

# Characteristics of HIV-infected childbearing women in Barbados

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**ABSTRACT** **Objective.** To describe the demographic profile, social and family characteristics, and life-style traits of HIV-infected childbearing women in the Caribbean nation of Barbados in comparison to a control group of HIV-negative women.

**Methods.** Data for this report were drawn from the Pediatrics HIV Surveillance Program of the Queen Elizabeth Hospital in Barbados. The data covered all HIV-infected women in the country who delivered between 1986–2000, with similar data coming from a control group of HIV-negative childbearing women. Routine information recorded during antenatal care was obtained from the women's case records. Additional data were collected from interviews with the women.

**Results.** There were 182 HIV-infected women who delivered during the study period, and a group of 202 childbearing women served as controls. In comparison to the control group, the HIV-infected women were younger, more often multiparous, and more likely to have been unemployed at the time of their pregnancy. The HIV-infected women also had had an earlier onset of sexual activity, had had more sexual partners during their lifetime, and were more likely to be involved with an older sexual partner. At the time of giving birth most of the HIV-infected women were asymptomatic for AIDS and were living with either their parents (mother or father or both) or the baby's father. In addition, at the time of their six-weeks-postnatal visit, the large majority of the HIV-infected women were involved in caring for their children. The proportion of HIV-infected women who were diagnosed prior to childbirth increased significantly over the study period, rising from 25% during 1986–1990 to 82% during 1996–2000. Slightly over one-fifth of the HIV-infected women had had one or more subsequent pregnancies after they had learned that they were infected.

**Conclusions.** The early age of sexual activity as well as repeated pregnancies, especially from different and older partners, may have contributed significantly to both vertical and horizontal HIV transmission in Barbados. Future studies of HIV incidence and its trend among childbearing women could be important for monitoring the HIV epidemic in this country. Many of the HIV-infected childbearing women in our study were unemployed, sick, and had multiple children. Therefore, to help them to plan for and cope with the disease and also the care of their children beyond the perinatal period, there is a need to provide the women with repeated counseling with continued follow-up and, where necessary, additional economic, social, and medical support.

**Key words** Women, pregnancy, HIV infections, risk factors, Barbados.

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The extent of the HIV epidemic within the Caribbean varies from country to country. While some of the nations have not been hit hard by the epidemic, others face infection rates

that are exceeded only by the rates found in countries of sub-Saharan Africa (1). In most of the severely affected countries of the Caribbean, their HIV epidemics have spread largely via

heterosexual contact, with a deadly combination of adverse lifestyle and sociocultural practices such as early sexual activity and frequent partner exchange by young people (1–5).

Barbados is one of the smaller countries in the English-speaking Caribbean, with an estimated 2001 population of 272 000, a land area of 430 km<sup>2</sup>, and a 2001 estimated per-capita gross national product of US\$ 14 010 (adjusted for purchasing power parity) (6). The Government of Barbados views health care as a fundamental right of all Barbadians and aims to provide comprehensive health care to all its citizens, at a cost that is affordable to the country. Services at government facilities are free of cost at the point of delivery. Private health services also are offered and are mainly used by those who can afford to pay for them. Life expectancy at birth for the total population is 77 years, and the infant mortality rate is 12.8 deaths per 1 000 live births (6).

As part of its public health services, Barbados has a well-organized Pediatric HIV Surveillance Program that monitors mother-to-child HIV transmission. The Program operates from the Department of Pediatrics at the Queen Elizabeth Hospital (QEH), which is under the Ministry of Health. The Pediatric HIV Surveillance Program has been facilitated by excellent provision of antenatal care. Women's utilization of voluntary antenatal screening for HIV increased from 24.6% in 1992 to 50% in 1994. Since 1997 more than 80% of pregnant women have undergone voluntary HIV screening. In the year 2000 over 90% of pregnant women underwent the voluntary screening, according to a recent conference presentation, which also reported that the HIV seroprevalence rate among pregnant women in Barbados during the period of 1992–2001 varied between 0.8% and 1.2%.<sup>2</sup>

Similar to the situation in some other Caribbean countries and elsewhere in the world where heterosexual transmission is the predominant mode of HIV transmission (1), there has been a steady increase in the number of HIV-infected pregnant women over the last 10 years in Barbados. Despite the increase in the Caribbean, there are few reports on the sociodemographic profile of these women (5, 7). This paper examines the demographic profile, social and family characteristics, and the lifestyle traits of a group of HIV-infected women in Barbados, and compares them with a control group of HIV-negative childbearing women. Such data could prove helpful in designing general policies and specific preventive measures. These data will also be useful for future studies of trends as part of the effort to monitor HIV epidemics within the general population and to assess the effectiveness of HIV prevention measures (8, 9).

## METHODS

Our study's data on HIV-infected women were drawn from the Pediatric HIV Surveillance Program in Barbados and from one-to-one personal interviews of the HIV-infected mothers, and with much of the same data collected from a group of HIV-negative childbearing women who served as controls. Operating since 1986, the Pediatric HIV Surveillance Program is a nationwide cohort study for monitoring pediatric HIV infection, particularly mother-to-child transmission. The Program operates from the Queen Elizabeth Hospital (QEH), which is located in the parish of St. Michael, on the outskirts of the capital city of Bridgetown. Voluntary antenatal HIV screening, which began in 1990, has facilitated this program. An antenatal HIV screening test is offered to all pregnant women irrespective of previously known HIV antibody status. Throughout the period we studied, the utilization of antenatal care in Barbados has been around 95%. Over 90% of all the deliveries in the country are

conducted at the QEH, with the rest being done at a private hospital. All HIV-infected childbearing women and their infants exposed to HIV are enrolled in the Pediatric HIV Surveillance Program and followed up at the QEH. All participating women are counseled about the nature of and the need for this surveillance program, and informed consent is taken. These women are also told about the strict confidentiality being maintained with respect to the data collected.

## Study population and data collection

All pregnant women known to be HIV-positive in Barbados who had childbirth from 1986 through 2000 were included in this study. These women were diagnosed as being HIV-positive either prior to the childbirth through an antenatal screening test for which they had volunteered or after their childbirth when the woman or her baby was found to be symptomatic with AIDS. Beginning in 1990, data were collected prospectively from all HIV-infected pregnant women in order to create a data bank to facilitate the study of perinatal HIV transmission as a part of the Pediatric HIV Surveillance Program. HIV-infected women who had delivered prior to 1990 were retrospectively recruited into this study, and with data on them gathered from their antenatal care records maintained at the QEH. Since 1996, in order to study the incidence of HIV infection among childbearing women in Barbados, HIV-negative childbearing women have been recruited into the surveillance program, with much of the same data collected on them as on the HIV-positive women.

The selection of the HIV-negative women to serve as controls for this study was sequential. That is, following delivery by an HIV-positive woman, one or more of the HIV-negative women who next gave birth were asked to take part in the study. Those who accepted were enrolled as controls.

During the antenatal care registration in Barbados, there is routine

<sup>2</sup> Kumar A, St. John MA. Trends in HIV seroprevalence among pregnant women and perinatal HIV exposure to infants in Barbados — a population based prospective study [conference presentation]. The IX International HIV/AIDS Conference, Barcelona, Spain, July 2002.

recording of such maternal information as age, gravidity and parity, education and employment status, marital status, age of the newborn baby's father, and the results of the venereal disease research laboratory (VDRL) serology test for syphilis. For this study, one of the authors collected these data from each mother's case records.

All the HIV-positive women and the HIV-negative women who were enrolled for this study were also asked to participate in a one-to-one personal interview so that additional data could be collected. For the interview a pre-designed questionnaire was used. Both the HIV-positive and the HIV-negative women were asked the same questions, except for the questions pertaining to HIV illness, which were omitted from the questionnaire for the HIV-negative women. These interviews were conducted in 1996 through 2001. Of the 182 HIV-positive women enrolled, 40 women who had delivered prior to 1995 could not be interviewed as they were either lost to follow-up or had died. None of the 142 HIV-positive mothers we were able to contact declined to be interviewed. However, some of these mothers did decline to answer some of the questions in the questionnaire. In the control group of 202 HIV-negative women, 15 of them refused to be interviewed, but data from their antenatal case records were available for analysis. The remaining 187 women in the control group were interviewed at the time of their routine six-weeks-postnatal follow-up visit at the QEH. Either one or the other of the two authors conducted the interviews with both the HIV-positive women and the HIV-negative women. During these interview sessions, mothers were told at the outset that the interviewer was not being judgmental in any way, and once again the confidentiality of the information they provided was stressed.

The additional information gathered from the HIV-positive women in these interviews included the time of the first diagnosis of being HIV-positive (in Barbados, women are offered HIV testing during each pregnancy ir-

respective of any previous HIV-test results), the reason for taking the HIV screening test, numbers of pregnancies since the woman had first learned that she was HIV-infected, the woman's present living arrangement (whom she was living with at the time of the six-weeks-postnatal visit), and the woman's involvement with the care of her baby (that is, if the newborn baby lived with her or if the baby lived with and was being cared for by someone other than the biological mother because the mother was too ill to provide the care or because the mother had abandoned the baby). Lifestyle and risk-taking behaviors of both the HIV-positive and the HIV-negative women as pertinent to perinatal HIV transmission and prevention were also elicited during these interviews. These behaviors included age at initiation of sexual activity, number of sexual partners they had had during their lifetime, and any history of illicit drug use.

#### **Data organization and statistical analysis**

The information comparing the HIV-positive women and the HIV-negative women was categorized and tabulated using contingency tables. Chi-square tests were used to check for the statistical significance of any differences between the demographic, obstetric, and lifestyle characteristics of the two groups of women. Epi Info 6 software (Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America) was used to create the questionnaire, for data storage, and to perform some of the statistical analyses, including the chi-square test and the calculation of relative risk (RR). All *P* values were two-sided and were corrected for continuity. Whenever the chi-square test could not be used because the cell value was less than 5, Fisher's exact test was used to test for significance. The VassarStats statistical calculator on the Internet (<http://departments.vassar.edu/~lowry/VassarStats.html>) was used to calculate confidence intervals. The chi-square test for trend was used with the

age distribution of HIV-positive mothers, the timing of diagnosis of HIV, and the proportion of HIV-infected mothers with repeated pregnancies.

## **RESULTS**

There were 182 HIV-infected women enrolled in this study, and they delivered 233 babies from 230 childbirths (including three sets of twin gestations) during the 1986–2000 study period. In the control group there were 202 HIV-negative women, who delivered 231 babies from 230 childbirths (including one set of twins). (For both groups of women the data results that follow in the text, tables, and Figure 1 and Figure 2 report information (e.g., age) for the women at the time of their initial pregnancy during the study report and omit that information for any subsequent pregnancy). As of January 2002, of the 182 HIV-infected childbearing women, 143 (78.6%) were still alive, 32 had died, and the status of 7 of them was unknown.

#### **The demographic and obstetric profiles of the HIV-positive and HIV-negative women**

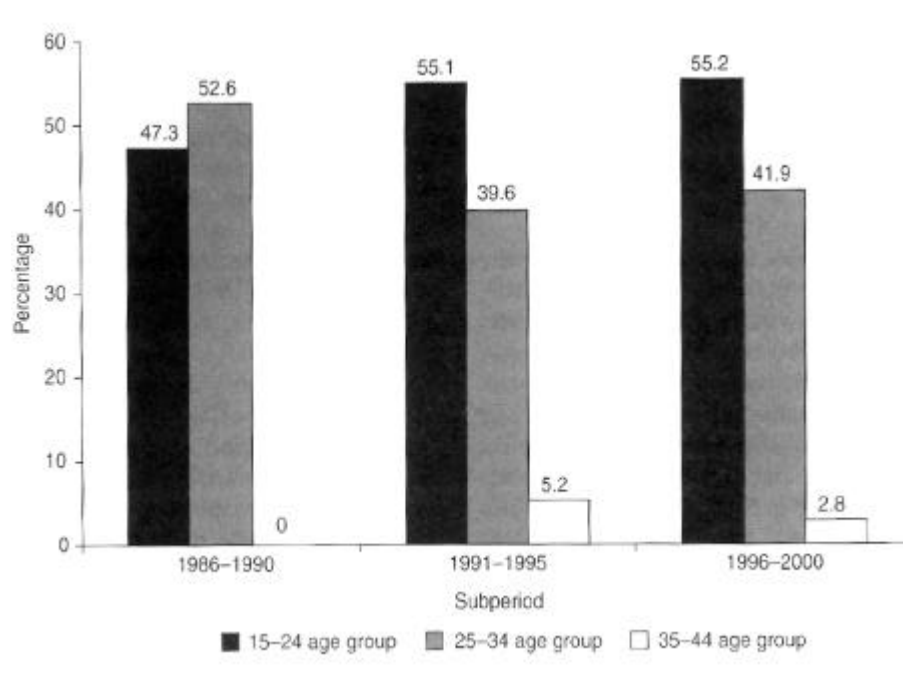
The demographic and obstetric profile of the 182 HIV-positive childbearing women and of the 202 HIV-negative childbearing women who served as controls are shown in Table 1 (not all of the data were available for all of the 182 HIV-positive women studied; the number of women for whom the particular data were available is indicated in parentheses in the table). For the HIV-positive women, age at the time of the childbirth ranged from 16 years to 37 years, with a median age of 24 years. For the HIV-negative women, the age ranged between 16 years and 40 years, with a median age of 26 years. Among the HIV-positive women, 60.9% were aged less than 25 years at the time of delivery, while 44.1% of the HIV-negative women were younger than 25 years. The difference in the proportion of women younger than 25 years in the

**TABLE 1. Demographic and obstetric profiles of HIV-positive and HIV-negative childbearing women, Barbados, 1986–2000**

Characteristic	HIV-positive		HIV-negative	
	No.	%	No.	%
Age (yr) at time of childbirth	<i>(n = 182)<sup>a</sup></i>		<i>(n = 202)</i>	
15–24	111	60.9	89	44.1
25–34	66	36.3	94	46.5
35–44	5	2.4	19	9.4
Number of the pregnancy	<i>(n = 171)</i>		<i>(n = 202)</i>	
1	32	18.7	56	27.7
2	46	26.9	51	25.2
3	93	54.4	95	47.1
Antenatal care	<i>(n = 182)</i>		<i>(n = 202)</i>	
Booked (3 antenatal visits)	167	91.8	195	96.5
Unbooked (< 3 antenatal visits)	15	8.2	7	3.5

<sup>a</sup> *n* = number of mothers for whom the respective data were available.

**FIGURE 1. Trend in age distribution (%) of HIV-positive women at time of childbirth, Barbados, 1986–2000**



two groups was statistically significant (RR = 1.38,  $P = 0.0009$ ).

There was no statistically significant difference in the proportion of the HIV-positive and HIV-negative women who were multiparous (RR = 1.12,  $P = 0.05$ ) despite a higher proportion (81.3%) of HIV-positive women being multiparous as compared to the HIV-negative women (72.3%) (Table 1).

Nearly one-tenth (8.2%) of the HIV-positive women were “unbooked,” that is, had fewer than three visits to a doctor for checkups during their antenatal care (in Barbados, pregnant women are initially booked for their antenatal care either at a public antenatal clinic or at the private office of an obstetrician or general practitioner, and then referred to the QEH in the

last trimester of their pregnancy for continued antenatal care and delivery). In comparison, 3.5% of the HIV-negative women were unbooked. This difference was not statistically significant ( $P = 0.07$ ).

Figure 1 shows the trend in the age distribution for these HIV-positive women at the time of childbirth, with the 1986–2000 study period divided into three five-year subperiods. The number of HIV-infected women in the age group of 15–24 years old increased from 47.3% (95% confidence interval (CI) = 31.1%–69.0%) during 1986–1990 to 55.2% (95% CI = 46.1%–63.9%) during the 1996–2000 period. However, this increase was not statistically significant, nor was a significant linear time trend found.

### HIV infection-related characteristics

The HIV infection-related characteristics of the HIV-infected childbearing women are shown in Table 2. Overall, 125 of the 182 HIV-positive women (68.7%) were diagnosed as being HIV-infected as a result of voluntary antenatal screening. Most of the women (88.6%) had no AIDS-defining features at the time of the childbirth.

The proportion of HIV-positive women who were diagnosed as being infected prior to childbirth increased from 25.0% (95% CI = 10.6%–47.1%) during the 1986–1990 subperiod to 82.0% (95% CI = 72.8%–88.7%) during the 1996–2000 subperiod (Figure 2). This very large increase was statistically significant ( $P < 0.0001$ ).

### Repeated pregnancies among the HIV-infected mothers

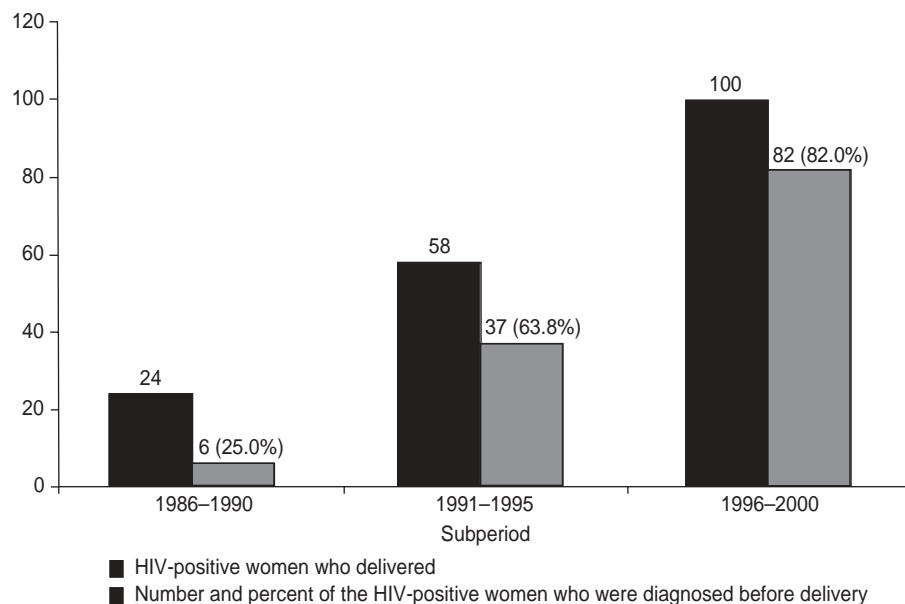
During the study period, 39 of the 182 HIV-positive women (21.4%) had a subsequent pregnancy after learning that they were HIV-infected. These 39 included 31 women who were pregnant for a second time (including two sets of twins), 6 women who were pregnant for a third time, and 2 women who were pregnant for the fifth time after being diagnosed as

**TABLE 2. HIV infection-related characteristics of HIV-positive childbearing women in Barbados, 1986–2000**

Characteristic	No.	%
Reason for screening and diagnosis ( <i>n</i> = 182) <sup>a</sup>		
Antenatal voluntary screening	125	68.7
Voluntary screening during neonatal period	2	1.1
During maternal illness suspected HIV	31	17.0
During child's illness suspected HIV	8	4.4
Other reasons	16	8.8
Repeat childbirths since HIV-positive ( <i>n</i> = 182)		
None	143	78.6
1	31	17.0
2	6	3.2
3	2	1.2
Maternal disease at childbirth ( <i>n</i> = 140)		
Asymptomatic	124	88.6
Symptomatic	16	11.4
Maternal vital status as of January 2002 ( <i>n</i> = 182)		
Alive	143	78.6
Deceased	32	17.6
Not known	7	3.8

<sup>a</sup> *n* = number of mothers for whom the respective data were available.

**FIGURE 2. Trend in the time of diagnosis of HIV infection among HIV-infected childbearing women, Barbados, 1986–2000**



HIV-infected. Figure 3 shows the trend over the 1986–2000 study period in the 51 repeated childbirths that occurred among the HIV-infected women after they had become aware of their infection status. The proportion of child-

births that resulted from a repeated pregnancy in women known to be HIV-positive prior to their conceiving increased from 14.3% (95% CI = 4.7%–33.6%) during the 1986–1990 subperiod to 25.2% (95% CI = 18.2%–33.7%)

for 1996–2000. While the increase in the proportion was large, the difference was not statistically significant ( $P = 0.31$ ).

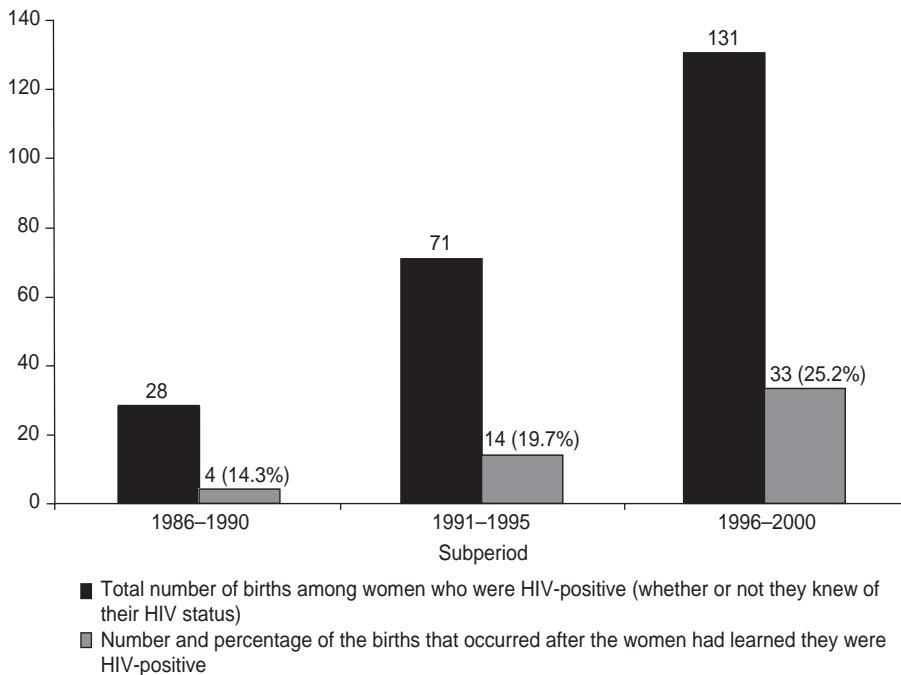
### Social and family characteristics of the HIV-infected mothers

All but 7 of the 182 HIV-infected women studied were from Barbados. Of the other 7, 6 of them were originally from the country of Guyana and 1 was from Saint Vincent and the Grenadines. Table 3 shows other social and family characteristics of the HIV-positive and HIV-negative women. One-quarter of the HIV-positive women had completed just primary education (schooling up to the age of 12 years, which is free and compulsory in Barbados), compared with 16.7% of the HIV-negative women. This difference between the two groups was not significant ( $P = 0.08$ ). Over half of the HIV-positive women had been unemployed prior to their pregnancy, whereas only 25% of the HIV-negative women were unemployed immediately prior to their pregnancy, a difference that was statistically significant ( $P = 0.0001$ ). Just under one-half of the HIV-positive women were living with one or both of their parents (with their mother in over 80% of those cases). More than four out of five of the HIV-positive women were involved with their child's care.

### Lifestyle-related characteristics of the HIV-positive and HIV-negative mothers

Table 4 compares the lifestyle-related characteristics of the HIV-infected women with those of the HIV-negative women. Nearly one-third of the HIV-positive women had had coitarche (first sexual intercourse) before the age of 16 years, whereas that was true for only one-fifth of the HIV-negative women. This difference was statistically significant (RR = 1.5,  $P = 0.04$ ). There was a history of rape at a young age in three cases; these women

**FIGURE 3. Trend in subsequent childbirths among women known to be HIV-infected, Barbados, 1986–2000**



subsequently had 5 or more sexual partners in their lifetime. Two other women stated that they sometimes offered sex in exchange for money, and both of these women had had more than 10 partners. Nearly half (45.4%) of the HIV-infected women had had 5 or more sex partners in their lifetime, whereas a little more than one-quarter (28.8%) of the HIV-negative women had had 5 or more sex partners in their lifetime, and this difference was statistically significant ( $RR = 1.6$ ,  $P = 0.01$ ). Also, 19.8% of the HIV-positive women had had 10 or more sexual partners in their lifetime, as compared to 8.5% of the HIV-negative women ( $P = 0.012$ ). In comparison to the HIV-negative women, with a significantly higher proportion of the HIV-positive women, the baby's father was more than 5 years older than the woman ( $RR = 2.0$ ,  $P = 0.0001$ ).

None of the HIV-positive or HIV-negative women who were interviewed reported a history of intravenous drug abuse. However, among the HIV-positive women, 5.8% re-

ported having smoked cocaine and 9.2% having smoked marijuana. Among the HIV-negative women, the respective percentages were 0.7% and 6.5%. The difference in the marijuana use between the two groups was not statistically significant, but for cocaine it was. A reactive VDRL serological test for syphilis was significantly more common among the HIV-positive women than among the HIV-negative women ( $P = 0.015$ ).

## DISCUSSION

We found an early onset of sexual activity (before 21 years of age) in over three-fourths of the HIV-positive women in Barbados. Similarly, Walrond et al. (19) reported an early onset of sexual activity among adolescents and adults in the country. In comparison to the HIV-negative mothers, a significantly higher proportion of the HIV-positive women in our study had had more than five sex partners in their lifetime. Also in a significantly

higher proportion of the HIV-positive women, the father of the newborn baby was more than 5 years older than the woman was. This early initiation of sexual activity and the pattern of a younger woman having a sexual relationship with an older man is known to have fueled the heterosexual spread of HIV in the Caribbean countries with high HIV prevalence levels (1).

Overall, we found that the HIV-infected mothers in our study were younger than the HIV-negative women. The proportion of HIV-infected women younger than 25 years old has been consistently high throughout the 15 years reviewed in this study. Over the period that we investigated, there was a noticeable (though not statistically significant) increase in the proportion of women who were having subsequent pregnancies after they had learned they were HIV-positive. The HIV-infected women had also had a significantly higher number of sexual partners during their lifetime in comparison to the HIV-negative women. These various lifestyle characteristics seen with the HIV-positive women may contribute significantly to both vertical and horizontal HIV transmission in Barbados. A disproportionately higher incidence of HIV infection among both younger women and younger pregnant women has been reported from countries that have experienced explosive HIV epidemics (10–13), so these lifestyle characteristics that we found in our study in Barbados are a cause for concern. Therefore, monitoring the HIV incidence and its trend among both young women and young pregnant women in Barbados could be essential in tracking the HIV epidemic in the country.

More than three-fourths of the HIV-infected mothers in our study were multigravida and multiparous. Similar findings have been reported from other Caribbean countries (2, 5). This makes the care of HIV-exposed children challenging for their young mothers, who are ailing both medically and psychosocially. Many of the HIV-infected childbearing women in our study were unemployed, sick, and had multiple children. Therefore, to help

**TABLE 3. Socioeconomic profile of HIV-positive and HIV-negative childbearing women, Barbados, 1986–2000**

Characteristic	HIV-positive		HIV-negative	
	No.	%	No.	%
Education completed	(n = 144) <sup>a</sup>		(n = 191)	
Primary	36	25.0	32	16.7
Secondary	99	68.7	139	72.8
Tertiary	9	6.2	20	10.5
Employment	(n = 110)		(n = 192)	
Employed with others	40	36.4	105	54.7
Self-employed	11	10.0	39	20.3
Unemployed	59	53.6	48	25.0
Living arrangement (woman living with)	(n = 146)		(n = 186)	
Newborn baby's father	58	39.7	75	40.3
One or both of her parents	71	48.6	82	44.1
On her own	17	11.6	29	15.6
Involvement in child's care	(n = 139)		(n = 189)	
Involved	118	84.9	171	90.5
Not involved	21	15.1	18	9.5

<sup>a</sup> n = number of mothers for whom the respective data were available.

**TABLE 4. Lifestyle characteristics of HIV-positive and HIV-negative childbearing women, Barbados, 1986–2000**

Characteristic	HIV-positive		HIV-negative	
	No.	%	No.	%
Age at first sexual intercourse	(n = 133) <sup>a</sup>		(n = 141)	
11–15	43	32.3	29	20.6
16–20	59	44.4	74	53.4
21–25	31	23.3	36	25.6
Number of lifetime sexual partners	(n = 121)		(n = 118)	
< 5	66	54.6	84	71.2
5–9	31	25.6	24	20.3
10	24	19.8	10	8.5
Marital status	(n = 127)		(n = 186)	
Unmarried	113	89.0	147	79.0
Married	12	9.4	24	12.9
Divorced	2	1.6	15	8.1
Age of baby's father vs. mother	(n = 118)		(n = 173)	
Younger by > 5 years	9	7.6	23	13.3
Same age ± 5 years	61	51.7	116	67.0
Older by > 5 years	48	40.7	34	19.7
Illicit drug use	(n = 120)		(n = 123)	
None	102	85.0	114	92.7
Smoked cocaine	7	5.8	1	0.7
Smoked marijuana	11	9.2	8	6.5
Maternal VDRL status (syphilis)	(n = 152)		(n = 198)	
Nonreactive	141	92.2	195	98.5
Reactive	11	7.8	3	1.5

<sup>a</sup> n = number of mothers for whom the respective data were available.

them to plan for and cope with the disease and the care of their children beyond the perinatal period, there is a need to provide these women with repeated counseling with continued follow-up and, where necessary, additional economic, social, and medical support. Another important goal of the counseling should be to encourage these women not to have additional pregnancies as well as to limit their behavior that is conducive to the horizontal spread of this disease.

The proportion of HIV-infected mothers in Barbados who were diagnosed during the antenatal period increased significantly over the 15 years of our study. In recent years the provision of excellent antenatal care, with the large majority of pregnant women volunteering for HIV screening, has made it possible to identify most of the HIV-infected women during early pregnancy and to provide them anti-retroviral prophylaxis that can prevent perinatal transmission. Such testing and care is an important asset in counseling women to reduce their risk-taking behaviors and also in planning adequate follow-up for both mothers and infants. In similar target groups in several countries, education and counseling has produced changes in risk-taking behaviors and has led to declining HIV infection rates among childbearing women (14–16).

At the time of delivery, most of the HIV-infected mothers in Barbados were still asymptomatic for AIDS-defining features. This could be advantageous for the child's care. However, it could be a challenge in providing preventive or interventional care for these mothers. This is because it is not easy to bring about desirable changes in the attitudes and practices in this young and asymptomatic age group.

One-fourth of the HIV-infected mothers had only received primary education. Over half of the infected women were unemployed at the time of their pregnancy. Similar observations have been made in other reports from the Caribbean as well as from developed countries (5, 17–19). The large majority of the HIV-infected mothers in our study were living either with

one or both of their parents (48.6%) or with the newborn baby's father (39.7%), and were involved with the care of their children. This extended family support system would be advantageous in planning HIV prevention strategies and in caring for HIV-infected mothers and children.

Rising numbers of repeated pregnancies among the HIV-infected women may result in an increase in the number of children exposed to HIV during the perinatal period, and this may offset

the reduction in mother-to-child transmission achieved by the use of the perinatal prophylactic antiretroviral drugs in Barbados. Using future studies to track HIV incidence and its trend among childbearing women may be important for monitoring the HIV epidemic in the country. It is hoped that the findings from this study will be useful in Barbados and in other countries that are facing similar situations in planning the care of HIV-infected women and in designing effective in-

terventions to reduce mother-to-child HIV transmission.

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## RESUMEN

### Características de las mujeres con infección por VIH que dan a luz en Barbados

**Objetivo.** Describir el perfil demográfico, las características sociales y familiares y los hábitos de vida de las mujeres infectadas por VIH que dan a luz en Barbados, país del Caribe, en comparación con un grupo testigo compuesto de mujeres sin infección por VIH.

**Métodos.** Los datos en que se basa este informe fueron obtenidos del Programa Pediátrico para la Vigilancia del VIH en el Hospital Reina Isabel de Barbados. Los datos abarcaron a todas las mujeres en el país que estaban infectadas por el VIH y que dieron a luz entre 1986 y 2000. Datos similares se obtuvieron de un grupo testigo compuesto de mujeres que dieron a luz pero que no estaban infectadas por el VIH. De las fichas médicas de las mujeres se extrajo la información de tipo general que había sido anotada durante las consultas prenatales. Datos adicionales se recolectaron mediante entrevistas con las mujeres.

**Resultados.** Ciento ochenta y dos mujeres infectadas por el VIH dieron a luz durante el período de estudio, y un grupo de 202 mujeres que dieron a luz sin estar infectadas por el VIH sirvió de testigo. En comparación con las de este último, las mujeres infectadas por el VIH eran más jóvenes, multíparas más a menudo, y más propensas a haber estado sin empleo cuando estaban embarazadas. Las mujeres infectadas por el VIH también habían empezado a tener relaciones sexuales a más temprana edad, habían tenido más compañeros sexuales y eran más proclives a tener un compañero sexual de edad más avanzada. La mayoría de las mujeres infectadas por el VIH carecían de síntomas de sida y vivían con sus padres (la madre, el padre, o ambos) o el padre de la criatura en el momento de dar a luz. Además, llegada la consulta correspondiente a la sexta semana posparto, la gran mayoría de las mujeres infectadas por el VIH estaban dedicadas a cuidar a sus hijos. La proporción de mujeres infectadas por el VIH cuyo diagnóstico se hizo antes de que dieran a luz aumentó de manera significativa durante el período de estudio, habiéndose elevado de 25% durante 1986-1990 a 82% durante 1999-2000. Un poco más de la quinta parte de las mujeres infectadas por el VIH habían tenido uno o más embarazos después de enterarse de que estaban infectadas.

**Conclusiones.** La precocidad del comienzo de las relaciones sexuales así como el elevado número de embarazos, especialmente de parejas diferentes y más viejas, podrían haber contribuido de un modo significativo a la transmisión vertical y horizontal del VIH en Barbados. Será importante en un futuro realizar estudios sobre la incidencia de la infección por el VIH y sus tendencias en mujeres en fase reproductiva a fin de monitorear la epidemia de dicha infección en este país. Muchas de las mujeres infectadas por el VIH que dieron a luz en nuestro estudio estaban sin trabajo o enfermas y tenían varios hijos. Por consiguiente, es necesario ofrecerles a estas mujeres asesoramiento y seguimiento periódicos y, si es necesario, un apoyo económico, social y médico adicional a fin de ayudarlas a planificar y afrontar las consecuencias de su enfermedad y el cuidado de sus hijos más allá del período perinatal.

"Ya en su tercer decenio, la epidemia de infección por el virus de la inmunodeficiencia humana y el SIDA (VIH/SIDA) en las Américas sigue aumentando en forma sostenida. Hacia finales de 1999 se estimó que aproximadamente 2,5 millones de personas estaban infectadas por el VIH en la Región: alrededor de 1,3 millones en América Latina, unos 360 000 en el Caribe y aproximadamente 900 000 en América del Norte. ... [Se estima que] cada día se producen entre 600 y 700 nuevas infecciones por el VIH en la Región, y hasta el año 2000 habían muerto más de medio millón de personas por esta causa."

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