

Botswana
Family Health Survey II
1988

Preliminary Report

Central Statistics Office
Ministry of Finance and
Development Planning

Family Health Division
Ministry of Health

Demographic and Health Surveys
Institute for Resource Development/Westinghouse



The Demographic and Health Surveys Program (DHS) is assisting government and private agencies with the implementation of 35 surveys in developing countries. Funded primarily by the Agency for International Development, DHS is a program within the Institute for Resource Development, Westinghouse (IRD), with assistance from The Population Council. Project objectives are: (1) to provide decisionmakers in the survey countries with a database and analyses useful for informed policy choices; (2) to expand the international population and health database; (3) to advance survey methodologies; (4) to develop in participating countries the skills and resources necessary to conduct high-quality demographic and health surveys.

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January 1989

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I. BACKGROUND

A. Introduction

The Botswana Family and Health Survey II (BFHS-II) was conducted on behalf of the Family Health Division of the Ministry of Health by the Central Statistics Office (CSO) through its Continuous Household Integrated Programme of Surveys (CHIPS). Financial and technical assistance for the survey was provided by the Demographic and Health Surveys Program at the Institute for Resource Development/Westinghouse (IRD), under a contract with the United States Agency for International Development (USAID), Washington.

This report is designed to provide preliminary results for some of the principal topics covered in the BFHS-II. A more complete presentation of the results will appear in the main survey report which is expected to be completed in August 1989. Final results may differ slightly from those presented here. Although these differences are expected to be minimal, readers are urged to view the results in this report with caution.

B. Objectives of the Survey

The BFHS-II is one of a series of surveys undertaken by the CSO as part of the Continuous Household Integrated Programme of Surveys. It was carried out as a sequel to the 1984 Botswana Family Health Survey and in conjunction with the second round of the 1987 Botswana Demographic Survey (BDS).

The immediate objective of the BFHS-II is to provide information on family planning awareness, approval and use, basic indicators of maternal and child health and other topics related to family health. In addition, the BFHS-II complements the data collected in the BDS by obtaining information needed to explore trends in fertility and mortality, and to examine the factors that influence these basic demographic indicators, particularly, the proximate determinants of fertility.

C. Questionnaires

Two questionnaires were used for the BFHS-II: a household and an individual questionnaire. The questionnaires were adapted from the DHS Model "B" Questionnaire, intended for use in countries with low contraceptive prevalence, with the addition of a modified version of the family planning section from the DHS Model "A" Questionnaire for high prevalence countries. The household and individual questionnaires were administered in either Setswana or English.

Information on the age and sex of all usual members and visitors in the selected households was recorded in the household questionnaire. This information was used to identify women eligible for the individual interview. Data on fostering for children age 0-14 were also collected in the household questionnaire.

The individual questionnaire was used to collect data for all eligible women, defined as those 15-49 years, who spent the night prior to the household interview in the selected household, irrespective of nationality or whether they were usual members of the household. The individual questionnaire was used to collect information on the following topics:

1. Respondent's Background
2. Reproductive Behavior
3. Teenage Pregnancy
4. Knowledge and Use of Family Planning
5. Maternal and Child Health and Breastfeeding
6. Marriage
7. Awareness of AIDS
8. Fertility Preferences
9. Husband's Background, Women's Work, and Child Support

D. Training and Fieldwork

The BFHS-II questionnaires were pretested in April and May 1988. Eight female interviewers, two female supervisors and five male interviewers/supervisors, all of whom had participated in the 1987 Botswana Demographic Survey, were trained for 12 days and conducted 166 interviews during the pretest.

Training for the main fieldwork was held in July 1988 and lasted three weeks. CSO and IRD staff were primarily responsible for training. In addition, staff from the Family Health Division of the Ministry of Health conducted several sessions on human reproduction, contraceptive methods, and maternal-child health. A separate training course was held for supervisors (9 of the 10 supervisor trainees had participated in the pretest as supervisors or interviewers). In all, 25 female interviewers, 9 supervisors (6 female and 3 male), and 9 drivers participated in the fieldwork. Fieldwork started on 4th August 1988 and was completed on 13th December 1988.

E. Data Processing

All data processing was carried out on microcomputers at CSO. Completed questionnaires were delivered to CSO regularly. Coding, data entry, and machine editing went on concurrently at CSO as the fieldwork progressed. Both coding and data entry, which were started in mid-September, were completed by mid-December. The tabulations for this preliminary report were produced in the week fieldwork was completed.

F. Sample Design and Implementation

The BFHS-II utilized a two-stage sample that is self-weighting at the household level within the urban and rural sectors, but not at the national level. The sample is based on the 1987 Botswana Demographic Survey (BDS) sample design. Primary Sampling Units (PSUs), the first stage units in the BDS, were census enumeration areas. The second stage unit was the household. The design involved over-sampling in urban areas, with 40 percent of the total sample allocated to the urban sector--nearly twice the proportion estimated to reside in urban areas in 1987. The PSUs included in the BDS were selected systematically, with probability proportional to size in each of five strata (two urban and three rural) defined in the survey. In total, 156 PSUs were selected for the BDS.

The complete sample of PSUs from the BDS was used for the BFHS-II. A new listing of dwellings was carried out shortly before the BFHS-II fieldwork and a sample of dwellings, independent of those included in the BDS, was selected. In all, 5050 dwellings (1928 urban and 3133 rural) were selected for the BFHS-II sample. Four thousand six hundred and seventy-three (4673) eligible women (2418 urban and 2255 rural) were identified, of which 4366 (2257 urban and 2109 rural) were successfully interviewed.

As discussed earlier, the sample design called for urban areas to be over-sampled relative to rural areas. Sample weights were used to compensate for the unequal probabilities of selection between the urban and rural areas. (The weights used in this report will vary slightly from the final set of weights which take into account non-response.) The weighted number of urban women is 1287 and the weighted number of rural women is 3079. The weighted totals are used in reporting the survey results throughout the remainder of this report.

II. RESULTS

A. Characteristics of the Respondents

The distributions of all women and women in union in the BFHS-II sample, by selected background characteristics, are shown in Table 1. Sixty-two percent of the women in the BFHS-II are under the age of 30, thirty percent live in urban areas, and 51 percent have completed primary education or higher. Thirty-nine percent of all women reported themselves to be currently in union or living with a man, while 53 percent said they had never been in union or lived with a man, and 8 percent were formerly in a union.

Table 1. Percent Distribution of All Women and Women in Union by Background Characteristics, Botswana, 1988

Background Characteristic	All Women		Women in Union	
	Percent	Number	Percent	Number
Age				
15-19	21.6	941	3.2	54
20-24	21.1	922	14.0	238
25-29	19.4	846	24.6	420
30-34	14.9	649	22.3	380
35-39	10.7	466	17.0	290
40-44	6.7	291	10.7	182
45-49	5.7	250	8.2	140
Marital Status				
Never in Union	53.0	2312	---	---
Currently in Union	39.1	1706	100.0	1706
Formerly in Union	8.0	348	---	---
Number of Living Children				
0-2 Children	60.1	2624	35.8	610
3-4 Children	21.6	944	31.1	531
5+ Children	18.3	798	33.1	565
Residence				
Urban	29.5	1287	31.0	529
Rural	70.5	3079	69.0	1177
Religion				
Spiritual/African	42.9	1871	43.0	733
Protestant	22.4	977	20.8	356
Catholic	8.9	387	9.1	156
Other	1.1	49	1.6	28
None	24.7	1077	25.2	430
Level of Education				
No Education	24.0	1050	32.4	552
Incomplete Primary	24.6	1074	29.1	497
Completed Primary	25.5	1112	19.5	333
Some Secondary or Higher	25.9	1130	19.0	324
Total	100.0	4366	100.0	1706

B. Fertility and Reproductive Intentions

All respondents in the BFHS-II were asked to report the total number of sons and daughters they had given birth to during their lives. They were also asked to provide a complete birth history giving, the date of birth, sex, and survival status of each child.

Table 2 shows that the level of fertility in Botswana is high with an average of 2.6 live births per woman. Fertility increases rapidly with age. The average number of live births is one for women in their early twenties, more than two for women in their late twenties, and almost four among women age 30-34. Women in the 45-49 age group, who are nearing the end of their childbearing years, have an average of almost six births.

Table 2. For all women, the mean number of Children Ever Born and Surviving, the Proportion Dead, and Age-Specific Fertility Rates, by Maternal Age, Botswana, 1988

Age	Mean Number of Children Ever Born	Mean Number of Children Surviving	Proportion Dead	Number of Births	Years of Exposure	Fertility Rate*	Number of Women
15-19	0.26	0.25	.034	611	4863	.126	941
20-24	1.17	1.12	.045	922	4359	.212	922
25-29	2.55	2.39	.062	756	3763	.201	846
30-34	3.71	3.50	.057	526	2756	.191	649
35-39	5.08	4.66	.082	284	1894	.150	466
40-44	5.43	4.90	.097	111	1313	.084	291
45-49	5.76	5.21	.097	20	578	.035	250
Total	2.58	2.40	.072	3230	19526	4.992	4366

* Based on births in the five years preceding the survey.

Of the average of 2.6 children born to women age 15-49, 2.4 were still alive at the time of the survey. Thus, approximately 7 percent of children born to these women had died before the survey. The proportion of children who died increases with each successive age-group of mothers. The increase in the proportion of children who died before the interview among mothers of older ages reflects both the longer average exposure time to the chance of dying for children of older women and a probable decline over time in infant and child mortality due to both socio-economic and health improvements during recent decades.

Age-specific fertility rates for the five years prior to the survey are also shown in Table 2. The rate increases from 126 births per 1000 women in the youngest age group to about 200 for women age 20-34, then decreases steadily to 35 for women age 45-49. The total fertility rate (TFR) for the five year period is 5.0. This represents the total number of births a woman would have by age 50 if she had children at the same rate as women currently in each age group.

A comparison of the data on fertility from the BFHS-II with the 1981 Census and the 1984 BFHS suggests that while the level of fertility in Botswana is still high, fertility has declined noticeably since 1981. The adjusted total fertility rate was 7.1 in 1981 and 6.5 in 1984, compared with 5.0 in 1988. Some of this decline may be due to variations in the measurement of fertility in the three surveys. The decline, however, is consistent with a sharp rise in the use of modern methods of family planning in Botswana. Results from the BFHS-II about the knowledge and use of family planning are presented in the following section.

Fertility intentions were investigated by asking questions about the respondent's desire to have another child and, if so, how soon. Table 3 shows the percent distribution of currently in union women according to their desire to limit family size or to space births. Thirty-eight percent of women report that they want no more children; 29 percent say they want another child, but only after two or more years. Thus, two out of three women currently in union are potential users of family planning for the purpose of either limiting or spacing births.

Table 3. Percent Distribution of Women in Union by Reproductive Intentions, According to Age, Botswana, 1988

Age	Want No More Children	Want More Later ¹	Want More Soon ²	Undecided ³	Missing ⁴	Total	Number of Women
15-19	16.1	59.7	38.3	2.1	3.8	100.0	54
20-24	10.9	49.1	30.4	6.1	3.5	100.0	238
25-29	28.3	37.7	25.3	8.1	0.6	100.0	420
30-34	33.9	34.3	23.3	8.1	0.3	100.0	380
35-39	52.3	17.8	19.8	9.3	0.9	100.0	290
40-44	60.3	9.3	20.9	8.1	1.4	100.0	182
45-49	71.4	1.5	15.0	11.1	1.0	100.0	140
Total	37.8	29.1	23.8	8.1	1.2	100.0	1706

¹ Want another child after 2 or more years

² Want another child within 2 years

³ Undecided about another child or timing of next child

⁴ Question not asked

C. Family Planning Knowledge and Use

Family planning activities have been integrated into maternal-child health services in Botswana since the beginning of the national programme in 1973. Family planning services are available at hospitals, health centres, clinics, and health posts. Participation is fostered through health education disseminated through home visits, schools, kgotla (community meetings), volunteer efforts, the workplace, and mass media, as well as individual counseling and health talks at health facilities.

Table 4. Percent of All Women and Women in Union who Know a Contraceptive Method, who Know a Source for Method, and who have Ever Used or are Currently Using any Contraceptive Method, by Method, Botswana, 1988

Contraceptive Method	Percent Knowing Method		Percent Knowing Source		Percent Ever Using Method		Currently Using Method	
	All	WIU	All	WIU	All	WIU	All	WIU
Any Method	95.3	94.8	94.8	94.2	56.0	62.8	29.6	32.9
Any Modern Method	95.1	94.3	94.7	94.1	54.0	59.9	28.8	31.5
Pill	94.4	93.6	93.9	93.2	45.7	49.3	17.6	14.7
IUD	89.3	89.4	88.4	89.0	13.3	17.3	4.4	5.6
Injections	87.0	89.3	87.1	89.2	9.9	15.0	3.2	5.5
Diaphragm/Foam/Jelly	50.9	51.3	50.4	51.0	0.7	1.3	0.0	0.0
Condom	87.3	87.7	85.6	86.0	9.8	10.1	1.3	1.2
Female Sterilization	57.5	66.4	56.3	65.4	2.2	4.3	2.2	4.3
Male Sterilization	23.2	24.5	22.8	24.0	0.2	0.3	0.1	0.2
Any Traditional Method	41.4	45.5	20.9	21.9	10.3	13.5	0.8	1.3
Periodic Abstinence	22.9	23.6	20.9	21.9	4.1	5.0	0.2	0.2
Withdrawal	15.1	29.0	NA	NA	4.0	5.9	0.1	0.3
Prolonged Abstinence	27.4	32.6	NA	NA	6.0	7.8	0.3	0.5
Other methods	3.1	3.8	NA	NA	0.7	1.0	0.1	0.3

All - All Women (Number = 4366)
 WIU - Women in Union (Number = 1706)
 NA - Question not asked

The BFHS-II results show that 95 percent of women in Botswana have heard of at least one modern method of contraception (Table 4), as compared to 78 percent, reported in the 1984 BFHS. Women are most likely to have heard of the pill, followed by the IUD, injection, and the condom. Almost all women who have heard of a method also know a source for obtaining the method.

More than half of all women and almost two-thirds of women in union have used a contraceptive method at some time. Most of these women have used a modern method, principally, the pill. The IUD, injection, and abstinence have each been used by approximately 1 out of 10 women.

Contraception is currently being used by 30 percent of all women and 33 percent of women currently in union. As seen in Table 4, about half of these women are using the pill. Of the rest, most are using the IUD, injection, and female sterilization (the latter concentrated among women in union). The use of modern methods of contraception has almost doubled in Botswana since 1984. This increase is a major factor in the recent decline in fertility. Only one percent of women are using traditional methods of contraception, a significant drop from the 9 percent reported in the BFHS.

Table 5 shows the percent of all women currently using contraception, according to selected background characteristics. Contraceptive use is almost as high among never in union and formerly in union women as among currently in union women. Women between age 25 and 39 are more likely than both younger and older women to use contraception. A significant number of women over age 40, however, have chosen female sterilization in order to limit their family size. Contraceptive use is highest among women with 3 or 4 children and higher among urban than rural women. Differentials in contraceptive use by education are also significant. The proportion of women with some secondary education, who are using contraception, is more than twice that of women with no education.

Table 5. Percent of All Women Currently Using a Contraceptive Method, by Selected Background Characteristics, Botswana, 1988

Background Characteristic	Any Method	Modern Methods						Traditional Methods	Number of Women
		Pill	IUD	Injection	Condom	Female Sterilization	Male Sterilization		
Age									
15-19	14.7	11.4	0.9	0.1	1.9	0.0	0.0	0.5	941
20-24	31.4	25.0	4.0	1.0	1.0	0.0	0.0	0.4	922
25-29	39.6	26.9	5.9	4.3	0.9	0.5	0.0	1.0	846
30-34	37.7	20.6	6.8	5.4	1.5	2.1	0.1	1.0	649
35-39	36.0	11.6	8.3	6.8	1.7	5.9	0.4	1.0	466
40-44	29.6	4.7	3.6	7.9	1.0	11.4	0.2	0.7	291
45-49	12.7	1.6	2.2	0.6	0.0	6.7	0.2	1.4	250
Marital Status									
Never in Union	27.2	20.4	3.2	1.5	1.3	0.4	0.0	0.4	2312
Currently in Union	32.9	14.7	5.6	5.5	1.2	4.3	0.2	1.3	1706
Formerly in Union	29.5	13.8	6.9	3.5	0.9	3.8	0.0	0.6	348
Number of Living Children									
0-2 Children	25.6	18.9	3.0	1.1	1.5	0.5	0.0	0.8	2624
3-4 Children	38.4	21.0	7.8	4.9	1.0	2.7	0.3	0.7	944
5+ Children	32.3	9.7	5.3	8.2	0.8	7.2	0.0	0.9	798
Residence									
Urban	38.8	23.6	7.3	2.7	2.0	2.4	0.2	0.6	1287
Rural	25.8	15.2	3.3	3.4	0.9	2.1	0.0	0.8	3079
Religion									
Spiritual/African	27.2	16.7	4.6	2.7	1.1	1.3	0.0	0.8	1871
Protestant	33.5	19.6	4.6	3.8	1.5	3.4	0.1	0.5	977
Catholic	42.0	23.9	5.9	2.9	2.8	3.9	0.5	2.1	387
Other	37.9	9.4	9.2	3.0	3.5	6.4	1.2	5.3	49
None	25.5	15.8	3.3	3.5	0.7	1.8	0.1	0.4	1077
Level of Education									
No Education	18.4	8.7	2.1	4.7	0.3	1.6	0.0	0.9	1050
Incomplete Primary	26.3	13.6	4.1	4.2	0.5	3.4	0.0	0.5	1074
Completed Primary	31.7	21.3	4.3	2.7	1.5	1.3	0.0	0.6	1112
Some Secondary or Higher	41.1	26.2	7.2	1.4	2.5	2.4	0.3	0.9	1130
Total	29.6	17.6	4.4	3.2	1.3	2.2	0.1	0.7	4366

The provision of family planning services in Botswana is fully integrated into the public sector health care delivery system, alongside other curative, preventive, and health promotion services. In addition to the government facilities, contraceptives can be obtained from private doctors and pharmacies. There is, however, no private organization providing family planning services in Botswana.

All women in the BFHS-II who were currently using contraception were asked where they obtained the method the last time. The responses to this question, classified by type of method, are shown in Table 6. Almost all women obtained their method from a government facility. Government clinics were the primary source for the pill, IUD, injection, and the condom. The second most frequently mentioned source for the pill, the IUD, and injection was a government hospital or health centre. For the condom, the second most important source named was a pharmacy. More than nine out of ten female sterilizations were performed at a government hospital or health centre. The remaining were performed by private doctors.

Table 6. Percent Distribution of All Women Currently Using a Contraceptive Method by Source for Method, According to Type of Method, Botswana, 1988

Source for Method	Pill	IUD	Injec- tion	Condom	Female Sterili- zation	Total*
Government Clinic	84.9	67.8	77.5	58.5	0.0	73.6
Government Hospital or Health Centre	9.0	25.2	14.0	6.4	92.1	18.3
Government Health Post	2.6	0.8	4.2	5.3	0.0	2.4
Private Doctor or Clinic	1.9	6.2	4.0	1.0	7.9	3.4
Pharmacy	1.2	0.0	0.0	11.4	0.0	1.2
Other	0.3	0.0	0.0	3.1	0.0	0.3
Don't know	0.0	0.0	0.0	14.2	0.0	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	771	194	139	55	95	1258

* Includes four users of male sterilization.

D. Unmet Need for Family Planning

In Table 7, women currently in union who are not using any contraceptive method are classified by their desire to limit or space births. The data from the table show the potential need for family planning among Botswana women.

Among all nonusers currently in union, one-third want no more children and an additional one-quarter want to wait at least two years before having another child. The remaining nonusers would like to have another child soon or are undecided. The proportion of women potentially in need of family planning to limit births increases with age and with the number of living children. Women aged 15-29 and women with 0-4 children are more likely to need family planning for spacing births.

Table 7. Percent of Women in Union Not Using Contraception, by Desire to Limit or Space Births and Selected Background Characteristics, Botswana, 1988

Background Characteristic	Limit*	Space**	Number of Women
Age			
15-19	19.5	36.3	45
20-24	9.1	44.0	178
25-29	27.2	34.6	264
30-34	31.4	29.8	245
35-39	43.2	18.1	179
40-44	48.9	11.7	117
45-49	67.3	1.7	118
Number of Living Children			
0-2 Children	14.1	29.7	449
3-4 Children	30.8	34.3	321
5+ Children	60.1	17.0	374
Residence			
Urban	33.1	28.0	310
Rural	34.1	26.4	835
Religion			
Spiritual/African	32.0	29.2	523
Protestant	36.9	22.9	211
Catholic	36.4	26.6	83
Other	39.3	11.7	12
None	34.2	25.9	314
Level of Education			
No Education	37.9	20.3	440
Incomplete Primary	38.1	26.2	346
Completed Primary	23.6	39.1	202
Some Secondary or Higher	26.4	30.7	157
Total	33.8	26.8	1145

* Want no more children

** Want another child in 2 or more years

E. Incidence and Treatment of Diarrhoea among Children

Data on the incidence of certain illnesses among children age 0-4 years were collected in the BFHS-II. As shown in Table 8, mothers reported that about 4 percent of their children had diarrhoea in the 24 hours before the survey and that about 10 percent had diarrhoea in the two weeks preceding the survey. Children of mothers younger than 20 had a higher incidence of diarrhoea, while children of women 35-44 had significantly lower levels. This reflects the fact that children of young mothers are predominantly infants and toddlers who are more susceptible to diarrhoea than older children. There is little variation in the proportion of children that had diarrhoea according to the sex of the child or urban-rural residence. Mothers with some secondary education reported somewhat lower levels of diarrhoea than mothers with primary or less education.

Table 8. Percent of Children Under 5 Years of Age Having an Episode of Diarrhoea within 24 Hours and within 2 Weeks Preceding the Survey, and Among Children Who Have Had Diarrhoea, the Percent Receiving Oral Rehydration Therapy (ORT), by Selected Background Characteristics, Botswana, 1988

Background Characteristic	Diarrhoea			Number of Children
	In Past 24 Hours	In Past 2 Weeks	Received ORT*	
Age of Mother				
15-19	6.4	14.4	62.5	232
20-24	4.9	11.1	73.9	783
25-29	4.1	9.2	64.3	822
30-34	4.6	10.4	60.2	601
35-39	2.7	6.5	59.2	360
40-44	1.4	5.5	87.7	167
45-49	3.2	9.7	42.7	63
Sex of Child				
Boy	3.9	10.1	72.3	1521
Girl	4.6	9.6	59.1	1508
Residence				
Urban	4.3	9.4	71.5	786
Rural	4.2	10.0	64.1	2242
Level of Education of Mother				
No Education	3.4	10.4	56.6	913
Incomplete Primary	5.2	10.1	67.0	774
Completed Primary	5.5	10.3	68.1	753
Some Secondary or Higher	2.8	8.0	79.2	588
Total	4.2	9.8	65.9	3029

* Either homemade or from commercially prepared packet

Among the children who had diarrhoea, two-thirds received some kind of oral rehydration therapy (ORT), whether homemade or from a commercially prepared packet. Children of mothers who lived in urban areas and of mothers with some education were more likely to receive ORT than children in rural areas or with mothers with no education. ORT was given more often to male children than female.

F. Immunization of Children

In the BFHS-II, mothers of children 0-4 years were asked whether they had health cards for these children and, if so, were asked to show them to the interviewer. From these health cards, interviewers recorded the dates on which the following vaccinations were given: BCG, polio (1,2,3), DPT (1,2,3), and measles.

Data presented here are only for children 1-4 years, since by the time children are 12 months of age they should be fully vaccinated against the principal childhood diseases. Data from Table 9 show that a health card was seen for two out of three children 1-4 years. This figure probably underestimates the proportion of children in Botswana with health cards because some children do not live with their mothers and their health card are with their caretakers, not with their mothers. Children of mothers over age 30, children of rural women, and children of mothers with less than primary education are more likely to have health cards than children of other women.

Table 9. Percent of Children 1-4 Years of Age for Whom Mother Could Show a Health Card and Among Children with Health Cards, the Percent for whom BCG, DPT, Polio, and Measles Immunizations are recorded on the Health Card, by Selected Background Characteristics, Botswana, 1988

Background/ Characteristic	Percent Health Card Seen	Among Children With Health Cards, Percent With:								Number of Children
		BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	
Age of Child										
12-23 months	74.0	98.6	96.6	97.0	95.1	97.8	97.5	93.2	92.3	609
24-35 months	69.4	96.8	99.2	99.2	98.1	97.2	98.7	97.6	96.4	584
36-47 months	62.0	96.7	97.1	96.6	96.0	96.6	96.5	95.2	95.3	602
48-59 months	58.7	96.4	97.4	97.9	97.3	95.5	98.0	97.3	93.5	556
Age of Mother										
15-19	66.8	99.3	96.4	96.4	96.4	95.6	96.4	96.4	93.8	120
20-24	54.6	97.6	99.0	97.6	96.0	97.0	96.9	94.9	93.7	568
25-29	64.6	97.3	97.0	97.5	96.6	96.4	97.6	95.4	95.8	668
30-34	71.9	96.1	95.7	96.5	95.6	96.1	97.0	95.1	94.0	500
35-39	71.7	97.9	99.5	99.7	97.0	99.5	99.0	97.0	95.0	293
40-44	82.7	96.6	98.3	99.5	99.5	97.0	99.5	99.0	91.1	142
45-49	76.8	96.7	100.0	96.7	96.7	96.7	100.0	93.4	93.4	58
Sex of Child										
Boy	65.6	96.9	98.2	98.5	97.6	97.1	98.4	95.9	95.6	1174
Girl	66.7	97.5	96.9	96.8	95.5	96.6	96.9	95.5	93.1	1177
Residence										
Urban	55.3	97.1	96.8	97.1	96.3	96.2	96.8	96.3	93.8	643
Rural	70.3	97.2	97.8	97.8	96.6	97.1	97.9	95.5	94.5	1708
Level of Education of Mother										
No Education	69.2	95.0	96.4	96.6	94.4	96.3	97.6	93.2	92.8	743
Incomplete Primary	72.6	97.2	97.4	97.9	97.2	96.5	97.1	96.3	94.0	600
Completed Primary	63.8	98.8	98.9	98.5	98.3	97.1	98.1	97.1	95.5	572
Some Secondary or Higher	55.4	99.3	98.5	98.2	97.0	98.3	98.3	97.7	96.4	436
Total	66.2	97.2	97.6	97.7	96.5	96.9	97.7	95.7	94.3	2351

Among children who have health cards, nearly all are fully vaccinated. Over 94 percent of children received BCG vaccine, 3 doses of polio vaccine, 3 doses of DPT vaccine, and measles vaccine. There is little variation in the proportion of children vaccinated by age of the child or mother, sex of the child, urban-rural residence, or education of the mother.

G. Antenatal Care, Delivery Assistance, and Postnatal Care

Another objective of the BFHS-II was to collect information on the health care received by women during pregnancy, at the time of delivery, and immediately after a birth. In Table 10, these data are presented for all births in the five years preceding the survey.

More than four out of five women received an injection during pregnancy to protect the child from tetanus. Women with some education were more likely to receive an injection than women with no education. Identical proportions of urban and rural women received an injection.

Table 10 shows that 92 percent of women who had given birth within the last five years had received at least one antenatal check from trained health personnel (doctor, nurse or trained midwife). The proportion was higher for urban than rural women, and for women with some education in comparison to women with no education. Urban and educated women were more likely to have seen a doctor than a nurse or midwife.

Table 10. For All Births in the Five Years Preceding the Survey, the Percent of Children Whose Mothers Received a Tetanus Toxoid Injection, Antenatal Care from a Doctor or Trained Nurse/Midwife, Assistance at Delivery from a Doctor or Trained Nurse/Midwife, and Postnatal Care from a Doctor, Trained Nurse/Midwife, or during a Home Visit, by Selected Background Characteristics, Botswana, 1988

Background Characteristic	Tetanus Toxoid Injection	Antenatal Care From:		Assistance at Delivery From:		Postnatal Care From:			Number of Births
		Doctor	Nurse/Midwife	Doctor	Nurse/Midwife	Doctor	Nurse/Midwife	Home Visit	
Age of Mother									
15-19	82.9	11.2	80.4	6.5	77.4	7.0	61.2	29.7	240
20-24	84.9	12.2	81.6	6.4	77.8	8.5	65.8	34.1	819
25-29	85.1	11.6	78.8	7.6	69.3	7.1	64.7	35.0	863
30-34	84.0	11.0	82.6	7.3	70.1	6.8	65.9	38.7	629
35-39	83.0	10.1	82.3	6.7	64.2	6.1	58.3	33.9	378
40-44	87.8	9.3	82.5	8.0	55.5	5.6	69.8	43.4	177
45-49	76.2	10.1	76.7	7.0	41.3	0.0	50.6	23.8	66
Residence									
Urban	85.0	20.1	76.5	13.6	79.9	13.6	66.9	40.3	819
Rural	84.2	8.2	82.5	4.8	67.0	4.7	63.2	33.5	2355
Level of Education of Mother									
No Education	76.3	7.2	75.0	3.4	50.0	3.1	50.0	29.3	964
Incomplete Primary	85.0	10.2	84.9	7.4	72.9	7.5	63.6	33.6	805
Completed Primary	88.6	13.2	83.7	7.1	81.4	7.2	74.3	38.6	798
Some Secondary or Higher	90.8	16.6	81.5	12.2	84.4	12.3	74.1	42.3	607
Total	84.4	11.3	81.0	7.0	70.3	7.0	64.2	35.2	3174

All mothers in Botswana are encouraged to deliver under the supervision of trained health personnel. Data collected in the BFHS-II show that more than three-quarters of the births within 60 months of the survey had trained medical assistance at the time of delivery. This assistance generally was from a nurse or midwife. Younger women received assistance at their births more often than older women.

There are large differentials in assistance at delivery according to education. Only five out of ten births to women with no education received assistance, while 9 out of 10 births to women with completed primary or higher education received assistance. Urban-rural differentials are also significant, though not as large.

Postnatal care in Botswana falls into two categories: (1) immediate postpartum care at home within the first week after delivery and (2) examination in a health facility about six to eight weeks after the birth. Table 10 shows that 7 out of 10 women received postnatal care from a doctor, nurse or trained midwife. The differences by urban-rural residence and education are narrower for post-natal care than for assistance at the delivery. One-third of women were visited by a health worker at home following a birth. A greater proportion of urban women and women with some education were visited at home following a birth than other women.

H. Teenage Pregnancy

Since pregnancy before the age of 20 places the health and welfare of teenagers at risk, the policy of the Government of Botswana is to encourage individuals and families to delay the first pregnancy until that age. Table 11 focuses on 941 teenagers (women aged 15-19) included in the survey. A series of questions was asked to investigate sexual activity, births to teen mothers, and the interruption of schooling.

Sixty-six percent of the teenagers reported that they were currently sexually active. The percentage of sexually active teenagers increased steadily from 26 percent of those 15 years of age to 88 percent of those 19 years of age. Table 11 shows that teenagers from urban areas, those with no education, and those from female headed households are more likely to be sexually active than their counterparts.

Table 11. Percent of Teenagers 15-19 years who are Sexually Active, Mothers, Currently Pregnant with First Child, Left School because of Pregnancy, and Readmitted to School, by Selected Background Characteristics, Botswana, 1988

Background Characteristic	Sexually Active	Mother	Pregnant With 1st Child	Left School Because of Pregnancy	Readmitted to School	Number of Teenagers 15-19
Age						
15	26.4	5.0	0.9	2.0	0.0	162
16	47.5	10.0	1.1	5.5	0.3	210
17	71.3	28.4	6.1	11.5	3.0	134
18	87.4	32.3	9.1	11.4	3.0	238
19	88.3	39.4	8.9	9.5	3.9	198
Residence						
Urban	66.5	21.0	6.2	8.8	2.8	286
Rural	65.7	24.7	5.1	7.8	1.8	656
Level of Education						
No Education	69.0	40.2	7.9	---	---	52
Incomplete Primary	61.8	28.9	4.5	12.7	0.9	186
Completed Primary	67.7	23.6	5.2	4.0	1.5	349
Some Secondary or Higher	65.9	18.3	5.8	10.9	3.6	355
Sex of Head of Household						
Male	63.4	23.6	4.9	8.2	1.5	437
Female	68.1	23.5	5.9	8.0	2.6	504
Total	65.9	23.6	5.4	8.1	2.1	941

The BFHS-II indicates that almost 24 percent of the teenagers are mothers. Education seems to be a major factor. Forty percent of teenagers with no education are mothers; this decreases to 29 percent for those who have some primary education. Although a similar number of teenagers in rural and urban areas are sexually active, a larger proportion of sexually active rural teenagers are mothers. Eight percent of all teenagers reported leaving school because of pregnancy; 2 percent were readmitted.

A comparison of the data on teenage fertility from the BFHS-II, the 1981 Census, and the 1984 BFHS suggests that the rate of teenage pregnancy continues to increase although at a slower pace than in the past. The 1981 Census shows that 20 percent of teenagers were mothers; compared to 23 percent in 1984 and 24 percent in 1988.

Demographic and Health Surveys

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