 months, particularly in urban areas and in Manzini and Hhohho. Children above two years of age had a lower total incidence than younger children.

Tables VI-16 and 17 address the question of motor development among children under 5 years of age in Swaziland. Mothers were asked if each of their children were walking and talking. Normally, children begin to walk around the age of one year, and failure to walk by age 2 indicates developmental problems. Table VI-16 shows that Hhohho has the highest rate of reported cases of not yet walking at 7 percent of children 2 years and older. The reported proportion of children still not walking in the urban areas was 6 percent, compared with 4 percent for rural children.

Children less than 12 months of age not talking, shown in Table VI-17, is between 93-96 percent, which follows normal development patterns for this age category. Children 13-24 months that were reported not talking were 21 percent. This includes children who could be considered to be "late" talkers. About 5 percent were reported not talking after two years of age, with only minor regional and residential variations in this adverse developmental indicator.

Schistosomiasis is suspected to be a serious problem in Swaziland. Hhohho reports the highest proportion of cases of blood in the urine, indicative of Schistosomiasis among children less than five years of age at 3 percent (Table VI-18). The incidence of blood in the urine increases overall with increasing age of the child. There is no difference in incidence for blood in urine between urban and rural residence.

Table VI-19 shows that 8 percent of the children were reported to have passed roundworms within the month prior to the interview. Urban prevalence was over 12 percent, compared with under 8 percent in rural areas. Prevalence increased with age. Under one year of age there are very few cases of passing

roundworms whereas once children begin crawling the increase is substantial. There was considerable regional variation, with the highest roundworm infestation prevalence reported for Hhohho, with almost 12 percent, compared to Shiselweni, which was lowest, with only 5 percent.

A large proportion of mothers reported children with ear discharge (Table VI-20). The overall incidence of ear discharges in the past month was over 15 percent. More than double the proportion occur in rural children at 17 percent than urban children at 8 percent. Shiselweni reports the highest percentage at 20 percent, with Hhohho following at 16 percent, Manzini at 13 percent and Lubombo at 11 percent.

VII. GENERAL HEALTH CONDITIONS--ADULTS

A. Behavioral Risk Factors

In this section, we review some key findings on behavioral risk factors for adults. By "behavioral risks" we mean adverse health-related conditions which are entirely, or to a considerable extent, under the control of the individual. Specifically, we are concerned with smoking, drinking of alcoholic beverages, and behaviors related to hypertension and diabetes.

Table VII-1 provides an overview of some of the behavioral risks reported by adult females and males. Only 3 percent of women and 2 percent of men have been told more than once that they have high blood pressure. Overall, nearly one-fifth of the women and men reported having had their blood pressure taken within the past year. Smoking is much less prevalent among women than men in Swaziland. Among women, only 3 percent had ever smoked compared to 25 percent of the men. For both males and females, smoking was higher in urban than rural areas. Almost four-fifths of the women who have "ever smoked" reported they were current smokers. However, half of these women report smoking five or fewer cigarettes per day. In contrast, of male respondents who had ever smoked, over 90 percent were current smokers. About half of these men smoked less than ten cigarettes per day.

Females were much less likely than males to have ever or recently consumed alcohol, and drinking was not as heavy (Table VII-1). Fourteen percent of women had ever consumed alcohol. Consumption was higher in urban than in rural areas (18 versus 13 percent). Among current and past drinkers, 30 percent self-reported "usually" drinking excessively.

While only 1.4 percent of ever drinkers (and less than 0.2 percent of all women) reported having driven under the influence of alcohol in the past month, 7.2 percent of these women reported having been driven by someone else who may have consumed too much alcohol in the past month. This proportion was notably higher in the urban than rural areas (12.4 versus 5.2 percent). Among men, by comparison, the reported proportion of ever-drinkers was 33 percent, of whom 81 percent had had a drink in the last week. Among all current drinkers (i.e., excluding those who have had no alcohol in the past year), about 28 percent reported being heavy drinkers. Among current

drinkers, almost 4 percent reported that they had driven while possibly under the influence of alcohol, and 7 percent reported riding with a driver who was in this condition.

Regarding diabetes, while less than 3 percent of females reported having diabetes, another 17 percent responded that they were not sure or did not know whether they had diabetes. The percentages for males were very similar.

B. Specific Infectious Diseases

In this section we review key findings on selected health conditions, including infectious diseases, of the adult female and male populations. Table VII-2 provides an overview of some of the major categories of diseases or their symptoms.

All female and male respondents were asked a series of questions concerning their experience regarding a select number of adverse health conditions. Major findings are summarized in Table VII-2. Males were three times as likely as females to report ever having had a sexually transmitted disease (STD). Almost 30 percent of the urban males reported having ever had an STD. The reported incidence of fever (for more than 2 days duration during the past month) and severe cough during the past month was somewhat lower for females than for males. Also, males were slightly more likely to have ever been treated for TB than females (4 and 3 percent, respectively).

Table VII-3 presents the regional distributions of some of these conditions among females and males. On all four adverse health conditions, namely STDs, fever, severe cough, and treatment for TB, Hhohho region females reported considerably higher levels than any other region. For males, levels of fever and cough were similar in Hhohho, Shiselweni and Lubombo (slightly over 30 percent) but lower in Manzini (27 percent). About one-fifth of males in Hhohho, Manzini and Shiselweni reported ever having STDs, compared to 27 percent in Lubombo. Reported treatment for TB was between 3-5 percent in each region.

Among both males and females, gonorrhoea ("drop") was the most frequently cited STD, accounting for two-thirds of all female and five-sixths of all male cases (Table VII-4). Second was syphilis ("cauliflower"), accounting for 14 percent of female and 6 percent of male STDs. "Likhubalo" and other diseases were relatively more frequently cited by females than males. Not surprisingly, there was far less experience with STDs among younger than older respondents, as seen in Table VII-5. Among both males and females, STDs were reported by only 3 percent of 15-19 year old respondents, followed by a rapid rise with increasing age, particularly among males, amongst whom 38 percent of 25-29 year olds reported past STD episodes.

As noted in Table VII-2, about 24 percent of women, compared with 31 percent of men, had experienced a fever of two or more days duration in the past month. Similarly, men reported a somewhat higher incidence of severe cough in the past month than women (29 versus 22 percent). For both sexes and both sets of symptoms, the reported incidence was somewhat higher among rural than urban residents.

A strong correlation was found between having had fever and having had a severe cough in the past month. For example, while 24 percent of women had experienced fever, 65 percent of these women had also experienced a severe cough, compared with only 9 percent of those who had no fever. Another way of looking at this is that almost 70 percent of women had had neither a cough nor fever in the past month, while 15 percent had had both a cough and a fever, and 17 percent had had one or the other health problem (tables not shown).

A similar association was found among males, except that males reported a slightly higher level of one or both health problems in the past month.

Incidence of these health problems was not strongly associated with age, though both women and men aged 20-34 were somewhat less likely to report illness than were respondents in the younger and older age categories.

Reported treatment for tuberculosis was somewhat higher among males than females (4.2 versus 2.9 percent), with part of this difference accounted for by the inclusion in the sample of males aged 50-59 years. Among females, there was no clear relationship between age and treatment for TB, whereas for males increasing age (and therefore exposure) was strongly associated with increases in treatment, so that men aged over 40 years were more than twice as likely as men under 30 years of age to have undergone such treatment (Table VII-6).

C. Knowledge of AIDS

Knowledge about AIDS was high among all groups of respondents (Figure VII-1). Table VII-7 shows that 84 percent of women and 91 percent of men knew of AIDS, with urban levels of knowledge somewhat higher than rural. Knowledge of AIDS was strongly related to educational levels, reaching 96 and 99 percent respectively among women and men having a highschool education or higher.

More important than mere knowledge or awareness of AIDS is knowledge about the transmission of the disease, and behavioral changes to minimize risk of transmission. Table VII-8 gives the distribution of responses to questions on various ways some people believe AIDS may be transmitted. These responses, asked only of people who knew of AIDS, show that considerable misinformation on modes of transmission exists. For example, 28 percent of females and 23 percent of males incorrectly believe that handshaking or hugging can transmit the disease, and 55 percent of females and 72 percent of males believe that insect bites can transmit it. On the more positive side, 87 percent of males are aware that male homosexual intercourse can spread the disease, and 94 percent of females and 96 percent of males recognize that heterosexual intercourse with an infected partner can transmit it.

Among respondents who have heard of AIDS, 24 percent of females and 13 percent of males perceive themselves to have either a strong or very strong chance of contracting AIDS. Nearly 50 percent of males and 35 percent of females do not consider themselves as being at risk at all (Table VII-9). Regarding personal behavioral responses to avoid AIDS, most respondents who are aware of AIDS claim to be avoiding behavior which would place them at high risk of

AIDS (Table VII-10). It is not clear how much this represents what may be perceived as "desired" responses to such questions, versus how much this is a reflection of respondents' previous activity and how much it represents actual changes in activity.

VIII. HEALTH CARE FACILITIES UTILIZATION

Health care facility utilization, or why people choose to go to certain types of health care providers for specific problems is an important consideration in planning national strategies to implement new interventions and improve already existing service delivery systems. The Swaziland FHS looked at factors that influence patterns of health facility utilization.

Table VIII-1 shows, for seven different health concerns, where respondents would prefer to go for care. Over 65 percent of both men and women know that immunizations for children are provided at clinics, yet 34 percent of the women and 31 percent of the men believe they can go to a hospital for immunizations. For children's diarrhea, 53 percent of the women prefer to seek hospital treatment, whereas 34 percent of the men choose the hospital as the preferred place for service. Children's high fever is also an illness where preference is given to clinics rather than hospital, (57 percent versus 43 percent). Men also prefer the clinics to the hospitals at 56 percent to 43 percent. Difficulty in becoming pregnant is less of a "western medicine" related condition or problem, as reflected by the 20 percent of the women and 30 percent of the men who admit preference in seeing a traditional healer.

Table VIII-2 summarizes the reported proportion of households in which any member visited at least one type of health care provider facility in the past year.

The top row of Table VIII-2 and Figure VIII-1 shows that 51 percent of females reported that household members had used one or more health providers or facilities. Most commonly used were government clinics, with 38 percent of all households reporting at least one visit, followed by government hospitals, with 29 percent. Traditional healers ranked next, with 22 percent of all households visiting at least once, followed by 17 percent to Mission clinics, 11 percent to private clinics and 8 percent to either private or mission hospitals.

The second row shows the same data, but in terms of proportions only of those households whose members visited any facility during the preceding year. The percentage of visits for this population to each type of provider was, of course, correspondingly higher.

Males tended to report somewhat lower overall household use of health facilities. Thus, compared with the 51 percent of households reporting attendance based on female reports, the corresponding figure for males was 49 percent. The relative proportions attending different types of providers remained very similar for males and females.

The remainder of this section will report only the female data related to health care facility utilization and its correlates. Satisfaction with the services received by attenders appears to be high at all facilities (Table VIII-3). Except for visits to traditional healers, between 72 and 79 percent expressed high levels of satisfaction, and most of the remainder reported that they were "fairly satisfied". Only between 6 and 8 percent expressed dissatisfaction, and this was based in most cases on feelings that they were not treated well by the provider.

Reported levels of satisfaction with visits to traditional healers were not quite as high, with over 16 percent expressing dissatisfaction, and another 24 percent reporting only "fairly satisfied". However, even for this category of service provider, almost three-fifths of attenders reported they were "very satisfied".

Who Uses Health Facilities?

We have observed that almost 51 percent of our female respondents report that members of their households used one or more health provider services or facilities in the past year. Table VIII-4 shows us that rural households were considerably more likely than urban to avail themselves of such facilities (53.0 versus 43.7 percent).

Substantial regional differences are also found. Shiselweni, with 63.6 percent use, ranks by far the highest, with the other three all reporting between 45 and 50 percent of households visiting at least one facility.

Regional differences in attendance at different types of clinics were also reported (Table VIII-5). Among households visiting any type of facility, government clinics ranked highest in each region, with household attendance ranging from 89 percent in Shiselweni to only 57 percent in Manzini.

Attendance at government hospitals paralleled this finding, with 72 percent attendance in Shiselweni, and only 42 percent in Manzini. However, attendance at private clinics and at private or mission hospitals ranked highest in Manzini.

What accounts for observed differentials in use? One can speculate on a number of factors which may contribute to these findings, with such factors relating particularly to geographic and economic accessibility of various types of providers, and socio-economic and cultural factors. Subsequent tables focus on some possible explanatory variables, and their relationships with use of different types of providers.

Table VIII-6 looks at the relationship of use of any type of facility with a major socio-economic variable which is also an indicator of access to health services, i.e., ownership by the household of a car or van. We find that ownership of such a vehicle is associated with a higher utilization of health facilities, in rural and even more strongly in urban areas. In urban areas 52 percent of households with motorized vehicles attended such facilities, compared with 41 percent of households lacking such items.

When we turn to the relationship between car ownership and attendance at government clinics, among households attending any provider, this picture is reversed, however, with car owners being somewhat less likely to attend government clinics than are households lacking this item (Table VIII-7). In the previous table we saw that attendance at any facility is higher in rural than in urban areas. This table shows us that government clinic attendance is particularly high in rural compared with urban areas (77.0 versus 60.4 percent). The complementary finding is that attendance at private facilities is relatively higher for urban users and for households owning cars or vans (table not shown).

Source of drinking water for the household is an indicator of relative socio-economic status. Tables VIII-8 to VIII-12 explore the relationship between attendance at different types of health providers and source of drinking water available to the household, for urban and rural populations, and for each of the four regions. To simplify the presentation of results, the "source of drinking water" is collapsed into "piped", which refers to water piped either into the home or into the compound or yard, versus "other", which includes all other sources. Of the latter, the major source is rivers or other surface supplies.

Turning first to attendance at any health provider facility, which as previously noted included about 51 percent of households reported by female respondents, Table VIII-8 shows us that people with piped water were generally less likely to have made use of health facilities (46.9 percent) than those lacking such access to piped water (51.9 percent). Since piped water is much more common in urban areas, this finding appears consistent with the earlier finding that urban use of health providers in the past year is considerably lower than rural (43.7 versus 53.0 percent). Table VIII-8 also suggests, however, that the overall negative association between piped water and use of health facilities is both indirect and spurious, since within residential and regional subgroupings this relationship does not hold up. Indeed, within both the urban and rural strata, households having piped water are actually slightly more likely to have used health facilities than are others. This is also true for two of the four regions.

Table VIII-9 provides further insights to these findings by summarizing the proportions of all households attending any type of facility who attended each type of facility or provider, by whether the household had piped water or made use of other sources of drinking water.

This table shows that government facilities, and particularly government clinics, received greater use in areas lacking access to piped water, which generally supports the conclusion that such facilities are used more heavily where socio-economic status, with its correlates of access to services, is lower. Conversely, private clinics were more than twice as likely to be used by households with piped water as with other sources (40 versus 16 percent). Mission clinics also appear disproportionately to serve the more disadvantaged populations, as do traditional healers.

Table VIII-10 helps explain these findings, and disentangle factors associated with use or non-use of specific types of providers. This table juxtaposes levels of attendance at government and private clinics, for urban versus rural residence, and for the four regions, by source of drinking water.

Here we see that attendance at government clinics is consistently higher, across all regional and residency categories, for households lacking piped water. Conversely, the finding that attendance at private clinics is far greater for households of the higher socio-economic status represented by having piped water is found to hold strongly for all residency and regional groups.

The relationship of source of water with attendance at government hospitals versus private or mission hospitals is less clearcut (Table VIII-11). In both sets, attendance is slightly lower for households with piped water. Within residency categories, urban populations with piped water were significantly less likely to visit these facilities than were households without such access. In rural areas, however, government hospitals were more likely to be visited by people with piped water. This may simply reflect the fact that the relatively few people in rural areas who have piped water are located in close

proximity to such government hospitals, which also may have piped water. Within regions, the relationship varies without any clear pattern, and presumably reflects the availability of these facilities more than any other factor. Perhaps the most interesting finding is that Shiselweni has by far the highest reported level of government hospital attendance, and this holds regardless of the source of drinking water, and that this contrasts with the almost total lack of visits to private or mission hospitals in that region, presumably due to lack of access to such facilities.

Reported use of traditional healers was much more likely where access to piped water was lacking (47 versus 27 percent; Table VIII-12). This table also shows us that rural use of traditional healers was almost twice as high as urban (47 versus 25 percent), and that within each region, use of traditional healers was notably lower among households with piped water than among those using other water sources.

Access to services, in terms of time taken to reach providers, is clearly one determinant of choice of service provider. The relative accessibility of government services is undoubtedly one factor influencing their greater use relative to private clinics and hospitals in rural areas. However, Table VIII-13 shows us that even among households visiting government clinics, it takes much longer on average to reach such clinics in rural than in urban areas. For instance, we note that in urban areas less than one third of respondents require half an hour or more to reach a government clinic, while in rural areas about two-thirds take this long to reach the government clinic, and one third require over an hour to reach the clinic.

Table VIII-14 reveals when government facilities are perceived open for service delivery. Overall, they are correctly viewed as being open for service delivery in the morning hours. Two-thirds of the Hhohho respondents viewed hospitals to be open in the morning, with 60 percent of the Manzini residents, 55 percent of the Shiselweni residents and 51 percent of the Lubombo residents perceiving hospitals to be open during this time of day.

Table VIII-15 shows that overall, 19 percent of the female respondents ever used the services of a traditional healer. Hhohho shows 27 percent of the respondents who report ever using a traditional healer. All the other regions have 15 percent of women with children less than five years of age who have ever used a traditional healer. Twenty percent of the rural population report having used traditional healers compared to 14 percent in the urban areas. Education plays an important factor as 28 percent without any formal education use traditional healers compared to only 10 percent of the respondents with a high school education or higher. Use of traditional healers as a "first resort" was only 4 percent overall, and below 3 percent in urban areas.

Who usually decides whether a family member with a health problem should visit a service provider is shown in Table VIII-16. The largest proportion of respondents replied that they themselves were the decision maker. Joint decisions with spouse also ranked high, as did decisions by spouses and other relatives.

We noted earlier (Table VIII-2) that only about half of all households reported that they had used a health facility in the previous year. The vast majority (95 percent) of those who did not seek assistance simply felt no

need, since there had been no sickness in the family during that period (Table VIII-17). Only 1 percent indicate that the reason they did not go was because they did not know where to go.

Women were asked the type of assistance they sought for the delivery of their babies. Overall, in Table VIII-18, half (50 percent) reported using a trained nurse/midwife for assistance. Doctors delivered only 6 percent. "Other" types of assistance, including Gogos and traditional birth attendants (TBAs), are reported to assist in 38 percent of the deliveries. Shiselweni reports the highest proportion of "others" at 47 percent with Lubombo following at 34 percent, Manzini with 33 percent and Hhohho at 29 percent. Important differences are noted between urban and rural delivery patterns. Doctors and trained midwives assist with 81 percent of urban, but only 40 percent of rural deliveries. In rural areas, 40 percent of deliveries are assisted by "others", including TBAs.

Over half (53 percent) of recent deliveries occurred in hospitals according to Table VIII-19. Forty-three percent are delivered in the home. A higher percent deliver in hospital in the Hhohho region, (61 percent) and in Manzini (59 percent), than in Shiselweni (43 percent) or Lubombo (49 percent). This could be explained by the distribution of facilities available in each region. Over half of the deliveries occur in the homes in Shiselweni (57 percent), which is viewed as the most "rural" region of Swaziland.

IX. CONCLUSIONS AND IMPLICATIONS

This Final Report of the Swaziland Family Health Survey has presented a comprehensive, yet not exhaustive, overview of major findings from all segments of the first national survey of overall health status of children and adults. The findings are intended to provide a baseline for health planning for the coming years. They also provide a challenge for the coming years, by helping to define what yet remains to be achieved.

On the one hand, the findings serve to corroborate existing evidence of substantial progress already made in several aspects of the overall effort to improve the population's health, and thereby its socioeconomic well being. We note in particular the evidence of progress in combatting childhood diseases, and in increased use of family planning and child-spacing services, as indicated by contraceptive prevalence.

On the other hand, the findings also indicate that much more remains to be done in all aspects of health, as Swaziland works toward the goal of "HEALTH FOR ALL". The survey also shows considerable regional and residential disparities in health status, and in access to health services, which must be addressed by national and regional health planners.

While this report has shown the potential for obtaining the types of programmatic data required for planning of health intervention strategies, through broad-coverage surveys it has also demonstrated some of the shortcomings of this approach. We note in particular that efforts to obtain accurate and reliable information on levels and correlates of infant mortality

did not succeed. This suggests the need for a careful rethinking of questions on infant deaths, and perhaps a quite different methodological approach, given the Swazi sociocultural setting, to obtaining valid information on this critical topic.

The objective of this survey has not simply been to provide baseline data, but rather to have that data used for informed planning and decision-making. In concluding, we briefly address the steps already taken and still ahead, for ensuring that these findings do indeed yield such practical results.

First, we note that within 3 months of the conclusion of fieldwork for this survey, in January 1989, a Preliminary Report containing particularly salient findings had already been produced. This report was distributed widely to relevant Ministry of Health and other government staff, as well as to other interested governmental and non-governmental staff.

Second, in late June 1989, a 2-day National Seminar was held in Mbabane, to review survey findings, and to consider through a set of workshops on the second day the implications of these findings for each of the major health sectors. In advance of the National Seminar, preliminary draft copies of this Final Report were distributed to key officials, and to seminar and workshop presenters, and a briefing was held for the Minister of Health. Following the Seminar, the "Proceedings" were compiled into a volume entitled, "Final Report: National Seminar--Family Health Survey". This report also contained the recommendations of each of the Working Groups for subsequent activity in each area of concern.

A major recommendation, endorsed by Seminar participants, was that there should be a series of regional workshops, in which further regional analyses would be performed, and implications of these findings considered individually for each of the four regions.

While key findings required by health planners and managers have already been disseminated widely, some additional steps to ensure further dissemination both within and outside Swaziland are underway, and can be carried forward by readers of this Final Report.

In this connection, we note that the full data set is available to investigators in Swaziland for further detailed analyses on particular topics. In addition, subject to clearance from the relevant Ministry of Health Officials in Swaziland, outside investigators may also be interested in conducting such analyses. There have already been some presentations of findings at professional health meetings, and papers are in preparation on specific topics. Some key findings from the March 1989 "Preliminary Report" have already been summarized in one widely distributed population periodical.

The findings in this report have relevance not only for their prime audience, which is the "Health Community" of Swaziland, but also for other national planners within the country, and indeed for all scholars and practitioners interested in progress in the health and wellbeing of African populations. It is to these workers, and to the populations they seek to serve, that this

.

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ATTACHMENT 1

SAMPLING ERRORS AND DESIGN

Survey sampling is a selection method where the population from which the chosen sample to be analyzed has a finite (countable) number of member elements. Nonsampling error and sampling error are the two types that comprise the total error in survey sampling.

Nonsampling error is usually caused by procedure mistakes and is attributable to the nonsampling parts. Examples of this would be interviewing the wrong household, data entry errors, differences in the interviewers, and problems with the questions themselves. These types are difficult to evaluate statistically and impossible to avoid entirely. Preventive measures are used to minimize this source of error.

Unlike nonsampling problems, sampling error can be evaluated statistically. The difference between an estimate and an expected value is the variable error and can be different for different samples from the same survey. The variability observed among all possible samples in the same design is known as the sampling error for a given population. The unit of measure for sampling error is the "standard error" for the statistic of interest. Useful statistics might include the standard error of the mean or standard error for a proportion or a percentage. The unit of standard error is derived from the square root of the variance of the statistic across all possible samples of

equal size and design. Confidence intervals can be computed from the standard error that would include a large part of the population being estimated. Since it is usually impractical to measure every member of a population, adequate samples that are randomly chosen can accurately reflect the composition of the population. A conventionally acceptable confidence interval is the value of two "standard errors" on either side of the mean average for a number of interest. The limits of both Swaziland surveys are two standard errors above and below the mean for the high and low limit respectively.

The method of choosing members of a sample determines the design of a survey. The most basic design utilizes simple random sampling, a method of probability sampling in which a sample of a specific number of elements is randomly chosen without replacement from a study population. If simple random sampling had been used to select members in the Swaziland surveys, the standard error could have been derived from conventional computer program languages such as SAS or SPSS. A more complex two stage sampling design was used and calculation of more difficult formulas were required. A package procedure called SESUDAAN, developed by Research Triangle Institute, was used to compute the sampling error.

SESUDAAN computes the standard error by using Taylor Series Linearization, a calculus derivation easily adapted to the computer and well known in statistical literature. A two stage sampling design can be thought of as taking a sample from a fixed number of previously selected samples. The individual elements are referred to as the "primary sampling units" or PSU's.

The second level (or sample) of the samples is called the stratum. The standard error can be calculated by taking the square root of the variance derived from the following general formula:

$$\text{var}(r) = \frac{1-f}{x^2} \sum_{h=1}^H \frac{m}{m-1} \left[\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right]$$

given that $r = y/x$, $z = y - rx$ and $z = y - rx$ also,

n represents the stratum from 1 to H

m_h is the total number of PSU's in the h-th stratum,

y_{hi} is the sum of the values of variable y in PSU in the h-th stratum,

x_{hi} is the sum of the number of cases in PSU i in the h-th stratum

f is the overall sampling fraction, usually negligible

SESUDAAN also calculates the "design effect" for estimates of different survey designs. The design effect is defined as the ratio between the standard error using a given sample design and the standard error that would result if simple random sampling had been used. A value for the design effect that is greater than 1 indicates that the increase in sampling error is due to a more complex and less statistically efficient design. A value of less than 1 signifies that the design is more efficient with less error than in simple random sampling.

The following tables display values for variables of interest extracted from the survey. The male Swaziland proportions are given in total, followed by regional values. The female tables come next with regional subdivisions and more data about contraception. The design effect for the female variables is consistently valued at 1, assuming simple random sampling.

In viewing the male and female surveys for all regions, the sampling errors are relatively small which means that the sample sizes are large enough for the variables to be reliable. An example of this would be that for males of all regions of Swaziland, the proportion living in urban areas (URBAN), is 0.218677 with standard error of 0.0048560 or approximately 21.87 percent with standard error of 0.486 percent. A 95 percent confidence interval for URBAN can be calculated by adding and subtracting 2 standard errors from the proportion to get the high and low limits. This would give a high limit of 0.2284 and a low limit of 0.2090 or about 22.8 percent and 20.9 percent.

As the surveys are divided into 4 basic regions, the standard error increases for the variables of interest. An illustration of this would be the value of the standard error for URBAN for Hhohho region males being 0.0105 compared with 0.0049 for total males. As the sample size decreases, the standard error increases. It may be repeated at this point that standard error is an evaluation based on the randomness of the sampling procedure and cannot measure nonsampling error. The previous calculations of confidence limits can be made for the other variables of interest.

LIST OF SELECTED VARIABLES FOR THE SWAZILAND

SURVEY OF FEMALES

NAME	ESTIMATE	VARIABLE	BASE POPULATION
REGION(1)	PROPORTION	HHOHHO	ALL WOMEN
REGION(2)	PROPORTION	MANZINI	ALL WOMEN
REGION(3)	PROPORTION	SHISELWENI	ALL WOMEN
REGION(4)	PROPORTION	LUBOMBO	ALL WOMEN
EDUC(1)	PRPORTION	NONE	ALL WOMEN
EDUC(2)	PROPORTION	PRIMARY	ALL WOMEN
EDUC(3)	PROPORTION	SECONDARY	ALL WOMEN
EDUC(4)	PRPORTION	HIGHER EDUCATION	ALL WOMEN
AGEG(1)	PROPORTION	15-19 YR OLD	ALL WOMEN
AGEG(2)	PROPORTION	20-24 YR OLD	ALL WOMEN
AGEG(3)	PROPORTION	25-29 YR OLD	ALL WOMEN
AGEG(4)	PROPORTION	30-34 YR OLD	ALL WOMEN
AGEG(5)	PROPORTION	35-59 YR OLD	ALL WOMEN
AGEG(6)	PROPORTION	40-44 YR OLD	ALL WOMEN
AGEG(7)	PROPORTION	45-49 YR OLD	ALL WOMEN
URBAN	PROPORTION	URBAN	ALL WOMEN
RURAL	PROPORTION	RURAL	ALL WOMEN
CUUS	PROPORTION	NOW USING METHOD	ALL WOMEN
EJUS	PROPORTION	EVER USED ANY METHOD	ALL WOMEN
PILL	PROPORTION	USING PILL	ALL WOMEN
IUD	PROPORTION	USING IUD	ALL WOMEN
INJECT	PROPORTION	USING INJECTION	ALL WOMEN
FEMSTER	PROPORTION	FEMALE STERILIZATION	ALL WOMEN
SMOKE	PROPORTION	EVER DRINK ALCOHOL	ALL WOMEN
AIDSKING	PROPORTION	KNOWLEDGE OF AIDS	ALL WOMEN

PROPORTIONS AND CONFIDENCE LIMITS OF CATEGORICAL VARIABLES
 SWAZILAND SURVEY FOR FEMALES, NO DESIGN EFFECT
 ALL REGIONS

NAME	PROPORTION	STANDARD ERROR	LOW LIMIT	HIGH LIMIT	SAMPLE SIZE
REGION	0.292185	0.00450165	0.283182	0.301188	4261
REGION	0.260033	0.00447353	0.251086	0.268980	4261
REGION	0.241023	0.00437653	0.232270	0.249776	4261
REGION	0.206759	0.00390996	0.198939	0.214579	4261
EDUC	0.216381	0.00615162	0.204078	0.228684	4261
EDUC	0.405069	0.00773514	0.389599	0.420540	4261
EDUC	0.280685	0.00697408	0.266737	0.294633	4261
EDUC	0.097864	0.00442459	0.089015	0.106714	4261
AGEG	0.237972	0.00642787	0.225117	0.250828	4261
AGEG	0.222718	0.00631006	0.210098	0.235338	4261
AGEG	0.172964	0.00590464	0.16115	0.184773	4261
AGEG	0.121802	0.00505469	0.111693	0.131912	4261
AGEG	0.103966	0.00460625	0.094754	0.113179	4261
AGEG	0.084722	0.00416574	0.076390	0.093053	4261
AGEG	0.055855	0.00344440	0.048967	0.062744	4261
URBAN	0.230462	0.00400541	0.222452	0.238473	4261
RURAL	0.769538	0.00400541	0.761527	0.777548	4261
CUUS	0.165923	0.00561266	0.154698	0.177149	4261
EUUS	0.307205	0.00683303	0.293539	0.320871	4261
PILL	0.047641	0.00330123	0.041039	0.054244	4261
IUD	0.014785	0.00182238	0.011140	0.018430	4261
INJECT	0.044121	0.00329007	0.037541	0.050701	4261
FEMSTER	0.024407	0.00231404	0.019779	0.029035	4261
SMOKE	0.022765	0.00240504	0.017955	0.027575	4261
DRINK	0.139873	0.00553963	0.128794	0.150953	4261
AIDSKN	0.838301	0.00553876	0.827223	0.849378	4261

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LIST OF SELECTED VARIABLES FOR THE SWAZILAND
SURVEY OF MALES

NAME	ESTIMATE	VARIABLE	BASE POPULATION
REGION(1)	PROPORTION	HHOHHO	ALL MEN
REGION(2)	PROPORTION	MANZINI	ALL MEN
REGION(3)	PROPORTION	SHISELWENI	ALL MEN
REGION(4)	PROPORTION	LUBOMBO	ALL MEN
EDUC(1)	PROPORTION	NONE	ALL MEN
EDUC(2)	PROPORTION	PRIMARY	ALL MEN
EDUC(3)	PROPORTION	SECONDARY	ALL MEN
EDUC(4)	PROPORTION	HIGHER EDUCATION	ALL MEN
AGEG(1)	PROPORTION	15-19 YR OLD	ALL MEN
AGEG(2)	PROPORTION	20-24 YR OLD	ALL MEN
AGEG(3)	PROPORTION	25-29 YR OLD	ALL MEN
AGEG(4)	PROPORTION	30-34 YR OLD	ALL MEN
AGEG(5)	PROPORTION	35-39 YR OLD	ALL MEN
AGEG(6)	PROPORTION	40-44 YR OLD	ALL MEN
AGEG(7)	PROPORTION	45-49 YR OLD	ALL MEN
AGEG(8)	PROPORTION	50-54 YR OLD	ALL MEN
AGEG(9)	PROPORTION	55-59 YR OLD	ALL MEN
URBAN	PROPORTION	URBAN	ALL MEN
RURAL	PROPORTION	RURAL	ALL MEN
KNOW	PROPORTION	KNOW ANY METHOD	ALL MEN
SMOKE	PROPORTION	CURRENTLY SMOKING	ALL MEN
DRINK	PROPORTION	EVER DRINK ALCOHOL	ALL MEN
AIDSKIN	PROPORTION	KNOWLEGE OF AIDS	ALL MEN

PROPORTIONS AND CONFIDENCE LIMITS OF CATEGORICAL VARIABLES
 SWAZILAND SURVEY FOR MALES WITH DESIGN EFFECT
 ALL REGIONS

NAME	PROPORTION	STANDARD ERROR	LOW LIMIT	HIGH LIMIT	SAMPLE SIZE	DESIGN EFFECT
REGION	0.285129	0.0059181	0.273293	0.296965	2272	0.39039
REGION	0.254684	0.0056411	0.243402	0.265966	2272	0.38088
REGION	0.253367	0.0059882	0.241390	0.265343	2272	0.43067
REGION	0.206821	0.0049165	0.196988	0.216654	2272	0.33477
EDUC	0.230094	0.0101515	0.209791	0.250397	2272	1.32168
EDUC	0.273419	0.0112771	0.250865	0.295973	2272	1.45442
EDUC	0.119731	0.0075851	0.104560	0.134901	2272	1.24027
AGEG	0.286300	0.0117353	0.262829	0.309770	2272	1.53129
AGEG	0.160568	0.0095300	0.141508	0.179628	2272	1.53090
AGEG	0.105386	0.0073721	0.090642	0.120131	2272	1.30970
AGEG	0.099824	0.0071733	0.085478	0.114171	2272	1.30103
AGEG	0.088847	0.0068709	0.075105	0.102588	2272	1.32495
AGEG	0.090310	0.0071602	0.075990	0.104631	2272	1.41786
AGEG	0.076991	0.0065184	0.063954	0.090027	2272	1.35845
AGEG	0.046107	0.0050305	0.036046	0.056168	2272	1.30728
AGEG	0.045667	0.0054764	0.034715	0.056620	2272	1.56346
URBAN	0.218677	0.0048560	0.208965	0.228389	2272	0.31357
RURAL	0.781323	0.0048560	0.771611	0.791035	2272	0.31357
KNOW	0.899444	0.0075826	0.884279	0.914609	2272	1.44432
SMOKE	0.229508	0.0102986	0.208911	0.250105	2272	1.36268
DRINK	0.330796	0.0114891	0.307818	0.353775	2272	1.35476
AIDSKN	0.906616	0.0071380	0.892340	0.920892	2272	1.36729

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TABLE II-1

Interview Status
1988 Swaziland Family Health Survey

1. Homestead Assignment (4350)	
	<u>Percent</u>
-Address not a homestead	0.9
-Homesteads found	<u>99.1</u>
	100.0
2. Homesteads (4312)	
	<u>Percent</u>
A. No Interview	<u>6.9</u>
-Not at home	1.5
-Vacant	5.4
B. Interviews	<u>93.1</u>
-Completed	91.9
-Refused	<u>1.2</u>
	100.0
3. Eligible Females (4341)	
	<u>Percent</u>
A. No Interview	<u>1.8</u>
-Not at home	0.9
-Refusal	0.6
-Other	0.3
B. Interview	<u>98.2</u>
	100.0
4. Eligible Males (2393)	
	<u>Percent</u>
A. No Interview	<u>5.0</u>
-Not at Home	3.0
-Refusal	1.2
-Other	0.8
B. Interview	<u>95.0</u>
	100.0

TABLE III-1

General Population Characteristics by Sex
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Characteristic</u>	<u>Female</u>	<u>Male</u>
<u>Residence</u>		
Urban	23.0	21.9
Rural	<u>77.0</u>	<u>78.1</u>
	100.0	100.0
<u>Religion</u>		
Protestant	42.1	37.8
Zionist	40.3	38.6
Catholic	9.6	9.3
Other	<u>8.0</u>	<u>14.3</u>
	100.0	100.0
<u>Main Source of Drinking Water</u>		
River, Spring	48.8	52.9
Piped	20.7	18.3
Public Tap	19.5	19.7
Well	8.6	7.6
Other	<u>2.4</u>	<u>1.5</u>
	100.0	100.0
<u>Toilet Facility in Homestead</u>		
Pit Latrine	44.8	49.1
Bush	42.0	37.4
Flush	<u>13.2</u>	<u>13.5</u>
	100.0	100.0
No. of Cases	(4261)	(2273)

TABLE III-2

Age Group Comparisons by Sex and Region,
1988 Swaziland Family Health Survey and 1986 Swaziland Census
(Percent Distribution)

<u>Female</u>										
Age Group	<u>Total</u>		<u>Hhohho</u>		<u>Manzini</u>		<u>Shiselweni</u>		<u>Lubombo</u>	
	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>
15-19	23.8	24.1	23.6	23.1	25.0	24.7	23.9	25.9	22.5	22.9
20-24	22.3	21.0	21.2	20.9	22.6	21.0	22.2	20.0	23.5	22.0
25-29	17.3	16.9	14.9	17.2	17.5	16.4	17.9	16.2	19.6	18.1
30-34	12.2	12.2	13.0	12.7	11.1	12.1	12.2	11.8	12.4	12.2
35-39	10.4	10.5	11.5	10.9	10.4	10.3	9.4	10.2	10.1	10.5
40-44	8.5	8.2	9.6	8.2	7.7	8.5	8.6	8.4	7.8	7.6
45-49	<u>5.6</u>	<u>7.0</u>	<u>6.2</u>	<u>7.0</u>	<u>5.8</u>	<u>6.9</u>	<u>5.9</u>	<u>7.5</u>	<u>4.1</u>	<u>6.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)		(1245)		(1108)		(1027)		(881)	
<u>Male</u>										
Age Group	<u>Total</u>		<u>Hhohho</u>		<u>Manzini</u>		<u>Shiselweni</u>		<u>Lubombo</u>	
	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>
15-19	28.6	24.8	31.3	23.4	25.3	24.7	33.9	30.8	22.6	21.9
20-24	16.0	16.5	15.0	16.1	19.5	17.3	13.5	15.4	16.4	16.9
25-29	10.5	13.3	9.0	13.4	10.4	13.1	11.8	11.2	11.2	14.9
30-34	10.0	10.8	8.1	11.1	9.0	10.6	10.7	9.6	12.9	11.4
35-39	8.9	9.5	9.2	10.0	9.3	9.3	7.1	8.4	10.0	10.2
40-44	9.0	7.6	11.3	8.0	8.0	7.7	8.2	6.7	8.2	7.9
45-49	7.7	7.7	6.6	7.9	8.4	7.7	6.3	7.4	10.0	7.9
50-54	4.6	5.6	5.6	6.0	4.1	5.6	3.9	5.5	4.7	5.3
55-59	<u>4.6</u>	<u>4.1</u>	<u>3.8</u>	<u>4.2</u>	<u>6.0</u>	<u>3.9</u>	<u>4.6</u>	<u>5.0</u>	<u>4.0</u>	<u>3.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(2273)		(689)		(569)		(474)		(541)	

TABLE III-3

Regional Population Comparisons by Sex,
1988 Swaziland Family Health Survey and 1986 Swaziland Census
(Percent Distribution)

<u>Region</u>	<u>Female (15-49)</u>		<u>Male (15-59)</u>	
	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>
Hhohho	29.2	26.8	28.5	26.0
Manzini	26.0	28.9	25.5	29.2
Shiselweni	24.1	22.1	25.3	18.8
Lubombo	<u>20.7</u>	<u>22.2</u>	<u>20.7</u>	<u>26.0</u>
TOTAL	100.0	100.0	100.0	100.0
	(4261)		(2273)	

TABLE III-4
 Population Distribution Comparisons by Sex, Region and Residence
 1988 Swaziland Family Health Survey
 (Percent Distribution)

<u>Region</u>	<u>Female</u>			<u>No. of Cases</u>	<u>Male</u>			<u>No. of Cases</u>
	<u>Urban</u>	<u>Rural</u>	<u>Total</u>		<u>Urban</u>	<u>Rural</u>	<u>Total</u>	
Hhohho	28.7	71.3	100.0	(1,245)	29.7	70.3	100.0	(689)
Manzini	28.8	71.2	100.0	(1,108)	26.1	73.9	100.0	(569)
Shiselweni	5.8	94.2	100.0	(1,027)	4.5	95.5	100.0	(474)
Lubombo	27.9	72.1	100.0	(881)	27.2	72.8	100.0	(541)
Total	23.0	77.0	100.0	(4,261)	21.9	78.1	100.0	(2,273)

TABLE III-5

Racial Group Comparisons by Sex,
1988 Swaziland Family Health Survey and 1986 Swaziland Census
(Percent Distribution)

<u>Race</u>	<u>Female (15-49)</u>		<u>Male (15-59)</u>	
	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>
Black (African)	98.3	99.2	98.7	98.7
Other	<u>1.7</u>	<u>0.8</u>	<u>1.3</u>	<u>1.3</u>
TOTAL	100.0	100.0	100.0	100.0
	(4261)		(2273)	

TABLE III-6

Level of Education Comparisons by Sex
 (Females 15-49 and Males 15-54)
 1988 Swaziland Family Health Survey
 and 1986 Swaziland Census
 (Percent Distribution)

<u>Education</u>	<u>Female</u>		<u>Male</u>	
	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>
None	21.6	26.7	21.6	25.1
Primary	40.5	40.2	38.1	38.1
Secondary	28.1	22.8	28.0	22.4
High School+	<u>9.8</u>	<u>10.3</u>	<u>12.3</u>	<u>14.4</u>
Total	100.0	100.0	100.0	100.0
No. of Cases	(4261)		(2170)*	

*Excludes 103 males aged 55-59, because education not available for this age group from the Census.

TABLE III-7

Highest Educational Level Attained by Sex and Religious Group
1988 Swaziland Family Health Survey
(Percent Distribution)

Female

<u>Education</u>	<u>Total</u>	<u>Religion</u>			
		<u>Catholic</u>	<u>Protestant</u>	<u>Zionist</u>	<u>Other</u>
None	21.6	11.2	13.0	27.7	49.1
Primary	40.5	36.7	36.4	47.3	32.4
Secondary	28.1	35.0	36.2	21.0	12.4
High School+	<u>9.8</u>	<u>17.1</u>	<u>14.3</u>	<u>4.0</u>	<u>6.2</u>
	100.0	100.0	100.0	100.0	100.0
No. of Cases	(426)	(409)	(1794)	(1718)	(340)

Males

<u>Education</u>	<u>Total</u>	<u>Religion</u>			
		<u>Catholic</u>	<u>Protestant</u>	<u>Zionist</u>	<u>Other</u>
None	23.0	8.8	13.9	27.3	44.6
Primary	37.7	30.8	33.5	45.2	33.0
Secondary	27.3	40.5	33.6	22.9	14.3
High School+	<u>12.0</u>	<u>19.9</u>	<u>19.0</u>	<u>4.6</u>	<u>8.2</u>
	100.0	100.0	100.0	100.0	100.0
No. of Cases	(2273)	(235)	(845)	(812)	(381)

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TABLE III-8

Population Distribution Comparisons by Sex
(Females 20-49, Males 20-59), Marital Status, and Region
1988 Swaziland Family Health Survey and 1986 Swaziland Census

<u>Marital Status</u>	<u>Total</u>		<u>Hhohho</u>		<u>Manzini</u>		<u>Shiselweni</u>		<u>Lubombo</u>	
	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>	<u>FHS</u>	<u>Census</u>
<u>Female</u>										
Married Swazi Custom	43.4	36.4	45.1	42.2	41.5	32.1	41.3	30.2	45.5	40.8
Married Civil Rites	8.8	9.2	9.2	9.2	8.3	10.6	10.2	9.8	7.2	7.1
Sep/Wid/Divorced	2.3	2.8	2.3	3.1	2.4	2.5	3.1	2.4	1.5	3.2
Not Married w/ Children	37.2	39.6	35.5	33.1	38.2	41.8	37.5	45.3	38.2	39.2
Not Married No Children	<u>8.2</u>	<u>11.9</u>	<u>7.8</u>	<u>12.4</u>	<u>9.6</u>	<u>13.0</u>	<u>7.9</u>	<u>12.3</u>	<u>7.6</u>	<u>9.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(3247)		(951)		(831)		(782)		(683)	
<u>Male</u>										
Married Swazi Custom	49.1	33.6	49.5	36.8	40.5	29.4	50.1	25.1	57.8	40.4
Married Civil Rites	8.4	9.9	10.4	11.3	12.2	11.1	5.2	9.8	4.8	7.2
Sep/Wid/Divorced	3.6	1.6	3.3	1.9	2.8	1.5	4.6	1.0	4.0	1.9
Never Married	<u>38.9</u>	<u>54.9</u>	<u>36.8</u>	<u>50.0</u>	<u>44.5</u>	<u>58.0</u>	<u>40.1</u>	<u>64.1</u>	<u>33.4</u>	<u>50.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(1763)		(527)		(449)		(331)		(456)	

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TABLE III-9

Marital Status Distribution for Females Aged 15-49
by Selected Characteristics
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Selected Characteristics</u>	<u>Married</u>		<u>Sep, Wid, Divorced</u>	<u>Never Married</u>		<u>Total</u>	<u>No. of Cases</u>
	<u>Swazi Custom</u>	<u>Civil Rite</u>		<u>With Child</u>	<u>No Children</u>		
Total	34.5	6.8	1.8	33.2	23.7	100.0	(4261)
<u>Residence</u>							
Urban	20.2	10.9	1.7	39.2	28.0	100.0	(982)
Rural	38.8	5.6	1.8	31.4	22.4	100.0	(3279)
<u>Region</u>							
Hhohho	36.8	7.2	1.8	32.2	22.1	100.0	(1245)
Manzini	31.3	6.3	1.8	33.5	27.1	100.0	(1108)
Shiselweni	32.5	7.8	2.3	33.7	23.7	100.0	(1027)
Lubombo	37.6	5.7	1.2	33.8	21.7	100.0	(881)
<u>Education</u>							
None	50.4	3.2	4.4	31.2	10.6	100.0	(922)
Primary	38.7	5.2	1.4	34.1	20.7	100.0	(1726)
Secondary	23.2	8.4	0.7	33.4	34.4	100.0	(1196)
High School+	14.4	16.6	1.0	33.8	34.3	100.0	(417)
<u>Religion</u>							
Catholic	28.1	7.8	2.2	35.9	25.9	100.0	(409)
Protestant	29.8	9.2	1.5	32.7	26.8	100.0	(1794)
Zionist	39.0	4.1	2.0	33.8	21.1	100.0	(718)
Other	44.4	6.2	1.8	30.3	17.4	100.0	(340)

TABLE IV-1

Percentage That Ever Had Sexual Intercourse
and Average Age at First Sex
by Sex, Age, and Residence
1988 Swaziland Family Health Survey

<u>Age</u>	<u>Female</u>			<u>Male</u>		
	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
15-19	51.5	55.2	50.3	35.1	37.8	34.7
20-24	96.5	95.5	96.8	87.4	79.2	89.3
25-29	99.6	99.5	99.6	98.1	99.5	97.5
30-34	99.6	98.4	100.0	99.6	99.5	99.6
35-39	100.0	100.0	100.0	98.8	98.2	99.1
40-44	99.7	100.0	99.7	99.8	99.4	100.0
45-49	100.0	100.0	100.0	99.4	100.0	99.2
50-54	-	-	-	99.4	100.0	99.2
55-59	-	-	-	99.4	98.0	99.6
Average Age First Sex*	17.3	17.5	17.2	19.0	19.0	19.0

*Calculated using standard life table techniques

TABLE IV-2

Percentage That Ever Had Sex and Average Age First Sex
by Sex, Age, and Region
1988 Swaziland Family Health Survey

Age	Female					Male				
	Total	Region				Total	Region			
		Hhohho	Manzini	Shiselweni	Lubombo		Hhohho	Manzini	Shiselweni	Lubombo
15-19	51.5	51.0	44.4	53.5	59.6	35.1	35.2	36.4	34.6	33.9
20-24	96.5	95.4	95.6	97.4	98.1	87.4	87.0	88.8	88.4	84.9
25-29	99.6	100.0	99.0	100.0	99.4	98.1	99.4	98.9	96.6	97.5
30-34	99.6	100.0	98.4	100.0	100.0	99.6	99.4	100.0	100.0	98.9
35-39	100.0	100.0	100.0	100.0	100.0	98.8	97.2	100.0	98.4	100.0
40-44	99.7	99.2	100.0	100.0	100.0	99.8	100.0	100.0	100.0	99.1
45-49	100.0	100.0	100.0	100.0	100.0	99.4	97.7	100.0	100.0	100.0
50-54	-	-	-	-	-	99.4	100.0	100.0	100.0	97.0
55-59	-	-	-	-	-	99.4	98.6	100.0	100.0	98.2
Average Age First Sex	17.3	17.7	17.4	16.9	17.0	19.0	19.4	18.5	18.9	19.4

TABLE IV-3

Knowledge of Time During Woman's Monthly
Menstrual Cycle When She Is At Greatest Risk of Getting Pregnant by Sex
and Selected Characteristics
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Females</u>	<u>Residence</u>			<u>Region</u>			
	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Hhohho</u>	<u>Manzini</u>	<u>Shis.</u>	<u>Lubombo</u>
During her period	2.3	4.6	1.6	5.0	2.0	0.9	0.6
Right after her period ended	21.3	23.7	20.6	18.2	20.1	28.8	18.6
In middle of cycle	12.6	16.5	11.4	11.5	14.0	14.0	10.7
Just before her period begins	16.2	20.4	15.0	14.7	20.0	14.6	15.6
At any time	16.1	13.2	17.0	13.0	17.4	12.7	22.8
Other	0.3	0.3	0.3	0.6	0.0	0.3	0.2
Don't know	<u>31.2</u>	<u>21.3</u>	<u>34.1</u>	<u>37.0</u>	<u>26.5</u>	<u>28.7</u>	<u>31.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(982)	(3279)	(1245)	(1108)	(1027)	(881)

<u>Males</u>	<u>Residence</u>			<u>Region</u>			
	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Hhohho</u>	<u>Manzini</u>	<u>Shis.</u>	<u>Lubombo</u>
During her period	0.8	1.7	0.6	1.8	0.3	0.1	1.2
Right after her period ended	38.0	34.6	39.0	42.6	27.8	34.8	48.2
In middle of cycle	6.3	12.7	4.5	7.8	13.5	2.0	0.5
Just before her period begins	13.8	13.3	13.9	12.3	13.8	19.4	8.9
At any time	3.6	4.2	3.5	2.9	3.8	5.0	2.8
Other	0.7	1.4	0.1	0.7	1.4	0.0	0.5
Don't know	<u>36.8</u>	<u>32.1</u>	<u>38.5</u>	<u>31.9</u>	<u>39.4</u>	<u>38.7</u>	<u>37.9</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(2273)	(770)	(1503)	(689)	(569)	(474)	(541)

TABLE IV-4

Percentage of All Live Births in the 5 Years Prior to the Survey
Who Were Ever Breastfed, by Selected Characteristics
1988 Swaziland Family Health Survey

<u>Selected Characteristic</u>	<u>Ever Breastfed</u>	<u>No. of Cases</u>
Total	94.8	(3207)
<u>Age</u>		
15-19	94.6	(276)
20-24	94.7	(973)
25-29	95.1	(814)
30-34	95.6	(545)
35-39	94.1	(387)
40-44	92.4	(158)
45-49	100.0	(54)
<u>Residence</u>		
Urban	93.1	(537)
Rural	95.2	(2670)
<u>Region</u>		
Hhohho	93.0	(912)
Manzini	95.1	(760)
Shiselweni	95.6	(831)
Lubombo	96.0	(704)
<u>Education</u>		
None	96.0	(766)
Primary	94.5	(1407)
Secondary	94.7	(793)
High School+	93.8	(241)

TABLE IV-5

Percentage of Births in 24 Months Prior to Survey Whose Mothers Are Still Breastfeeding, Postpartum Amenorrhoea, Abstaining, Insusceptible, and Using Solid Foods by Number of Months Since Birth
1988 Swaziland Family Health Survey

<u>Months Since Birth</u>	<u>Percentage Still</u>					<u>No. of Cases</u>
	<u>Breastfeeding</u>	<u>Post Partum Amenorrhoea</u>	<u>Post Partum Abstaining</u>	<u>Post Partum Insusceptible*</u>	<u>Using Solid Food</u>	
< 3	95.6	89.6	86.3	95.6	31.3	(182)
3-4	95.6	73.0	60.4	86.2	78.0	(159)
5-6	94.1	59.3	43.2	75.4	94.9	(118)
7-8	92.1	56.1	20.2	63.2	94.7	(114)
9-10	84.1	43.4	16.8	54.0	98.2	(113)
11-12	89.4	44.7	10.6	50.4	97.6	(123)
13-14	72.1	27.9	8.4	34.4	98.0	(154)
15-16	65.8	21.4	6.8	26.5	99.2	(117)
17-18	60.5	16.7	13.2	26.3	98.2	(114)
19-20	46.7	12.2	1.1	12.2	98.9	(90)
21-22	40.2	10.8	6.9	16.7	98.0	(102)
23-24	25.7	5.9	3.0	8.9	100.0	(101)

*Either amenorrhoeic or abstaining at the time of the survey

TABLE IV-6

Mean* Number of Months of Breastfeeding, Postpartum Amenorrhoea,
Postpartum Abstinence and Postpartum Insusceptibility
by Selected Characteristics
1988 Swaziland Family Health Survey

Selected Characteristic	Duration in Months			
	Breastfeeding	Post Partum Amenorrhoea	Post Partum Abstinence	Post Partum Insusceptibility**
Total	18.0	10.2	6.6	12.0
<u>Residence</u>				
Urban	16.3	8.8	6.9	11.3
Rural	18.3	10.5	6.5	12.2
<u>Region</u>				
Hhohho	18.2	9.5	6.9	11.9
Manzini	17.6	9.7	7.4	12.1
Shiselweni	18.0	11.5	5.7	12.6
Lubombo	18.0	10.1	6.2	11.5
<u>Education</u>				
None	19.4	11.0	6.0	12.7
Primary	18.2	10.1	6.3	11.6
Secondary	16.8	9.7	6.9	11.8
High School+	16.4	10.2	8.3	13.3

*Calculated using prevalence/incidence method for births in the 24 months prior to the survey.

**Either amenorrhoeic or abstaining at the time of the survey

TABLE IV-7A

Desired Breastfeeding Length (in months) for Females Age 15-49 by Selected Characteristics
1988 Swaziland Family Health Survey
(Percent Distribution)

Desired BF Length (Mths)	Total	Residence		Region				Education			
		Urban	Rural	Hhohho	Manzini	Shis.	Lubombo	None	Prim.	Sec.	HS+
<12	1.2	2.0	1.0	1.6	1.0	0.6	1.8	1.0	0.8	1.2	3.6
12-23	29.7	23.6	31.5	20.6	27.4	39.5	33.8	31.2	29.7	29.4	26.9
24-35	64.0	67.3	63.1	71.3	67.3	55.6	59.4	63.3	64.4	64.2	63.3
36+	4.2	5.6	3.8	4.7	3.6	4.2	4.3	3.2	4.2	4.7	5.3
As long as possible	0.8	1.4	0.6	1.7	0.6	0.1	0.7	1.2	0.8	0.5	1.0
Don't know	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(982)	(3279)	(1245)	(1108)	(1027)	(881)	(922)	(1726)	(1196)	(417)
Mean	21.6	22.3	21.4	22.6	21.9	20.5	21.2	21.3	21.7	21.8	21.6

TABLE IV-7B

Desired Breastfeeding Length (in months) for Males Age 15-59
by Selected Characteristics
1988 Swaziland Family Health Survey
(Percent Distribution)

Desired BF Length (Mths)	Total	Residence		Region				Education			
		Urban	Rural	Hhohho	Manzini	Shis.	Lubombo	None	Prim.	Sec.	HS+
<12	3.3	3.8	3.2	4.1	4.6	2.8	1.1	1.8	3.2	4.0	4.6
12-23	34.6	28.6	36.3	27.0	31.3	43.5	38.3	38.9	35.5	30.9	32.1
24-35	50.8	54.5	49.8	51.4	54.7	46.8	50.3	46.1	50.8	53.3	54.5
36+	8.6	8.0	8.7	13.8	5.3	6.4	8.1	10.4	8.0	9.1	5.6
As long as possible	1.7	3.6	1.2	1.6	2.7	0.5	2.0	1.6	1.6	1.7	2.2
Don't know	1.0	1.6	0.9	2.2	1.4	0.0	0.1	1.2	0.9	1.1	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(2273)	(770)	(1503)	(689)	(569)	(474)	(541)	(546)	(812)	(595)	(320)
Mean	21.3	21.8	21.2	23.1	20.6	19.8	21.5	21.7	21.1	21.6	20.8

TABLE IV-8
 Population Comparisons, Mean Number of Children Ever Born,
 Age-Specific Fertility Rates, and Total Fertility Rate* (TFR)
 by Age and Residence
 1988 Swaziland Family Health Survey
 and 1986 Swaziland Census

<u>Age</u>	<u>Mean Children Ever Born</u>				<u>Age-Specific Fertility Rates</u>					
	<u>Census</u>	<u>Family Health Survey</u>			<u>Age</u>	<u>Census</u>	<u>Family Health Survey</u>			<u>Total**</u>
		<u>Total</u>	<u>Urban</u>	<u>Rural</u>			<u>Total*</u>	<u>Urban*</u>	<u>Rural*</u>	
15-19	0.3	0.3	0.2	0.3	15-19	.088	.054	.042	.058	.129
20-24	1.6	1.5	1.3	1.6	20-24	.229	.205	.169	.215	.224
25-29	3.1	2.9	2.5	3.1	25-29	.224	.221	.142	.248	.211
30-34	4.6	4.0	3.2	4.2	30-34	.201	.210	.148	.230	.198
35-39	5.6	5.0	4.4	5.2	35-39	.152	.175	.121	.189	.129
40-44	6.4	5.5	4.5	5.8	40-44	.080	.088	.075	.090	.067
45-49	6.7	5.4	4.5	5.6	45-49	<u>.044</u>	<u>.045</u>	<u>.008</u>	<u>.056</u>	<u>.033</u>
					TFR	5.1	5.0	3.5	5.4	5.0

*Family Health Survey TFR calculated using cohort-period technique for 5 years prior to date of interview (Goldman and Hobcraft, 1982)

**Family Health Survey TFR calculated directly for births in each age group by individual years 1984-1988.

TABLE IV-9
 Mean Number of Children Ever Born, by Selected Characteristics
 1988 Swaziland Family Health Survey

<u>Age</u>	<u>Total</u>	<u>Region</u>				<u>Education</u>				<u>Religion</u>			
		<u>Hhohho</u>	<u>Manzini</u>	<u>Shis.</u>	<u>Lubombo</u>	<u>None</u>	<u>Primary</u>	<u>Second.</u>	<u>HS+</u>	<u>Catholic</u>	<u>Protestant</u>	<u>Zionist</u>	<u>Other</u>
15-19	0.3	0.4	0.2	0.3	0.3	0.6	0.4	0.2	0.2	0.3	0.2	0.4	0.4
20-24	1.5	1.5	1.4	1.5	1.7	1.7	1.7	1.4	1.0	1.5	1.4	1.6	1.7
25-29	2.9	3.0	2.6	3.1	3.1	3.6	3.3	2.4	1.6	2.4	2.7	3.2	2.9
30-34	4.0	3.8	4.0	4.2	3.8	4.0	4.3	3.8	2.7	3.4	4.0	4.3	3.5
35-39	5.0	4.9	5.4	4.9	4.8	5.2	5.3	4.6	2.7	5.8	4.6	5.4	4.6
40-44	5.5	5.0	5.4	6.1	5.9	5.3	5.9	4.9	3.3	5.9	5.2	5.8	5.1
45-49	5.4	5.1	5.4	5.5	5.8	5.5	5.6	5.1	2.1	5.7	5.4	5.4	4.6

TABLE IV-10

Age-Specific and Total Fertility Rates* (TFR) by
Region, Education, and Religion
1988 Swaziland Family Health Survey

Age Group	Region				Education				Religion			
	Hhohho	Manzini	Shis.	Lubombo	None	Primary	Secondary	HS+	Catholic	Protestant	Zionist	Other
15-19	.069	.045	.051	.051	.090	.063	.043	.037	.048	.047	.064	.049
20-24	.202	.183	.218	.222	.197	.234	.204	.144	.205	.187	.226	.181
25-29	.217	.201	.253	.214	.239	.242	.196	.164	.171	.205	.247	.216
30-34	.193	.207	.243	.202	.220	.212	.216	.157	.176	.191	.241	.204
35-39	.182	.172	.167	.175	.196	.179	.147	.087	.159	.140	.212	.192
40-44	.062	.092	.093	.119	.081	.102	.067	.022	.069	.075	.101	.105
45-49	.052	.028	.049	.056	.071	.030	.029	.000	.026	.040	.046	.091
Total Fertility Rate	4.9	4.6	5.4	5.2	5.5	5.3	4.5	3.1	4.3	4.4	5.7	5.2

*TFR calculated using cohort-period technique for 5 years prior to date of interview (Goldman and Hobcraft, 1982)

TABLE IV-11

Average Desired Family Size Reported by Females Aged 15-49 and
Males Aged 15-59 by Selected Characteristics
1988 Swaziland Family Health Survey

	<u>Female*</u>	<u>No. of Cases</u>	<u>Male*</u>	<u>No. of Cases</u>
Total	4.2	(4193)	5.1	(1767)
<u>Age</u>				
15-19	3.7	(971)	4.4	(444)
20-24	3.9	(937)	4.3	(284)
25-29	4.1	(734)	4.6	(233)
30-34	4.4	(516)	5.2	(216)
35-39	4.5	(442)	5.4	(172)
40-44	5.1	(357)	5.9	(155)
45-49	5.1	(236)	6.9	(117)
50-54	-	-	7.1	(86)
55-59	-	-	7.2	(60)
<u>Residence</u>				
Urban	3.5	(963)	4.5	(601)
Rural	4.4	(3230)	5.2	(1166)
<u>Region</u>				
Hhohho	4.0	(1213)	5.2	(527)
Manzini	3.8	(1093)	4.5	(475)
Shiselweni	4.6	(1022)	5.3	(397)
Lubombo	4.5	(865)	5.0	(368)
<u>Religion</u>				
Catholic	3.8	(404)	4.6	(196)
Protestant	4.0	(1766)	4.7	(693)
Zionist	4.4	(1691)	5.4	(613)
Other	4.8	(332)	5.4	(265)
<u>Education</u>				
None	5.1	(906)	6.6	(350)
Primary	4.3	(1691)	5.2	(614)
Secondary	3.6	(1182)	4.5	(511)
High School+	3.2	(414)	3.8	(292)

*Excluded 68 women and 506 men who stated that family size was "up to God".

TABLE IV-12

Percentage Distribution of Who Makes the Decision About the
Number of Children Couples Should Have by Sex and Selected Characteristics
1988 Swaziland Family Health Survey

	<u>Female</u>				<u>Total</u>	<u>No. of Cases</u>	<u>Male</u>				<u>Total</u>	<u>No. of Cases</u>
	<u>Who Makes Decision</u>						<u>Who Makes Decision</u>					
	<u>Husband</u>	<u>Wife</u>	<u>Both</u>	<u>Other</u>			<u>Husband</u>	<u>Wife</u>	<u>Both</u>	<u>Other</u>		
Total	37.1	11.0	43.1	8.8	100.0	(4261)	53.1	4.3	33.0	9.6	100.0	(2273)
Age												
15-19	33.4	12.5	43.9	10.2	100.0	(1014)	62.2	5.6	26.1	6.1	100.0	(510)
20-24	38.2	9.6	45.4	6.7	100.0	(949)	49.4	5.5	37.3	7.8	100.0	(338)
25-29	40.7	11.1	40.8	7.3	100.0	(737)	50.0	3.3	38.5	8.2	100.0	(281)
30-34	37.6	8.7	45.5	8.3	100.0	(519)	49.0	3.1	37.1	10.8	100.0	(270)
35-39	37.2	13.1	42.0	7.7	100.0	(443)	54.5	4.1	28.3	13.0	100.0	(228)
40-44	38.8	9.1	38.5	13.6	100.0	(361)	52.4	3.1	36.3	8.3	100.0	(211)
45-49	33.6	14.3	41.2	10.9	100.0	(238)	51.0	4.4	27.0	17.7	100.0	(200)
50-54	-	-	-	-	-	-	47.6	1.3	37.1	14.0	100.0	(132)
55-59	-	-	-	-	-	-	32.3	3.5	49.2	15.0	100.0	(103)
Residence												
Urban	25.1	12.3	54.9	7.7	100.0	(982)	47.6	3.6	39.6	9.2	100.0	(770)
Rural	40.7	10.6	39.6	9.1	100.0	(3279)	54.6	4.5	31.2	9.6	100.0	(1503)
Region												
Hhohho	30.6	12.1	46.4	10.8	100.0	(1245)	50.5	5.0	30.1	14.4	100.0	(689)
Manzini	33.7	12.4	45.6	8.4	100.0	(1108)	46.6	4.6	39.7	9.2	100.0	(569)
Shiselweni	48.1	9.6	33.6	8.7	100.0	(1027)	66.2	3.7	27.9	2.2	100.0	(474)
Lubombo	37.9	9.4	46.3	6.4	100.0	(881)	48.7	3.8	35.2	12.3	100.0	(541)
Religion												
Catholic	31.3	10.8	47.9	10.0	100.0	(409)	46.1	5.2	39.9	8.8	100.0	(235)
Protestant	33.1	11.9	48.2	6.8	100.0	(1794)	52.5	3.8	37.0	6.7	100.0	(845)
Zionist	41.8	10.6	37.4	10.1	100.0	(1718)	54.4	4.7	30.8	10.1	100.0	(812)
Other	41.8	8.5	38.8	10.8	100.0	(340)	55.4	4.2	24.4	16.0	100.0	(381)
Education												
None	47.9	8.4	32.1	11.6	100.0	(922)	52.9	4.5	26.3	16.4	100.0	(546)
Primary	39.7	11.6	39.5	9.3	100.0	(1726)	60.3	4.6	26.5	8.6	100.0	(812)
Secondary	32.3	12.6	47.7	7.4	100.0	(1196)	51.3	3.6	38.0	7.1	100.0	(595)
High School+	16.6	10.1	69.1	4.3	100.0	(417)	34.7	4.9	55.3	5.1	100.0	(320)

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TABLE IV-13

Desired Birth Interval (in months) for Females Age 15-49 by Selected Characteristics
 1988 Swaziland Family Health Survey
 (Percent Distribution)

Desired Birth Interval (Mths)	Total	Residence		Region				Education			
		Urban	Rural	Hhohho	Manzini	Shis.	Lubombo	None	Prim.	Sec.	HS+
12-23	2.4	2.8	2.2	2.6	2.6	1.7	2.5	3.2	2.1	2.1	2.2
24-35	34.9	27.0	37.3	29.9	27.7	43.6	41.0	39.6	37.2	31.8	24.2
36-47	38.4	37.3	38.7	42.2	36.9	37.2	36.2	39.3	38.9	37.7	36.0
48+	24.2	32.5	21.7	25.1	32.8	17.4	20.1	17.9	21.6	28.2	37.6
Don't know	0.1	0.5	0.0	0.2	0.0	0.1	0.2	0.0	0.2	0.2	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(982)	(3279)	(1245)	(1108)	(1027)	(881)	(922)	(1726)	(1196)	(417)
Mean	35.5	38.1	34.7	36.5	37.5	33.6	33.8	33.5	34.8	36.8	39.2

TABLE IV-14
 Desired Birth Interval (in months) for Males Age 15-59
 by Selected Characteristics
 1988 Swaziland Family Health Survey
 (Percent Distribution)

Desired Birth Interval (Months)	Total	Residence		Region				Education			
		Urban	Rural	Hhohho	Manzini	Shis.	Lubombo	None	Primary	Second.	HS+
12-23	4.4	6.0	4.0	5.9	3.8	5.1	2.3	3.8	4.6	4.4	5.0
24-35	36.4	36.7	36.3	40.3	32.1	39.0	33.0	38.9	39.1	32.0	33.3
36-47	40.2	39.0	40.6	35.5	39.8	39.8	47.8	38.5	38.0	43.9	42.1
48+	19.0	18.3	19.2	18.3	24.2	16.1	16.9	18.8	18.3	19.7	19.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(2,273)	(770)	(1,503)	(689)	(569)	(474)	(541)	(546)	(812)	(595)	(320)
Mean	34.1	33.9	34.2	33.5	36.0	32.6	34.6	33.7	33.7	34.8	34.7

TABLE IV-14
 Desired Birth Interval (in months) for Males Age 15-59
 by Selected Characteristics
 1988 Swaziland Family Health Survey
 (Percent Distribution)

Desired Birth Interval (Months)	Total	Residence		Region				Education			
		Urban	Rural	Hhohho	Manzini	Shis.	Lubombo	None	Primary	Second.	HS+
2-23	4.4	6.0	4.0	5.9	3.8	5.1	2.3	3.8	4.6	4.4	5.0
4-35	36.4	36.7	36.3	40.3	32.1	39.0	33.0	38.9	39.1	32.0	33.3
6-47	40.2	39.0	40.6	35.5	39.8	39.8	47.8	38.5	38.0	43.9	42.1
8+	19.0	18.3	19.2	18.3	24.2	16.1	16.9	18.8	18.3	19.7	19.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(2,273)	(770)	(1,503)	(689)	(569)	(474)	(541)	(546)	(812)	(595)	(320)
Mean	34.1	33.9	34.2	33.5	36.0	32.6	34.6	33.7	33.7	34.8	34.7

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TABLE IV-15

Percentage Distribution of Planning Status of All Live Births
in the 5 Years Prior to the Date of Survey by
Residence, Region, and Education
1988 Swaziland Family Health Survey

<u>Selected Characteristics</u>	<u>Planned</u>	<u>Mistimed</u>	<u>Unwanted</u>	<u>Total</u>	<u>No. of Cases</u>
<u>Total</u>	65.5	26.0	8.5	100.0	(3207)
<u>Residence</u>					
Urban	56.4	30.5	13.1	100.0	(537)
Rural	67.3	25.1	7.6	100.0	(2670)
<u>Region</u>					
Hhohho	56.1	32.7	11.2	100.0	(912)
Manzini	63.3	26.4	10.3	100.0	(760)
Shiselweni	75.2	20.6	4.2	100.0	(831)
Lubombo	68.5	23.3	8.2	100.0	(704)
<u>Education</u>					
None	67.0	23.2	9.8	100.0	(766)
Primary	67.9	23.9	8.2	100.0	(1407)
Secondary	62.2	30.6	7.2	100.0	(791)
High School+	57.7	32.0	10.4	100.0	(241)

TABLE V-1

Percentage of All Females Aged 15-49 and All Males Aged 15-59
Who Have Knowledge of at Least One Effective Method
of Contraception* by Age, Residence, and Region
1988 Swaziland Family Health Survey

<u>Female</u>	<u>Total</u>	<u>Residence</u>		<u>Region</u>			
		<u>Urban</u>	<u>Rural</u>	<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>
Total	81.9	91.4	79.0	81.9	86.7	78.4	79.8
<u>Age</u>							
15-19	71.8	80.4	69.0	73.8	78.3	66.1	66.7
20-24	88.0	95.0	86.1	87.9	92.0	86.4	85.0
25-29	91.4	98.9	88.9	93.0	95.4	88.0	89.0
30-34	89.2	96.9	86.7	89.5	93.5	86.4	87.2
35-39	82.6	96.8	78.8	80.4	87.8	82.3	79.8
40-44	72.0	89.9	67.8	69.8	80.0	63.6	76.8
45-49	68.5	82.7	64.5	71.4	70.3	67.2	61.1
<u>Male</u>							
Total	88.0	94.8	86.1	88.9	90.6	82.9	89.7
<u>Age</u>							
15-19	80.9	97.6	78.4	83.3	87.7	71.0	85.0
20-24	90.7	95.6	89.6	91.8	92.6	88.0	89.2
25-29	92.2	95.1	91.1	89.8	96.1	92.2	90.6
30-34	93.0	95.8	91.6	89.5	96.2	95.1	90.7
35-39	90.8	94.0	89.5	95.6	89.5	83.7	92.2
40-44	90.4	96.1	88.1	93.6	89.9	83.8	93.1
45-49	88.0	88.5	87.8	86.0	87.0	80.7	96.5
50-54	94.6	92.3	95.2	91.7	97.2	98.5	92.4
55-59	85.0	92.0	83.6	90.4	80.8	90.0	78.6

*Effective methods included: pill, IUD, condom, injection, foaming tablets, female sterilization, and male sterilization.

TABLE V-2

Percentage of All Females Aged 15-49 and All Males Aged 15-59
With Knowledge of Contraceptive Methods, by Method and Residence
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Female</u>			<u>Male</u>		
	<u>Total</u>	<u>Residence</u>		<u>Total</u>	<u>Residence</u>	
<u>Urban</u>		<u>Rural</u>	<u>Urban</u>		<u>Rural</u>	
Pill	79.8	88.7	77.1	70.9	83.1	67.5
Injection	75.1	84.8	72.2	62.3	75.2	58.7
IUD	63.0	78.2	58.4	29.6	53.3	23.0
Condom	59.2	76.1	54.1	78.4	90.2	75.1
Female Sterilization	42.7	59.3	37.8	45.1	55.8	42.1
Withdrawal	22.0	33.4	18.6	44.0	52.9	41.5
Rhythm	21.1	34.8	17.0	33.6	43.6	30.7
Foaming Tablets	19.9	33.5	15.9	16.8	23.5	14.9
Male Sterilization	9.6	17.2	7.3	13.0	20.6	10.9
No. of Cases	(4261)	(982)	(3279)	(2273)	(770)	(1503)

TABLE V-3

Percentage of All Females Aged 15-49 With Knowledge
of Contraceptive Methods, by Method and Region
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Total</u>	<u>Region</u>			
		<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>
Pill	79.8	79.0	84.7	76.8	78.2
Injection	75.1	72.2	80.7	75.0	72.4
IUD	63.0	63.6	70.8	58.4	57.7
Condom	59.2	58.8	67.0	54.0	56.0
Female Sterilization	42.7	46.3	48.6	37.2	36.9
Withdrawal	22.0	28.0	27.3	13.6	16.8
Rhythm	21.1	25.5	28.0	15.5	12.7
Foaming Tablets	19.9	27.1	18.7	13.4	19.0
Male Sterilization	9.6	11.2	11.9	5.3	9.4
No. of Cases	(4261)	(1245)	(1108)	(1027)	(881)

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TABLE V-4

Percentage of All Males Aged 15-59 With Knowledge of
Contraceptive Methods, by Method and Region
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Total</u>	<u>Region</u>			
		<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>
Condom	78.4	77.0	83.2	73.5	80.6
Pill	70.9	72.5	80.2	54.5	77.4
Injection	62.3	64.6	68.7	49.6	66.7
Female Sterilization	45.1	48.6	52.3	23.9	57.5
Withdrawal	44.0	55.7	46.0	21.4	53.0
Rhythm	33.6	39.8	38.0	22.8	32.6
IUD	29.6	34.8	41.0	16.6	24.7
Foaming Tablets	16.8	18.9	24.9	11.8	9.9
Male Sterilization	13.0	16.5	17.6	8.1	8.7
No. of Cases	(2273)	(689)	(569)	(474)	(541)

TABLE V-5

Percentage of All Females Aged 15-49 With Knowledge
of Contraceptive Methods, by Method and Age Group
1988 Swaziland Family Health Survey

Contraceptive Method	Total	Age Groups						
		15-19	20-24	25-29	30-34	35-39	40-44	45-49
Pill	79.8	68.3	86.8	89.8	87.7	80.4	70.1	65.5
Injection	75.1	61.9	83.0	85.8	84.2	74.7	66.5	60.9
IUD	63.0	46.2	71.8	78.0	71.9	63.9	53.2	47.1
Condom	59.2	49.7	67.9	69.7	63.8	57.6	47.6	42.9
Female Sterilization	42.7	25.5	45.5	49.8	53.4	51.2	43.8	42.4
Withdrawal	22.0	10.0	23.2	27.7	25.6	25.5	24.9	32.4
Rhythm	21.1	18.4	25.1	24.3	22.7	17.8	16.1	16.8
Foaming Tablets	19.9	10.6	23.4	26.1	22.9	22.3	18.3	18.9
Male Sterilization	9.6	5.6	10.3	10.6	11.4	11.5	11.4	10.5
No. of Cases	(4261)	(1014)	(949)	(737)	(519)	(443)	(361)	(238)

TABLE V-6

Percentage of All Males Aged 15-59 With Knowledge of
Contraceptive Methods, by Method and Age
1988 Swaziland Family Health Survey

Contraceptive Method	Age Groups									
	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Condom	78.4	71.8	83.7	85.0	85.5	81.9	82.8	72.4	75.2	68.7
Pill	70.9	62.0	71.6	75.1	81.7	77.9	76.5	71.1	67.3	69.6
Injection	62.3	50.6	64.2	66.4	73.5	66.4	73.1	64.4	70.2	53.7
Female Sterilization	45.1	35.1	43.9	46.0	46.0	56.3	56.6	55.7	49.2	41.8
Withdrawal	44.0	21.6	45.3	46.9	49.1	56.8	63.7	59.9	57.5	56.9
Rhythm	33.6	21.7	38.8	41.0	39.4	42.0	37.3	35.4	35.9	30.0
IUD	29.6	17.0	35.8	35.7	42.4	37.2	38.6	23.6	25.7	27.5
Foaming Tablets	16.8	11.6	16.4	15.3	20.8	19.1	27.6	14.3	20.3	20.4
Male Sterilization	13.0	10.3	11.5	16.7	11.7	13.3	15.2	14.6	14.9	20.4
No. of Cases	(2273)	(510)	(338)	(281)	(270)	(228)	(211)	(200)	(132)	(103)

TABLE V-7

Percentage of All Females Aged 15-49 With Knowledge
of Contraceptive Methods, by Method and Education
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Total</u>	<u>Education</u>			
		<u>None</u>	<u>Primary</u>	<u>Secondary</u>	<u>High School+</u>
Pill	79.8	66.2	76.5	88.6	97.8
Injection	75.1	59.4	72.0	84.7	95.2
IUD	63.0	41.6	58.2	76.2	92.3
Condom	59.2	36.6	52.1	75.1	92.8
Female Sterilization	42.7	28.6	38.2	50.5	70.3
Withdrawal	22.0	16.4	19.0	23.6	42.4
Rhythm	21.1	7.8	14.2	27.8	60.0
Foaming Tablets	19.9	9.8	16.5	23.7	46.3
Male Sterilization	9.6	4.7	6.0	11.0	31.2
No. of Cases	(4261)	(922)	(1726)	(1196)	(417)

TABLE V-8

Percentage of All Men Aged 15-59 With Knowledge of
Contraceptive Methods, by Method and Education
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Total</u>	<u>Education</u>			
		<u>None</u>	<u>Primary</u>	<u>Secondary</u>	<u>High School+</u>
Condom	78.4	67.4	69.9	91.9	95.5
Pill	70.9	58.8	65.7	78.6	92.9
Injection	62.3	52.5	57.0	68.2	84.1
Female Sterilization	45.1	35.6	38.9	48.4	75.6
Withdrawal	44.0	48.4	35.6	42.7	65.0
Rhythm	33.6	22.9	26.1	37.6	68.1
IUD	29.6	14.7	20.3	36.9	71.1
Foaming Tablets	16.8	9.7	12.7	17.7	41.3
Male Sterilization	13.0	8.3	8.4	11.9	39.3
No. of Cases	(2273)	(546)	(812)	(595)	(320)

TABLE V-9

Percentage of All Females Aged 15-49 With Knowledge
of Contraceptive Methods, by Method and Marital Status
1988 Swaziland Family Health Survey

Contraceptive Method	Total	Marital Status				
		MSC	MCR	SWD	NMWC	NMNC
Pill	79.8	79.9	89.3	71.4	85.5	69.4
Injection	75.1	74.9	86.2	68.8	82.1	62.9
IUD	63.0	62.1	83.0	45.4	70.1	49.8
Condom	59.2	56.1	76.8	44.2	63.6	53.6
Female Sterilization	42.7	45.1	67.5	41.6	44.8	29.4
Withdrawal	22.0	24.1	38.8	19.5	23.7	12.1
Rhythm	21.1	17.8	37.0	15.6	20.7	22.4
Foaming Tablets	19.9	19.5	35.6	18.2	22.4	12.9
Male Sterilization	9.6	7.8	27.0	6.5	9.5	7.6
No. of Cases	(4261)	(1470)	(289)	(77)	(1416)	(1009)

Codes:

MSC -- Married Swazi Custom
MCR -- Married Civil Rite
SWD -- Separated, Widowed, Divorced
NMWC -- Never Married, With Child
NMNC -- Never Married, No Child

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TABLE V-10

Percentage of All Males Aged 15-59 With Knowledge
of Contraceptive Methods, by Method and Marital Status
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Total</u>	<u>Marital Status</u>			
		<u>MSC</u>	<u>MCR</u>	<u>SWD</u>	<u>Never</u>
Condom	78.4	79.3	91.7	76.3	76.5
Pill	70.9	75.9	83.4	66.1	66.7
Injection	62.3	67.3	78.0	67.2	57.2
Female Sterilization	45.1	52.2	65.6	32.2	39.1
Withdrawal	44.0	56.5	64.9	45.2	33.8
Rhythm	33.6	36.7	49.5	24.3	30.3
IUD	29.6	31.2	57.3	29.9	25.7
Foaming Tablets	16.8	16.2	46.1	18.1	14.0
Male Sterilization	13.0	10.9	36.3	16.4	11.7
No. of Cases	(2273)	(831)	(175)	(82)	(1185)

Codes:

MSC -- Married Swazi Custom
MCR -- Married Civil Rite
SWD -- Separated, Widowed, Divorced
Never -- Never Married

TABLE V-11

Percentage of All Females Aged 15-49 With Knowledge
of Contraceptive Methods, by Method and Religion
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Total</u>	<u>Religion</u>			
		<u>Catholic</u>	<u>Protestant</u>	<u>Zionist</u>	<u>Other</u>
Pill	79.8	83.6	84.5	77.3	62.6
Injection	75.1	79.2	79.6	73.0	57.1
IUD	63.0	67.7	71.3	57.4	41.5
Condom	59.2	63.1	68.4	52.3	40.3
Female Sterilization	42.7	48.7	49.7	36.5	30.3
Withdrawal	22.0	21.3	27.6	17.0	18.5
Rhythm	21.1	29.3	27.7	13.4	15.3
Foaming Tablets	19.9	25.7	24.4	14.7	16.2
Male Sterilization	9.6	14.1	13.4	5.4	5.3
No. of Cases	(4261)	(409)	(1794)	(1718)	(340)

TABLE V-12

Percentage of All Males Aged 15-59 With Knowledge
of Contraceptive Methods, by Method and Religion
1988 Swaziland Family Health Survey

<u>Contraceptive Method</u>	<u>Total</u>	<u>Religion</u>			
		<u>Catholic</u>	<u>Protestant</u>	<u>Zionist</u>	<u>Other</u>
Condom	78.4	84.1	82.0	75.9	72.0
Pill	70.9	77.8	72.9	68.1	68.7
Injection	62.3	70.7	65.1	60.6	54.0
Female Sterilization	45.1	51.1	48.9	40.7	43.2
Withdrawal	44.0	55.0	44.4	39.8	47.0
Rhythm	33.6	41.0	38.0	28.8	29.8
IUD	29.6	46.1	36.0	23.5	18.8
Foaming Tablets	16.8	19.9	22.2	13.1	10.4
Male Sterilization	13.0	19.9	16.5	9.0	10.5
No. of Cases	(2273)	(235)	(845)	(812)	(381)

TABLE V-13

Percentage of All Females Aged 15-49 and All Males Aged 15-59
Who Ever Used Contraception, by Method and Residence
1988 Swaziland Family Health Survey

	Female			Male		
	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
<u>Ever Used</u>	30.7	47.0	25.8	27.6	38.3	24.7
Pill	19.0	31.7	15.2	5.5	10.1	4.2
Injection	10.5	17.1	8.6	2.7	5.1	2.0
Female Sterilization	2.6	3.4	2.3	1.7	2.7	1.4
IUD	4.6	10.2	2.9	1.2	3.5	0.6
Withdrawal	2.5	5.0	1.8	9.7	8.9	9.9
Rhythm	2.2	5.6	1.1	7.8	9.9	7.2
Condom	3.0	8.2	1.4	12.9	21.7	10.4
Foaming Tablets	1.4	3.2	0.9	0.7	1.0	0.6
Male Sterilization	0.1	0.4	0.1	0.1	0.0	0.1
No. of Cases	(4261)	(982)	(3279)	(2273)	(770)	(1503)

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TABLE V-14

Percentage of All Females Aged 15-49 and All Males Aged 15-59
Currently Using Contraception by Method and Residence
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Current Use and Method</u>	<u>Female</u>			<u>Male</u>		
	<u>Total</u>	<u>Residence</u>		<u>Total</u>	<u>Residence</u>	
		<u>Urban</u>	<u>Rural</u>		<u>Urban</u>	<u>Rural</u>
<u>Currently Using</u>	<u>16.6</u>	<u>28.1</u>	<u>13.1</u>	<u>19.1</u>	<u>26.4</u>	<u>17.1</u>
Pill	4.8	8.9	3.5	1.3	1.9	1.1
Injection	4.4	6.7	3.7	1.1	1.7	0.9
Female Sterilization	2.4	3.3	2.2	1.2	2.1	1.0
IUD	1.5	3.5	0.9	0.2	0.7	0.1
Withdrawal	0.9	1.6	0.7	3.8	3.1	4.0
Rhythm	0.8	1.5	0.6	3.4	3.5	3.4
Condom	0.6	1.3	0.4	7.3	12.1	5.9
Foaming Tablets	0.1	0.1	0.2	0.2	0.2	0.1
Male Sterilization	0.1	0.4	0.1	0.0	0.0	0.0
Other	0.9	0.8	0.9	0.7	1.1	0.6
<u>Not Currently Using</u>	<u>83.4</u>	<u>71.9</u>	<u>86.9</u>	<u>80.9</u>	<u>73.6</u>	<u>82.9</u>
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
No. of Cases	(4261)	(982)	(3279)	(2273)	(770)	(1503)

TABLE V-15

Percentage of All Females Aged 15-49
Currently Using Contraceptives by Method and Region
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Current Use and Method</u>	<u>Total</u>	<u>Region</u>			
		<u>Hhohho</u>	<u>Manzini</u>	<u>Shis.</u>	<u>Lubombo</u>
<u>Currently Using</u>	<u>16.6</u>	<u>21.2</u>	<u>18.1</u>	<u>10.5</u>	<u>15.2</u>
Pill	4.8	5.5	4.7	3.0	5.9
Injection	4.4	5.8	4.3	3.4	3.7
Female Sterilization	2.4	2.6	3.8	1.7	1.5
IUD	1.5	2.2	1.4	0.9	1.2
Withdrawal	0.9	2.1	0.8	0.0	0.5
Rhythm	0.8	1.0	1.2	0.4	0.5
Condom	0.6	0.9	0.7	0.5	0.2
Foaming Tablets	0.1	0.2	0.3	0.1	0.0
Male Sterilization	0.1	0.1	0.0	0.1	0.5
Other	0.9	0.8	1.0	0.5	1.3
<u>Not Currently Using</u>	<u>83.4</u>	<u>78.8</u>	<u>81.9</u>	<u>89.5</u>	<u>84.8</u>
Total	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(1245)	(1108)	(1027)	(881)

TABLE V-16

Percentage of All Females Aged 15-49 Currently Using
Contraceptives, by Method and Age Group
1988 Swaziland Family Health Survey
(Percent Distribution)

Contraceptive Method	Total	Age Groups						
		15-19	20-24	25-29	30-34	35-39	40-44	45-49
<u>Currently Using</u>	<u>16.6</u>	<u>5.9</u>	<u>18.9</u>	<u>20.9</u>	<u>23.3</u>	<u>21.2</u>	<u>16.3</u>	<u>16.8</u>
Pill	4.8	2.2	6.3	7.5	7.3	4.7	1.1	1.3
Injection	4.4	1.1	7.8	5.7	6.0	5.2	1.1	1.3
Female Sterilization	2.4	0.0	0.1	1.6	2.3	5.9	8.3	9.7
IUD	1.5	0.2	1.2	2.4	3.1	2.3	1.7	0.0
Withdrawal	0.9	0.3	0.5	0.8	1.2	0.9	2.5	2.5
Rhythm	0.8	1.3	1.1	0.7	0.4	0.5	0.3	0.4
Condom	0.6	0.3	0.7	0.7	1.5	0.5	0.3	0.0
Foaming Tablets	0.1	0.0	0.2	0.3	0.0	0.2	0.3	0.0
Male Sterilization	0.1	0.0	0.0	0.1	0.6	0.2	0.3	0.0
Other	0.9	0.6	0.9	1.1	1.0	1.0	0.6	1.7
<u>Not Currently Using</u>	<u>83.4</u>	<u>94.1</u>	<u>81.1</u>	<u>79.1</u>	<u>76.7</u>	<u>78.8</u>	<u>83.7</u>	<u>83.2</u>
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(1014)	(949)	(737)	(519)	(443)	(361)	(238)

TABLE V-17

Percentage of All Females Aged 15-49 Currently Using
Contraceptives, by Method and Marital Status
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Contraceptive Method</u>	<u>Total</u>	<u>Marital Status</u>				
		<u>MSC</u>	<u>MCR</u>	<u>SWD</u>	<u>NMWC</u>	<u>NMNC</u>
<u>Currently Using</u>	<u>16.6</u>	<u>17.9</u>	<u>35.6</u>	<u>14.3</u>	<u>18.8</u>	<u>6.4</u>
Pill	4.8	4.6	9.3	1.3	5.9	2.4
Injection	4.4	4.0	4.8	0.0	7.4	1.0
Female Sterilization	2.4	3.8	9.0	7.8	1.1	0.1
IUD	1.5	1.3	4.8	1.3	1.8	0.3
Withdrawal	0.9	1.7	1.7	1.3	0.5	0.1
Rhythm	0.8	0.4	1.7	0.0	0.3	1.9
Condom	0.6	0.4	1.7	0.0	0.8	0.3
Foaming Tablets	0.1	0.2	0.0	0.0	0.2	0.0
Male Sterilization	0.1	0.1	1.4	1.3	0.0	0.0
Other	0.9	1.4	1.1	1.3	0.7	0.3
<u>Not Currently Using</u>	<u>83.4</u>	<u>82.1</u>	<u>64.4</u>	<u>85.7</u>	<u>81.2</u>	<u>93.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(1470)	(289)	(77)	(1416)	(1009)

Codes:

MSC -- Married Swazi Custom
MCR -- Married Civil Rite
SWD -- Separated, Widowed, Divorced
NMWC -- Never Married, With Child
NMNC -- Never Married, No Children

TABLE V-18

Percentage of All Females Aged 15-49 Currently Using
Contraception by Method and Number of Live Births
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Current Use and Method</u>	<u>Total</u>	<u>Number of Live Births</u>					
		<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5+</u>
<u>Currently Using</u>	<u>16.6</u>	<u>6.8</u>	<u>14.6</u>	<u>23.3</u>	<u>23.2</u>	<u>22.5</u>	<u>19.3</u>
Pill	4.8	2.5	5.5	8.6	5.7	6.8	3.3
Injection	4.4	0.9	4.9	7.3	7.3	6.5	3.9
Female Sterilization	2.4	0.3	0.3	1.3	3.1	4.2	6.0
IUD	1.5	0.5	1.6	2.0	2.8	2.1	1.3
Withdrawal	0.9	0.1	0.4	1.3	1.0	0.5	2.1
Rhythm	0.8	1.9	0.7	0.4	0.4	0.8	0.2
Condom	0.6	0.4	0.5	1.3	0.6	0.0	0.8
Foaming Tablets	0.1	0.0	0.1	0.2	0.2	0.0	0.3
Male Sterilization	0.1	0.0	0.0	0.2	0.8	0.0	0.1
Other	0.9	0.3	0.5	0.9	1.4	1.6	1.3
<u>Not Currently Using</u>	<u>83.4</u>	<u>93.2</u>	<u>85.4</u>	<u>76.7</u>	<u>76.8</u>	<u>77.5</u>	<u>80.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(1073)	(749)	(549)	(509)	(382)	(999)

TABLE V-19

Percentage of All Females Aged 15-49 Currently
Using Contraceptives, by Method and Education
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Contraceptive Method</u>	<u>Total</u>	<u>Education</u>			
		<u>None</u>	<u>Primary</u>	<u>Secondary</u>	<u>High School+</u>
<u>Currently Using</u>	<u>16.6</u>	<u>9.9</u>	<u>13.1</u>	<u>20.8</u>	<u>33.8</u>
Pill	4.8	1.7	3.3	6.0	13.9
Injection	4.4	2.6	4.0	5.3	7.7
Female Sterilization	2.4	2.4	2.5	2.4	2.4
IUD	1.5	0.2	0.8	2.8	3.6
Withdrawal	0.9	0.9	1.2	0.8	0.2
Rhythm	0.8	0.3	0.3	1.3	2.6
Condom	0.6	0.3	0.3	0.8	2.2
Foaming Tablets	0.1	0.0	0.2	0.1	0.2
Male Sterilization	0.1	0.1	0.1	0.2	0.5
Other	0.9	1.3	0.5	1.2	0.5
<u>Not Currently Using</u>	<u>83.4</u>	<u>90.1</u>	<u>86.9</u>	<u>79.2</u>	<u>66.2</u>
Total	100.0	100.0	100.0	100.0	100.0
No. of Cases	(4261)	(922)	(1726)	(1196)	(417)

TABLE V-20

Percentage of All Females Aged 15-49 Currently Using
Contraception by Method and Religion
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Current Use and Method</u>	<u>Total</u>	<u>Religion</u>			
		<u>Catholic</u>	<u>Protestant</u>	<u>Zionist</u>	<u>Other</u>
<u>Currently Using</u>	<u>16.6</u>	<u>21.8</u>	<u>20.0</u>	<u>12.4</u>	<u>13.8</u>
Pill	4.8	5.9	5.8	3.6	3.8
Injection	4.4	5.1	5.2	3.6	3.8
Female Sterilization	2.4	3.2	3.2	1.5	2.4
IUD	1.5	3.2	1.8	0.8	1.2
Withdrawal	0.9	0.7	0.8	1.0	1.2
Rhythm	0.8	1.5	1.3	0.2	0.3
Condom	0.6	0.5	0.7	0.5	0.6
Foaming Tablets	0.1	0.2	0.1	0.2	0.3
Male Sterilization	0.1	0.5	0.2	0.1	0.0
Other	0.9	1.0	1.0	0.9	0.3
<u>Not Currently Using</u>	<u>83.4</u>	<u>78.2</u>	<u>80.0</u>	<u>87.6</u>	<u>86.2</u>
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
No. of Cases	(4261)	(409)	(1794)	(1718)	(340)

TABLE V-21

Percentage of All Females Aged 15-49 Currently Using Contraception,
by Selected Characteristics and Residence
1988 Swaziland Family Health Survey

<u>Selected Characteristics</u>	<u>Residence</u>			<u>No. of Cases</u>		
	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
Total	16.6	28.1	13.1	(4261)	(982)	(3279)
<u>Age</u>						
15-19	5.9	10.8	4.3	(1014)	(250)	(764)
20-24	18.9	29.2	16.1	(949)	(202)	(747)
25-29	20.9	35.8	15.8	(737)	(187)	(550)
30-34	23.3	40.6	17.6	(519)	(128)	(391)
35-39	21.2	38.3	16.6	(443)	(94)	(349)
40-44	16.3	29.0	13.4	(361)	(69)	(292)
45-49	16.8	28.8	13.4	(238)	(52)	(186)
<u>Education</u>						
None	9.9	14.7	9.2	(922)	(116)	(806)
Primary	13.1	20.2	11.4	(1726)	(327)	(1399)
Secondary	20.8	30.1	17.3	(1196)	(329)	(867)
High School+	33.8	44.8	22.7	(417)	(210)	(207)
<u>Region</u>						
Hhohho	21.2	36.7	15.0	(1245)	(357)	(888)
Manzini	18.1	25.4	15.2	(1108)	(319)	(789)
Shiselweni	10.5	20.0	9.9	(1027)	(60)	(967)
Lubombo	15.2	21.1	12.9	(881)	(246)	(635)

TABLE V-22

Percentage of Women* Aged 15-49 Currently Using Contraception
by Method for Botswana, Lesotho, Swaziland, and Zimbabwe

Contraceptive Method	<u>Botswana</u>	<u>Zimbabwe</u>	<u>Lesotho</u>	<u>Swaziland</u>
	<u>1988</u>	<u>1988</u>	<u>1977</u>	<u>1988</u>
Current Use	<u>29.6</u>	<u>32.2</u>	<u>5.0</u>	<u>16.6</u>
Pill	17.6	23.5	1.0	4.8
IUD	4.4	0.7	0.0	1.5
Injection	3.2	0.2	0.0	4.4
Foam	0.0	0.0	0.0	0.1
Condom	1.3	0.9	0.0	0.6
Female St.	2.2	1.7	1.0	2.4
Male St.	0.1	0.1	0.0	0.1
Traditional	0.8	5.0	3.0	2.7
<u>Non-Use</u>	<u>70.4</u>	<u>67.8</u>	<u>95.0</u>	<u>83.4</u>
Total	100.0	100.0	100.0	100.0

* Botswana, Zimbabwe and Swaziland surveys refer to "all women," while Lesotho refers to "women in union".

TABLE V-23
 Age at Time of First Contraceptive Use by Selected Characteristics:
 Female Ever-Users of Contraception Aged 15-49
 1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Age at First Use</u>					<u>Total</u>	<u>Average Age</u>	<u>No. of Cases</u>
	<u>< 15</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30 +</u>			
Total	0.8	26.4	38.3	18.8	15.7	100.0	23.4	(1,292)
<u>Residence</u>								
Urban	0.9	29.5	39.0	19.4	11.2	100.0	22.7	(454)
Rural	0.7	24.7	38.0	18.5	18.1	100.0	23.7	(838)
<u>Education</u>								
None	1.7	24.2	26.4	20.2	27.5	100.0	25.0	(178)
Primary	0.4	23.1	34.2	22.2	20.1	100.0	24.2	(468)
Secondary	0.7	27.6	41.0	18.4	12.2	100.0	22.8	(434)
High School +	0.9	33.0	51.9	10.8	3.3	100.0	21.2	(212)
<u>Region</u>								
Hhohho	1.3	30.7	39.7	16.8	11.5	100.0	22.5	(469)
Manzini	0.3	26.8	40.9	16.3	15.8	100.0	23.2	(362)
Shiselweni	0.0	18.8	33.5	25.0	22.8	100.0	25.1	(224)
Lubombo	1.3	24.5	36.3	20.7	17.3	100.0	23.7	(237)

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TABLE V-24

Percent Distribution of Current Users of Contraception,
by Method and Residence, According to Source of Method
1988 Swaziland Family Health Survey

<u>TOTAL</u>			Female			All Modern
<u>Source</u>	<u>Pill</u>	<u>Injection</u>	<u>Sterili-</u>	<u>IUD</u>	<u>Condom</u>	<u>Methods</u>
Clinic/Health Center	63.6	56.4	0.0	54.0	50.0	48.2
Hospital	6.9	20.7	98.1	20.6	11.5	29.7
FLAS	19.2	14.4	0.0	15.9	19.2	13.6
Private Clinic	6.9	8.0	0.0	7.9	7.7	6.0
Pharmacy	1.5	0.0	0.0	0.0	7.7	1.0
<u>Other</u>	<u>2.0</u>	<u>0.5</u>	<u>1.9</u>	<u>1.6</u>	<u>3.8</u>	<u>1.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(203)	(188)	(104)	(63)	(26)	(596)
<u>URBAN</u>						
<u>Source</u>						
Clinic/Health Center	48.3	39.4	0.0	50.0	*	38.4
Hospital	9.2	24.2	93.8	17.6	*	27.0
FLAS	26.4	21.2	0.0	17.6	*	19.4
Private Clinic	10.3	13.6	0.0	11.8	*	10.1
Pharmacy	1.2	0.0	0.0	0.0	*	1.7
<u>Other</u>	<u>4.6</u>	<u>1.5</u>	<u>6.2</u>	<u>2.9</u>	<u>*</u>	<u>3.4</u>
Total	100.0	100.0	100.0	100.0	*	100.0
No. of Cases	(87)	(66)	(32)	(34)	(13)	(237)
<u>RURAL</u>						
<u>Source</u>						
Clinic/Health Center	75.0	65.6	0.0	58.6	*	54.6
Hospital	5.2	18.8	100.0	24.1	*	31.5
FLAS	13.8	10.7	0.0	13.8	*	9.8
Private Clinic	4.3	4.9	0.0	3.4	*	3.3
Pharmacy	1.7	0.0	0.0	0.0	*	0.6
<u>Other</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>*</u>	<u>0.3</u>
Total	100.0	100.0	100.0	100.0	*	100.0
No. of Cases	(116)	(122)	(72)	(29)	(13)	(359)

* < 25 Cases.

TABLE V-25

Percent Distribution of Current Users of Contraception, by Method
and Region, According to Source of Method
1988 Swaziland Family Health Survey

<u>TOTAL</u>			Female Sterili- zation	IUD	Condom
<u>Source</u>	<u>Pill</u>	<u>Injection</u>			
Clinic/Health Center	63.6	56.4	0.0	54.0	50.0
Hospital	6.9	20.7	98.1	20.6	11.5
FLAS	19.2	14.4	0.0	15.9	19.2
Private Clinic	6.9	8.0	0.0	7.9	7.7
Pharmacy	1.5	0.0	0.0	0.0	7.7
<u>Other</u>	<u>2.0</u>	<u>0.5</u>	<u>1.9</u>	<u>1.6</u>	<u>3.8</u>
Total	100.0	100.0	100.0	100.0	100.0
No. of Cases	(203)	(188)	(104)	(63)	(26)

HHOHHOSource

Clinic/Health Center	50.0	45.8	0.0	57.1	*
Hospital	11.8	27.8	93.8	14.3	*
FLAS	19.1	8.3	0.0	10.7	*
Private Clinic	11.8	16.7	0.0	14.3	*
Pharmacy	1.5	0.0	0.0	0.0	*
<u>Other</u>	<u>5.9</u>	<u>1.4</u>	<u>6.2</u>	<u>3.6</u>	*
Total	100.0	100.0	100.0	100.0	*
No. of Cases	(68)	(72)	(32)	(28)	(11)

MANZINISource

Clinic/Health Center	44.2	56.2	0.0	*	*
Hospital	0.0	6.2	100.0	*	*
FLAS	44.2	35.4	0.0	*	*
Private Clinic	9.6	2.1	0.0	*	*
Pharmacy	1.9	0.0	0.0	*	*
<u>Other</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	*	*
Total	100.0	100.0	100.0	*	*
No. of Cases	(52)	(48)	(42)	(15)	(8)

* < 25 cases

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TABLE V-25 (con't.)

<u>Source</u>	<u>Pill</u>	<u>Injection</u>	<u>Female Sterili- zation</u>	<u>IUD</u>	<u>Condom</u>
<u>SHISELWENI</u>					
Clinic/Health Center	90.3	74.3	*	*	*
Hospital	3.2	17.1	*	*	*
FLAS	6.4	2.9	*	*	*
Private Clinic	0.0	5.7	*	*	*
Pharmacy	0.0	0.0	*	*	*
<u>Other</u>	<u>0.0</u>	<u>0.0</u>	*	*	*
Total	100.0	100.0	*	*	*
No. of Cases	(31)	(35)	(17)	(9)	(5)

LUBOMBO

Source

Clinic/Health Center	84.6	60.6	*	*	*
Hospital	9.6	30.3	*	*	*
FLAS	1.9	9.1	*	*	*
Private Clinic	1.9	0.0	*	*	*
Pharmacy	1.9	0.0	*	*	*
<u>Other</u>	<u>0.0</u>	<u>0.0</u>	*	*	*
Total	100.0	100.0	*	*	*
No. of Cases	(52)	(33)	(13)	(11)	(2)

* < 25 cases

TABLE V-26

Most Recent Contraceptive Method Used by Females Who Had
Used Contraception in the Past But Are Not Currently Using by
Selected Characteristics
1988 Swaziland Family Health Survey
(Percent Distribution)

Method	Total	Urban	Residence		Region			Education			
			Rural	Hhohho	Manzini	Shiselweni	Lubombo	None	Primary	Second	HS+
Pill	54.5	51.6	55.8	48.6	57.3	55.6	60.8	52.2	55.8	55.1	51.4
Injection	25.4	25.3	25.5	26.6	22.6	28.2	24.3	21.7	27.3	26.7	20.3
IUD	9.1	12.4	7.7	8.9	11.0	11.1	4.7	4.4	8.0	11.8	12.2
Foaming Tablets	1.7	2.2	1.4	1.9	1.2	2.6	0.9	2.2	2.0	0.0	4.0
Condom	1.3	1.6	1.2	2.3	0.6	1.7	0.0	0.0	0.0	2.1	5.4
Rhythm	1.0	1.6	0.7	0.9	0.6	0.0	2.8	3.3	0.0	0.5	2.7
Other	<u>7.0</u>	<u>5.4</u>	<u>7.7</u>	<u>10.8</u>	<u>6.7</u>	<u>0.8</u>	<u>6.6</u>	<u>16.3</u>	<u>6.8</u>	<u>3.7</u>	<u>4.0</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(602)	(186)	(416)	(214)	(164)	(117)	(107)	(92)	(249)	(187)	(74)

TABLE V-27

Reason Stopped Using Contraception by Last Method Used
for Women Who Had Had Used Contraception in the Past
But Are Not Currently Using
1988 Swaziland Family Health Survey
(Percent Distribution)

Reason Stopped Using	Total	Last Method Used			
		Pill	IUD	Injection	Other*
Negative side effects	55.8	61.0	60.0	59.5	18.2
Desired Pregnancy	12.5	11.0	18.2	9.8	21.2
Spouse Opposed	5.8	6.7	1.8	5.9	4.6
Religion	1.5	1.5	0.0	2.0	1.5
Not Sexually Active	3.5	2.7	0.0	2.0	13.6
Lazy	10.8	9.2	5.4	13.1	18.2
Menopause	0.5	0.0	0.0	1.3	1.5
Other	9.6	7.9	14.6	6.5	21.2
Total	100.0	100.0	100.0	100.0	100.0
No. of Cases	(602)	(328)	(55)	(153)	(66)

*Includes foaming tablets, condom, rhythm, and other methods.

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TABLE V-28

Percent of Female Nonusers That Desire to Use Contraceptives
Now or In the Future, and Knowledge of Availability
by Selected Characteristics
1988 Swaziland Family Health Survey

<u>Selected Characteristics</u>	<u>Percent Who Desire to Use Contraceptives</u>	<u>No. of Cases</u>	<u>Percent of Those Who Desire Who Know Where To Obtain Method</u>	<u>No. of Cases</u>
Total	45.1	(3554)	73.4	(1602)
<u>Residence</u>				
Urban	49.0	(706)	76.6	(346)
Rural	44.1	(2848)	72.5	(1256)
<u>Region</u>				
Hhohho	45.5	(981)	69.5	(446)
Manzini	47.6	(907)	75.2	(432)
Shiselweni	41.1	(919)	77.0	(378)
Lubombo	46.3	(747)	72.2	(346)
<u>Age</u>				
15-19	54.4	(954)	60.9	(519)
20-24	58.3	(770)	78.0	(449)
25-29	54.9	(583)	82.5	(320)
30-34	37.9	(398)	76.8	(151)
35-39	31.5	(349)	80.0	(110)
40-44	15.9	(302)	81.2	(48)
45-49	2.5	(198)	*	(5)
<u>Education</u>				
None	32.6	(831)	66.8	(271)
Primary	45.2	(1500)	72.4	(678)
Secondary	50.8	(947)	73.8	(481)
High School+	62.3	(276)	86.6	(172)

* <25 cases

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TABLE V-29

Female Nonusers Who Desire to Use a Method in the Future,
by Method of Choice and Source Where Method Would be Obtained,
by Residence and Region
1988 Swaziland Family Health Survey
(Percent Distribution)

<u>Method of Choice</u>	<u>Total</u>	<u>Residence</u>		<u>Region</u>			
		<u>Urban</u>	<u>Rural</u>	<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>
Injection	48.0	43.1	49.4	46.2	44.0	54.5	48.3
Pill	26.7	26.0	26.9	24.2	27.1	25.4	30.9
IUD	6.7	10.4	5.6	6.7	7.9	6.6	5.2
Female Sterilization	2.3	2.6	2.2	3.6	2.3	1.3	1.7
Condom	2.1	2.3	2.0	2.0	2.6	2.1	1.4
Other	1.8	2.6	1.6	2.7	1.6	1.6	1.2
Don't know	12.4	13.0	12.3	14.6	14.6	8.5	11.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(1602)	(346)	(1256)	(446)	(432)	(378)	(346)
 <u>Source Where Method Would Be Obtained</u>							
Clinic/Health Centre (Public)	69.3	50.9	74.6	58.7	61.5	87.6	71.2
Hospital	20.2	22.6	19.4	31.3	13.8	11.7	24.4
FLAS	9.2	24.5	4.7	9.0	21.5	0.7	3.2
Other	1.4	1.9	1.2	1.0	3.1	0.0	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	(1176)	(265)	(911)	(310)	(325)	(291)	(250)

1988

TABLE V-30
 Percentage Distribution: Females Age 15-59 Opinion of Who Should Decide
 Whether a Person Should Use a Method of Contraception
 by Selected Characteristics
 1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Decision Maker About Use of Contraception</u>						<u>Total</u>	<u>No. of Cases</u>
	<u>Husband</u>	<u>Wife</u>	<u>Both</u>	<u>Gogo</u>	<u>Doesn't Believe</u>	<u>Other</u>		
Total	26.1	27.1	33.9	0.7	9.2	3.0	100.0	(4,261)
<u>Residence</u>								
Urban	19.1	30.4	42.7	0.5	3.2	4.1	100.0	(982)
Rural	28.2	26.1	31.3	0.7	11.1	2.6	100.0	(3,279)
<u>Education</u>								
None	36.0	20.9	26.4	0.9	14.1	1.7	100.0	(922)
Primary	26.9	26.5	32.1	0.7	10.5	3.2	100.0	(1,726)
Secondary	22.7	30.1	37.2	0.6	6.0	3.3	100.0	(1,196)
High School +	10.8	34.5	48.4	0.2	2.4	3.6	100.0	(417)
<u>Region</u>								
Hhohho	27.5	28.9	35.9	1.0	3.4	3.4	100.0	(1,245)
Manzini	22.8	32.0	32.8	0.5	7.7	4.2	100.0	(1,108)
Shiselweni	28.5	18.5	29.4	0.7	22.2	0.7	100.0	(1,027)
Lubombo	25.6	28.4	37.7	0.3	4.4	3.5	100.0	(881)
<u>Marital Status</u>								
Married Swazi								
Custom	32.0	23.0	31.8	0.4	11.4	1.4	100.0	(1,500)
Married Civil Rite	22.6	20.2	46.2	0.1	8.3	2.2	100.0	(372)
Sep./Wid./Div.	22.5	27.5	28.8	0.0	18.8	2.5	100.0	(80)
Never Married,								
With Child	26.9	33.3	30.7	0.5	6.6	1.9	100.0	(1,344)
Never Married, No Child	17.6	27.5	37.2	1.4	9.1	7.2	100.0	(965)

TABLE V-31
 Percentage Distribution: Males Age 15-59 Opinion of Who Should Decide
 Whether a Person Should Use a Method of Contraception
 by Selected Characteristics
 1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Decision Maker About Use of Contraception</u>						<u>Total</u>	<u>No. of Cases</u>
	<u>Husband</u>	<u>Wife</u>	<u>Both</u>	<u>Gogo</u>	<u>Doesn't Believe</u>	<u>Other</u>		
Total	37.8	5.9	30.7	0.3	20.4	4.8	100.0	(2,273)
<u>Residence</u>								
Urban	36.4	7.1	41.0	0.2	10.9	4.4	100.0	(770)
Rural	38.2	5.6	27.8	0.4	23.1	4.9	100.0	(1,503)
<u>Education</u>								
None	43.8	5.3	18.4	0.7	25.8	6.0	100.0	(546)
Primary	38.9	6.1	26.3	0.2	23.6	4.9	100.0	(812)
Secondary	37.4	4.9	37.2	0.4	15.5	4.6	100.0	(595)
High School +	23.6	8.9	53.5	0.0	11.2	2.8	100.0	(320)
<u>Region</u>								
Hhohho	49.9	6.6	31.1	0.7	6.1	5.6	100.0	(689)
Manzini	24.2	7.9	40.3	0.0	23.2	4.4	100.0	(569)
Shiselweni	39.6	3.9	14.6	0.3	40.7	0.9	100.0	(474)
Lubombo	35.6	5.2	38.1	0.3	11.9	8.9	100.0	(541)
<u>Marital Status</u>								
Married Swazi								
Custom	37.5	5.0	29.7	0.5	24.0	3.3	100.0	(831)
Married Civil Rite	24.9	6.3	54.2	0.0	14.2	0.5	100.0	(175)
Sep./Wid./Div.	40.1	8.5	6.2	0.0	29.4	15.8	100.0	(82)
Never Married	39.2	6.4	29.9	0.3	18.4	5.7	100.0	(1,185)

TABLE V-32
 Percentage of All Women Age 15-49 Who Are In Need of
 Family Planning Services,*
 by Selected Characteristics and Residence
 1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Total</u>		<u>Urban</u>		<u>Rural</u>	
Total	41.6	(4,261)	35.1	(982)	43.6	(3,279)
<u>Age</u>						
15-19	32.2	(1,014)	31.1	(250)	32.5	(764)
20-24	47.6	(949)	39.6	(202)	49.8	(747)
25-29	45.3	(737)	32.1	(187)	49.8	(550)
30-34	43.4	(519)	31.2	(128)	47.3	(391)
35-39	47.9	(443)	37.2	(94)	50.7	(349)
40-44	40.7	(361)	44.9	(69)	39.7	(292)
45-49	31.9	(238)	38.5	(52)	30.1	(186)
<u>Education</u>						
None	46.2	(922)	43.1	(116)	46.6	(806)
Primary	45.5	(1,726)	42.5	(327)	46.2	(1,399)
Secondary	36.3	(1,196)	32.8	(329)	37.6	(867)
High School +	30.5	(417)	22.9	(210)	38.2	(207)
<u>Region</u>						
Hhohho	40.2	(1,245)	29.1	(357)	44.6	(888)
Manzini	42.3	(1,108)	38.2	(319)	44.0	(789)
Shiselweni	40.3	(1,027)	38.3	(60)	40.4	(967)
Lubombo	44.3	(881)	39.0	(246)	46.3	(635)
<u>Marital Status</u>						
Married, Swazi Custom	46.3	(1,470)	36.9	(198)	47.7	(1,272)
Married Civil Rite	32.9	(289)	18.7	(107)	41.2	(182)
Sep./Wid./Div.	52.0	(77)	**	(17)	46.7	(60)
Never Married, With Child	53.2	(1,416)	43.6	(385)	56.7	(1,031)
Never Married, No Child	20.3	(1,009)	26.2	(275)	18.1	(734)

*Women are defined as in need of family planning services who are:
 not currently pregnant, not currently desiring a pregnancy, and not
 using a contraceptive method for reasons not related to pregnancy,
 subfecundity, or sexual activity.

**Less than 25 cases.

TABLE V-33
 Percentage of Women Aged 15-44 Who Are In Need of Family Planning Services,
 Who Have Ever Used Contraception and Who Desire to Use
 Contraception Now or In the Future, by Selected Characteristics
 1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Ever-Used Contraception</u>	<u>Desire to Use Contraception</u>	<u>No. of Cases</u>
Total	19.3	56.3	(1,773)
<u>Residence</u>			
Urban	29.3	57.4	(345)
Rural	16.9	56.0	(1,428)
<u>Age</u>			
15-19	4.6	68.2	(327)
20-24	17.5	68.1	(452)
25-29	26.6	67.1	(334)
30-34	27.6	48.4	(225)
35-39	21.2	44.3	(212)
40-44	26.5	24.5	(147)
45-49	17.1	5.3	(76)
<u>Education</u>			
None	11.0	44.6	(426)
Primary	19.6	56.7	(786)
Secondary	24.6	62.0	(434)
HS+	26.8	73.2	(127)
<u>Region</u>			
Hhohho	24.0	54.4	(500)
Manzini	21.8	56.9	(469)
Shiselweni	14.2	54.6	(414)
Lubombo	15.6	59.7	(390)
<u>Marital Status</u>			
Married Swazi Custom	20.6	48.2	(680)
Married Civil Rite	29.5	46.3	(95)
Sep./Wid./Div.	30.0	15.0	(40)
Never Married, With Child	20.6	65.7	(753)
Never Married, No Child	3.4	59.0	(205)

TABLE VI-1

Percentage of Children Less Than 5 Years of Age
Who Received Immunizations by Selected Characteristics
1988 Swaziland Family Health Survey

	<u>BCG</u>	<u>DPT3+</u>	<u>Polio3+</u>	<u>Measles</u>	<u>No. of Cases</u>
TOTAL	91.8	71.2	67.2	58.1	(3092)*
<u>Age in Months</u>					
<12	94.2	36.8	29.3	11.7	(726)
12-23	93.7	82.8	77.9	65.4	(686)
24-35	92.4	84.4	81.9	77.1	(629)
36-47	90.5	80.4	79.2	74.7	(525)
48-59	86.3	78.4	75.7	73.2	(526)
<u>Residence</u>					
Urban	92.9	70.3	64.9	50.6	(522)
Rural	91.5	71.4	67.6	59.6	(2570)
<u>Region</u>					
Hhohho	87.1	64.3	59.9	47.9	(879)
Manzini	94.5	72.9	71.3	60.9	(732)
Shiselweni	95.1	77.7	75.5	68.6	(812)
Lubombo	90.7	70.3	62.0	55.6	(669)
<u>Education</u>					
None	86.1	66.5	63.5	57.4	(732)
Primary	93.1	72.9	68.5	58.5	(1353)
Secondary	94.6	72.8	69.2	60.5	(770)
High School+	92.4	70.5	64.4	50.0	(237)

*Excludes missing data for: 1 record DPT3, 3 records Polio3, and 4 records measles.

TABLE VI-2

Percentage of Children Less Than 5 Years of Age
Receiving BCG Immunization, by Selected Characteristics
1988 Swaziland Family Health Survey

<u>TOTAL</u>	<u>Number of Doses</u>			<u>Total</u>	<u>No. of Cases</u>
	<u>0</u>	<u>1</u>	<u>Don't know</u>		
<u>Age in Months</u>					
0-5	5.9	93.8	0.3	100.0	(387)
6-11	4.7	94.7	0.6	100.0	(339)
12-17	4.5	95.0	0.5	100.0	(399)
18-23	7.3	92.0	0.7	100.0	(287)
24-59	8.8	89.9	1.4	100.0	(1680)
<u>Total</u>	7.3	91.8	1.0	100.0	(3092)
<u>Region</u>					
<u>Hhohho</u>					
0-5	9.2	89.9	0.9	100.0	(109)
6-11	10.2	88.8	1.0	100.0	(98)
12-17	8.0	91.2	0.9	100.0	(113)
18-23	12.5	86.4	1.1	100.0	(88)
24-59	12.3	85.4	2.3	100.0	(471)
<u>Total</u>	11.2	87.1	1.7	100.0	(879)
<u>Manzini</u>					
0-5	2.1	97.9	0.0	100.0	(96)
6-11	2.4	97.7	0.0	100.0	(85)
12-17	5.3	94.7	0.0	100.0	(95)
18-23	3.1	96.9	0.0	100.0	(64)
24-59	6.6	92.6	0.8	100.0	(392)
<u>Total</u>	5.1	94.5	0.4	100.0	(732)
<u>Shiselweni</u>					
0-5	7.4	92.6	0.0	100.0	(95)
6-11	2.2	97.8	0.0	100.0	(91)
12-17	0.0	99.0	1.0	100.0	(97)
18-23	1.4	97.3	1.4	100.0	(74)
24-59	4.6	93.9	1.5	100.0	(455)
<u>Total</u>	3.8	95.1	1.1	100.0	(812)
<u>Lubombo</u>					
0-5	4.6	95.4	0.0	100.0	(87)
6-11	3.1	95.4	1.5	100.0	(65)
12-17	4.3	95.7	0.0	100.0	(94)
18-23	11.5	88.5	0.0	100.0	(61)
24-59	11.6	87.9	0.6	100.0	(362)
<u>Total</u>	8.8	90.7	0.5	100.0	(669)

TABLE VI-3

Percentage of Children Less Than 5 Years of Age Receiving
DPT Immunizations* by Selected Characteristics
1988 Swaziland Family Health Survey

TOTAL	Number of Doses				Booster	Don't Know	Total	No. of Cases
	0	1	2	3				
Age in Months								
0-5	53.5	23.3	12.7	9.8	0.8	0.0	100.0	(387)
6-11	11.0	6.5	15.7	66.3	0.6	0.0	100.0	(338)
12-17	6.5	3.3	8.0	79.0	3.3	0.0	100.0	(399)
18-23	7.3	4.5	4.5	67.6	16.0	0.0	100.0	(287)
24-59	10.5	2.8	5.3	55.7	25.5	0.2	100.0	(1680)
<u>Total</u>	15.1	6.0	7.6	55.2	16.0	0.1	100.0	(3091)*
<u>Region</u>								
<u>Hhohho</u>								
0-5	63.3	19.3	6.4	10.1	0.9	0.0	100.0	(109)
6-11	13.4	8.2	15.5	60.8	2.1	0.0	100.0	(97)
12-17	10.6	5.3	11.5	70.8	1.8	0.0	100.0	(113)
18-23	10.2	10.2	9.1	55.7	14.8	0.0	100.0	(88)
24-59	14.4	3.8	7.6	57.8	16.1	0.2	100.0	(471)
<u>Total</u>	19.5	7.1	9.0	53.6	10.7	0.1	100.0	(878)
<u>Manzini</u>								
0-5	56.2	22.9	10.4	9.4	1.0	0.0	100.0	(96)
6-11	3.5	4.7	15.3	76.5	0.0	0.0	100.0	(85)
12-17	7.4	3.2	10.5	70.5	8.4	0.0	100.0	(95)
18-23	3.1	1.6	0.0	78.1	17.2	0.0	100.0	(64)
24-59	8.9	3.1	5.6	53.3	29.1	0.0	100.0	(392)
<u>Total</u>	13.8	5.7	7.5	54.6	18.3	0.0	100.0	(732)
<u>Shiselweni</u>								
0-5	41.1	32.6	15.8	9.5	1.0	0.0	100.0	(95)
6-11	8.8	9.9	13.2	68.1	0.0	0.0	100.0	(91)
12-17	2.1	3.1	4.1	89.7	1.0	0.0	100.0	(97)
18-23	2.7	2.7	2.7	70.3	21.6	0.0	100.0	(74)
24-59	5.9	3.1	2.0	53.0	35.6	0.4	100.0	(455)
<u>Total</u>	9.6	7.3	5.2	55.5	22.2	0.3	100.0	(812)
<u>Lubombo</u>								
0-5	51.7	18.4	19.5	10.3	0.0	0.0	100.0	(87)
6-11	20.0	1.5	20.0	58.5	0.0	0.0	100.0	(65)
12-17	5.3	1.1	5.3	86.2	2.1	0.0	100.0	(94)
18-23	13.1	1.6	4.9	70.5	9.8	0.0	100.0	(61)
24-59	12.7	0.8	6.1	59.1	21.3	0.0	100.0	(362)
<u>Total</u>	17.5	3.3	9.0	57.6	12.7	0.0	100.0	(669)

*Excludes one case with missing information on DPT.

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TABLE VI-4

Percentage of Children Less Than 5 Years of Age
Receiving Polio* Immunizations by Selected Characteristics
1988 Swaziland Family Health Survey

<u>TOTAL</u> <u>Age in Months</u>	<u>Number of Doses</u>				<u>Booster</u>	<u>Don't Know</u>	<u>Total</u>	<u>No. of Cases</u>
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>				
0-5	66.4	19.4	8.0	5.9	0.3	0.0	100.0	(387)
6-11	24.0	6.2	13.7	54.9	0.9	0.3	100.0	(337)
12-17	12.5	3.8	7.3	73.9	2.5	0.0	100.0	(399)
18-23	11.9	4.2	3.8	66.6	13.6	0.0	100.0	(287)
24-59	11.9	4.3	4.6	56.9	22.2	0.1	100.0	(1679)
<u>Total</u>	20.1	6.3	6.3	53.4	13.8	0.1	100.0	(3089)*
<u>Region</u>								
<u>Hhohho</u>								
0-5	77.1	14.7	4.6	3.7	0.0	0.0	100.0	(109)
6-11	26.0	8.3	12.5	49.0	3.1	1.0	100.0	(96)
12-17	17.7	4.4	10.6	65.5	1.8	0.0	100.0	(113)
18-23	15.9	8.0	6.8	61.4	8.0	0.0	100.0	(88)
24-59	16.8	6.6	5.5	58.3	12.8	0.0	100.0	(470)
<u>Total</u>	25.3	7.7	7.0	51.7	8.2	0.1	100.0	(876)
<u>Manzini</u>								
0-5	64.6	19.8	7.3	8.3	0.0	0.0	100.0	(96)
6-11	22.4	3.5	12.9	61.2	0.0	0.0	100.0	(85)
12-17	8.4	2.1	5.3	76.8	7.4	0.0	100.0	(95)
18-23	4.7	1.6	1.6	75.0	17.2	0.0	100.0	(64)
24-59	10.2	3.8	3.3	55.1	27.3	0.3	100.0	(392)
<u>Total</u>	18.0	5.5	5.1	54.2	17.1	0.1	100.0	(732)
<u>Shiselweni</u>								
0-5	54.7	29.5	9.5	5.3	1.1	0.0	100.0	(95)
6-11	17.6	9.9	13.2	59.3	0.0	0.0	100.0	(91)
12-17	3.1	3.1	4.1	89.7	0.0	0.0	100.0	(97)
18-23	4.1	2.7	2.7	68.9	21.6	0.0	100.0	(74)
24-59	5.9	3.7	2.4	53.2	34.5	0.2	100.0	(455)
<u>Total</u>	12.4	7.3	4.7	54.1	21.4	0.1	100.0	(812)
<u>Lubombo</u>								
0-5	67.8	13.8	11.5	6.9	0.0	0.0	100.0	(87)
6-11	32.3	1.5	16.9	49.2	0.0	0.0	100.0	(65)
12-17	20.2	5.3	8.5	64.9	1.1	0.0	100.0	(94)
18-23	23.0	3.3	3.3	62.3	8.2	0.0	100.0	(61)
24-59	14.9	2.5	7.5	61.6	13.5	0.0	100.0	(362)
<u>Total</u>	25.0	4.3	8.7	53.8	8.2	0.0	100.0	(669)

*Excludes three cases missing information on Polio Immunizations

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TABLE VI-5

Percentage of Children Less Than 5 Years of Age
Receiving Measles Immunization*, by Selected Characteristics
1988 Swaziland Family Health Survey

<u>TOTAL</u> <u>Age in Months</u>	<u>Number of Doses</u>			<u>Total</u>	<u>No. of Cases</u>
	<u>0</u>	<u>1</u>	<u>Don't Know</u>		
0-8	96.1	2.5	1.4	100.0	(561)
9-11	52.8	43.6	3.7	100.0	(163)
12-17	29.9	63.6	6.5	100.0	(398)
18-23	24.0	67.9	8.0	100.0	(287)
24-59	16.9	75.1	8.0	100.0	(1679)
<u>Total</u>	35.5	58.1	6.4	100.0	(3088)*
<u>Hhohho</u>					
0-8	92.9	2.6	4.5	100.0	(155)
9-11	50.0	40.0	10.0	100.0	(50)
12-17	29.5	55.4	15.2	100.0	(112)
18-23	26.1	50.0	23.9	100.0	(88)
24-59	19.8	61.5	18.7	100.0	(470)
<u>Total</u>	36.3	47.9	15.8	100.0	(875)
<u>Manzini</u>					
0-8	96.4	2.9	0.7	100.0	(140)
9-11	46.3	51.2	2.4	100.0	(41)
12-17	32.6	63.2	4.2	100.0	(95)
18-23	15.6	82.8	1.6	100.0	(64)
24-59	17.9	78.6	3.6	100.0	(392)
<u>Total</u>	36.2	60.9	2.9	100.0	(732)
<u>Shiselweni</u>					
0-8	98.0	2.0	0.0	100.0	(149)
9-11	64.9	35.1	0.0	100.0	(37)
12-17	21.7	77.3	1.0	100.0	(97)
18-23	13.5	86.5	0.0	100.0	(74)
24-59	8.8	88.4	2.9	100.0	(455)
<u>Total</u>	29.7	68.6	1.7	100.0	(812)
<u>Lubombo</u>					
0-8	97.4	2.6	0.0	100.0	(117)
9-11	51.4	48.6	0.0	100.0	(35)
12-17	36.2	59.6	4.3	100.0	(94)
18-23	42.6	55.7	1.6	100.0	(61)
24-59	22.4	72.4	5.3	100.0	(362)
<u>Total</u>	40.8	55.6	3.6	100.0	(669)

*Excludes four cases missing information on Measles Immunizations

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TABLE VI-6

Immunization Coverage for Children Aged 12-23 Months
Compared to Previous EPI National Coverage Survey
1988 Swaziland Family Health Survey

<u>Antigen</u>	<u>October 1988</u> <u>Swaziland Family Health Survey</u>		<u>October 1987</u> <u>1987 W.H.O./E.P.I. 30 Cluster Survey</u>	
	<u>Vaccination Coverage</u>		<u>Vaccination Coverage</u>	
	<u>12-23 months</u> <u>with card</u>	<u>No. of</u> <u>Cases</u>	<u>12-23 months</u> <u>with card</u>	<u>No. of</u> <u>Cases</u>
BCG	98.3	(476)	92.0	(214)
DPT1	99.7	(476)	89.0	(214)
DPT2	97.2	(476)	85.0	(214)
DPT3	92.8	(476)	74.0	(214)
Booster	11.3	(476)	N/A	-
Polio1	99.7	(476)	89.0	(214)
Polio2	97.0	(476)	85.0	(214)
Polio3	91.8	(476)	74.0	(214)
Booster	9.9	(476)	N/A	-
Measles	90.3	(476)	74.0	(214)
FULLY	71.0	(476)	60.0	(214)

N/A = Not available

TABLE VI-7

Immunization Coverage Comparisons from Neighboring Countries
by Specific Type of Survey and Age Category Using Card Verification
1987-1988

	<u>BCG</u>			<u>DPT 3</u>			<u>Polio 3</u>			<u>Measles</u>		
	<u><12</u>	<u>12-23</u>	<u><60</u>	<u><12</u>	<u>12-23</u>	<u><60</u>	<u><12</u>	<u>12-23</u>	<u><60</u>	<u><12</u>	<u>12-23</u>	<u><60</u>
	<u>months</u>	<u>months</u>	<u>months</u>	<u>months</u>	<u>months</u>	<u>months</u>						
<u>Swaziland</u>												
WHO, 1987	-	92	-	-	74	-	-	74	-	-	74	-
FHS, 1988	-	98	98	-	93	92	-	92	91	-	90	90
<u>Botswana</u>												
WHO, 1987	-	99	-	-	86	-	-	88	-	-	91	-
FHS, 1988	-	-	97	-	-	97	-	-	96	-	-	94
<u>Lesotho</u>												
WHO, 1988	-	84	-	-	77	-	-	77	-	-	79	-
<u>Mozambique</u>												
Lichinga, 1988	-	92	-	-	58	-	-	58	-	-	54	-
Xai Xai, 1988	-	92	-	-	89	-	-	89	-	-	84	-
<u>Malawi</u>												
UNICEF, 1986	-	99	-	-	70	-	-	56	-	-	66	-
Administrative Coverage, 1988	92	-	-	55	-	-	50	-	-	53	-	-
<u>Zimbabwe</u>												
Demographic and Health Survey, 1988	-	-	94	-	-	92	-	-	92	-	-	94

Sources: WHO/EPI Information System, 1987
Botswana Family Health Survey, 1988
Swaziland Family Health Survey, 1988
Lesotho CCCD Project Annual Report, 1988
Zimbabwe Demographic and Health Survey, 1988

TABLE VI-8

Percent of Children Less Than 5 Years of Age Reported
To Have Had Diarrhea During The 2 Weeks Prior to Interview,
by Selected Characteristics of the Homestead
1988 Swaziland Family Health Survey

<u>Selected Characteristics of the Homestead</u>	<u>Percent with Diarrhea</u>	<u>No. of Cases</u>
Total	23.4	(3096)*
<u>Number of Children Living in Homestead of Given Size</u>		
1-2	20.3	(69)
3-4	21.6	(348)
5-6	24.5	(616)
7-8	22.6	(611)
9+	24.8	(1286)
<u>Household Features</u>		
Electricity	16.0	(250)
Radio	23.2	(2682)
Television	14.4	(118)
<u>Transportation</u>		
Bicycle	24.7	(578)
Motorcycle	15.6	(45)
Car/Van	21.0	(523)
Tractor	25.5	(94)
Truck	19.1	(21)

*Excludes 4 cases with missing data on Diarrhea.

TABLE VI-9

Reported Prevalence of Diarrhea in Children Under 5 Years of Age
 Within Previous 2 Weeks of Interview by Selected Characteristics
 1988 Swaziland Family Health Survey

	<u>Total</u>	<u>Age in Months</u>			<u>No. of Cases</u>
		<u>0-12</u>	<u>13-36</u>	<u>37+</u>	
<u>TOTAL</u>	23.4	25.6	28.0	15.6	(3096)*
<u>Region</u>					
Hhohho	26.2	28.2	30.5	18.9	(882)
Manzini	17.7	21.3	22.1	9.3	(733)
Shiselweni	26.1	25.4	32.4	19.1	(812)
Lubombo	22.4	27.6	25.8	13.5	(669)
<u>Residence</u>					
Urban	21.5	22.7	25.2	14.5	(522)
Rural	23.7	26.2	28.6	15.8	(2574)

*Excludes 4 cases with missing data on Diarrhea.

TABLE VI-10

Rate of Utilization of Different Treatments (In Percentage)
for Reported Cases of Diarrhea in the Last Two Weeks of
Children Under 5 Years of Age by Selected Characteristics
1988 Swaziland Family Health Survey

	<u>Received No Treatment</u>	<u>Home/ SSS</u>	<u>Packets ORS</u>	<u>IV Treatment</u>	<u>Trad. Healer</u>	<u>Other</u>	<u>Total</u>	<u>No. of Cases</u>
<u>TOTAL</u>	11.1	65.8	15.1	2.4	1.2	4.4	100.0	(723)
<u>Region</u>								
Hhohho	8.7	65.4	13.9	3.0	1.3	7.8	100.0	(231)
Manzini	19.2	56.2	14.6	0.8	2.3	6.9	100.0	(130)
Shiselweni	9.9	70.3	17.9	0.0	0.9	0.9	100.0	(212)
Lubombo	9.3	68.7	13.3	6.0	0.7	2.0	100.0	(150)
<u>Age of Child in Months</u>								
0-6	14.3	70.2	13.1	0.0	1.2	1.2	100.0	(84)
7-12	19.2	54.2	20.0	3.3	0.0	3.3	100.0	(120)
13-24	7.6	65.3	16.0	3.6	0.9	6.7	100.0	(225)
25-36	11.6	63.0	15.2	2.9	3.6	3.6	100.0	(138)
37-48	4.6	75.9	11.5	1.2	1.2	5.8	100.0	(87)
49-59	11.6	75.4	10.1	0.0	0.0	2.9	100.0	(69)
<u>Residence</u>								
Urban	9.8	64.3	16.9	1.8	0.9	6.3	100.0	(112)
Rural	11.3	66.1	14.7	2.5	1.3	4.1	100.0	(611)

TABLE VI-11

Prevalence of Diarrhea in Children
Under 5 Years of Age
In Relation to Type of Homestead Toilet Facility
1988 Swaziland Family Health Survey

	<u>Toilet Facility</u>				<u>No. of Cases</u>
	<u>Total</u>	<u>Flush</u>	<u>Latrine</u>	<u>Other</u>	
<u>TOTAL</u>	23.4	18.0	23.5	24.0	(3096)
<u>Region</u>					
Hhohho	26.2	18.2	25.3	29.7	(882)
Manzini	17.7	7.7	18.4	18.9	(733)
Shiselweni	26.1	**	26.5	25.4	(812)
Lubombo	22.4	22.8	23.8	21.7	(669)
<u>Residence</u>					
Urban	21.5	18.1	24.0	25.0	(522)
Rural	23.7	16.7	23.3	24.0	(2574)

*Excludes 4 cases with missing data.

** < 25 cases

TABLE VI-12

Prevalence of Diarrhea in Children
Under 5 Years of Age
In Relation to Homestead Water Source
1988 Swaziland Family Health Survey

	<u>Water Source</u>				<u>No. of Cases</u>
	<u>Total</u>	<u>Piped</u>	<u>Well</u>	<u>Other</u>	
<u>TOTAL</u>	23.4	19.8	26.8	23.8	(3096)
<u>Region</u>					
Hhohho	26.2	21.9	30.6	26.8	(882)
Manzini	17.7	16.5	17.7	18.9	(733)
Shiselweni	26.1	17.6	28.0	26.0	(812)
Lubombo	22.4	21.9	26.6	22.1	(669)
<u>Residence</u>					
Urban	21.5	18.8	27.3	20.2	(522)
Rural	23.7	21.7	26.7	23.9	(2574)

*Excludes 4 cases with missing data.

TABLE VI-13

Immunization Against Tetanus During Last Pregnancy For Women
Aged 15-49 Who Have Had A Live Birth Within 5 Years of
Interview by Selected Characteristics
1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Percent Immunized</u>	<u>No. of Cases</u>
Total	92.3	(2159)
<u>Age in Years</u>		
15-19	93.1	(245)
20-24	91.5	(657)
25-29	93.9	(510)
30-34	92.9	(338)
35-39	91.9	(258)
40-44	88.5	(113)
45-49	89.5	(38)
<u>Residence</u>		
Urban	91.3	(389)
Rural	92.5	(1770)
<u>Educational Status</u>		
None	88.6	(472)
Primary	93.2	(938)
Secondary	94.6	(558)
High School	90.6	(191)
<u>Region</u>		
Hhohho	91.4	(625)
Manzini	93.6	(528)
Shiselweni	91.0	(554)
Lubombo	93.8	(452)

TABLE VI-14

Percentage of Children Less than 5 Years of Age Who Had Fever Present
More Than Two Days and Difficulty Breathing in Past Month
by Selected Characteristics
1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Percent</u>	<u>No. of Cases</u>
Total	11.5	(3135)
Hhohho	13.1	896
Manzini	13.4	747
Shiselweni	9.5	814
Lubombo	9.9	678
<u>Residence</u>		
Urban	11.6	526
Rural	11.5	2609

TABLE VI-15

Percentage of Children Less Than 5 Years of Age Who Had
Fever Present More Than Two Days and Difficulty Breathing
in Past Month by Selected Characteristics and Age of Child
1988 Swaziland Family Health Survey

<u>Characteristic</u>	<u>Total</u>	<u>Current Age of Child in Months</u>					<u>No. Cases</u>
		<u>0-5</u>	<u>6-12</u>	<u>13-18</u>	<u>19-24</u>	<u>25+</u>	
Total	11.5	11.0	19.2	11.4	13.0	9.4	(3135)
<u>Region</u>							
Hhohho	13.1	12.5	19.0	14.9	17.5	9.5	(896)
Manzini	13.4	6.1	28.0	12.1	13.5	11.4	(747)
Shiselweni	9.5	5.2	10.0	13.3	11.8	9.1	(814)
Lubombo	9.9	16.1	20.5	4.4	7.9	7.8	(678)
<u>Residence</u>							
Urban	11.6	11.4	28.6	7.4	13.0	8.6	(527)
Rural	11.5	16.9	17.6	12.3	13.0	9.6	(2609)

TABLE VI-16

Percent of Children Less Than 5 Years of Age Reported Not Walking
by Selected Characteristics and Age of Child
1988 Swaziland Family Health Survey

	<u>Age of Child In Months</u>			<u>No. of Cases</u>
	<u>0-12</u>	<u>13-24</u>	<u>25+</u>	
Total				(3096)
<u>Region</u>				
Hhohho	88.1	20.9	7.1	(882)
Manzini	93.6	15.7	4.3	(733)
Shiselweni	92.2	16.9	1.8	(812)
Lubombo	95.1	18.4	2.5	(669)
<u>Residence</u>				
Urban	94.7	20.5	6.1	(522)
Rural	91.4	17.6	3.6	(2574)

TABLE VI-17

Percent of Children Less Than 5 Years of Age Reported Not Talking
by Selected Characteristics and Age of Child
1988 Swaziland Family Health Survey

	<u>Age of Child In Months</u>			<u>No. of Cases</u>
	<u>0-12</u>	<u>13-24</u>	<u>25+</u>	
<u>Region</u>				
Hhohho	93.4	47.1	4.7	(882)
Manzini	94.1	48.4	6.2	(733)
Shiselweni	93.2	51.2	4.1	(812)
Lubombo	96.3	57.9	5.4	(669)
<u>Residence</u>				
Urban	93.9	50.0	4.3	(522)
Rural	94.1	51.1	5.2	(2574)
TOTAL				(3096)

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TABLE VI-18

Percent of Children Less Than 5 Years of Age
Reported to Have Had Blood in Urine in Past Month
by Selected Characteristics and Age of Child
1988 Swaziland Family Health Survey

<u>Age of Child</u>	<u>Total</u>	<u>Region</u>				<u>Residence</u>	
		<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>	<u>Urban</u>	<u>Rural</u>
<1 year	0.6	1.4	0.6	0.0	0.0	0.8	0.5
1	1.3	3.0	0.0	1.2	0.7	0.9	1.4
2	1.9	2.9	0.7	1.2	2.7	2.4	1.8
3	2.5	3.8	0.9	2.8	1.9	2.3	2.5
4	2.7	5.0	3.0	0.0	2.7	4.0	2.4
TOTAL	1.7	3.1	1.0	1.0	1.5	1.9	1.6
No. of Cases	(3095)	(882)	(732)	(812)	(669)	(522)	(2573)

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TABLE VI-19

Percent of Children Less Than 5 Years of Age Reported To Have
Passed Roundworms in Past Month by Selected Characteristics and Age of Child
1988 Swaziland Family Health Survey

<u>Age of Child</u>	<u>Total</u>	<u>Region</u>				<u>Residence</u>	
		<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>	<u>Urban</u>	<u>Rural</u>
<1 year	1.1	2.9	0.6	0.0	0.7	0.8	1.2
1	8.7	12.9	10.6	5.3	5.2	17.5	7.0
2	10.8	14.9	12.2	5.9	10.3	15.4	9.7
3	11.2	11.4	11.9	8.3	14.4	16.8	10.1
4	12.3	17.9	12.6	6.4	12.5	12.0	12.4
TOTAL	8.4	11.5	9.0	4.9	7.9	12.3	7.6
No. of Cases	(3095)	(881)	(733)	(812)	(669)	(521)	(2574)

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TABLE VI-20

Percent of Children Less Than 5 Years of Age
Reported to Have Ear Discharge in the Past Month
by Selected Characteristics and Age of Child
1988 Swaziland Family Health Survey

<u>Age of Child</u>	<u>Total</u>	<u>Region</u>				<u>Residence</u>	
		<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>	<u>Urban</u>	<u>Rural</u>
<1 year	6.7	7.7	5.5	10.2	2.6	5.0	7.1
1	15.8	15.8	18.8	15.8	12.9	6.1	17.8
2	18.6	21.3	16.6	21.8	13.7	9.8	20.8
3	17.7	17.1	13.6	28.3	8.7	10.1	19.3
4	19.9	17.9	17.0	28.6	15.2	9.3	21.7
TOTAL	15.3	15.5	13.9	20.2	10.5	7.8	16.8
No. of Cases	(3096)	(882)	(733)	(812)	(669)	(552)	(2574)

TABLE VII-1

Percentage of Females Aged 15-49 and Males Aged 15-59 With
Selected Behavioral Risks, by Residence
1988 Swaziland Family Health Survey

<u>Percentage of Adults Who...</u>	<u>Females</u>			<u>Males</u>		
	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
Have been told more than once they have high blood pressure	3.2	6.0	2.4	1.6	2.9	1.2
Have ever smoked cigarettes	2.9	4.9	2.3	25.2	28.8	24.2
Are currently smoking cigarettes	2.3	3.7	1.9	23.0	23.0	22.9
Have ever consumed alcohol	14.0	18.3	12.7	33.1	38.5	31.6
Have driven in past month when had perhaps too much to drink	0.2	0.5	0.1	1.1	2.1	0.9
Have diabetes	2.8	2.4	2.9	2.4	2.7	2.4
No. of Cases	(4261)	(982)	(3279)	(2273)	(770)	(1503)

TABLE VII-2

Percentage of Females Aged 15-49 and
Males Aged 15-59 with Selected Health Conditions, by Residence
1988 Swaziland Family Health Survey

Percentage of Adults Who Have Had...	Females			Males		
	Total	Urban	Rural	Total	Urban	Rural
More than 2 days of Fever in past month	23.7	23.0	23.9	31.0	25.6	32.5
Severe Cough in past month	21.8	20.0	22.4	28.8	21.4	30.9
STDs	7.0	7.1	7.0	22.5	29.1	20.7
Treatment for TB	3.0	4.0	2.6	4.2	4.8	4.1
No. of Cases	(4261)	(982)	(3279)	(2273)	(770)	(1503)

TABLE VII-3
 Percentage of Females Aged 15-49 and Males Aged 15-59 With
 Selected Health Conditions by Region
 1988 Swaziland Family Health Survey

<u>Adults Who Have Had...</u>	<u>Females</u>					<u>Males</u>				
	<u>Total</u>	<u>Hhohho</u>	<u>Manzini</u>	<u>Shis.</u>	<u>Lubombo</u>	<u>Total</u>	<u>Hhohho</u>	<u>Manzini</u>	<u>Shis.</u>	<u>Lubombo</u>
More Than 2 Days of Fever in Past Month	23.7	31.8	20.1	18.9	22.5	31.0	33.7	27.1	31.4	31.6
Severe Cough in Past Month	21.8	28.9	17.4	21.9	17.3	28.8	31.4	23.2	32.1	28.2
STDs	7.0	9.2	5.1	6.9	6.7	22.5	21.2	23.0	19.9	26.9
Treatment for TB	3.0	4.2	2.9	2.3	2.0	4.2	4.8	4.7	3.1	4.5
No. of Cases	(4,261)	(1,245)	(1,108)	(1,027)	(881)	(2,273)	(689)	(569)	(474)	(541)

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TABLE VII-4

Female Versus Male Reported Incidence
of Sexually Transmitted Diseases
1988 Swaziland Family Health Survey

	<u>Female</u>	<u>Male</u>
Ever had STD/VD	7.0	22.5
What type?		
"Cauliflower"; Syphilis	13.7	5.7
Drop; Gonorrhoea	66.7	84.6
Pubic Lice	9.0	3.4
Likhubalo or "other"	10.6	3.1
Combination of above	<u>0.0</u>	<u>3.2</u>
	100.0	100.0
No. of Cases	(4261)	(2273)

TABLE VII-5

Percentage Reported Ever Had STDs,
by Age Group for Females Aged 15-49 and Males Aged 15-59
1988 Swaziland Family Health Survey

<u>Age</u>	<u>Female</u>	<u>Male</u>
15-19	3.0	3.0
20-24	7.2	21.7
25-29	11.6	38.3
30-34	9.1	38.4
35-39	8.8	29.2
40-44	6.1	31.6
45-49	3.8	28.3
50-54	--	34.9
55-59	--	23.6
TOTAL	7.0	22.5
No. of Cases	(4261)	(2273)

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TABLE VII-6
 Percentage Treated for TB, For
 Females Aged 15-49 and Males Aged 15-59 by Age
 1988 Swaziland Family Health Survey

<u>Age</u>	<u>Percent Treated</u>	
	<u>Female</u>	<u>Male</u>
15-19	3.6	2.3
20-24	2.3	3.7
25-29	3.5	2.6
30-34	2.7	4.0
35-39	2.5	4.8
40-44	3.1	7.3
45-49	2.1	7.0
50-54	--	6.4
55-59	--	8.9
TOTAL	2.9	4.2
No. of Cases	(4261)	(2273)

TABLE VII-7

Percentage of All Females Aged 15-49 and All Males Aged 15-59 Who Have Ever Heard of AIDS, by Selected Characteristics and Residence
1988 Swaziland Family Health Survey

Selected Characteristics	Females			Males			No. of Cases					
	Total	Urban	Rural	Total	Urban	Rural	Females			Males		
							Total	Urban	Rural	Total	Urban	Rural
Total	83.8	92.5	81.2	90.7	96.2	89.1	(4261)	(982)	(3279)	(2273)	(770)	(1503)
<u>Age</u>												
15-19	85.3	90.8	83.5	90.8	99.2	89.6	(1014)	(250)	(764)	(510)	(85)	(425)
20-24	84.2	91.6	82.2	93.4	97.1	92.6	(949)	(202)	(747)	(338)	(106)	(232)
25-29	84.7	91.4	82.4	90.0	96.1	87.6	(737)	(187)	(550)	(281)	(119)	(162)
30-34	84.6	96.9	80.6	95.8	98.6	94.4	(519)	(128)	(391)	(270)	(122)	(148)
35-39	83.1	96.8	79.4	87.8	94.0	85.4	(443)	(94)	(349)	(228)	(88)	(140)
40-44	79.8	89.9	77.4	93.0	93.9	92.7	(361)	(69)	(292)	(211)	(90)	(121)
45-49	79.4	92.3	75.8	84.2	95.5	79.4	(238)	(52)	(186)	(200)	(89)	(111)
50-54	-	-	-	87.9	95.4	86.0	-	-	-	(132)	(43)	(89)
55-59	-	-	-	85.0	88.0	84.4	-	-	-	(103)	(28)	(75)
<u>Education</u>												
None	72.8	84.5	71.1	86.3	91.5	85.4	(922)	(116)	(806)	(546)	(147)	(399)
Primary	81.0	91.1	78.7	88.5	96.1	87.1	(1726)	(327)	(1399)	(812)	(220)	(592)
Secondary	92.1	94.5	91.2	93.7	96.4	92.7	(1196)	(329)	(867)	(595)	(227)	(368)
High School+	95.9	95.7	96.1	98.8	99.7	98.1	(417)	(210)	(207)	(320)	(176)	(144)
<u>Region</u>												
Hhohho	82.8	93.3	78.6	88.4	94.6	85.8	(1245)	(357)	(888)	(689)	(276)	(413)
Manzini	87.0	94.7	83.9	93.8	98.2	92.2	(1108)	(319)	(789)	(569)	(216)	(353)
Shiselweni	92.4	96.7	92.1	88.2	97.4	87.8	(1027)	(60)	(967)	(474)	(44)	(430)
Lubombo	71.3	87.4	65.0	92.9	96.1	91.5	(881)	(246)	(635)	(541)	(234)	(307)

TABLE VII-8

**Female Versus Male Comparison of
Knowledge of How AIDS May be Transmitted
(Among Respondents Who Have Heard of AIDS)
1988 Swaziland Family Health Survey**

Percent Responding "Yes or "No"

	<u>Female (N=3572)</u>			<u>Male (N=2061)</u>			Correct Response*
	Yes	No	Total	Yes	No	Total	
Handshake or hugging	27.5	72.5	100.0	22.5	77.5	100.0	No
Sharing hypodermic needle	69.2	30.8	100.0	91.6	18.4	100.0	Yes
Sharing classroom, office or apartment	31.2	68.8	100.0	20.9	79.1	100.0	No
Receiving blood transfusion	71.4	28.6	100.0	81.4	18.6	100.0	Yes
Male homosexual intercourse	78.9	21.1	100.0	86.8	13.2	100.0	Yes
Heterosexual intercourse	93.5	6.5	100.0	96.2	3.8	100.0	Yes
Giving blood	52.0	48.0	100.0	49.7	50.3	100.0	No
Being bitten by insect	54.6	45.4	100.0	72.1	27.9	100.0	No
Sharing personal items (dishes, toilet, etc.)	33.9	66.1	100.0	37.0	63.0	100.0	No

*For some items, the "correct responses" are not as clearcut as this column implies. For example, donating blood will not put the donor at risk, unless unsterilized needles are used. Receiving blood donations, conversely, will not result in transmission if blood supplies have been screened adequately.

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TABLE VII-9

Female Versus Male Perceptions of Own
Chances of Contracting AIDS
(Among Respondents Who Have Heard of AIDS)
1988 Swaziland Family Health Survey
(Percent Distribution)

	<u>Females</u>	<u>Males</u>
Chance of getting AIDS		
Very strong chance	8.0	4.5
Strong chance	14.8	7.3
Some chance	20.2	18.9
Not much chance	22.1	20.3
No chance	34.0	48.1
Don't know	<u>0.9</u>	<u>0.9</u>
Total	100.0	100.0
No. of Cases	(3572)	(2066)

TABLE VII-10

Female and Male Behavioral Responses
 To Avoid AIDS, Among Respondents
 Aware of AIDS
 1988 Swaziland Family Health Survey

	<u>Percentage Answering "Yes"</u>	
	<u>Female</u> <u>N=3572</u>	<u>Male</u> <u>N=2066</u>
Stopped having intercourse	13.5	10.8
Have sex less often	33.1	32.7
Stopped having sex with more than one partner	67.6	72.4
Stopped having sex with partners who are not well known	68.9	77.5

TABLE VIII-1

Percent Distribution of Sources Females Aged 15-49 and Males Aged 15-59 Report
They Prefer for First Contact for Care of Common Perinatal and
Child Health Problems, by Sex of Respondent
1988 Swaziland Family Health Survey

Health Problem	Females (N = 4261)					Males (N = 2273)				
	Clinic	Hospital	Traditional Healer	Don't Know	Total	Clinic	Hospital	Traditional Healer	Don't Know	Total
Child immunization	65.3	34.2	0.2	0.3	100.0	68.4	30.6	0.7	0.3	100.0
Child diarrhea	46.8	52.8	0.2	0.2	100.0	65.2	33.9	0.6	0.2	100.0
Child's high fever	42.8	56.9	0.1	0.2	100.0	56.2	43.0	0.6	0.3	100.0
Child's prolonged cough	38.0	61.5	0.2	0.3	100.0	45.9	53.0	0.8	0.3	100.0
Antenatal care	64.5	34.7	0.3	0.5	100.0	50.1	48.7	0.5	0.6	100.0
Delivery of baby	13.5	85.8	0.1	0.6	100.0	8.5	89.4	0.6	1.5	100.0
Difficulty getting pregnant	11.5	65.1	20.2	3.2	100.0	9.0	58.0	30.0	3.1	100.0

TABLE VIII-2

Reported Visits by Any Homestead Member to Different
Types of Health Facilities Visited at Least
Once in Past Year, by Whether Respondent was Female or Male
1988 Swaziland Family Health Survey

<u>Respondent</u>		Visited Any Health Facilities	Visited Government Clinic	Visited Private Clinic	Visited Mission Clinic	Visited Government Hospital	Visited Private or Mission Hospital	Visited Traditional Healer
<u>Female</u>	% of all respondents (N=4257)	50.9	37.5	10.5	16.6	29.1	8.0	21.8
	% of all who visited any provider (N=2167)	100.00	73.7	20.8	32.7	57.1	15.7	42.8
<u>Male</u>	% of all Respondents (N=2273)	48.5	35.3	10.7	16.9	27.8	12.1	23.2
	% of all who visited any provider (N=1102)	100.0	72.7	22.1	34.8	57.2	24.9	47.8

TABLE VIII-2

Reported Visits by Any Homestead Member to Different
Types of Health Facilities Visited at Least
Once in Past Year, by Whether Respondent was Female or Male
1988 Swaziland Family Health Survey

<u>Respondent</u>		Visited Any Health Facilities	Visited Government Clinic	Visited Private Clinic	Visited Mission Clinic	Visited Government Hospital	Visited Private or Mission Hospital	Visited Traditional Healer
<u>Female</u>	Percent of all respondents (N=4257)	50.9	37.5	10.5	16.6	29.1	8.0	21.8
	Percent of all who visited any provider (N=2167)	100.00	73.7	20.8	32.7	57.1	15.7	42.8
<u>Male</u>	Percent of all respondents (N=2273)	48.5	35.3	10.7	16.9	27.8	12.1	23.2
	Percent of all who visited any provider (N=1102)	100.0	72.7	22.1	34.8	57.2	24.9	47.8

TABLE VIII-3
Attendance by Household/Homestead Members at
Different Types of Facilities, by Whether They Were Satisfied
With the Services They Received
Females Aged 15-49 and Males Aged 15-59
1988 Swaziland Family Health Survey

<u>Female</u>	<u>Whether Satisfied?</u>				<u>No. of Cases</u>
	<u>No</u>	<u>Yes, Fairly</u>	<u>Yes, Very</u>	<u>Total</u>	
<u>Type of Facility or Provider</u>					
Government Clinic	6.1	17.8	76.1	100.0	(1,583)
Private Clinic	7.0	18.0	75.0	100.0	(428)
Mission Clinic	5.1	15.8	79.1	100.0	(704)
Government Hospital	8.1	17.2	74.7	100.0	(1,196)
Private or Mission Hospital	7.5	20.3	72.2	100.0	(335)
Traditional Healer	16.4	24.2	59.4	100.0	(928)

<u>Male</u>	<u>Whether Satisfied?</u>				<u>No. of Cases</u>
	<u>No</u>	<u>Yes, Fairly</u>	<u>Yes, Very</u>	<u>Total</u>	
<u>Type of Facility or Provider</u>					
Government Clinic	8.6	18.6	72.8	100.0	(732)
Private Clinic	9.7	15.5	74.9	100.0	(218)
Mission Clinic	8.0	18.5	73.5	100.0	(331)
Government Hospital	8.0	15.3	76.8	100.0	(546)
Private or Mission Hospital	7.0	15.5	77.4	100.0	(246)
Traditional Healer	12.7	22.9	64.4	100.0	(459)

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TABLE VIII-4

Whether Any Member of Household Attended at Least One Health Facility Within The Past Year, by Residence and Region
As Reported by Females Age 15-49
1988 Swaziland Family Health Survey

	<u>Yes</u>	<u>No</u>	<u>Total</u>	<u>No. of Cases</u>
A. Residence				
Urban	43.7	56.3	100.0	(989)
Rural	<u>53.0</u>	<u>47.0</u>	<u>100.0</u>	(3279)
	50.9	49.1	100.0	(4261)
	<u>Yes</u>	<u>No</u>	<u>Total</u>	<u>No. of Cases</u>
B. Region				
Hhohho	45.7	54.3	100.0	(1242)
Manzini	45.8	54.2	100.0	(1108)
Shiselweni	63.6	36.4	100.0	(1027)
Lubombo	<u>49.7</u>	<u>50.3</u>	<u>100.0</u>	(880)
	50.9	49.1	100.0	(4237)

TABLE VIII-5

Percentage of Households Visiting Different Types of
Health Facilities, by Region, Among Households
Visiting Any Health Provider in Past 12 Months
As Reported by Females Age 15-49
1988 Swaziland Family Health Survey

<u>Region</u> <u>Type of Facility</u>	<u>Percentage Visiting in</u>				<u>Total</u>
	<u>Hhohho</u>	<u>Manzini</u>	<u>Shiselweni</u>	<u>Lubombo</u>	
Govt. Clinic	72.1	56.8	89.0	72.5	73.7
Private Clinic	25.1	26.0	21.0	8.9	20.8
Mission Clinic	26.8	35.7	39.5	26.5	32.7
Govt. Hospital	63.0	42.2	72.0	44.6	57.1
Private or Mission Hospitals	20.7	23.5	1.2	22.0	15.7
Traditional Healers	37.9	33.1	56.4	40.3	42.8

TABLE VIII-6

Percentage of Households in Which Any Member of Household Visited
Any Type of Health Facility in Past Year, by Urban Versus Rural
Residence, and Whether Household Owned a Car or Van
As Reported by Females Age 15-49
1988 Swaziland Family Health Survey

Whether Have Car or Van	Urban			Rural			Total		
	Percent Visited			Percent Visited					
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Yes	51.9	48.1	100.0	55.9	44.1	100.0	55.6	44.4	100.0
No	<u>40.8</u>	<u>59.2</u>	<u>100.0</u>	<u>52.5</u>	<u>47.5</u>	<u>100.0</u>	<u>50.0</u>	<u>50.0</u>	<u>100.0</u>
Total	43.7	56.3	100.0	53.0	47.0	100.0	50.9	49.1	100.0

TABLE VIII-7

Percentage of Households Having Any Visits to a Government Clinic,
 Among Households Visiting Any Health Facility, by Urban Versus Rural
 Residence, and Whether They Had a Car
 As Reported by Females Age 15-49
 1988 Swaziland Family Health Survey

<u>Have Car</u>	<u>Urban</u>		<u>Rural</u>		<u>Total</u>	
	<u>Percent Visited</u>		<u>Percent Visited</u>		<u>Yes</u>	<u>No</u>
	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>		
Yes	56.7	43.2	74.7	25.3	69.1	30.9
No	<u>62.0</u>	<u>38.0</u>	<u>77.5</u>	<u>22.5</u>	<u>74.9</u>	<u>25.1</u>
Total	60.4	39.6	77.0	23.0	73.7	26.3

TABLE VIII-8

Percentage of Households With Any Visit to Any Health Facility in
 Previous Year, by Source of Drinking Water, by Urban-Rural
 Residence and by Region
 As Reported by Females Age 15-49
 1988 Swaziland Family Health Survey

	<u>Percentage Attending Any Facility</u>		
	<u>Piped</u>	<u>Not Piped</u>	<u>Total</u>
A. Residence			
Urban	44.3	42.5	43.7
Rural	53.5	53.0	53.0
B. Region			
Hhohho	44.5	46.2	45.7
Manzini	46.5	45.5	45.8
Shiselweni	67.0	63.2	63.6
Lubombo	41.1	52.0	49.7
Total	46.9	51.9	50.9

TABLE VIII-9

Percentage Attending Different Types of
Health Facilities, by Source of Drinking
Water, Among Households Attending
at Least One Type of Facility
As Reported by Females Age 15-49
1988 Swaziland Family Health Survey

	<u>Source of Water</u>		<u>Total</u>
	<u>Piped</u>	<u>Other</u>	
Government Clinic	64.9	75.8	73.7
Private Clinic	40.2	16.3	20.8
Mission Clinic	21.1	35.4	32.7
Government Hospital	55.5	57.5	57.1
Private or Mission Hospital	13.3	16.2	15.7
Traditional Healer	26.9	46.6	42.8

TABLE VIII-10

Percentage of Households With Any Visit to Any Health Facility in
Past Year, Who Visited a Government or Private Clinic, by
Urban Versus Rural Residence, and by Region, by Source of Drinking Water
As Reported by Females Age 15-49
1988 Swaziland Family Health Survey

	<u>Government</u>			<u>Private</u>		
	<u>Piped</u>	<u>Other</u>	<u>Total</u>	<u>Piped</u>	<u>Other</u>	<u>Total</u>
A. Residence						
Urban	57.1	66.7	60.4	44.7	29.3	39.4
Rural	81.7	76.6	77.0	30.5	15.1	16.2
B. Region						
Hhohho	68.2	73.7	72.2	42.9	18.6	25.2
Manzini	48.3	59.3	56.8	43.9	20.9	26.0
Shiselweni	97.0	88.1	89.0	44.8	18.3	21.0
Lubombo	55.1	76.3	72.5	25.6	5.3	8.9
Total	64.9	75.8	73.7	40.2	16.3	20.8

TABLE VIII-11

Percentage of Households With Any Visits to Any Health Facilities in Past Year, Who Visited a Government Hospital or Either a Private or a Mission Hospital, by Urban Versus Rural Residence and by Region, and by Source of Drinking Water As Reported by Females Age 15-49
1988 Swaziland Family Health Survey

	<u>Government Hospital</u>			<u>Private or Mission Hospital</u>		
	<u>Source of Water</u>			<u>Source of Water</u>		
	<u>Piped</u>	<u>Other</u>	<u>Total</u>	<u>Piped</u>	<u>Other</u>	<u>Total</u>
A. Residence						
Urban	47.9	67.4	54.6	15.6	24.5	18.7
Rural	71.8	56.6	57.8	8.4	15.5	15.0
B. Region						
Hhohho	55.2	65.9	63.0	7.8	25.4	20.6
Manzini	50.9	39.7	42.2	36.0	19.9	23.5
Shiselweni	91.0	69.8	72.0	0.0	1.4	1.2
Lubombo	32.1	47.4	44.6	2.6	26.2	22.0
Total	55.5	57.5	57.1	13.3	16.2	15.7

TABLE VIII-12

Percentage of Households Making Any Visit to
Any Health Provider in Past Year, Who Visited
a Traditional Healer, by Urban Versus Rural Residence, and by Region;
by Source of Drinking Water
As Reported by Females Age 15-49
1988 Swaziland Family Health Survey

	<u>Percentage Visiting Traditional Healer</u>		
	<u>Piped Water</u>	<u>Other Source</u>	<u>Total</u>
A. Residence			
Urban	19.2	35.4	24.7
Rural	43.5	47.6	47.3
B. Region			
Hhohho	26.6	42.0	37.9
Manzini	24.6	35.6	33.1
Shiselweni	38.8	58.4	56.4
Lubombo	20.5	44.6	40.3
Total	26.9	46.6	42.8

TABLE VIII-13

Distance to Health Care Facilities Measured By
Time Spent Travelling
1988 Swaziland Family Health Survey

	Less Than 30 <u>minutes</u>	30-59 <u>minutes</u>	60+ <u>minutes</u>	Don't <u>know</u>	<u>Total</u>	<u>No. of Cases</u>
<u>Government Clinic</u>						
<u>Region</u>						
Hhohho	45.1	27.3	24.6	2.9	100.0	(410)
Manzini	39.9	35.1	24.7	0.4	100.0	(288)
Shiselweni	35.8	30.5	33.6	0.2	100.0	(581)
Lubombo	31.6	37.9	30.6	0.0	100.0	(317)
Total	38.1	32.0	29.1	0.9	100.0	(1596)
<u>Residence</u>						
Urban	66.8	21.6	10.4	1.2	100.0	(259)
Rural	32.5	34.0	32.7	0.8	100.0	(1337)
<u>Private Clinic</u>						
<u>Region</u>						
Hhohho	58.7	18.5	18.5	4.4	100.0	(92)
Manzini	40.4	33.3	24.6	1.8	100.0	(57)
Shiselweni	44.9	21.2	33.1	0.9	100.0	(118)
Lumbombo	*	*	*	*	*	(13)
Total	48.6	23.6	25.7	2.1	100.0	(280)
<u>Residence</u>						
Urban	72.3	16.9	7.2	3.6	100.0	(83)
Rural	38.6	26.4	33.5	1.5	100.0	(197)
<u>Mission Clinic</u>						
<u>Region</u>						
Hhohho	33.0	27.5	36.3	3.3	100.0	(91)
Manzini	26.4	48.6	23.6	1.4	100.0	(72)
Shiselweni	25.7	42.5	31.9	0.0	100.0	(226)
Lumbombo	21.8	52.7	25.5	0.0	100.0	(55)
Total						
<u>Residence</u>						
Urban	61.0	24.4	12.2	2.4	100.0	(41)
Rural	23.3	43.4	32.5	0.7	100.0	(403)

*Less Than 25 Cases.

TABLE VIII-14

Times of Day Different Types of Hospitals
Are Perceived Open for Service Delivery
1988 Swaziland Family Health Survey

	<u>Early Morning Only</u>	<u>All Morning</u>	<u>All Day Until Evening</u>	<u>All Day Including Evening</u>	<u>Don't Know</u>	<u>Total</u>	<u>No. of Cases</u>
<u>Government Hospital</u>							
<u>Region</u>							
Hhohho	4.8	74.6	20.2	0.4	0.0	100.0	(272)
Manzini	1.7	59.5	28.3	10.4	0.0	100.0	(173)
Shiselweni	2.2	54.9	42.9	0.0	0.0	100.0	(408)
Lubombo	0.0	51.4	22.9	22.3	3.4	100.0	(175)
Total	2.4	60.3	31.0	5.6	0.6	100.0	(1028)
<u>Residence</u>							
Urban	10.0	68.0	19.3	2.0	0.7	100.0	(150)
Rural	1.1	59.0	33.0	6.3	0.6	100.0	(878)
<u>Government Clinic</u>							
<u>Region</u>							
Hhohho	5.3	75.6	21.3	0.8	0.0	100.0	(357)
Manzini	2.8	82.0	13.7	0.0	1.8	100.0	(255)
Shiselweni	2.0	56.2	41.7	0.0	0.0	100.0	(489)
Lubombo	0.0	52.6	41.5	0.7	5.2	100.0	(306)
Total	2.6	64.3	31.4	0.4	1.4	100.0	(1407)
<u>Residence</u>							
Urban	7.8	75.4	13.4	1.1	2.2	100.0	(179)
Rural	1.8	62.6	34.0	0.2	1.3	100.0	(1228)

TABLE VIII-15

Percent of Female Respondents With Children
Under 5 Years of Age Who Ever Used Traditional Healers
And Would Use Traditional Healer as First Resort
by Selected Characteristics
1988 Swaziland Family Health Survey

	<u>Ever Used</u>	<u>As First Resort</u>	<u>No. of Cases</u>
TOTAL	18.9	4.1	(2157)
<u>Region</u>			
Hhohho	27.4	6.3	(623)
Manzini	15.2	4.2	(528)
Shiselweni	15.5	2.7	(554)
Lubombo	15.5	2.6	(452)
<u>Residence</u>			
Urban	13.9	2.8	(389)
Rural	20.0	4.4	(1768)
<u>Education</u>			
None	28.4	7.0	(471)
Primary	19.4	7.0	(471)
Secondary	12.9	2.2	(557)
High School+	10.0	3.7	(191)

TABLE VIII-16

Who Usually Decides Whether a Family Member
With a Health Problem Should Go to a Health Care Provider
1988 Swaziland Family Health Survey

	<u>Females</u>	<u>Males</u>
<u>Total</u>		
Respondent	38.8	45.7
Spouse (partner)	14.6	16.3
Both Respondent and Spouse	10.6	15.4
Grandparent	11.5	4.8
Other Relative	2.3	1.3
Other	22.2	16.5
No. of Cases	(4257)	(2273)

TABLE VIII-17

Why Respondent Did Not Use A Health Care
 Provider in the Previous 12 Months Before the Interview
 1988 Swaziland Family Health Survey

	<u>Females</u>	<u>Males</u>
<u>Total</u>		
No sickness in family	94.7	95.4
Scared	1.9	1.1
Did not know where to go	1.1	0.9
Don't know	2.0	2.2
Refused to answer	0.3	0.3
No. of Cases	(4257)	(2273)

TABLE VIII-18

Women With Children less than 5 Years of Age by Type of Assistance
With Birth Delivery and by Selected Characteristics
1988 Swaziland Family Health Survey

	<u>Type of Assistance</u>					<u>Total</u>	<u>No. of Cases</u>
	<u>Doctor</u>	<u>Trained Nurse/Midwife</u>	<u>RHM</u>	<u>Other</u>	<u>No One</u>		
<u>Total</u>	5.7	49.7	1.9	35.7	7.0	100.0	(3099)
<u>Region</u>							
Hhohho	8.9	54.2	2.5	29.2	5.2	100.0	(885)
Manzini	4.8	56.2	1.4	32.9	4.8	100.0	(733)
Shiselweni	2.8	40.0	1.2	46.9	9.0	100.0	(812)
Lubombo	5.8	48.4	2.4	33.9	9.4	100.0	(669)
<u>Residence</u>							
Urban	13.0	67.8	0.4	14.0	4.8	100.0	(522)
Rural	4.2	46.1	2.2	40.1	7.5	100.0	(2577)

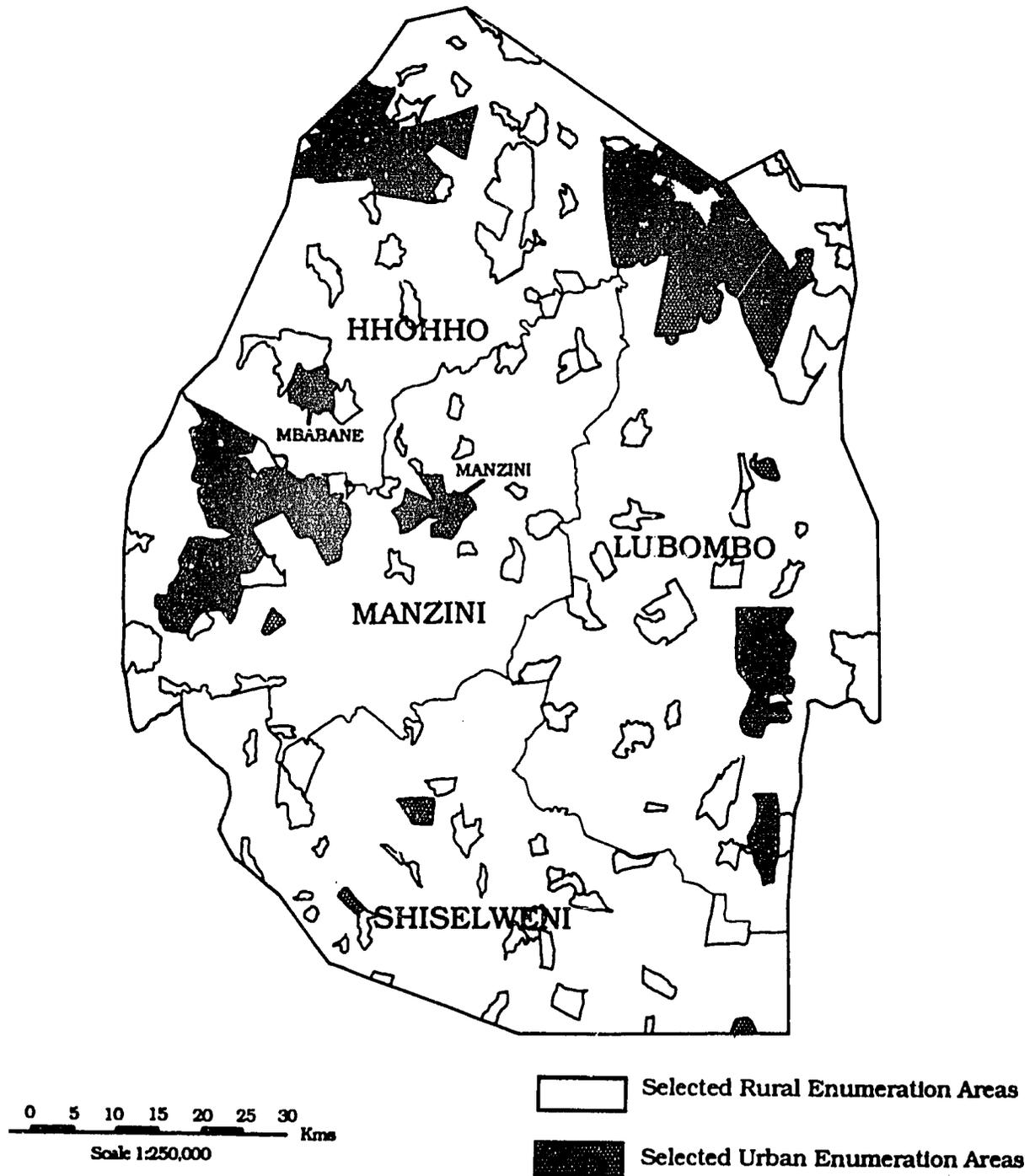
TABLE VIII-19

Place of Delivery Reported by Women With Children
Less than 5 Years of Age by Region and Residence
1988 Swaziland Family Health Survey

	<u>Place of Delivery</u>						<u>Total</u>	<u>No. of Cases</u>
	<u>Hospital</u>	<u>Health Center/Clinic</u>	<u>Home of TBA</u>	<u>Own Home</u>	<u>Home of Friend/Relative</u>	<u>Other</u>		
Total	52.7	2.9	0.3	43.4	0.1	0.8	100.0	(3099)
<u>Region</u>								
Hhohho	61.2	2.2	0.3	34.8	0.1	1.4	100.0	(885)
Manzini	58.5	2.9	0.1	37.4	0.0	1.1	100.0	(733)
Shiselweni	42.6	0.7	0.1	57.0	0.0	0.0	100.0	(812)
Lubombo	48.6	5.8	0.5	44.4	0.2	0.6	100.0	(669)
<u>Residence</u>								
Urban	76.7	3.6	0.8	16.9	0.0	2.1	100.0	(522)
Rural	48.2	2.7	0.2	48.5	0.1	0.5	100.0	(2577)

Figure II-1

1988 Swaziland Family Health Survey

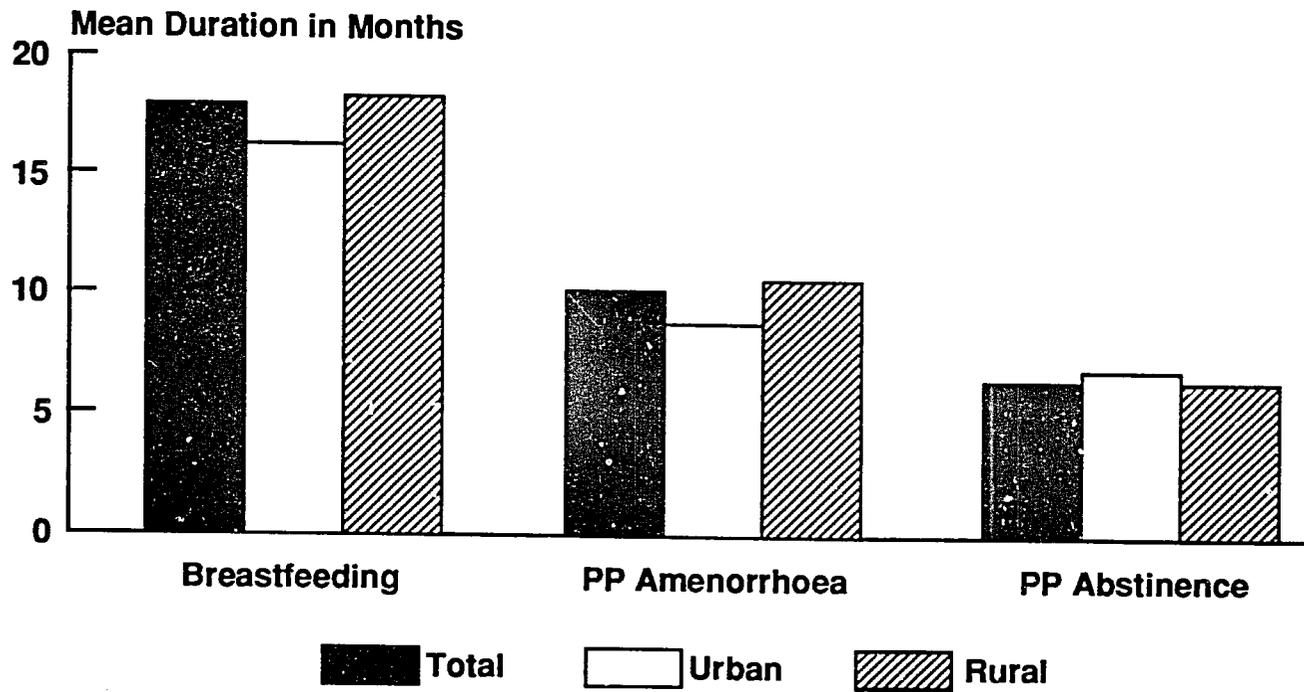


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Figure IV-1

Swaziland

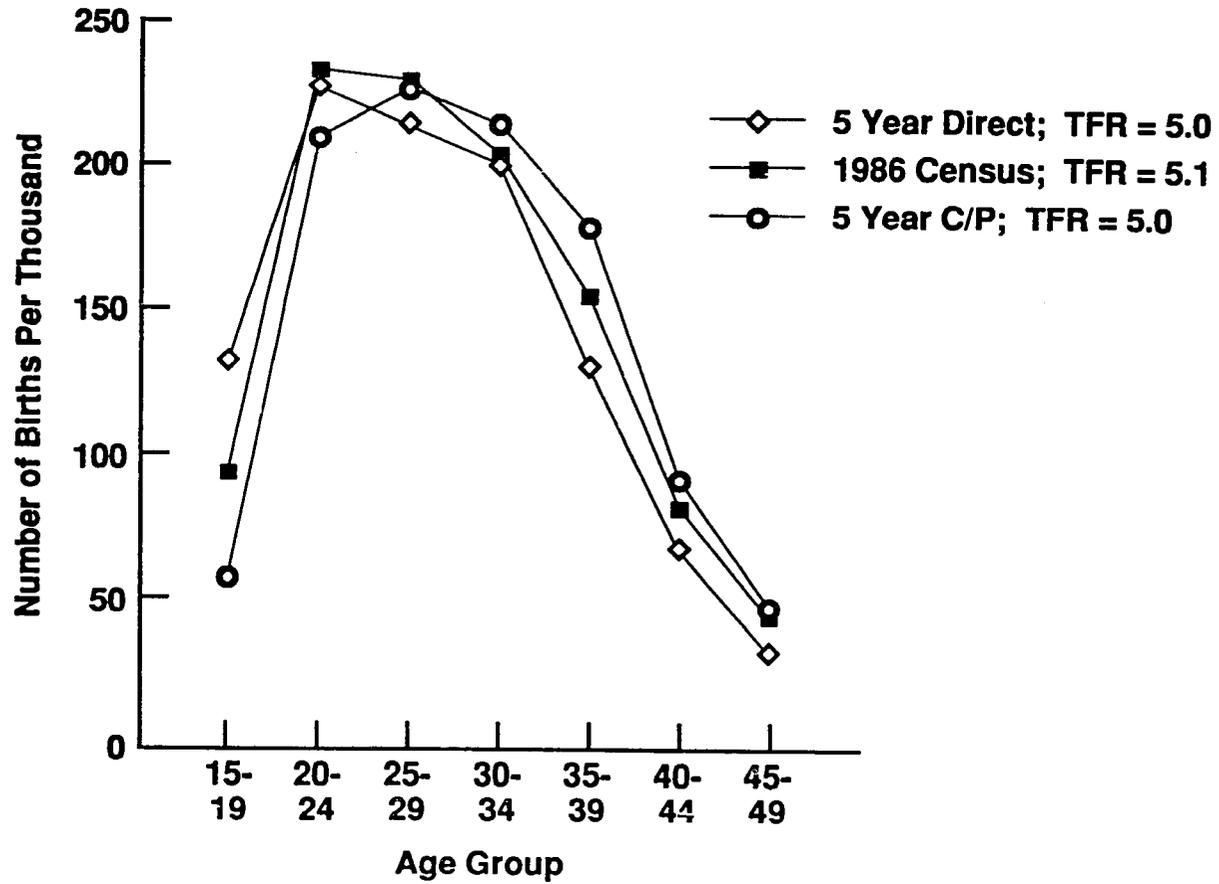
Duration of Breastfeeding, Amenorrhea and Post-Partum Abstinence by Residence



198

Figure IV-2

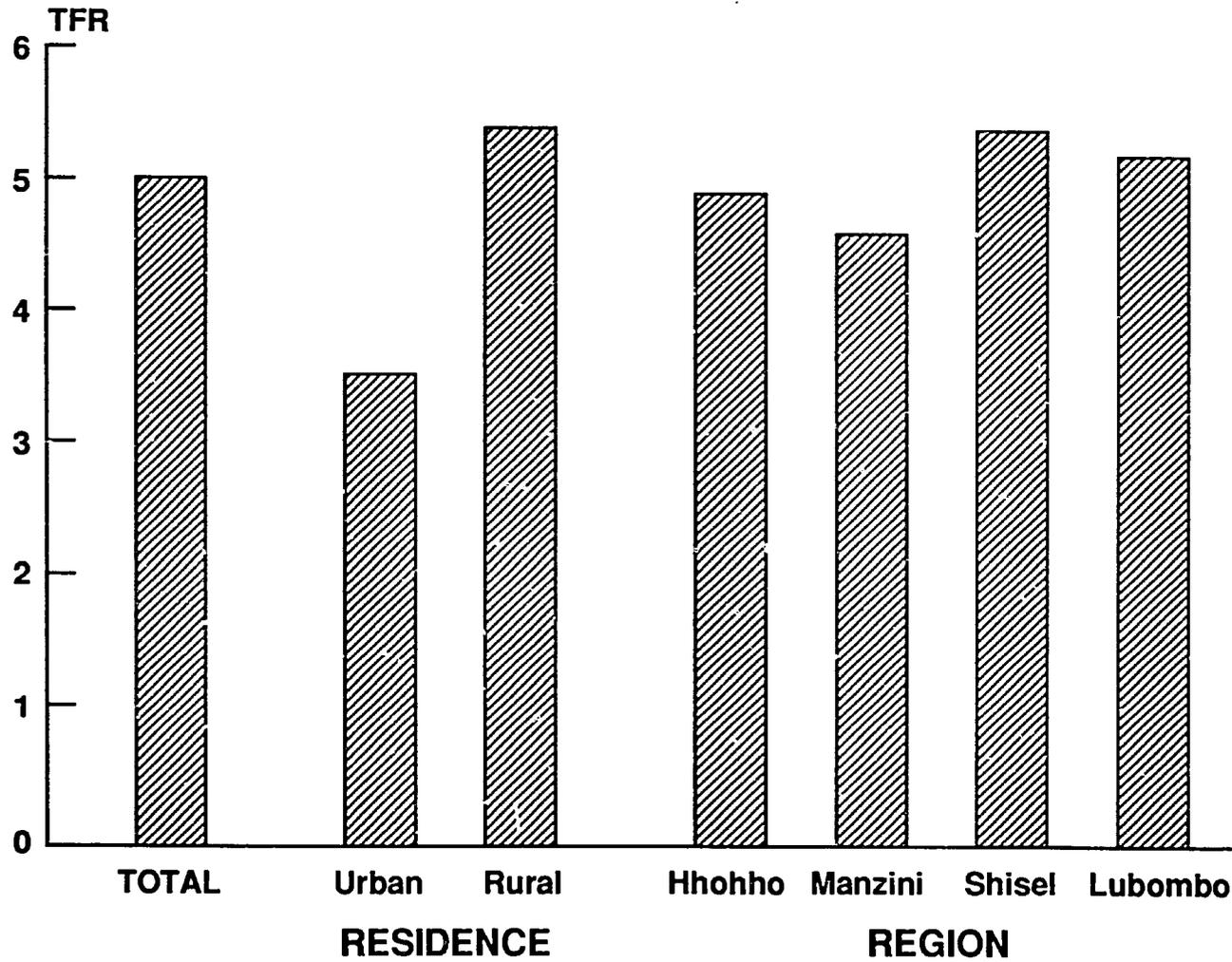
Swaziland Age-Specific Fertility Rates 1986 Census, 1988 FHS



1988

Figure IV-3

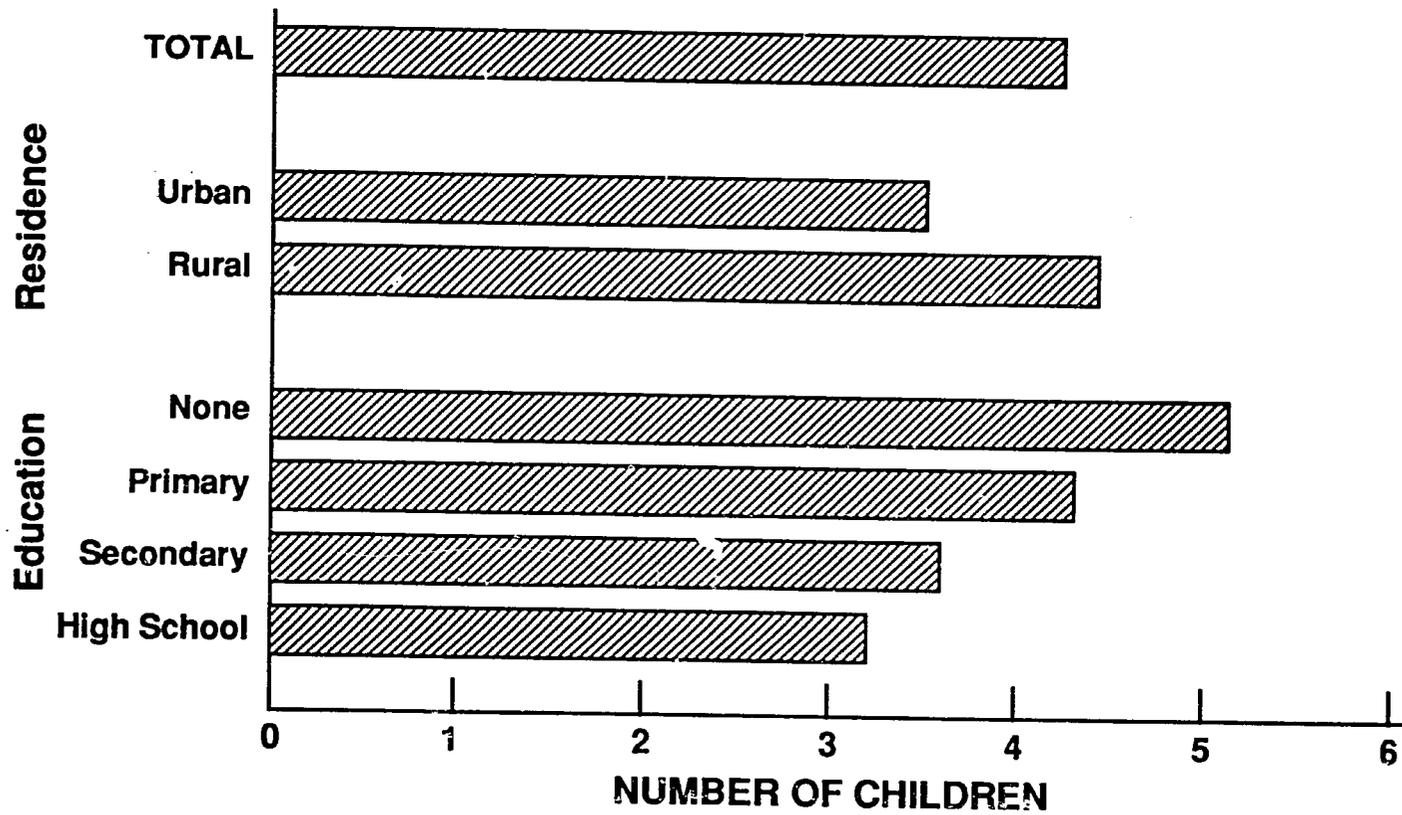
TFR Levels by Residence and Region



200

Figure IV-4

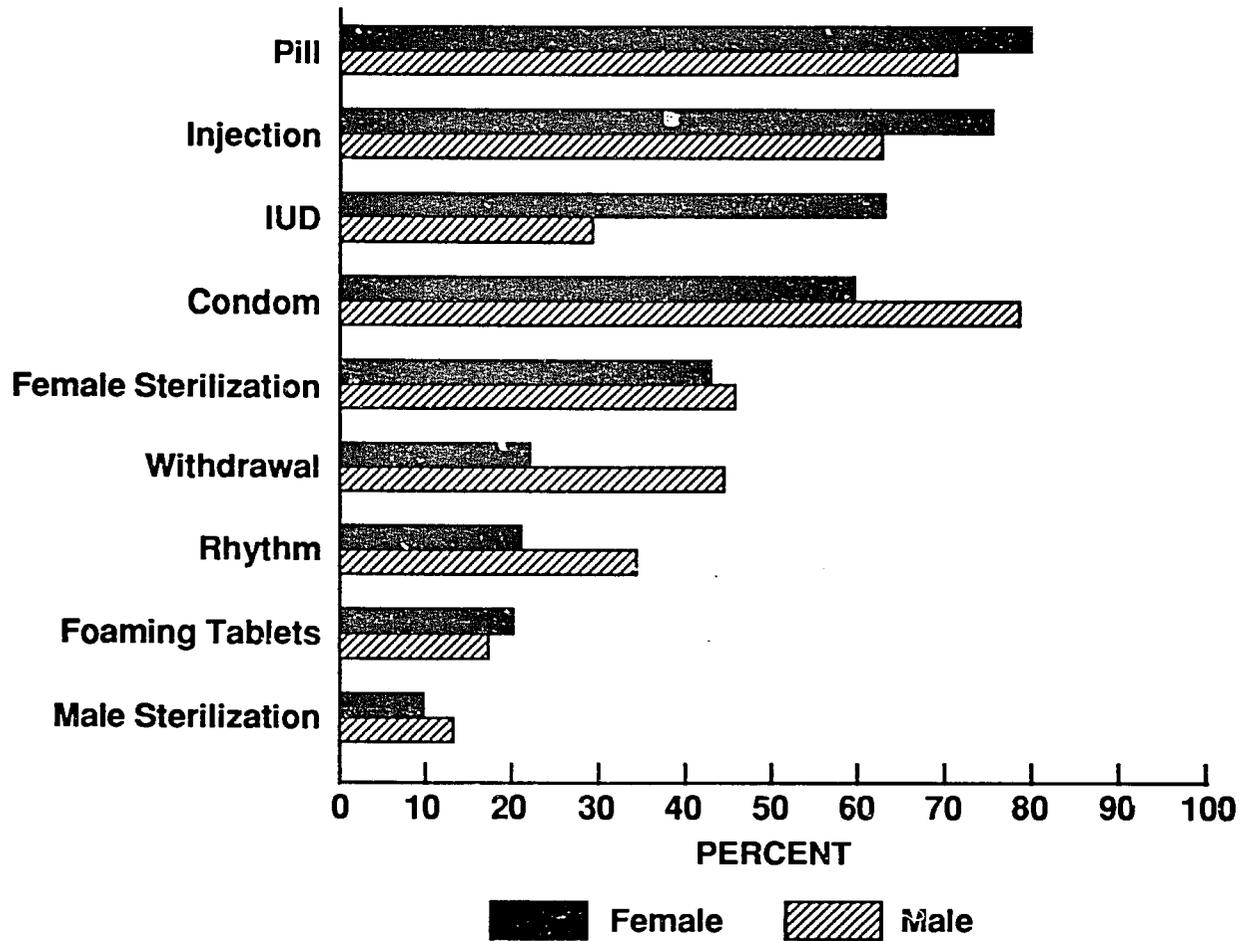
Desired Family Size by Females by Residence and Education



201

Figure V-1

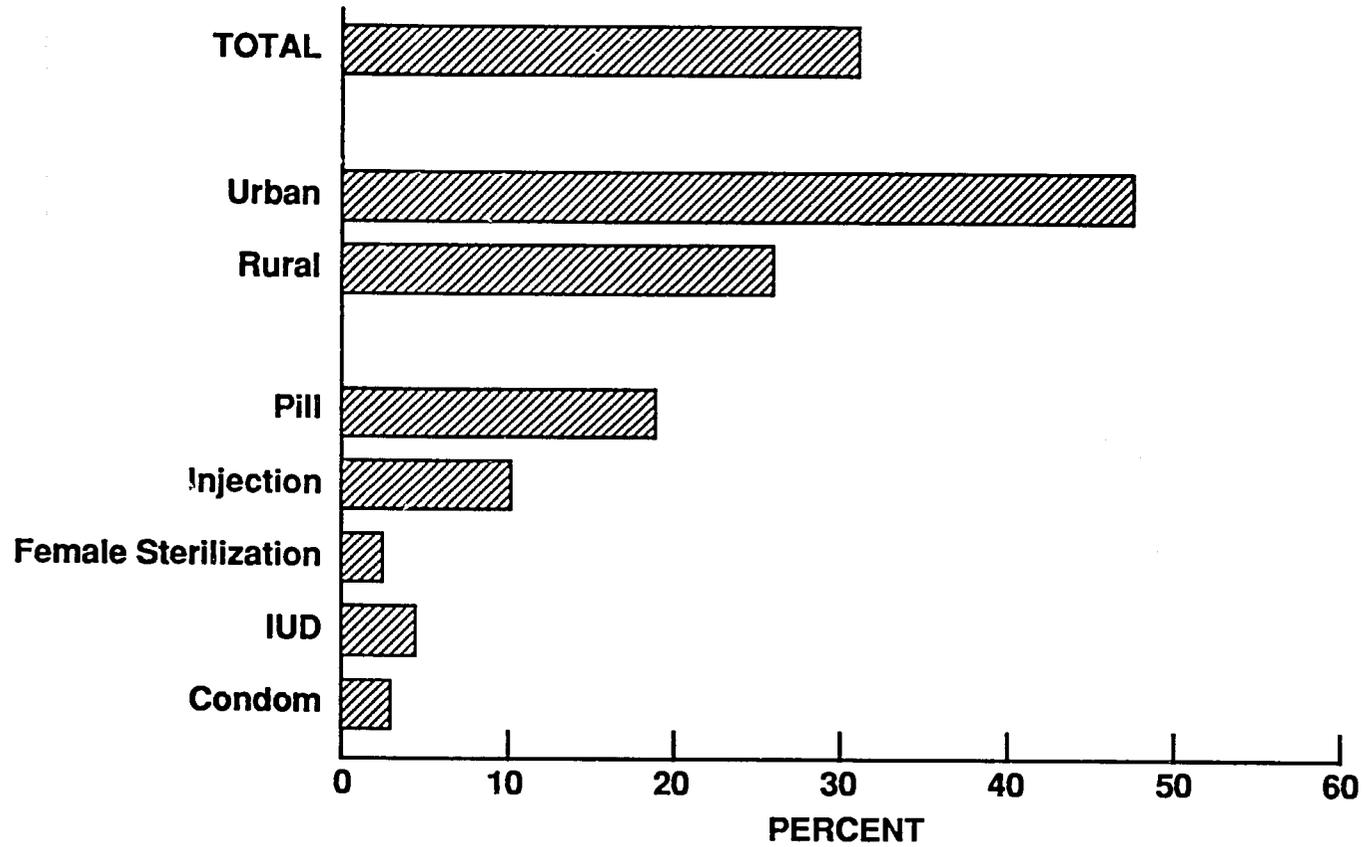
Swaziland Knowledge of Contraceptive Methods by Males and Females



102

Figure V-2

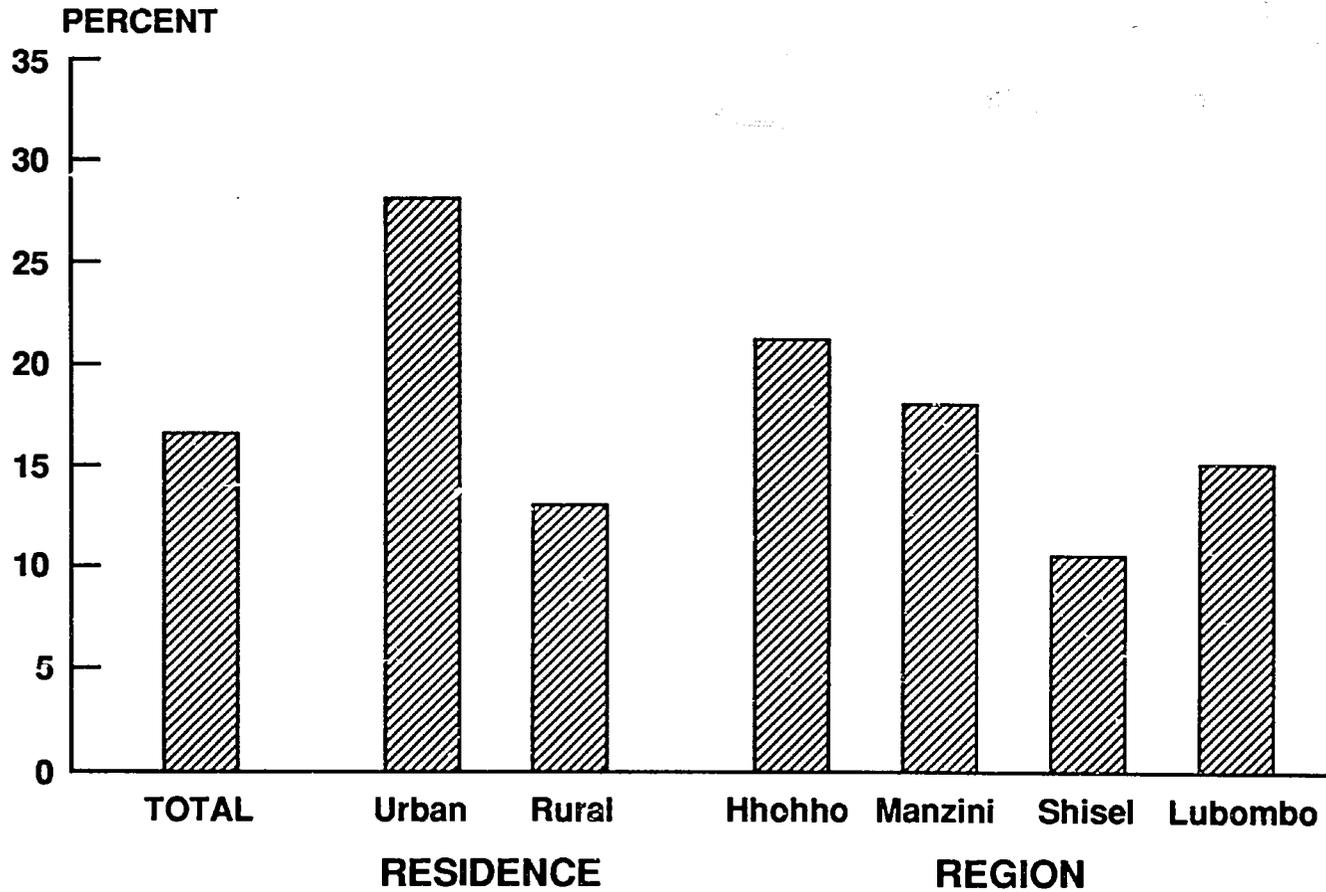
Ever Use of Any Contraceptive Method and Ever Use of Selected Methods by Females 15 - 49 Years of Age



60

Figure V-3

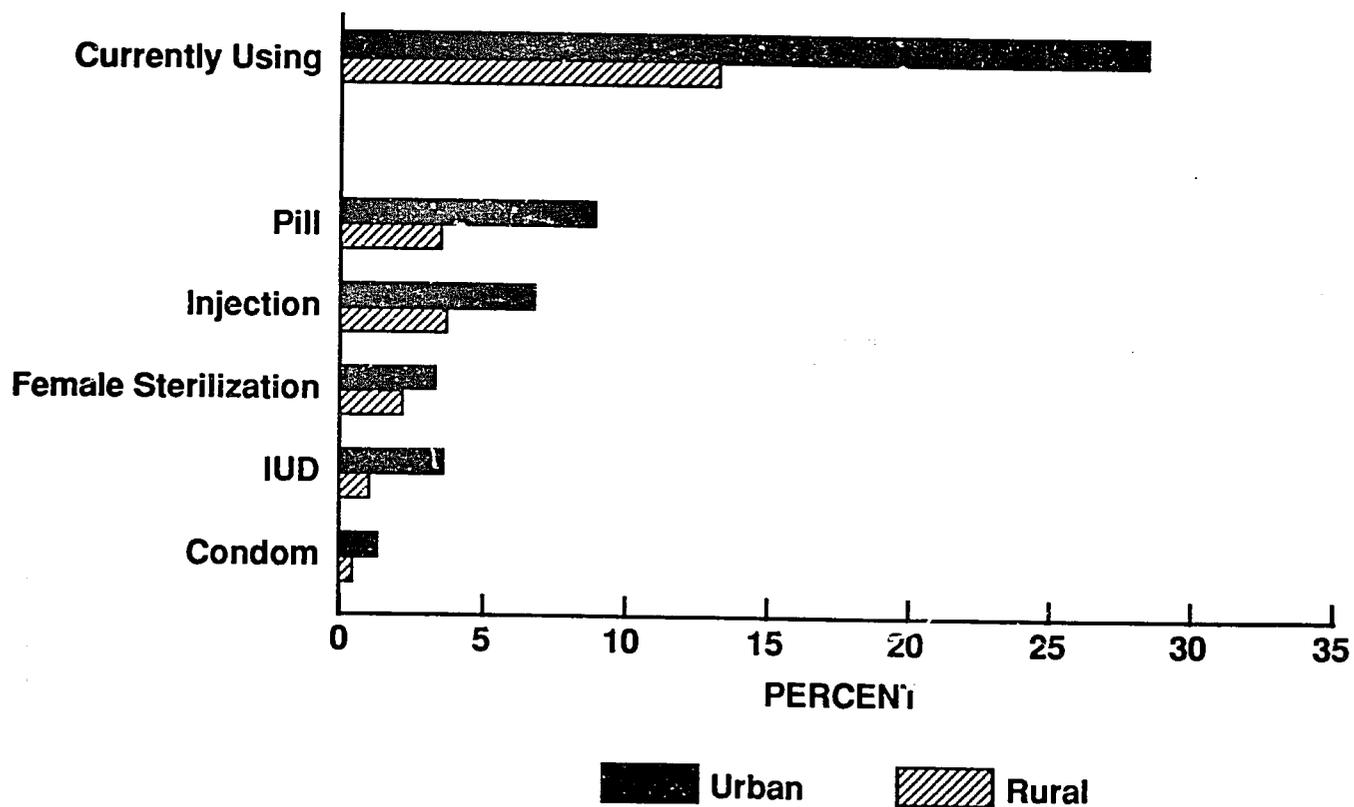
Current Contraceptive Use By Residence and Region All Females 15-49 Years of Age



202

Figure V-4

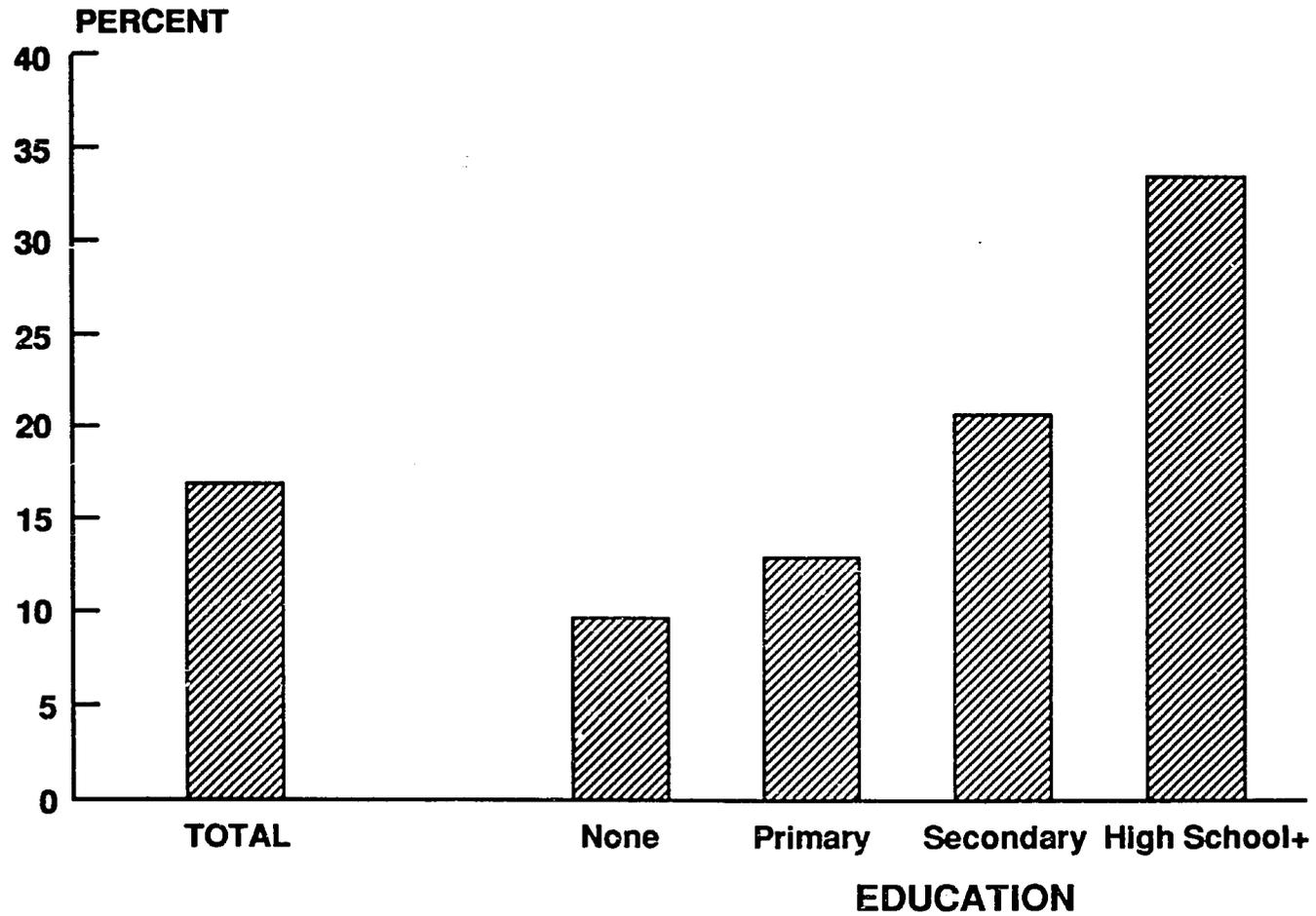
Current Contraceptive Use By Methods and Residence Females 15-49 Years of Age



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Figure V-5

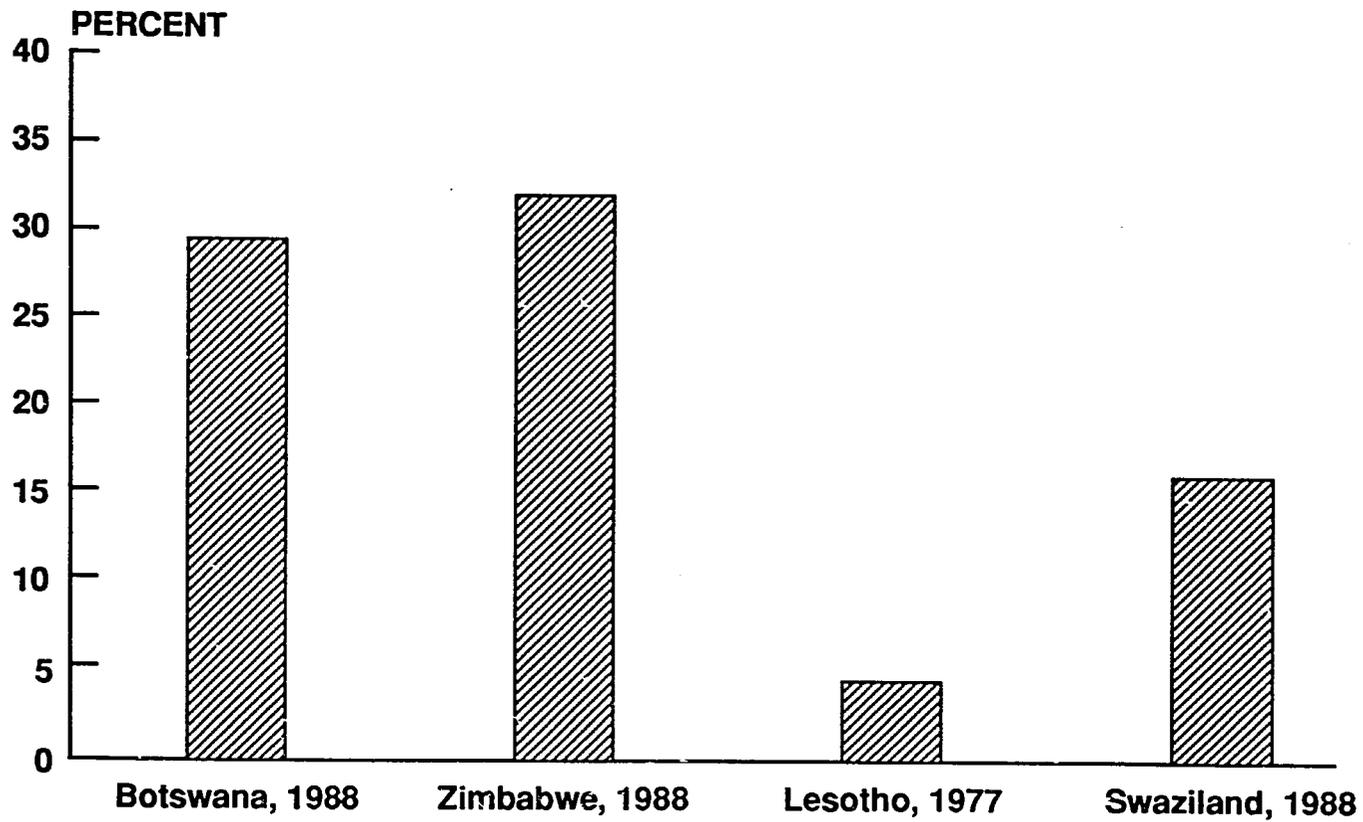
Current Contraceptive Use by Education Females 15-49 Years of Age



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Figure V-6

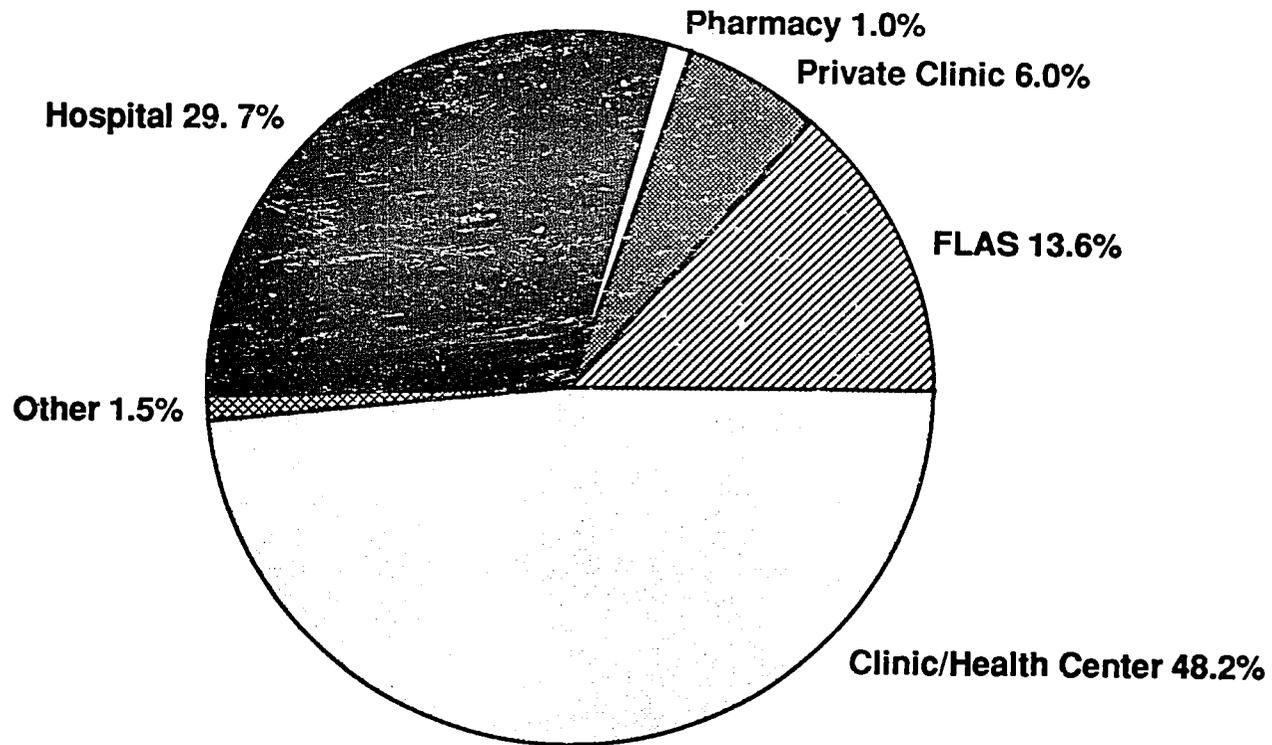
Percentage of Females Currently Using Contraception in Botswana, Zimbabwe, Lesotho, and Swaziland



1027

Figure V-7

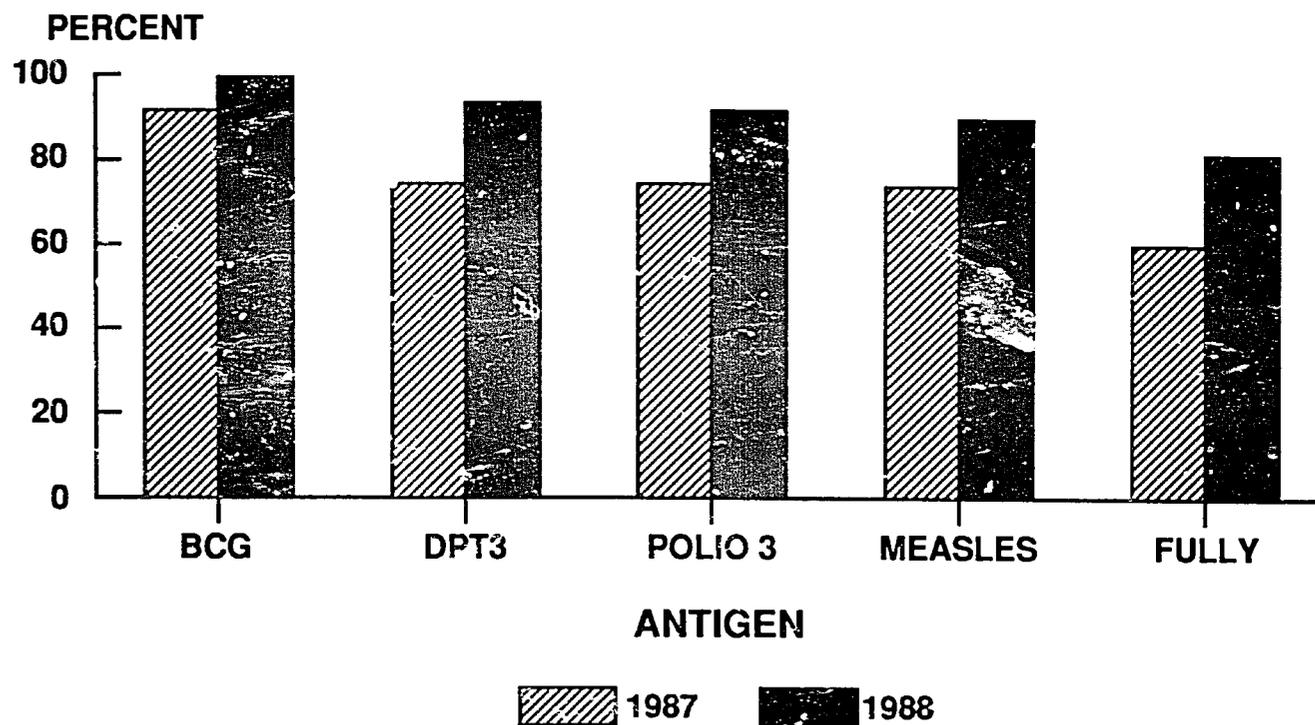
Swaziland Source of Family Planning Supply for Current Users



208

Figure VI-1

Swaziland Immunization Coverage Surveys Children 12-23 Months Of Age

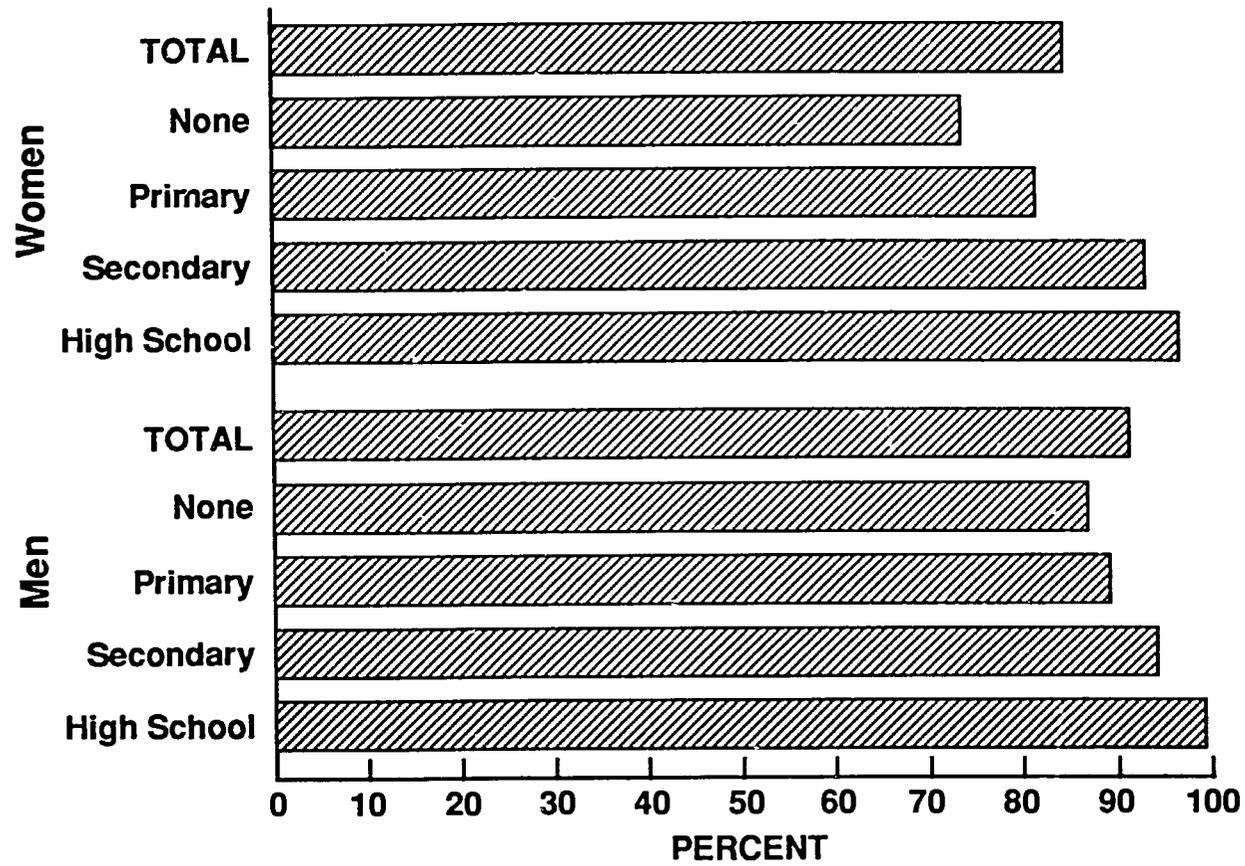


W.H.O. 30-Cluster Survey, 1987
Swaziland Family Health Survey, 1988
(Both Surveys Used Card Verification)

209.

Figure VII-1

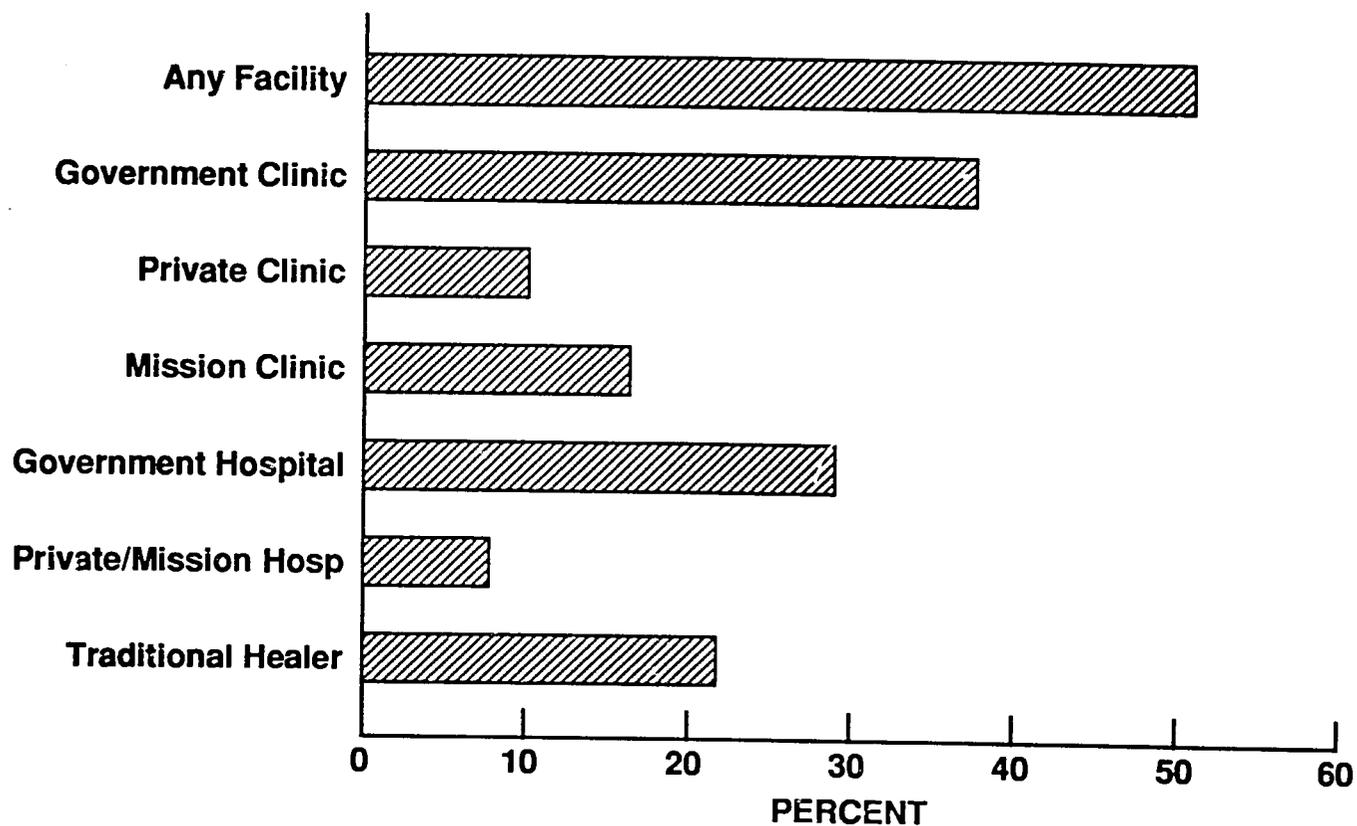
Percentage of Females and Males Who Ever Heard of AIDS by Education Level



0/6

Figure VIII-1

Percentage of Females Visiting Type of Health Facility at Least Once In Past Year



11/2

ahouse
16/8/99

QUESTIONNAIRE NUMBER

[CLUSTER NUMBER] [H H NO.]

SWAZILAND
FAMILY HEALTH SURVEY
HOMESTEAD/HOUSEHOLD QUESTIONNAIRE

Identification

Region _____
Enumeration Area _____

Interviewer Visits

Visit	1	2	3	Final Visit
Day	_____	_____	_____	_____
Month	_____	_____	_____	_____
Interview Status*	_____	_____	_____	_____
Interviewer	_____	_____	_____	_____
Supervisor	_____	_____	_____	_____

* Interview Status Codes: 1 Completed Homestead/Household Interview
2 Not At Home
3 Refusal
4 Vacant Dwelling
5 Other (specify)

2125

HOMESTEAD/HOUSEHOLD SCHEDULE

 NOW I WOULD LIKE SOME INFORMATION ABOUT THE PEOPLE WHO USUALLY LIVE IN
 YOUR HOMESTEAD/HOUSEHOLD

No.	Name	Sex	Age
	Please give me the names of the persons who usually live in your homestead/household (Identify Mother-in-law or Gogo with *)	Is (NAME) male/female 1 Male 2 Female	How old is he/she (years)? Sequential Number of Eligible Women for Individual Interview Sequential Number of Eligible Men for Individual Interview
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

1. Is anyone in the above list a traditional healer?

- 1 Yes
- 2 No (SKIP TO Q 4)

2. What type?

3. Sex of traditional healer?

- 1 Male
- 2 Female

4. Total Number of Eligible Women (Age 15-49) _____

5. Total Number of Eligible Men (Age 15-59) _____

IF THERE ARE NO ELIGIBLE WOMEN OR NO ELIGIBLE MEN, TERMINATE THE INTERVIEW.
 THE SELECTION OF THE MALE TO BE INTERVIEWED FOLLOWS.

INTERVIEWER: SELECTION OF MALE TO BE INTERVIEWED--ORDER OF LISTING IS OLDEST TO YOUNGEST MALE.

Eligible Males	Name	LAST DIGIT OF QUESTIONNAIRE £									
		0	1	2	3	4	5	6	7	8	9
1		1	1	1	1	1	1	1	1	1	1
2		2	1	2	1	2	1	2	1	2	1
3		3	1	2	3	1	2	3	1	2	X
4		1	2	3	4	1	2	3	4	X	X
5		2	3	4	5	1	2	3	4	5	1
6		5	6	1	2	3	4	X	X	X	X
7		2	3	4	5	6	7	1	X	X	X
8		8	1	2	3	4	5	6	7	X	X

The man in your household that I need to speak with is:

(NAME) _____

WHO GAVE THIS INFORMATION? (BY OBSERVATION)

- 1 One of the eligible female respondents
- 2 One of the eligible male respondents
- 3 Other homestead/household member
- 4 Neighbor
- 5 Other (specify)

QUESTIONNAIRE NUMBER _____ [CLUSTER NUMBER] [HH NO.]

SWAZILAND
FAMILY HEALTH SURVEY
FEMALE QUESTIONNAIRE

Identification

Region _____
Enumeration Area _____
Sex of Questionnaire _____ (1 = female, 2 = male)
Female Sequence Number _____

Interviewer Visits

Visit	1	2	3	Final Visit
Day	_____	_____	_____	_____
Month	_____	_____	_____	_____
Interview Status *	_____	_____	_____	_____
Interviewer	_____	_____	_____	_____
Supervisor	_____	_____	_____	_____

* Interview Status Codes: 1 Completed Individual Interview
2 Not At Home
3 Refusal
4 Other

(specify) _____

215

I. HOMESTEAD/HOUSEHOLD FEATURES

101. What is the main source of drinking water for members of your homestead/household?

- 1 Piped into residence
- 2 Piped into yard or plot
- 3 Public tap
- 4 Well with handpump
- 5 Well without handpump
- 6 River, spring, surface water
- 7 Tanker truck, other vendor
- 8 Rainwater
- 9 Other (specify) _____

102. What kind of toilet facility does your homestead/household have?

- 1 Flush
- 2 Bucket
- 3 Pit latrine
- 4 Other (specify) _____

103. Does your homestead/household have:

[READ]	<u>Yes</u>	<u>No</u>
Electricity?	1	2
A radio?	1	2
A television?	1	2

104. Does any member of your homestead/household own:

[READ]	<u>Yes</u>	<u>No</u>
A bicycle?	1	2
A motorcycle?	1	2
A car/van?	1	2
A tractor	1	2
A truck	1	2

II. RESPONDENT'S BACKGROUND

201. How old were you on your last birthday? _____
202. In what month and year were you born? _____
Month Year
203. Have you ever attended school?
- 1 Yes
 - 2 No (SKIP TO Q 206)
204. What is the highest level of schooling you attended: primary, secondary, high school or university?
- 1 Primary
 - 2 Secondary
 - 3 High school
 - 4 University
205. What were the number of years you completed at that level? _____
years
206. Have you ever attended an adult literacy class?
- 1 Yes
 - 2 No
207. What is your religion?
- 1 Catholic
 - 2 Protestant or other Christian Sects
 - 3 Zionist
 - 4 Muslim
 - 5 No Religion
 - 6 Traditional
 - 7 Other (specify) _____
208. Have you ever been married (according to Swazi custom or civil rite) or lived with a man?
- 1 Yes
 - 2 No (SKIP TO Q 215)
209. Are you now married (according to Swazi custom or civil rite), or living with a man, or are you widowed, divorced, separated or not now living together?
- 1 Married civil rite
 - 2 Married, Swazi Custom
 - 3 Living with a man, but not married
 - 4 Widowed (SKIP TO Q 212)
 - 5 Divorced (SKIP TO Q 212)
 - 6 Separated (SKIP TO Q 212)
 - 7 Not now living with a man (SKIP TO Q 212)

210. Does your husband/partner have any other wives besides yourself?

- 1 Yes
- 2 No (SKIP TO Q 212)

211. How many other wives does he have?

212. How many times have you been married?

Number

213. In what month and year did you start living with your (first) husband or partner?

Month Year

Code: 88 = Unknown

IF UNKNOWN YEAR GO TO Q 214, OTHERWISE SKIP TO Q 215

214. How old were you when you started living with him?

Age

215. ETHNIC BACKGROUND OF RESPONDENT
(BY OBSERVATION ONLY)

- 1 Black (African)
- 2 White or other

(GO TO Q 301)

28-

III. BEHAVIORAL RISKS

THE FOLLOWING QUESTIONS ARE ABOUT HIGH BLOOD PRESSURE.

301. Have you had your blood pressure taken in the past 12 months?

- 1 Yes
- 2 No

302. Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?

- 1 No (SKIP TO Q 306)
- 2 Yes, by a doctor
- 3 Yes, by a nurse
- 4 Yes, by other health professional
- 8 Don't know/Not sure (SKIP TO Q 306)
- 9 Refused (SKIP TO Q 306)

(IF YES, PROBE AS TO SPECIFICALLY WHETHER IT WAS A DOCTOR, NURSE OR OTHER HEALTH PROFESSIONAL.)

303. Have you been told on more than one occasion that your blood pressure was high, or have you been told this only once?

- 1 More than once
- 2 Only once
- 8 Don't know/Not sure
- 9 Refused

304. Are you supposed to be taking high blood pressure medicine now?

- 1 Yes
- 2 No (SKIP TO Q 306)
- 8 Don't know/Not sure (SKIP TO Q 306)
- 9 Refused (SKIP TO Q 306)

305. Are you taking the medicine?

(IF YES, PROBE AS TO WHETHER "ALL OR MOST OF THE TIME" OR "ONLY OCCASIONALLY" IF NECESSARY)

- 1 Yes, all or most of the time
- 2 Yes, only occasionally
- 3 No
- 8 Don't know/Not sure
- 9 Refused

306. Do you have diabetes?

- 1 Yes
- 2 No
- 8 Don't know

313. What type of alcoholic beverage do you usually drink?

Is it:

- [READ]
- 1 Beer
 - 2 Wine
 - 3 Hard liquor
 - 4 "Home brew"
 - 5 Other (specify) _____

314. At what age did you first begin consuming alcohol? _____
Age

315. When was the last time you had an alcoholic drink?

- [Read]
- 1 Today (SKIP TO Q 318)
 - 2 In the last week (SKIP TO Q 318)
 - 3 In the last month (SKIP TO Q 318)
 - 4 In the last year (SKIP TO Q 318)
 - 5 Longer ago (GO TO NEXT QUESTION)

316. At what age did you have your last drink? _____
Age

317. When you were drinking, did you usually drink enough to

- [Read]
- 1 Feel high; Get a little dizzy
 - 2 Be drunk
 - 3 Not remember; Blackout
 - 4 Not as much as any of these

(SKIP TO Q 401)

318. When you drink, do you usually drink enough to:

- [Read]
- 1 Feel high; Get a little dizzy
 - 2 Be drunk
 - 3 Not remember; Blackout
 - 4 Not as much as any of these (SKIP TO Q 320)

319. How many times have you drunk this much in the past month?

Number of times

320. In the past month have you driven when you had perhaps had too much to drink?

- 1 Yes
- 2 No

321. In the past month have you ridden with a driver who perhaps had had too much to drink?

- 1 Yes
- 2 No

IV. FERTILITY

NOW WE ARE GOING TO TALK ABOUT YOUR CHILDBEARING HISTORY

401. How old were you when your first period started?

_____ Age (PROBE)

- 77 It hasn't come yet
- 88 Doesn't know

402. Have you ever been pregnant?

- 1 Yes
- 2 No
- 3 Not sure

403. Are you currently pregnant?

- 1 Yes (SKIP TO Q 411)
- 2 No
- 3 Not sure

IF SHE HAS ANSWERED "NO" TO BOTH QUESTIONS 402 AND 403, THEN CONTINUE
WITH QUESTION 404; OTHERWISE, SKIP TO QUESTION 414

404. If you could choose exactly the number of children to have in
your whole life, how many would that be?

_____ Number

- 77 Fate, Up to God
- 88 Don't know

405. How old do you think a child should be before the mother stops
breast-feeding him/her?

_____ months

- 77 As long as possible

406. How old do you think it is best for a child to be before
another child is born?

_____ months

222

407. Who should decide the number of children a couple wants to have?
- 1 Husband
 - 2 Wife
 - 3 Both
 - 4 Mother-in-law (Gogo)
 - 5 Fate, Up to God
 - 6 Other (specify) _____
408. When, during her monthly menstrual cycle, do you think a woman has the greatest chance of becoming pregnant? PROBE: What are the days during the month when a woman has to be careful to avoid becoming pregnant?
- 1 During her period
 - 2 Right after her period has ended
 - 3 In the middle of the cycle
 - 4 Just before her period begins
 - 5 At any time
 - 6 Other (specify) _____
 - 8 Don't know
409. Have you ever had sexual intercourse?
- 1 Yes
 - 2 No (SKIP TO Q 601)
410. At what age did you first have sexual intercourse? _____
Age
(SKIP TO Q 601)
411. When do you expect to give birth? _____
Month Year
412. When you became pregnant did you want to become pregnant?
- 1 Yes (SKIP TO Q 414)
 - 2 No
 - 3 God's will, fate, didn't think about it
 - 8 Don't know, not sure
413. Was it that you wanted no more children, or that you just wanted to wait longer before another pregnancy?
- 1 Wanted no more children
 - 2 Wanted to wait longer
 - 8 Don't know, not sure, don't remember
414. At what age did you first have sexual intercourse? _____
Age
415. How many times have you been pregnant (including the current pregnancy, live births, still births, miscarriages, or abortions)?

Number

 Have you resumed sexual relations since the birth of (NAME)?
 1 Yes or (Pregnant) / / / / / / / / / / / / / / / /
 2 No (SKIP TO Q 439) / / / / / / / / / / / / / / / /

How many months after the birth of (NAME) did you resume sexual relations?
 _____ Months _____ Months _____ Months _____ Months _____ Months

Is (NAME) Still Alive?
 1 Yes (SKIP TO BOX) 1 Yes (SKIP TO BOX)
 2 No 2 No 2 No 2 No 2 No

IF DEAD: How old was (NAME) when he/she died?
 Record days if less than 1 month, months if less than 2 years, or years.
 1 _____ Days 1 _____ Days 1 _____ Days 1 _____ Days 1 _____ Days
 2 _____ Months 2 _____ Months 2 _____ Months 2 _____ Months 2 _____ Months
 3 _____ Years 3 _____ Years 3 _____ Years 3 _____ Years 3 _____ Years

What illnesses did (NAME) have when he/she died?
 [CHECK ALL THAT APPLY]
 1 Diarrhea 1 Diarrhea 1 Diarrhea 1 Diarrhea 1 Diarrhea
 2 Fever 2 Fever 2 Fever 2 Fever 2 Fever
 3 Vomiting 3 Vomiting 3 Vomiting 3 Vomiting 3 Vomiting
 4 Rigid Neck 4 Rigid neck 4 Rigid neck 4 Rigid neck 4 Rigid neck
 5 Poor sucking 5 Poor sucking 5 Poor sucking 5 Poor sucking 5 Poor sucking
 6 Convulsions 6 Convulsions 6 Convulsions 6 Convulsions 6 Convulsions
 7 Other 7 Other 7 Other 7 Other 7 Other
 8 don't know 8 don't know 8 don't know 8 don't know 8 don't know

IF NO OTHER LIVE BIRTHS GO TO QUESTION 445, OTHERWISE CONTINUE WITH NEXT BIRTH, RETURN TO QUESTION 422.

of female 38.

7. How many times did you go to each provider for pre natal care during your last pregnancy?

_____	Clinic/
_____	PHU/Hosp
_____	Priv MD
_____	T.Healer
_____	TBA
_____	Other

8. Where did you give birth to (NAME)?

	1 Hospital	1 Hospital	1 Hospital	1 Hospital	1 Hospi
	2 H.Center/ Clinic	2 H.Center/ Clinic	2 H.Center/ Clinic	2 H.Center/ Clinic	2 H.Cer Cli
	3 Home of TBA	3 Home of TBA	3 Home of TBA	3 Home of TBA	3 Home TBA
	4 Own Home	4 Own Home	4 Own Home	4 Own Home	4 Own H
	5 Home of friend or relative	5 Home of friend or relative	5 Home of friend or relative	5 Home of friend/ or relative	5 Home fric
	6 Other	6 Other	6 Other	6 Other	6 Other

9. Who assisted with the delivery of (NAME)?

	1 Doctor	1 Doctor	1 Doctor	1 Doctor	1 Docto
	2 Trained Nurse/ Midwife	2 Trained Nurse/ Midwife	2 Trained Nurse/ Midwife	2 Trained Nurse/ Midwife	2 Train Nurse Midw
	3 TBA	3 TBA	3 TBA	3 TBA	3 TBA
	4 RHM	4 RHM	4 RHM	4 RHM	4 RHM
	5 Gogo	5 Gogo	5 Gogo	5 Gogo	5 Gogo
	6 Other	6 Other	6 Other	6 Other	6 Other
	7 No One	7 No One	7 No One	7 No One	7 No On

10. When you became pregnant did you want to become pregnant?

	1 Yes (SKIP TO Q 432)	1 Yes (SKI Q 432)			
	2 No	2 No	2 No	2 No	2 No
	3 God's will, fate	3 God's will, fate	3 God's will, fate	3 God's will, fate	3 God's will,
	8 Don't know	8 Don't know	8 Don't know	8 Don't know	8 Don'

431.	Was it that you wanted no no more children, or that you just wanted to wait longer before another pregnancy?	1 Wanted no more children 2 Wanted to wait longer 8 Don't know	1 Wanted no more children 2 Wanted to wait longer 8 Don't know	1 Wanted no more children 2 Wanted to wait longer 8 Don't know	1 Wanted no more children 2 Wanted to wait longer 8 Don't know	1 Wanted no more children 2 Wanted to wait longer 8 Don't know
432.	Did you ever feed (NAME) at the breast?	1 Yes 2 No (SKIP TO Q 436)				
433.	Are you still breast-feeding (NAME)? If Dead, circle "2"	1 Yes (SKIP TO Q 435) 2 No (or Dead)	/ / / / / / / / / / / /	/ / / / / / / / / / / /	/ / / / / / / / / / / /	/ / / / / / / / / / / /
434.	How many months did you breast-feed (NAME)?	___ months 96 until death				
435.	At what age was (NAME) first given <u>any</u> : infant formula, incumbe, cow's milk, or solid foods <u>other than breast milk</u> ?	___ Age in months 77 Not yet				
436.	How many months after the birth of (NAME) did your menstrual period first return?	___ Months 96 hasn't returned 99 don't remember				

442. What was the date of your last live birth? _____
month year
443. When you became pregnant with your last live birth did you want to become pregnant?
- 1 Yes (SKIP TO Q 445)
 - 2 No
 - 3 God's will, fate
 - 8 Don't know
444. Was it that you wanted no more children, or that you just wanted to wait longer before another pregnancy?
- 1 Wanted no more children
 - 2 Wanted to wait longer
 - 8 Don't know
445. Do you normally care for someone else's children less than 5 years of age?
- 1 Yes
 - 2 No (SKIP TO Q 501)
446. How many children? _____
Number
447. Whose children are they?
- 1 Daughter's
 - 2 Daughter-in-law's
 - 3 Other relative
 - 4 Other

(GO TO Q 501)

V. MATERNAL-CHILD HEALTH

 NOW I WOULD LIKE TO ASK YOU A FEW QUESTIONS
 ABOUT THE HEALTH OF THESE SAME CHILDREN

ONLY FOR BIRTHS IN THE PAST FIVE YEARS, SINCE
 OCTOBER 1983. BEGIN WITH THE LAST BIRTH.

	Last Birth	Next to Last Birth	Second From Last Birth	Third From Last Birth	Fourth From Last Birth
----- Name					
01. Survival Status	1 Alive 2 Dead (GO TO BOX AFTER Q 522)				
02. Who normally cares for (NAME)?	1 Nat.Mother 2 Gogo 3 Other Rel. 4 Other Per. (IF 2-4 SKIP TO Q 504)	1 Nat.Mother 2 Gogo 3 Other Rel. 4 Other Per. (IF 2-4 SKIP TO Q 504)	1 Nat.Mother 2 Gogo 3 Other Rel. 4 Other Per. (IF 2-4 SKIP TO Q 504)	1 Nat.Mother 2 Gogo 3 Other Rel. 4 Other Per. (IF 2-4 SKIP TO Q 504)	1 Nat.Mother 2 Gogo 3 Other Rel. 4 Other Per. (IF 2-4 SKIP TO Q 504)
03. How much contact does Natural Mother have with (NAME)	1 Daily 2 Weekly 3 LT Monthly 4 Monthly (ALL SKIP TO Q 505)	1 Daily 2 Weekly 3 LT Monthly 4 Monthly (ALL SKIP TO Q 505)	1 Daily 2 Weekly 3 LT Monthly 4 Monthly (ALL SKIP TO Q 505)	1 Daily 2 Weekly 3 LT Monthly 4 Monthly (ALL SKIP TO Q 505)	1 Daily 2 Weekly 3 LT Monthly 4 Monthly (ALL SKIP TO Q 505)
04. How old was (Name) when had last regular contact with Nat.Mother?	Age	Age	Age	Age	Age

505. How many doses of the following Immunizations has (NAME) received?

Codes:

- 0 = None
- 1 = 1
- 2 = 2
- 3 = 3
- 4 = Booster
- 8 = Don't know

A. BCG

Year of Last Vaccination	_____	_____	_____	_____	_____
Card Used	<u>1 Yes</u> 2 No				

Where? _____

B. DPT

Year of Last Vaccination	_____	_____	_____	_____	_____
Card Used	<u>1 Yes</u> 2 No				

Where? _____

C. POLIO

Year of Last Vaccination	_____	_____	_____	_____	_____
Card Used	<u>1 Yes</u> 2 No				

Where? _____

D. MEASLES

Year of Last Vaccination	_____	_____	_____	_____	_____
Card Used	<u>1 Yes</u> 2 No				

Where? _____

506.	Has (NAME) had diarrhea during past 2 weeks	1 Yes 2 No (SKIP TO Q 508)				
507.	What treatment did (NAME) receive?	1 None 2 Home rem/SSS 3 Oral Rehy. Salts 4 IV Treatment 5 Treatment by Traditional Healer 6 Other Specify	1 None 2 Home rem/SSS 3 Oral Rehy. Salts 4 IV Treatment 5 Treatment by Traditional Healer 6 Other Specify	1 None 2 Home rem/SSS 3 Oral Rehy. Salts 4 IV Treatment 5 Treatment by Traditional Healer 6 Other Specify	1 None 2 Home rem/SSS 3 Oral Rehy. Salts 4 IV Treatment 5 Treatment by Traditional Healer 6 Other Specify	1 None 2 Home rem/SSS 4 Oral Rehy. Salts 5 IV Treatment 6 Treatment by Traditional Healer 7 Other Specify
508.	Has (NAME) been weighed in the past 12 months?	1 Yes 2 No (SKIP TO Q 510)				
509.	How many times?					
510.	Has (NAME) had fever that lasted more than 2 days in the past month?	1 Yes 2 No				
511.	Has (NAME) had difficult or rapid breathing in the past month?	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	2 No
512.	Has (NAME) passed Roundworms in the past month?	1 Yes 2 No				

513.	Has (NAME) suffered from blood in his/her urine in the past month?	1 Yes 2 No				
514.	Has (NAME) ever had measles?	1 Yes 2 No				
515.	Has (NAME) ever been treated for TB?	1 Yes 2 No (SKIP TO Q 517)				
516.	Does (NAME) have a Blue TB Card?	1 Yes 2 No				
517.	Has (NAME) ever had a fit?	1 Yes 2 No (SKIP TO Q 520)				
518.	Has (NAME) had repeated fits?	1 Yes 2 No (SKIP TO Q 520)				
519.	Did the fits begin in the first year of life or later	1 1st year 2 Later	1 1st year 2 Later	1 1st year 2 Later	1 1st year 2 Later	2 Later
520.	Does (NAME) have ear discharge at present?	1 Yes 2 No				
521.	Can (NAME) walk?	1 Yes 2 No				
522.	Can (NAME) talk?	1 Yes 2 No				

IF NO OTHER LIVE BIRTHS, GO TO QUESTION 523. OTHERWISE, CONTINUE WITH NEXT LIVE BIRTH RETURN TO QUESTION 501.

523. Do you ever use the traditional health sector for your children less than 5 years of age?

- 1 Yes
- 2 No (SKIP TO Q 601)

524. Do you use the traditional sector as a first resort?

- 1 Yes
- 2 No (SKIP TO Q 526)

525. Why? _____

526. If no, why do you use the traditional sector?

(GO TO Q 601)

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VI. FAMILY PLANNING

 NOW I WOULD LIKE TO TALK TO YOU ABOUT METHODS THAT PEOPLE
 USE TO SPACE OR LIMIT THE NUMBER OF THEIR CHILDREN.

601. a. FIRST ASK: PLEASE TELL ME ALL THE METHODS YOU HAVE HEARD OF
 TO SPACE OR LIMIT THE NUMBER OF CHILDREN A PERSON
 CAN HAVE.

CIRCLE NUMBER 1 NEXT TO EACH
 METHOD MENTIONED.

b. THEN: READ EACH METHOD NOT MENTIONED AND CIRCLE 2 OR 0
 AS APPROPRIATE.

c. THEN ASK: QUESTIONS ABOUT USE FOR EVERY METHOD KNOWN
 (CIRCLE 3 OR 4).

<u>Method</u>	<u>Method</u>	<u>Have You Ever Heard of it?</u>		<u>Have You Ever Used it?</u>	
		<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
1.Pills, oral contraceptives	1	2	0	3	4
2.IUD, coil, loop	1	2	0	3	4
3.Condom	1	2	0	3	4
4.Injection	1	2	0	3	4
5.Foaming tablets	1	2	0	3	4
6.Female sterilization, T.L.	1	2	0	3	4
7.Male sterilization, vasectomy	1	2	0	3	4
8. Rhythm, safe period	1	2	0	3	4
9. Cervical mucus, Billings	1	2	0	3	4
10.Withdrawal	1	2	0	3	4
11.Other(Specify)_____	1	2	0	3	4

602. CHECK: Respondent has ever used at least one method of
 contraception.

- 1 Yes
- 2 No (SKIP TO Q 605)

603. Are you currently using a method of contraception?

- 1 Yes
- 2 No (SKIP TO Q 605)

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604. What is the method you are currently using?

- 1 Pills, oral contraceptives
- 2 IUD, coil, loop
- 3 Condom
- 4 Injection
- 5 Foaming tablets
- 6 Female sterilization, T.L.
- 7 Male sterilization, vasectomy
- 8 Rhythm, safe period
- 9 Cervical mucus, Billings
- 10 Withdrawal
- 11 Other (specify) _____

605. Who should decide whether a person should use a method of contraception?

- 1 Husband (Partner)
- 2 Wife
- 3 Both
- 4 Mother-in-law (Gogo)
- 5 Doesn't believe in using contraception
- 6 Other (Specify) _____

IF RESPONDENT HAS USED CONTRACEPTION IN THE PAST BUT IS NOT USING IT NOW, SKIP TO Q 606.

IF RESPONDENT HAS NEVER USED CONTRACEPTION, SKIP TO Q 610.

IF RESPONDENT IS USING MODERN REVERSIBLE CONTRACEPTION NOW (METHODS 1-5), SKIP TO Q 618.

IF RESPONDENT IS NOW USING METHODS 8-11 ONLY, SKIP TO Q 620.

IF RESPONDENT OR HUSBAND IS STERILIZED (METHODS 6 OR 7), SKIP TO Q 637.

606. How old were you when you first used contraception? _____
Age

607. What was the family planning method you used most recently?

- 1 Pills
- 2 IUD
- 3 Condoms
- 4 Injection
- 5 Foaming tablets
- 6 Rhythm, safe period
- 7 Billings, cervical mucus
- 8 Other (specify) _____

608. What was the date you last used this method? _____
Month year

22 of female 38

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609. Why did you stop using that method?

IF PREGNANT NOW, SKIP TO Q 614

610. Do you think you are able to get pregnant at the present time?

- 1 Yes (SKIP TO Q 612)
- 2 No
- 3 Not sure, don't know

611. Why not?

- 1 Menopause
- 2 Has had an operation for medical reasons which makes pregnancy impossible (or husband partner has had an operation) (SKIP TO Q 701)
- 3 Has tried to get pregnant for at least 2 years without success (or has not gotten pregnant despite at least 2 years of noncontraception) (SKIP TO Q 701)
- 4 Currently pregnant (SKIP TO Q 701)
- 5 Postpartum/breast-feeding (SKIP TO Q 614)
- 6 Other (specify) _____ (SKIP TO Q 614)

612. Would you like to become pregnant now?

- 1 Yes (SKIP TO Q 614)
- 2 No
- 3 Currently pregnant
- 4 God's will, fate (SKIP TO Q 614)
- 8 Don't know, not sure (SKIP TO Q 614)

613. Why are you not using a method to prevent pregnancy now?

614. In the future, do you think you will want to use a method to prevent pregnancy?

- 1 Yes
- 2 No (SKIP TO Q 626)
- 3 Not sure (SKIP TO Q 625)

615. What method would you most like to use?

- | | |
|-------------------------|----------------------------|
| 01 Pills | 07 Male Sterilization |
| 02 IUD | 08 Rhythm/Safe Period |
| 03 Condom | 09 Billings/Cervical Mucus |
| 04 Injection | 10 Withdrawal |
| 05 Foaming Tablets | 11 Other _____ |
| 06 Female Sterilization | 88 Don't know |

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616. Do you know where to obtain methods for preventing pregnancy or information on methods?

- 1 Yes
- 2 No (SKIP TO Q 625)

617. Where? (IF MORE THAN ONE PLACE MENTIONED, CIRCLE THE ONE SHE WOULD MOST LIKELY USE)

- 1 Clinic or health centre (not private)
- 2 Hospital
- 3 Private clinic, physician
- 4 FLAS
- 5 Pharmacy
- 6 Shop, other than pharmacy
- 7 Field educator or volunteer health worker
- 8 Traditional healer
- 9 Rural Health Motivator
- 10 Other (specify) _____

(SKIP TO Q 625)

618. How old were you when you first used contraception? _____
Age

619. Where do you get your family planning supplies?

- 1 Clinic or health centre (not private) (SKIP TO Q 625)
- 2 Hospital (SKIP TO Q 625)
- 3 Private clinic, physician (SKIP TO Q 625)
- 4 FLAS (SKIP TO Q 625)
- 5 Pharmacy (SKIP TO Q 625)
- 6 Shop, other than pharmacy (SKIP TO Q 625)
- 7 Field educator or volunteer health worker (SKIP TO Q 626)
- 8 Traditional healer (SKIP TO Q 626)
- 9 Rural Health Motivator (SKIP TO Q 626)
- 10 Other (specify) (SKIP TO Q 625)

620. How old were you when you first used contraception? _____
Age

621. In the future do you think you will want to use a different method to prevent pregnancy?

- 1 Yes
- 2 No (SKIP TO Q 626)
- 3 Don't know, not sure (SKIP TO Q 626)

622. What method would you most like to use?

- | | |
|-------------------------|-----------------------------|
| 01 Pills | 08 Rhythm, safe period |
| 02 IUD | 09 Billings, Cervical mucus |
| 03 Condom | 10 Withdrawal |
| 04 Injection | 11 Other (specify) _____ |
| 05 Foaming tablets | 12 Any Method |
| 06 Female Sterilization | 88 Don't Know/Not Sure |
| 07 Male Sterilization | |

623. Do you know where to obtain methods for preventing pregnancy c
information on methods?

- 1 Yes
- 2 No (SKIP to Q 625)

624. Where? (IF MORE THAN ONE PLACE MENTIONED, CIRCLE THE ONE SHE
WOULD MOST LIKELY USE)

- 1 Clinic or health centre (not private)
- 2 Hospital
- 3 Private clinic, physician
- 4 FLAS
- 5 Pharmacy
- 6 Shop, other than pharmacy
- 7 Field educator or volunteer health worker
- 8 Traditional healer
- 9 Rural Health Motivator
- 10 Other (specify) _____

625. Would you like to receive family planning supplies from someone
in your local community?

- 1 Yes
- 2 No
- 8 Don't know, maybe

626. Do you want to have any more children (after this pregnancy)?

- 1 Yes (SKIP TO Q 632)
- 2 No
- 3 God's will, fate (SKIP TO Q 633)
- 4 Not sure (SKIP TO Q 633)

QUESTIONS 627-631 ARE ONLY FOR WOMEN WHO DO NOT WANT MORE CHILDREN.

627. Would you be interested in an operation that would prevent yo
from having any more children?

- 1 Yes
- 2 No (SKIP TO Q 631)
- 8 Not sure

628. Do you know where to go for this operation or to get
information about it?

- 1 Yes
- 2 No (SKIP TO Q 701)

629. Where? IF MORE THAN ONE PLACE MENTIONED, CIRCLE THE ONE SHE WOULD MOST LIKELY USE)

- 1 Clinic or health centre (not private)
- 2 Hospital
- 3 Private clinic, physician
- 4 FLAS
- 5 Pharmacy
- 6 Shop, other than pharmacy
- 7 Field educator or volunteer health worker
- 8 Traditional healer
- 9 Rural Health Motivator
- 10 Other (specify) _____

630. Since you have all the children you want and you know where to get this operation, why have you not had it?

(SKIP TO Q 701)

631. Why are you not interested in this operation?

(SKIP TO Q 701)

QUESTIONS 632-636 ARE ONLY FOR WOMEN WHO WANT OR MIGHT WANT MORE CHILDREN

632. How many more children would you like to have (after this pregnancy)?

- _____ number of children
- 66 As many as possible
 - 77 As many as God sends, up to fate
 - 88 Don't know

633. After you have all the children you want, would you be interested in an operation that would prevent you from having any more children?

- 1 Yes
- 2 No (SKIP TO Q 636)
- 3 Not sure

634. Do you know where to get this operation or information about it?

- 1 Yes
- 2 No (SKIP TO Q 701)

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635. Where?

- 1 Clinic or health centre (not private)
- 2 Hospital
- 3 Private clinic, physician
- 4 FLAS
- 5 Pharmacy
- 6 Shop, other than pharmacy
- 7 Field educator or volunteer health worker
- 8 Traditional healer
- 9 Rural Health Motivator
- 10 Other (specify) _____

(SKIP TO Q 701)

636. Why would you not be interested in this operation?

(SKIP TO Q 701)

QUESTIONS 637-641 ARE FOR WOMEN WHO HAVE BEEN STERILIZED OR WHOSE HUSBANDS HAVE HAD A VASECTOMY.

637. Where was your T.L. (your husband's vasectomy) done?

- 1 Hospital, Swaziland
- 2 Hospital, South Africa
- 3 Hospital, Other
- 4 Other (specify) _____

638. How old were you (he) when you (he) had the operation?

Age

639. Have you ever used any other method of contraception?

- 1 Yes
- 2 No (SKIP TO Q 641)

640. How old were you when you first used contraception? _____
Age

641. Are you satisfied with having had the operation?

- 1 Yes
- 2 No

SKIP TO Q 701

VII. SPECIFIC INFECTIOUS DISEASES

WE ALSO NEED TO KNOW ABOUT THE TREATMENT WOMEN HAVE RECEIVED FOR
HEALTH PROBLEMS THAT COULD AFFECT THEIR
CHILDBEARING.

701. Have you ever had a venereal disease?

- 1 Yes
- 2 No (SKIP TO Q 708)

702. What was the name of this disease? _____

703. Was it ulcerative or non-ulcerative?

- 1 Ulcerative
- 2 Non-ulcerative

704. How did you treat it?

- 1 Self medication
- 2 Went to Health Facility
- 3 Went to Traditional Healer

705. Have you had more than one episode in the past year?

- 1 Yes
- 2 No

706. Was your partner treated?

- 1 Yes
- 2 No (SKIP TO Q 708)

707. How?

- 1 Self medication
- 2 Went to Health Facility
- 3 Went to Traditional Healer

708. Have you had a fever that lasted more than 2 days in the past month?

- 1 Yes
- 2 No

709. Have you suffered severe cough or had difficulty breathing in the past month?

- 1 Yes
- 2 No

710. Have you ever been treated for TB?

- 1 Yes
- 2 No

711. Have you ever heard of AIDS or the AIDS virus?

- 1 Yes
- 2 No (SKIP TO Q 801)

712. Which activities listed below are ways in which a person can get the AIDS virus?

	Yes	No
[READ] Shaking hands or hugging	1	2
Sharing hypodermic needles	1	2
Sharing an apartment, classroom, or office	1	2
Receiving a blood transfusion	1	2
Sexual intercourse between men	1	2
Sexual intercourse between a man and a woman	1	2
Giving a blood donation	1	2
Being bitten by an insect that has bitten someone with the AIDS virus	1	2
Sharing personal items like dishes, toilets, etc	1	2

713. Can a person get AIDS from someone who has the AIDS virus but does not have the disease.

- 1 Yes
- 2 No
- 8 Don't know

714. What would you say are the chances that you could get AIDS? Would you say that you have . . .

	Yes	No
[READ] A very strong chance	1	2
A strong chance	1	2
Some chance	1	2
Not much chance, or	1	2
No chance at all?	1	2

715. To keep you or your partner from catching diseases such as AIDS or venereal disease, do you use any of the methods listed below?

	Yes	No
[READ] Condom	1	2
Foaming tablets	1	2
Spermicidal jelly, foam or cream	1	2
No methods used for this purpose (SKIP TO Q 717)	1	2
Not having sex now (SKIP TO Q 801)	1	2

716. Which of these methods, if any, did you begin to use for protection since you first heard about AIDS?

	Yes	No
[READ] Condom	1	2
Foaming tablets	1	2
Spermicidal jelly, foam or cream	1	2
No methods used for this purpose	1	2

717. To keep people from catching diseases such as AIDS or venereal disease, doctors have suggested several changes people can make in their sexual behavior. In which ways, if any, have you changed your sexual behavior?

	Yes	No
[READ] Stopped having sexual intercourse	1	2
Don't have sex as often	1	2
Stopped having sex with more than one man	1	2
Stopped having sex with men I don't know well	1	2

(GO TO Q 801)

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VIII. HEALTH CARE UTILIZATION

 NOW I WANT TO ASK YOU A FEW QUESTIONS ABOUT WHERE YOU GO FOR HEALTH CARE.

801. Sometimes people go to different types of facilities for different types of health problems. For each of the following conditions, would you be more likely to go for your first visit to a traditional healer or clinic?

	Traditional Healer	Clinic	hospital	Don't Know
Difficulty getting pregnant	1	2	3	4
Antenatal care for pregnancy	1	2	3	4
Delivery of Baby	1	2	3	4
Immunization of children	1	2	3	4
Child's diarrhea	1	2	3	4
Child's high fever	1	2	3	4
Child's prolonged coughing	1	2	3	4
Child's mental/emotional problems	1	2	3	4
accidents/wounds	1	2	3	4

802. Who in your homestead (household) usually decides whether a family member with a health problem would go to a traditional healer or a clinic?

- 1 Respondent
- 2 Spouse(partner)
- 3 Both respondent and spouse
- 4 grandparent
- 5 Other relative
- 6 Other (specify) _____

803. In the past year, have you or any member of your family visited a health care provider for any kind of health problem?

- 1 Yes (SKIP TO Q 805)
- 2 No

804. If you did not go to a clinic, hospital or traditional healer, why not?

- 1 No sickness in family
 - 2 Scared
 - 3 Didn't know where to go
 - 4 Don't know
 - 5 Refused to answer
- [END OF INTERVIEW]

805. Did you or any member of your family visited a Government clinic in the past year?

- 1 Yes
- 2 No (SKIP TO Q 817)

806. How many times did you visit a Government Clinic in the past year?

_____ number

807. How long did it take you or your family member to get to the Government clinic?

- 1 less than 15 minutes
- 2 15 - 29 minutes
- 3 30-59 minutes
- 4 60+ minutes
- 8 Don't know

808. How did you or your family member get to the Government clinic?

- 1 Bus or other public transportation
- 2 Private car
- 3 Walking (SKIP TO Q 810)
- 4 Can't remember
- 5 Other

809. What did your travel cost you to get to the Government clinic?

- 1 Less than E. 1
- 2 E. 1-2
- 4 E. 3+
- 5 Can't remember

810. Did you have to take time off from work to go to the Government clinic?

- 1 Yes
- 2 No (SKIP TO Q 813)

811. Did you lose any income by having to go to the Government clinic?

- 1 Yes
- 2 No (SKIP TO Q 813)

812. How much money did you lose by taking time off your work to go to the Government clinic?

- 1 Less than E. 1
- 2 E. 1-2
- 3 E. 3+
- 4 Can't remember

813. On the whole, how satisfied were you with the service you received from the Government clinic?

- 1 Not satisfied
- 2 Fairly satisfied (SKIP TO Q 815)
- 3 Very satisfied (SKIP TO Q 815)

814. Why were you not satisfied with the Government Clinic?

(SKIP TO Q 816)

815. What is it that you find most satisfying about visiting a Government Clinic?

816. What times of day can you go for service at a Government Clinic?

- 1 Early morning only
- 2 All morning
- 3 All day until evening
- 4 All day including evenings and weekends
- 5 Don't know/can't remember

817. Did you or any member of your family visit a Private Clinic in the past year?

- 1 Yes
- 2 No (SKIP TO Q 829)

818. How many times did you or your family visit a Private Clinic in the past year?

_____ number

819. How long did it take you to get to the Private Clinic?

- 1 less than 15 minutes
- 2 15 - 29 minutes
- 3 30-59 minutes
- 4 60+ minutes
- 8 Don't know (SKIP TO Q 829)

820. How did you get to the Private Clinic?

- 1 Bus or other public transportation
- 2 Private car
- 3 Walking (SKIP TO Q 829)
- 4 Can't remember
- 5 Other

821. What did your travel cost you to get to the Private clinic?

- 1 Less than E. 1
- 2 E. 1-2
- 4 E. 3+
- 5 Can't remember
- 8 Don't know

822. Did you have to take time off from work to go to the Private Clinic?

- 1 Yes
- 2 No (SKIP TO Q 825)

823. Did you lose any income by having to go to the Private Clinic?

- 1 Yes
- 2 No (SKIP TO Q 825)

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824. How much money did you lose by taking time off your work to go to the Private clinic?

- 1 Less than E. 1
- 2 E. 1-2
- 3 E. 3+
- 4 Can't remember

825. On the whole, how satisfied were you with the service you received from the Private clinic?

- 1 Not satisfied
- 2 Fairly satisfied (SKIP TO Q 827)
- 3 Very satisfied (SKIP TO Q 827)

826. Why were you not satisfied with the Private clinic?

(SKIP TO Q 828)

827. What is it that you find most satisfying about visiting a Private clinic?

828. What times of day can you go for service at a Private clinic?

- 1 Early morning only
- 2 All morning
- 3 All day up until evening
- 4 All day including evenings and weekends
- 5 Don't know/can't remember

829. Has any member of your family visited a Mission clinic in the past year?

- 1 Yes
- 2 No (SKIP TO Q 841)

830. How many times? _____ number

831. How long did it take you to get to the Mission clinic?

- 1 Less than 15 minutes
- 2 15 - 29 minutes
- 3 30-59 minutes
- 4 60+ minutes
- 8 Don't know

832. How did you get to the Mission clinic?

- 1 Bus or other public transportation
- 2 Private car
- 3 Walking (SKIP TO Q 834)
- 4 Can't remember
- 5 Other

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833. What did your travel cost you to get to the Mission clinic?

- 1 Less than E. 1
- 2 E. 1-2
- 3 E. 3+
- 4 Can't remember
- 8 Don't know

834. Did you have to take time off from work to go to the Mission clinic?

- 1 Yes
- 2 No (SKIP TO Q 837)

835. Did you lose any income by having to go to the Mission clinic?

- 1 Yes
- 2 No (SKIP TO Q 837)

836. How much money did you lose by taking time off your work to go to the Mission clinic?

- 1 Less than E. 1
- 2 E. 1-2
- 3 E. 3+
- 4 Can't remember

837. On the whole, how satisfied were you with the service you received from the Mission clinic?

- 1 Not satisfied
- 2 Fairly satisfied (SKIP TO Q 839)
- 3 Very satisfied (SKIP TO Q 839)

838. Why were you not satisfied with the Mission clinic?

(SKIP TO Q 840)

839. What is it that you find most satisfying about visiting a Mission clinic?

840. What times of day can you go for service at a Mission clinic?

- 1 Early morning only
- 2 All morning
- 3 All day up until evening
- 4 All day including evenings and weekends
- 5 Don't know/can't remember

841. Did you or a family member visit a Government Hospital during the past year?

- 1 Yes
- 2 No (SKIP TO Q 848)

842. How many times? . ____ ____ number

843. How long did it take you to get to the Government Hospital?

- 1 . Less than 15 minutes
- 2 15 - 29 minutes
- 3 30-59 minutes
- 4 60+ minutes
- 8 Don't know

844. On the whole, how satisfied were you with the service you received from the Government Hospital?

- 1 Not satisfied
- 2 Fairly satisfied (SKIP TO Q 846)
- 3 Very satisfied (SKIP TO Q 846)

845. Why were you not satisfied with the Government Hospital?

(SKIP TO Q 847)

846. What is it that you find most satisfying about visiting a Government Hospital?

847. What times of day can you go for service at the Government Hospital?

- 1 Early morning only
- 2 All morning
- 3 All day up until evening
- 4 All day including evenings and weekends
- 5 Don't know/can't remember

848. Did you or a family member visit a Private or Mission Hospital during the past year?

- 1 Yes
- 2 No (SKIP TO Q 855)

849. How many times? . ____ ____ number

850. How long did it take you to get to the Private/Mission Hospital?

- 1 Less than 15 minutes
- 2 15 - 29 minutes
- 3 30-59 minutes
- 4 60+ minutes
- 8 Don't know

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851. On the whole, how satisfied were you with the service you received from the Private/Mission Hospital?

- 1 Not satisfied
- 2 Fairly satisfied (SKIP TO Q 853)
- 3 Very satisfied (SKIP TO Q 853)

852. Why were you not satisfied with the Private/Mission Hospital?

(SKIP TO 854)

853. What is it that you find most satisfying about visiting a Private/Mission Hospital?

854. What times of day can you go for service at the Private/Mission Hospital?

- 1 Early morning only
- 2 All morning
- 3 All day up until evening
- 4 All day including evenings and weekends
- 5 Don't know/can't remember

855. Did you or a family member visit a Traditional Healer during the past year?

- 1 Yes
- 2 No (END OF INTERVIEW)

856. How many times? ____ ____ Number

857. On the whole, how satisfied were you with the service you received from the Traditional Healer?

- 1 Not satisfied
- 2 Fairly satisfied (SKIP TO Q 859)
- 3 Very satisfied (SKIP TO Q 859)

858. Why were you not satisfied with the Traditional Healer?

(SKIP TO Q 860)

859. What is it that you find most satisfying about visiting a Traditional Healer?

860. About how long would it take you to reach the nearest Traditional Healer?

- 1 Less than 15 minutes
- 2 15-29 minutes
- 3 30-59 minutes
- 4 60+ minutes

(END OF INTERVIEW)

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