

# Haitians in Massachusetts and the Need for HIV Prevention and Care: A Community Action Plan

**Metro  
Boston Haitian  
REACH 2010  
Community  
Planning  
Group**

**Core Agencies:**

Center for Community, Health,  
Education and Research

Boston Medical Center

University of Massachusetts,  
Boston

Boston Public Health  
Commission

**Produced by:**

Boston AIDS Consortium

# Metro Boston Haitian REACH 2010 Community Planning Group HIV Prevention and Care Plan Table of Contents

- I. List of Acronyms
- II. Executive Summary
- III. Introduction
  - Description of REACH 2010 and Metro Boston Haitian Community Planning Group
  - Purpose of Needs Assessment
  - Objectives of Plan
  - Methods/Description of Process used in Plan Formation
- IV. Overview & Epidemiology of HIV among Haitians in Massachusetts
  - Unique Considerations
- V. Haitian Community Perspective/HIV + Haitians Outside Care System
  - REACH 2010 Community Survey
  - Haitian Health Institute (HHI) Study
  - South Shore Haitians United for Progress (SHUP) Survey
- VI. HIV Prevention & Education among Haitians
  - HIV Prevention Needs
  - Risk Characteristics
  - Barriers to Accessing and Providing Care
  - Specific Mental Health & Substance Abuse Considerations
  - HIV Prevention Interventions
- VII. HIV Care
  - HIV Care Needs and Barriers
  - Specific Mental Health & Substance Abuse Considerations
  - Voices of Experience 2000 Results
- VIII. Recommendations to Providers and Funders
  - Overall Recommendations
  - Specific Gender & Age-Related Recommendations
    - Females
    - Males
    - Adolescents & Young Adults (17-24 years old)
    - Pediatric, School and Family
- IX. Bibliography

## Acronyms

AIDS – Acquired Immune Deficiency Syndrome

ASO – AIDS Service Organization

BAC – Boston AIDS Consortium

BMC – Boston Medical Center

BPHC – Boston Public Health Commission

BW – Brigham and Women's Hospital

CBO – Community Based Organization

CCHER – Center for Community, Health, Education and Research

CDC – Centers for Disease Control and Prevention

EMA – Eligible Metropolitan Area

ESL – English as a Second Language

HHI/TDC – Haitian Health Institute/Technical Development Corporation

HIV – Human Immuno-deficiency Virus

HMO – Health Maintenance Organization

HPHC – Harvard Pilgrim Health Care

IDU – Injecting Drug User

INS – Immigration and Naturalization Service

MDPH – Massachusetts Department of Public Health

MGH – Massachusetts General Hospital

MSM – Men who have Sex with Men

NEMC – New England Medical Center

RN/LPN – Registered Nurse/Licensed Practical Nurse

SHUP – South Shore Haitian United for Progress

STD – Sexually Transmitted Disease

VOE – Voices of Experience

## Executive Summary

*Haitians in Massachusetts and the Need for HIV Prevention and Care: A Community Action Plan, Metro Boston Haitian REACH 2010 Community Planning Group* is a plan that describes the need for HIV prevention and care services among Haitians in Massachusetts, and lists recommendations designed to improve the quality and quantity of services provided. The plan is primarily intended for health and social service agencies that provide services to Haitians in Massachusetts, though it may also be useful to funders as well as the Haitian community itself.

The plan was developed by the REACH 2010 Metro Boston Haitian Community Planning Group who believes that a holistic health approach must be taken within the Haitian community in order for HIV prevention and care programs and interventions to be effective. Although Haitians face a disproportionate AIDS rate in relation to the size of the population in the state, HIV/AIDS is not generally considered by the Haitian community to be one of the top diseases affecting the Haitian community. Thus, providers must understand the Haitian community's overall, psycho-social and health needs, of which HIV/AIDS is one part.

Following is a brief summary of each of the sections.

### **Section II: Introduction**

Describes the Centers for Disease Control and Prevention's REACH 2010 initiative and the Metro Boston Haitian REACH 2010 Community Planning Group. The introduction provides an overview of the methods and process used in conducting the needs assessment and developing the plan and describes the objectives of the plan.

### **Section III: Overview & Epidemiology of HIV among Haitians in Massachusetts**

Discusses the demographics and epidemiology of HIV/AIDS within the Haitian community in Massachusetts, highlighting overall trends in the Haitian community relative to the rest of the state's non-Haitian population.

### **Section IV: Haitian Community Perspective/HIV + Haitians Outside Care System**

Illustrates the Haitian community's perspective on what the overall priorities are within the community. This section also illustrates the Haitian community's perspective on HIV/AIDS prevention and care needs within the community. Additional information from two separate studies contributed to the information in this section as well as other sections: the Haitian Health Institute study, and the South Shore Haitians United for Progress study.

### **Section V: HIV Prevention & Education among Haitians**

Describes the HIV prevention needs, what places Haitians at risk of acquiring HIV, barriers to accessing and providing HIV prevention services, and specific information about mental health and substance abuse concerns as they relate to HIV prevention. This section also lists successful HIV prevention interventions that are currently available in Massachusetts for the Haitian population.

**Section VI: HIV Care**

Discusses the HIV care needs of Haitians, and barriers to accessing care by and providing care to the Haitian community. Specific mental health and substance abuse considerations that are specific to HIV care are also discussed. Additional information from Suffolk University's Voices of Experience study was included in this section.

**Section VII: Recommendations to Providers and Funders**

Lists overall recommendations as well as specific gender and age-related recommendations.

**Section VIII: Bibliography**

Special thanks is extended to those who provided recent research results to this plan that are pertinent to HIV/AIDS prevention and care needs of Haitians in Massachusetts. Specifically, the Metro Boston Haitian REACH 2010 Community Planning Group would like to thank the Haitian Health Institute and the Technical Development Corporation, the South Shore Haitians United for Progress, and Suffolk University/Voices of Experience.

Finally, a special thanks is extended to the all of the members and attendees of the Metro Boston Haitian REACH 2010 Community Planning Group:

Sincerely,

Kathy Steger-Craven  
Co-Chair

Sincerely,

Riche Zamor  
Co-Chair

Sincerely,

Bernadette Montasse  
Co-Chair

## Introduction

### **Description of REACH 2010 and Haitian Community Planning Group**

REACH 2010 is a 12 month community planning process funded by the Centers for Disease Control and Prevention's "REACH 2010" Initiative. The overall goal of the REACH 2010 initiative is to bring about community and systems change that will lessen or eliminate health disparities. This can take the form of new or modified programs, policies or practices facilitated by the initiative that improve access and eliminate disparities. The project supports community-based coalitions working on the following six health priority areas: HIV infection/AIDS, deficits in child and/or adult immunization, infant mortality, cardiovascular disease, diabetes, and deficits in breast and cervical cancer screening and management.

The Metro Boston Haitian REACH 2010 Community Planning Group is a group of health and social service providers, clinicians, consumers, epidemiologists and community members who mobilized to conduct an assessment of the needs for HIV/AIDS services and prevention in the Massachusetts Haitian community. It is the only REACH 2010 project in the nation focussing solely on Haitians and one of two focussing on HIV/AIDS.

The *goal* of the Metro Boston Haitian REACH 2010 Community Planning Group is to help ensure that Haitians infected and affected by HIV/AIDS in Massachusetts continue to receive the care and resources they need to maximize their health and quality of life.

The *output* of the group is this HIV/AIDS Prevention and Care Community Action Plan for Massachusetts Haitians, which outlines community-level interventions for HIV for implementation in REACH 2010 Phase II.

### **Purpose of Needs Assessment**

The *purpose of the needs assessment* (key informant / personal interviews, provider prevention surveys, provider care surveys, consumer group interviews, community surveys, epidemiological profile, service utilization review and literature review) is to:

- Determine the service needs of the Haitian service recipients;
- Identify services that Haitians living in Massachusetts are currently utilizing;
- Identify barriers to accessing and providing services for Haitians; and
- Brainstorm ways to design, improve and increase effective programs and interventions for Haitians.

## **Objectives of the Plan**

The *objectives (intended outcomes) of this plan* are to:

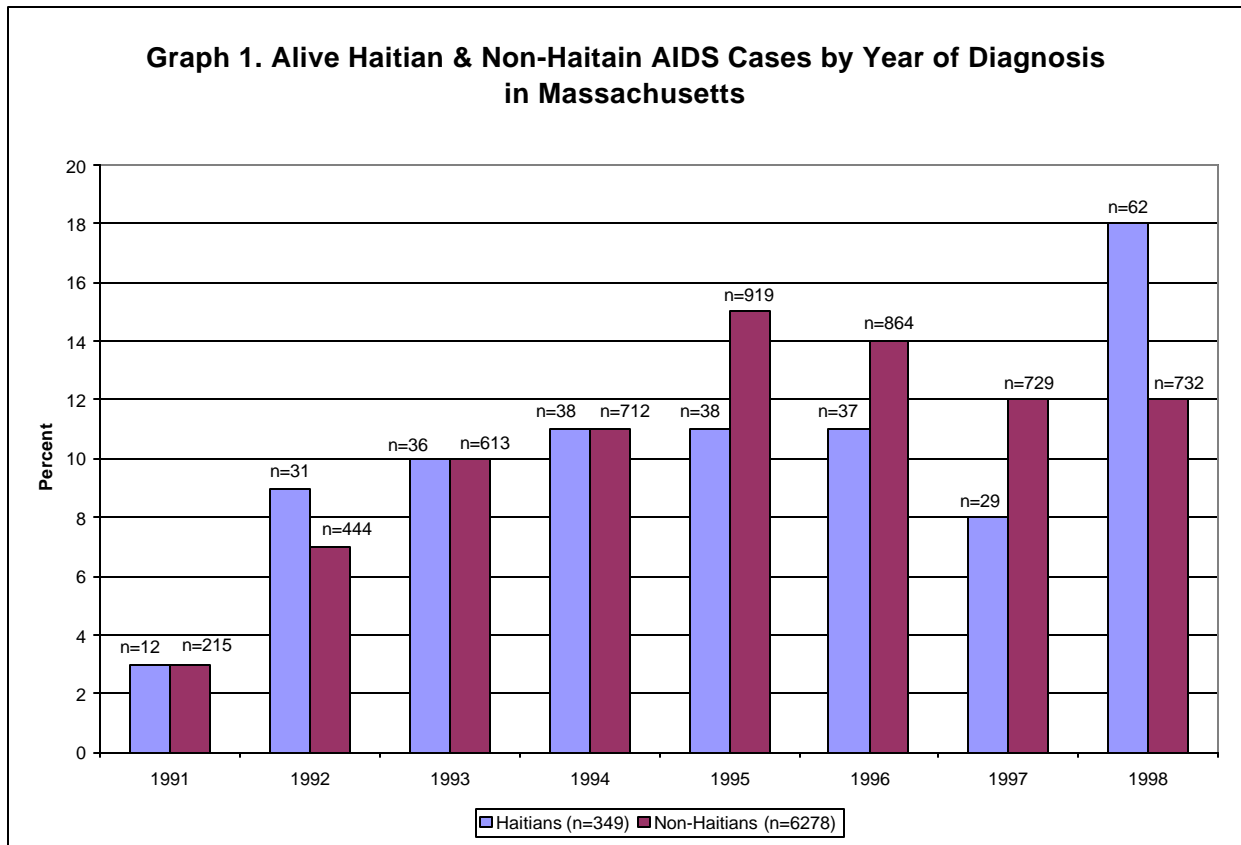
- Help agencies/programs provide services to their clients;
- Help agencies/programs more effectively apply for and obtain grants, including Phase II REACH 2010 funding;
- Help funders identify agencies/programs that are addressing the needs of people living with HIV or at-risk persons or communities; and
- Serve as a guide for other population-based community planning groups.

## **Methods/Description of Process Used in Plan Formation**

The Metro Boston Haitian REACH 2010 Community Planning Group conducted an assessment of the needs of Haitians living in Massachusetts. The needs assessment included 14 key informant interviews with providers, group interviews with consumers, written surveys of providers on HIV care and HIV prevention among Haitians, 260 community surveys, a review of recent epidemiological, demographic and service utilization data for the state, and a literature review of recent research on AIDS among Haitians in Massachusetts. The recent research reports incorporated into this document include those from the Haitian Health Institute/Technical Development Corporation (HHI/TDC), South Shore Haitians United for Progress (SHUP), and Suffolk University's Voices of Experience (VOE). The needs assessment culminated in this plan.

## Overview & Epidemiology of HIV among Haitians in Massachusetts

In Massachusetts, there have been 15,121 individuals diagnosed with AIDS since the beginning of the epidemic, of which 6,627 are currently living. It is estimated that 18-24,000 people in the state are living with HIV/AIDS. This figure includes people reported to the surveillance department with HIV or AIDS, those who are not in medical care and who know their status, and those who do not know their status. Every racial and ethnic group in Massachusetts experienced a decline in diagnosed AIDS cases and in HIV/AIDS related deaths between 1995-1997. However, as the graph below indicates, the number of AIDS cases diagnosed among Haitians increased dramatically in 1998. There are currently 349 Haitians living with AIDS in Massachusetts. This increase was not experienced among non-Haitian Massachusetts residents. (See Graph 1).



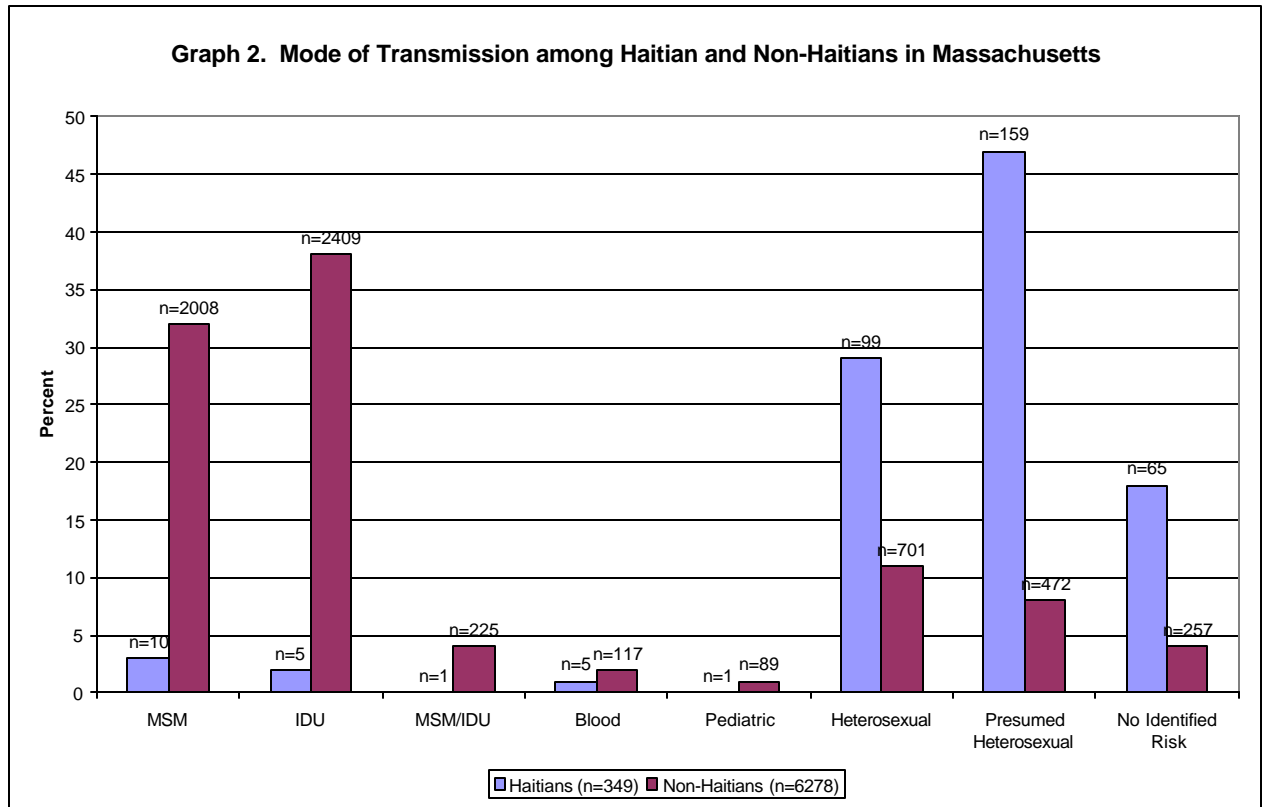
State AIDS incidence data from January 1, 1997-December 31, 1998 (new AIDS diagnoses in the last 2-years) indicate that people newly diagnosed are more likely to be female, members of communities of color, and have heterosexual sex as the mode of transmission than the cumulative reported cases. According to the MDPH, between 1990 and 1997, the proportion of AIDS cases attributable to heterosexual<sup>1</sup> or presumed heterosexual<sup>2</sup> sex in Massachusetts increased from 13% to 29%. In the City of Boston this increase went from 13% in 1990 to 38% in 1997.

Massachusetts has the fourth largest Haitian population in the United States with an estimated 80,000 Haitian residents. According to a recent assessment of the needs of Haitians in greater

<sup>1</sup> Heterosexual transmission means that the person had heterosexual sex with a known injecting drug user, bisexual male, hemophiliac, transfusion/transplant recipient or person with HIV/AIDS.

<sup>2</sup> Presumed heterosexual means that the person had heterosexual sex with someone whose risk is unknown, and they deny injecting drugs or MSM as behaviors that they engage in.

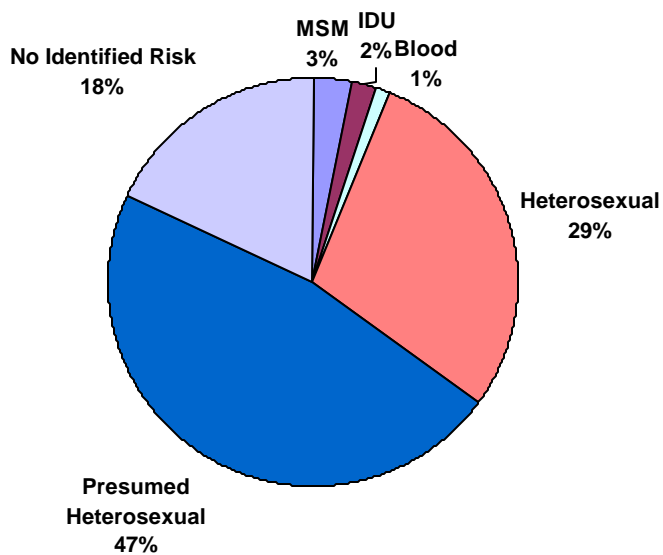
Boston prepared for the Haitian Health Institute (HHI) by the Technical Development Corporation, Haitians make up between 7.5 and 10% of Boston's total population. As of April 1, 2000, there were 684 cumulative reported AIDS cases among Haitians living in Massachusetts who were born in Haiti.<sup>3</sup> Of these, 349 are currently living with AIDS. According to MDPH data, Haitians comprise about 5% of cumulative AIDS cases and about 6% of all alive AIDS cases in the state. People born in Haiti diagnosed with AIDS and living in Massachusetts are more likely to be female, to have been infected through heterosexual or presumed heterosexual contact, and to live in the Metro Boston region than those people not born in Haiti diagnosed with AIDS and living in Massachusetts. Unlike the overall AIDS cases, 65% of Haitians living with AIDS have unspecified transmission risk. (See Graph 2).



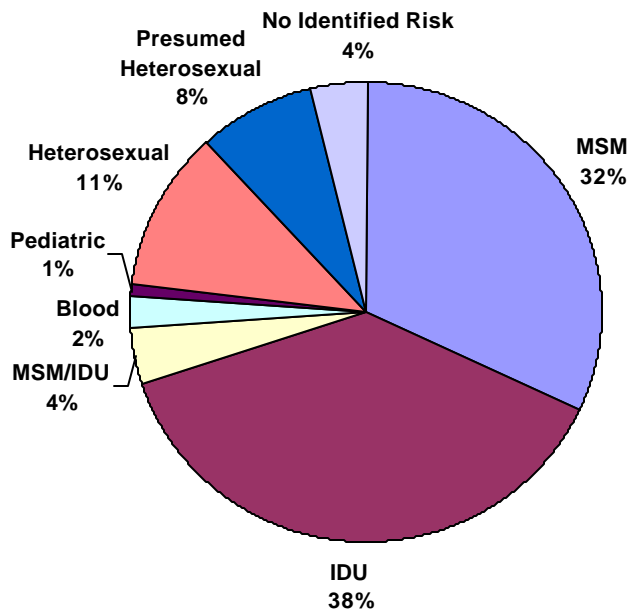
In Massachusetts, 76% of Haitians living with AIDS were infected through heterosexual or presumed heterosexual sex. (See Graphs 3 & 4). Another 18% were recorded as having no identified risk, 3% as MSM, 2% as IDU, 1% as through blood products and <1% as pediatric. Due to stigmas surrounding homosexuality and substance abuse in the Haitian community, these two modes of transmission are likely to be under reported. Furthermore, Graph 2 does not adequately illustrate that pediatric transmission is a significant mode of transmission among Haitians. Haitians account for 18% of all pediatric AIDS cases in the state (CCHER website, 3/13/00). When stratified by gender, 21% of male and 11% of female HIV infections among Haitians are due to no identified risk. (See Graphs 5 & 6).

<sup>3</sup> Note that the data for Haitians in this section include only those actually born in Haiti, and children of Haitian born parents. These data do not include Haitians born in the US or other countries. Other people of Haitian decent may be recorded as Black and/or African American, thus Haitian data are likely to be an underestimate. For these reasons, it is difficult to obtain the exact number of Haitians living with AIDS in Massachusetts, or estimates of Haitians living with HIV in the state.

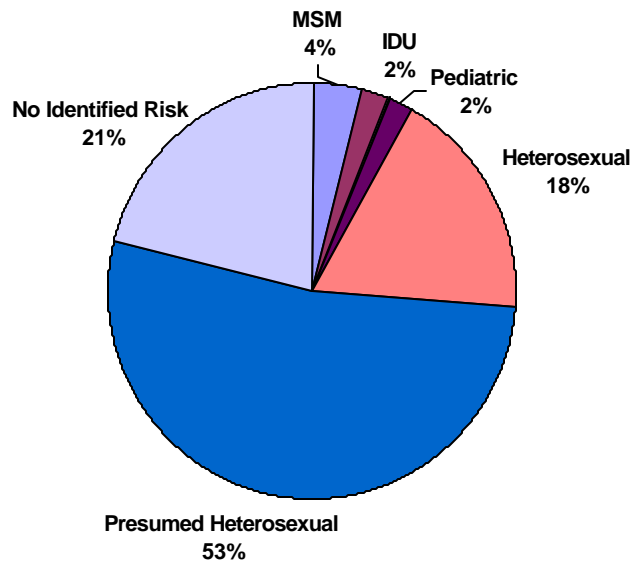
**Graph 3. Haitians Living with AIDS by Mode of Transmission (n=349)**



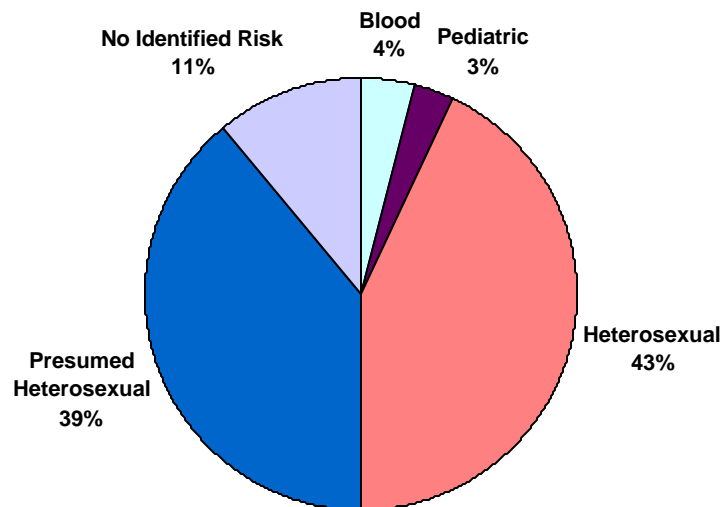
**Graph 4. Non-Haitians Living with AIDS by Mode of Transmission (n=6278)**



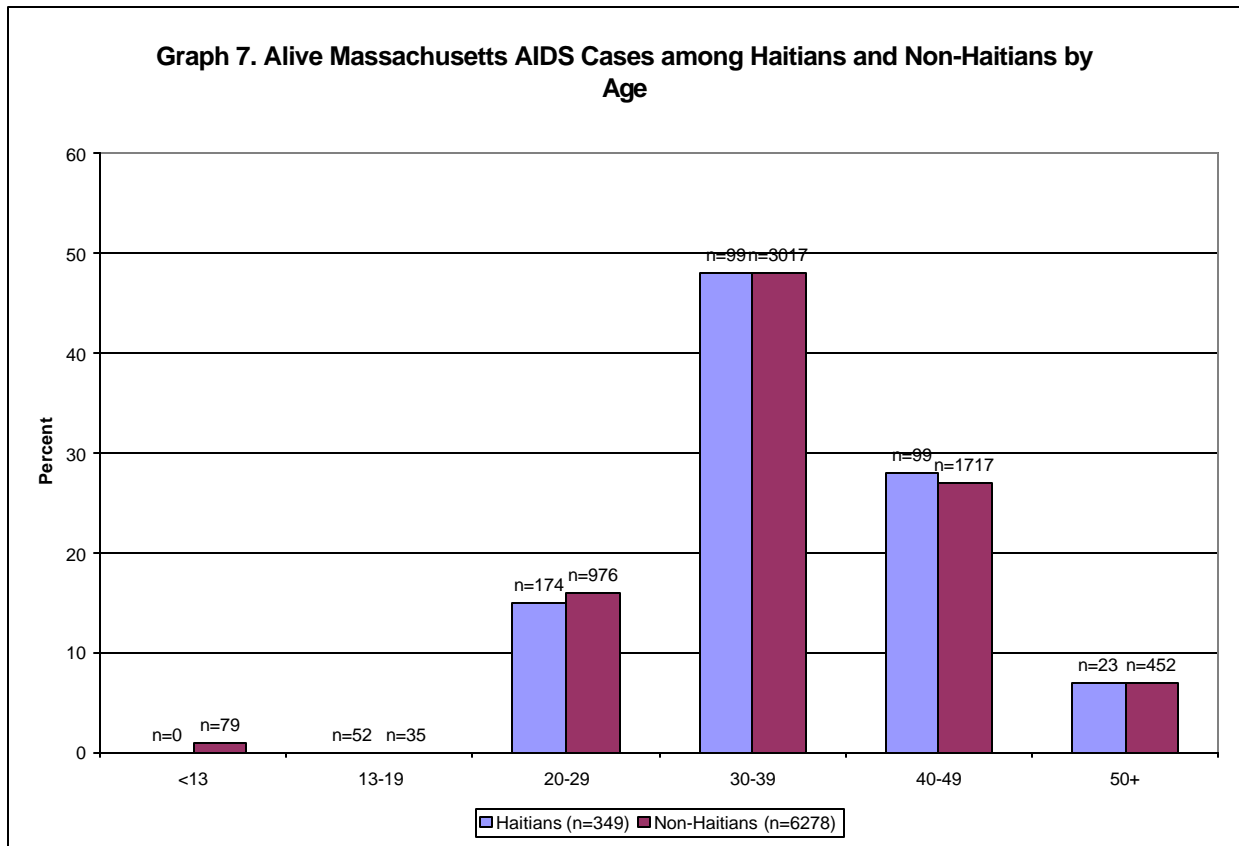
**Graph 5. Male Haitians Living with AIDS by Mode of Transmission in Massachusetts (n=209)**



**Graph 6. Female Haitians living with AIDS by Mode of Transmission in Massachusetts (n=140)**



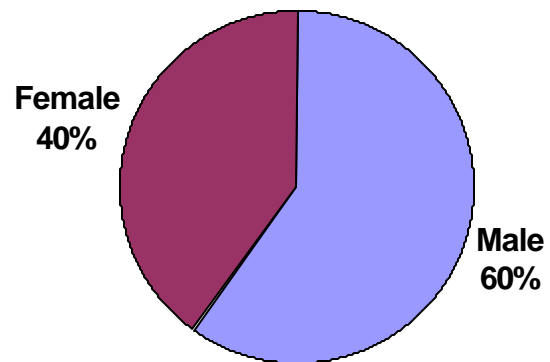
Graph 7 shows the age at time of AIDS diagnosis of Haitians and non-Haitians living with AIDS in Massachusetts. The graph illustrates that, like non-Haitians, the majority of Haitians are diagnosed between the ages of 30-39 years of age.



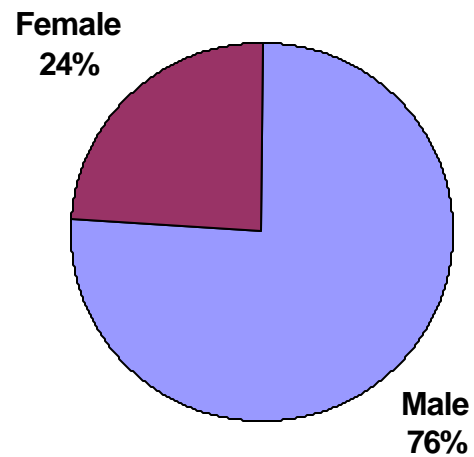
Women are extremely disproportionately represented among Haitians living with AIDS in Massachusetts. (See Graphs 8, 9 & 10). Haitian women comprise 40% of all alive AIDS cases among Haitians in the state, whereas non-Haitian women comprise about 24% of all alive AIDS cases among non-Haitians in the state. Overall, AIDS cases among men are declining more rapidly over time than cases among women.

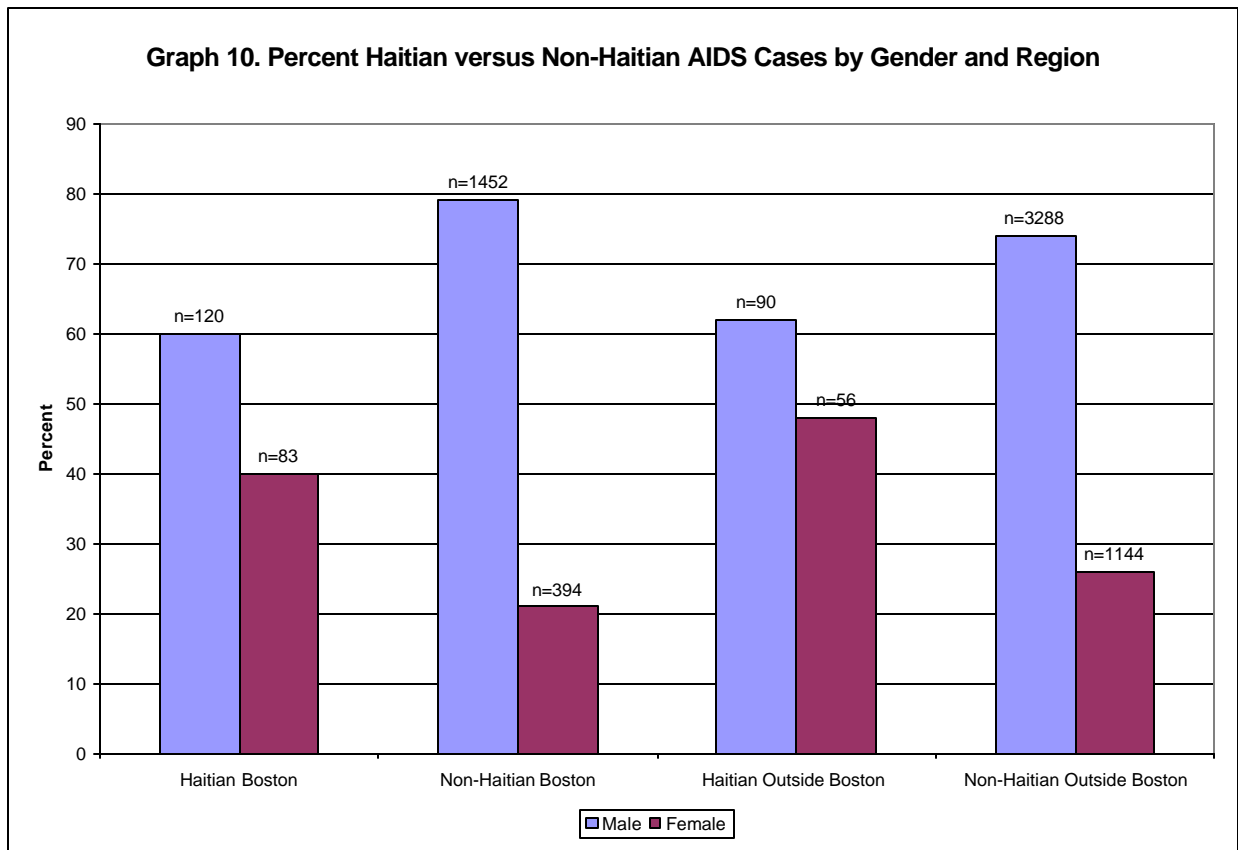
The Haitian Health Institute study indicated that between 1994 and 1999 in Boston, Haitian males comprised 7% of AIDS cases among males and Haitian females comprised 15% of all cases among females. Between 1997 and 1998, the number of cases among Haitian men almost doubled (from 10 to 19) but the number of cases among Haitian females almost tripled (from 4 to 12), indicating the disproportionate impact of HIV on Haitian women.

**Graph 8. Alive AIDS Cases among Haitians in Massachusetts by Gender (n=349)**

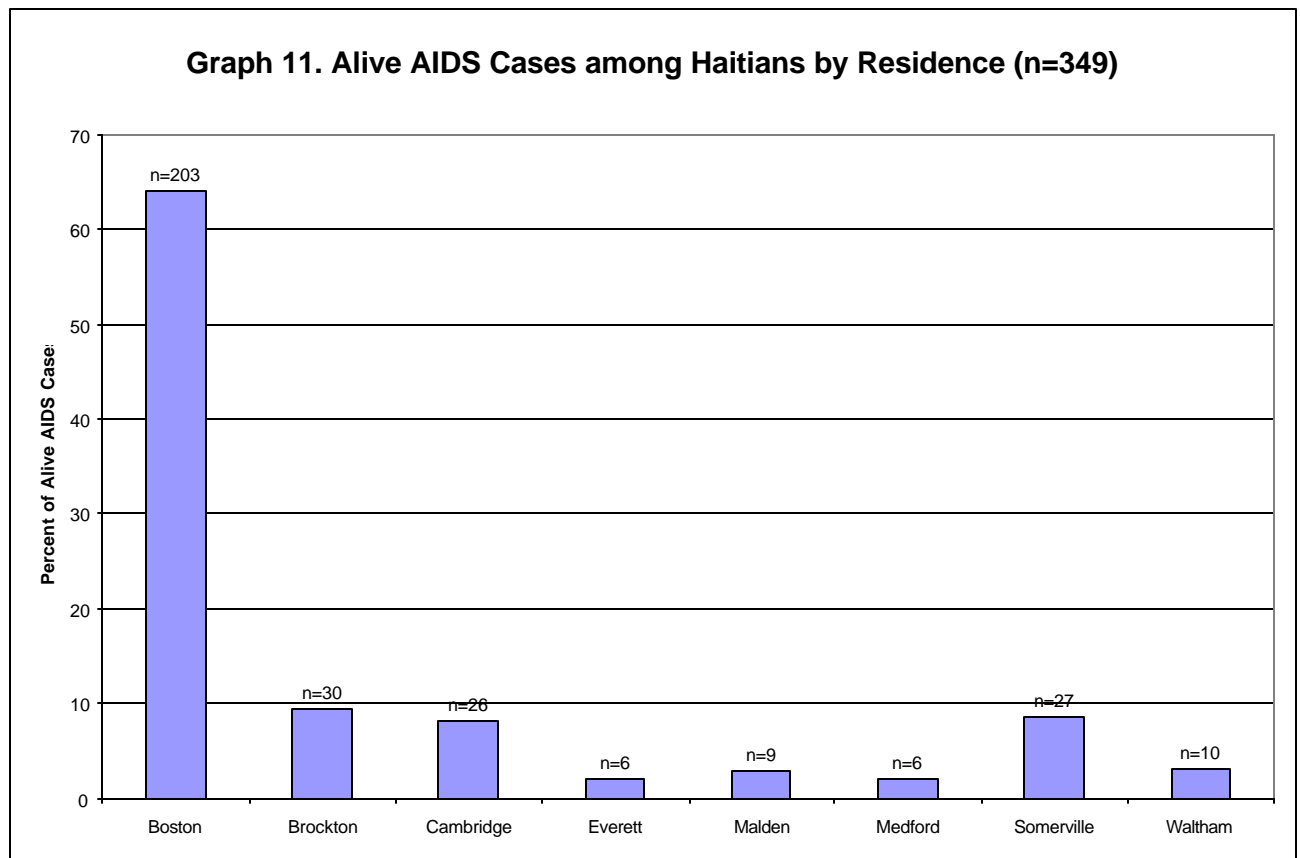


**Graph 9. Alive AIDS Cases among Non-Haitians in Massachusetts by Gender (n=6278)**

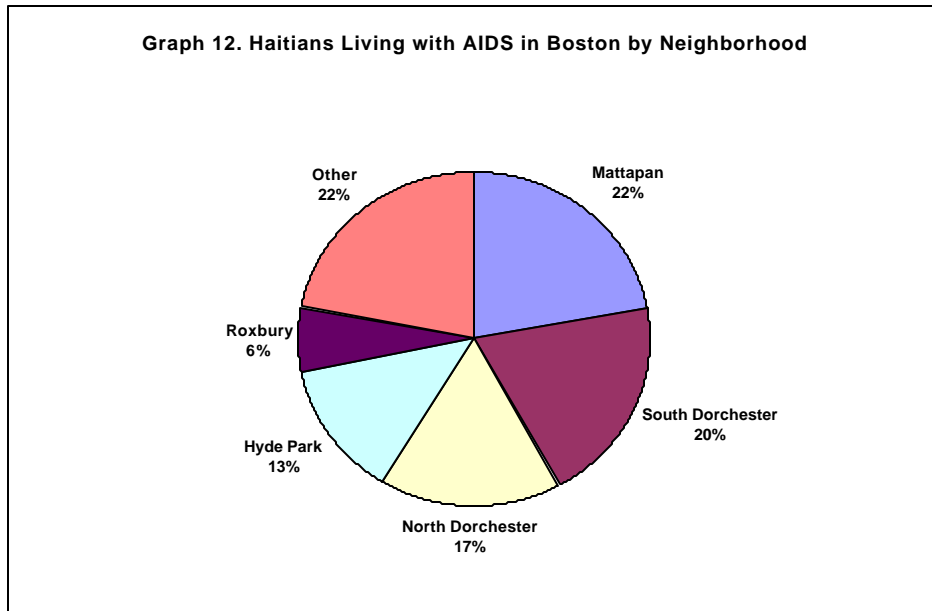




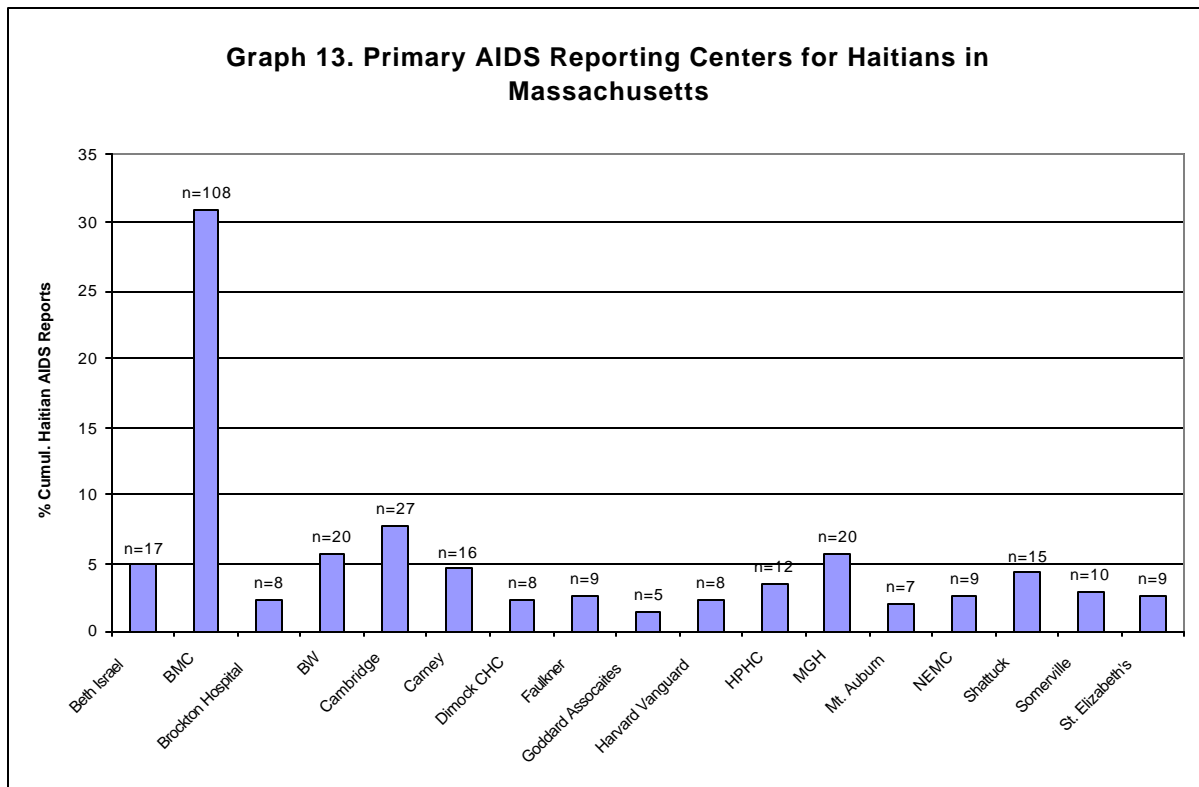
Graph 11 shows the geographic distribution of alive AIDS cases among Haitians in the state. The majority of Haitians living with AIDS reside in Boston, Cambridge, Somerville and Brockton.



As Graph 11 illustrates, the majority of Haitians living with AIDS reside in Boston. The following graph indicates the specific neighborhoods within the City of Boston where Haitians living with AIDS reside.



According to the Massachusetts Department of Public health, the seropositivity rate for Haitians testing at public sites decreased from 9% to 7% between 1994 and 1995. However, the absolute number of Haitians testing positive increased from 23 in 1994 to 32 people in 1995. In addition, Haitians infrequently visit STD clinics in the state. Only 42 out of 6,400 who were counseled about HIV in 1998 were Haitian. These factors indicate that Haitians in Massachusetts continue to be at considerable risk, and that HIV is likely underestimated in the population. Graph 13 shows the primary AIDS reporting centers for Haitians statewide.



## **Unique Considerations**

In the 1980s, Haitians were labeled as part of the “4H Group” (heroin users, hemophiliacs, homosexuals and Haitians) that resulted in fear, discrimination and stigma towards, and among, Haitians. While more options have become available during recent years, Haitians continue to experience a great need for culturally appropriate services.

According to key informant interviews with providers, Haitians frequently cite negative experiences with health care providers that do not understand Haitian Creole and who they feel are non-empathetic. Language differences are barriers to learning about and accessing services, as is having an undocumented immigration status. Fear of stigmatization and lack of family and community support are major barriers to care.

The level of acculturation into United States’ society also affects HIV prevention and care. Traditional health beliefs may cause misconceptions and denial about HIV disease and risks. Haitians thus have a need for culturally- and linguistically-specific interventions and services including treatment information in Haitian Creole, translation and interpretation services, case management and advocacy, and legal services.

Haitians not in care are those who do not access any form of HIV/AIDS care services and may include the uninsured, those who choose not to access services, those who are HIV positive but unaware of their status, and those with competing priorities such as the homeless or mentally ill. It can be assumed that Haitians living with HIV outside the system of care face a wide range of unmet needs, whether or not the services exist to meet those needs.

## REACH 2010 Community Survey

The results of a pilot community perspective survey of 11 Haitians conducted outside a Haitian church show that community members feel that there is a shortage of health clinics and doctors geared towards them. Respondents expressed concerns about money and the lack of health insurance among Haitians; the need for health education and specific disease information was also noted.

Although Haitians face a disproportionate AIDS rate in relation to the size of the population in the state, HIV/AIDS was not mentioned as one of the top diseases affecting the Haitian community. Interviewees felt that the top health concerns in the Massachusetts Haitian community are high blood pressure, cancer (including prostate cancer), and diabetes. This could indicate that more education is needed on the risk and prevalence of HIV/AIDS among Haitians in Massachusetts.

Of the Haitians interviewed at the church, 27% said that they or someone they knew was a Haitian living with HIV/AIDS. Of the 27% living with HIV/AIDS, an estimated 50% are not receiving care. The reasons given for why these Haitians living with HIV are not in care included embarrassment, fear that others will find out, lack of education about the benefits of accessing care, and lack of health insurance.

Respondents said that, in the past, they had obtained information about HIV/AIDS through schools, physicians, hospitals and health clinics, and via television and pamphlets. The following were selected by respondents as important means of preventing HIV transmission:

- Abstinence;
- Not using intravenous drugs;
- Using a latex condom;
- For substance abusers, using new needles or those cleaned with bleach;
- Receiving information on the risks of having multiple sex partners; and
- Receiving good education about HIV/AIDS.

When asked what one should do if they wanted to know their HIV status, the majority responded “get tested,” “talk to your doctor,” or “read about it.” Overall, respondents to this survey showed that they were aware of how HIV is prevented, though they did not rank the disease as being a high priority in the Haitian community.

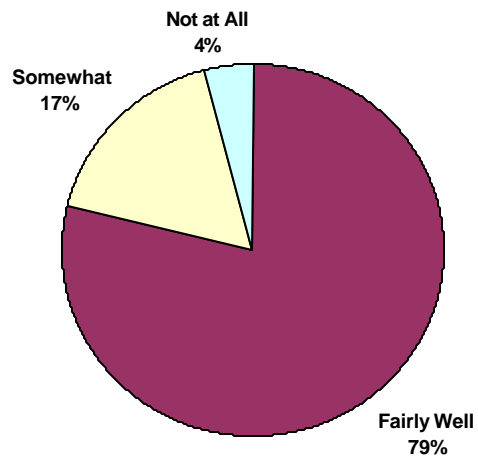
Other health needs/issues of the Haitian community that were mentioned include:

- Housing;
- Government assistance (money);
- Limited health clinics;
- Limited Haitian health clinics with Haitian doctors;
- Language barriers; and
- A need for more education and motivation via radio, journals & television.

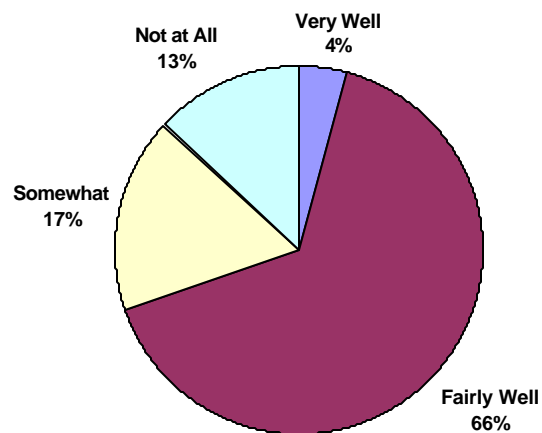
## **Haitian Health Institute Study Data**

The following four graphs show community data from the Haitian Health Institute (HHI) study prepared by the Technical Development Corporation (TDC).

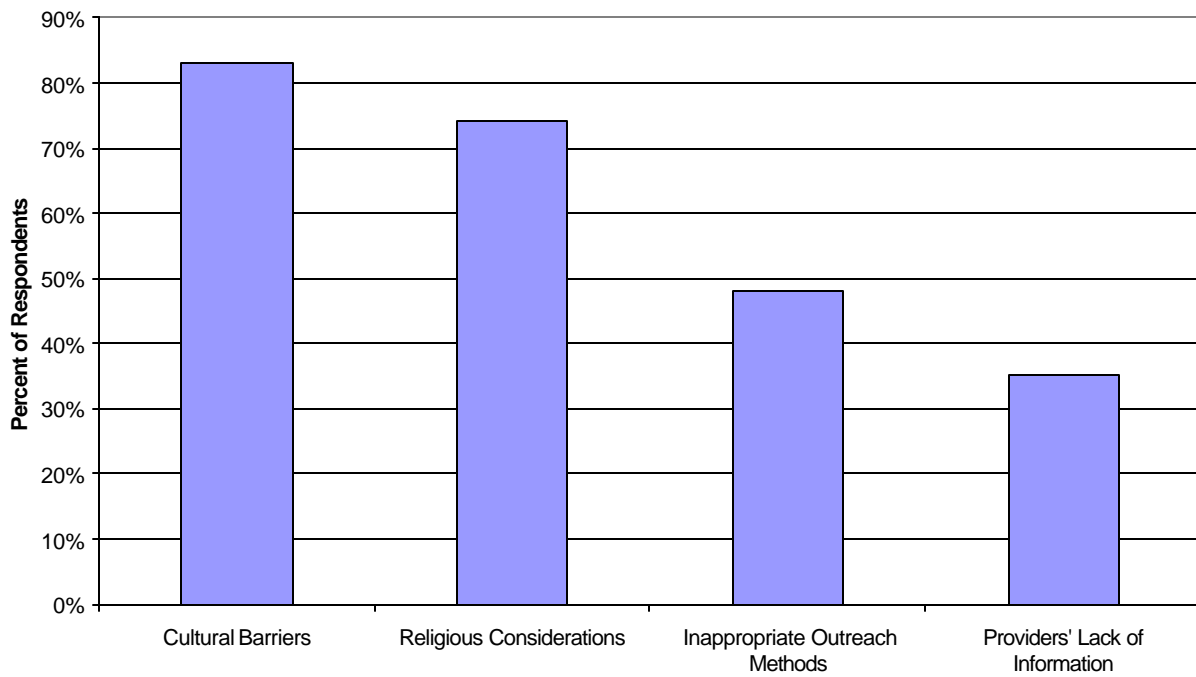
**Graph 14. Providers' Perceptions of How Well the Haitian Community is Informed on HIV Prevention (HHI/TDC) (n=23)**



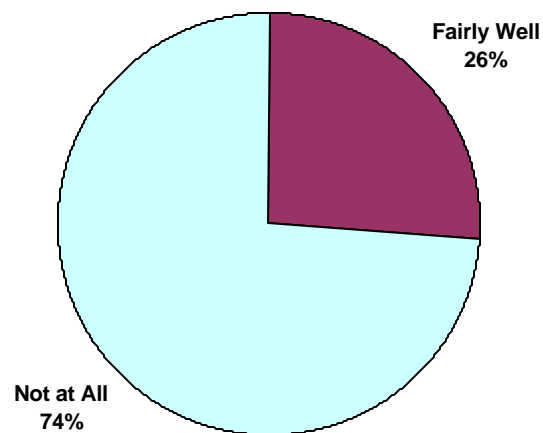
**Graph 15. Providers' Perceptions of How Well the Haitian Community is Informed on HIV Testing & Counseling (HHI/TDC) (n=23)**



**Graph 16. Providers' Opinion on Barriers to Educating the Haitian Community about HIV (HHI/TDC) (n=55)**

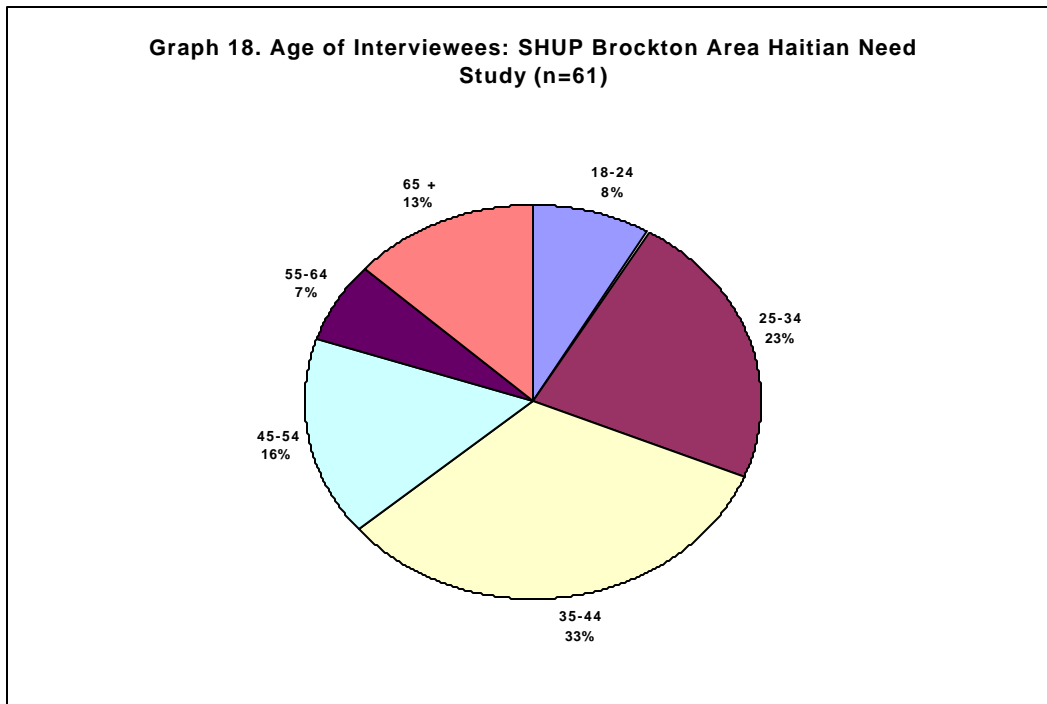


**Graph 17. Providers' Perceptions of How Well Informed the Haitian Community is on Mental Health Programs (HHI/TDC) (n=23)**

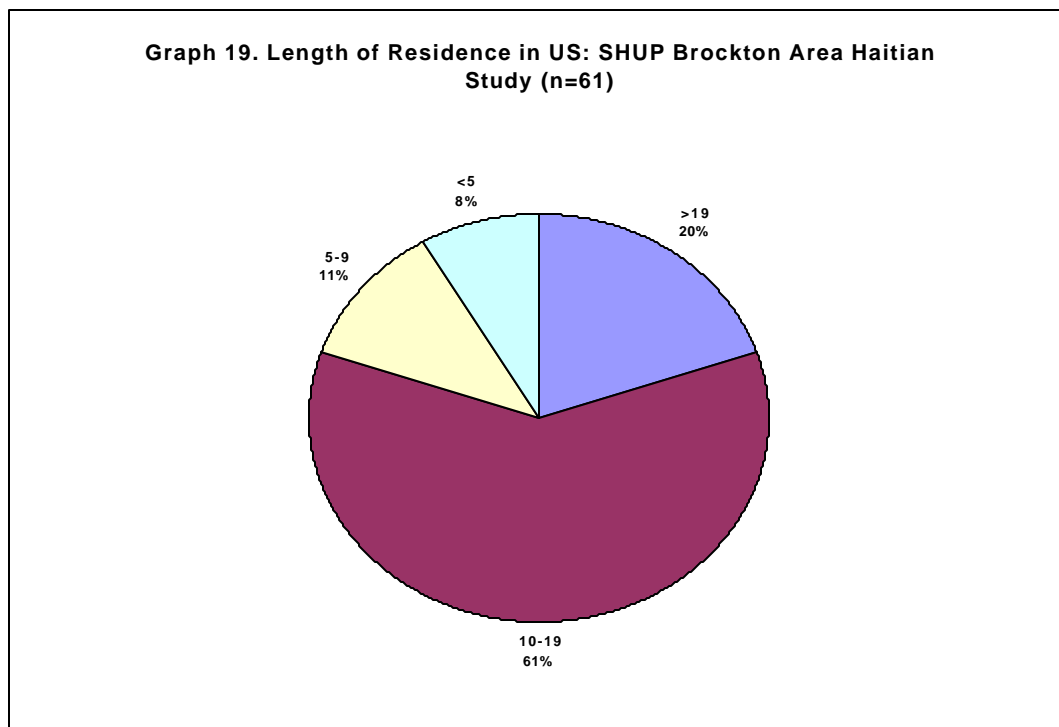


## **South Shore Haitian United for Progress (SHUP) Survey**

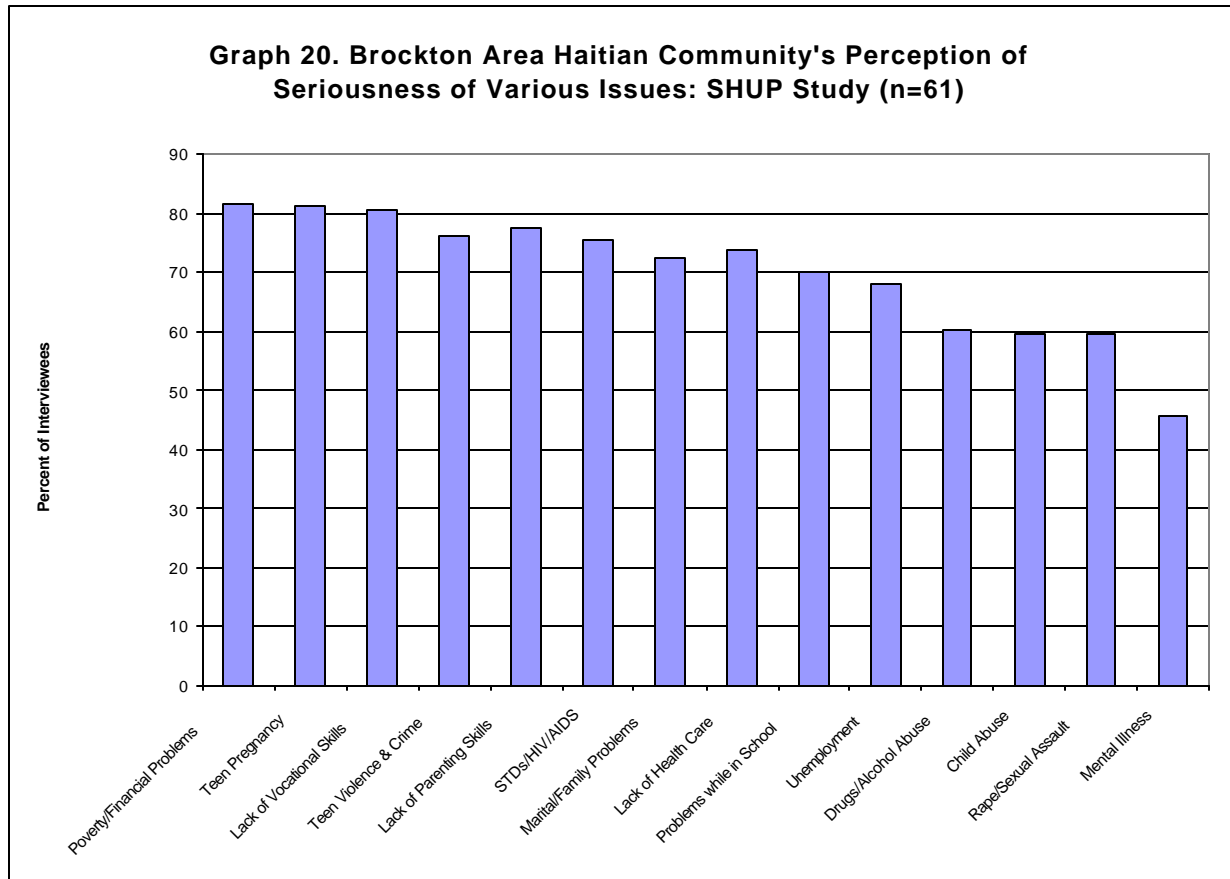
The South Shore Haitian United for Progress (SHUP) organization conducted a study on the needs of Haitians in the Brockton area. The study consisted of 61 interviews held with Haitians in the Brockton area (Brockton 58, Randolph 2, Avon 1). Brockton is a small city about 25 miles south of Boston. Sixty-four percent of interviewees were female, 33% male and 3% unknown. Graph 18 shows the age of interviewed Haitians.

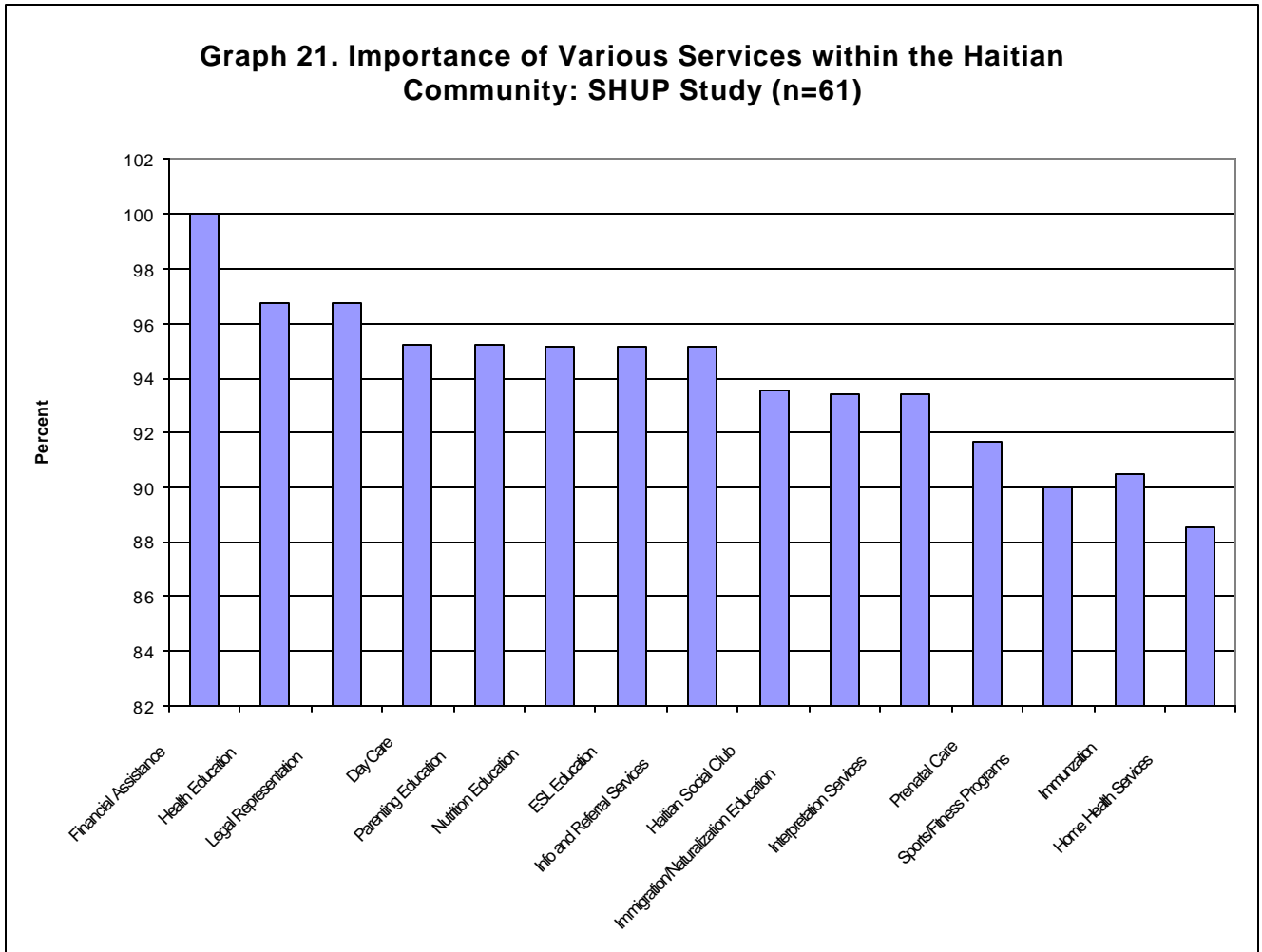


Of those interviewed, 93% currently have children living with them. This finding may have program implications and affect peoples' ability and likelihood to access HIV care. Of those interviewed, 57% were not United States citizens, though 81% had resided in the United States for at least 10 years. (See Graph 19).



Graph 21 illustrates the most important services within the Haitian community. According to interviewed Haitians, financial assistance, health education and legal representation were the top three issues. Though between 90-100% of all Haitians interviewed noted that the services mentioned in Graph 20 were important to the Haitian community, only a small percent (between 33-44%) of interviewed Haitians had ever accessed such services. The primary reason given was that they did not know about the service or how to arrange to get the service. The second most commonly stated reason for not accessing services is that the interviewee did not need the service.





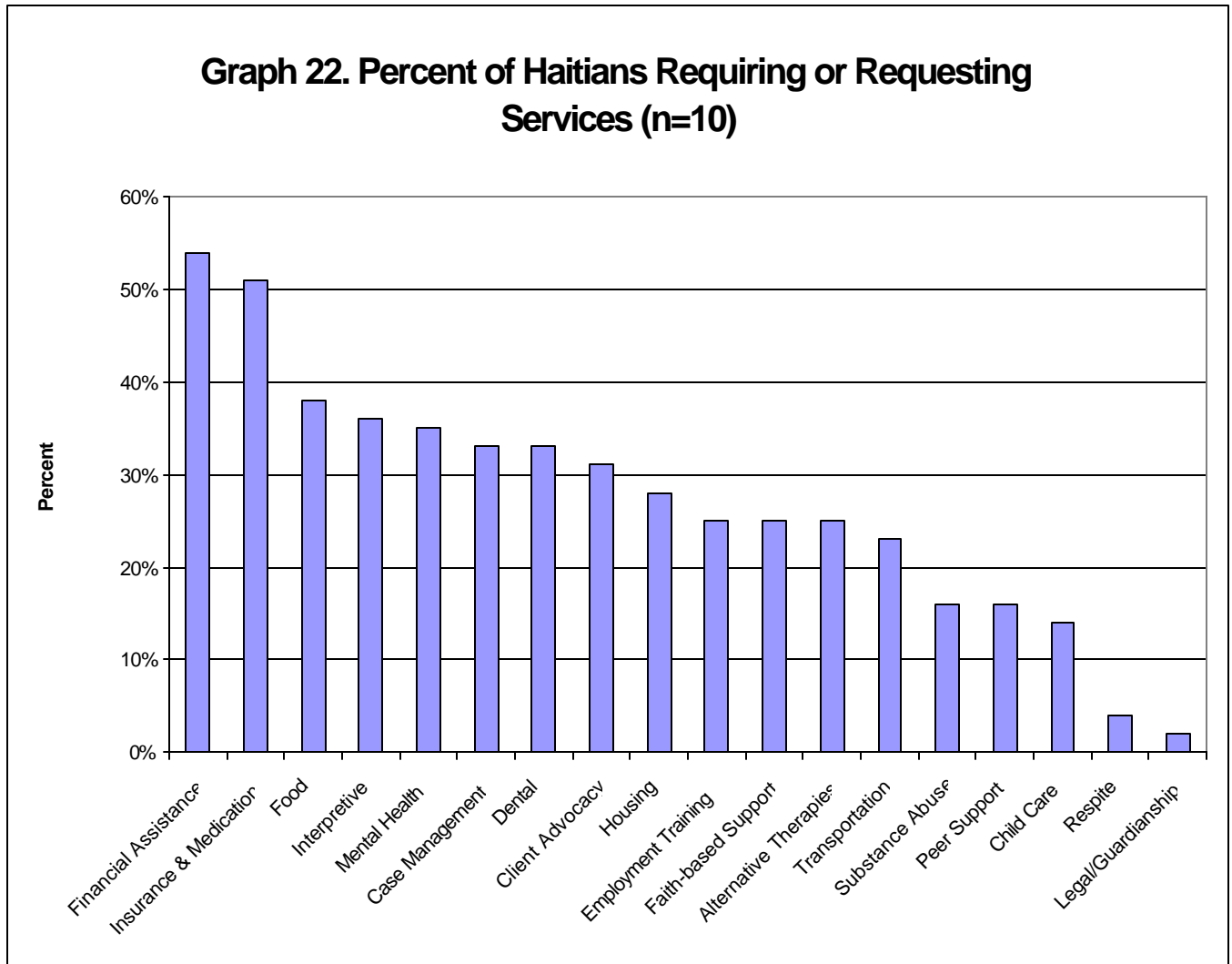
Finally, The SHUP study found that respondents felt the best way to communicate information to the Haitian community was through the following mediums:

- 44% Radio;
- 31% Telephone;
- 29% Cable Community TV;
- 25% Word of Mouth;
- 24% Pamphlet;
- 19% Educational Workshops; and
- 11% Home Visits.

## HIV Prevention & Education Among Haitians

### HIV Prevention Needs (RESULTS AS OF APRIL 27, 2000)

On average, providers who were surveyed noted that their Haitian clients either request or require the services highlighted in Graph 22 below. The highest requests/referrals are made for financial assistance, and medication and insurance assistance. The fewest number of requests/referrals are made for legal/guardianship and respite services.



In addition to the above needs, survey respondents noted that Haitians require providers who they feel they can trust, who listen to them and respect them, and who will provide confidential services. Furthermore, Haitians require literacy and English as a second language services, assistance in securing green cards and working permits, assistance in securing financial aid for college entrance, and assistance in securing RN/LPN license reciprocity.

## **Risk Characteristics**

According to HIV prevention providers who were surveyed, the primary characteristics that place Haitians at risk of acquiring HIV include the following (in no particular order):

- Low perception of susceptibility to HIV;
- Belief in alternative etiologies for HIV/AIDS;
- Lack of infection/transmission knowledge;
- Lack of information about HIV and AIDS care;
- Lack of education/information about HIV prevention;
- Gender-power dynamics;
- Negative attitude toward condom use;
- The value of fertility and associated attitudes toward condom use;
- Fear of rejection among women who insist partner uses a condom;
- Sexually active teenagers/sharing partners;
- Poverty;
- Illiteracy;
- Crowded housing;
- Unsafe sex;
- Multiple partners (lifetime);
- Adult males having multiple wives;
- Prostitution/sexual favors;
- Acculturation;
- Religious beliefs, including voodoo; and
- Lack of knowledge on substance abuse issues.

Providers mentioned that exploitation and women's general lack of power further increase a Haitian woman's risk of acquiring HIV. Also, poverty may be more of an inhibiting factor for Haitian women than for Haitian men. These factors may prevent Haitian women from asking their partners to use condoms, and may make women living with HIV more fearful and reluctant to inform their partners of their status.

## **Barriers to Accessing and Providing Care**

According to the HIV prevention providers surveyed, the most commonly reported barriers to accessing HIV prevention services include:

- Community and religious beliefs;
- Fear of rejection by family and loss of family support and;
- Communication skills to share family problems with spouses, children, and others;
- Gender issues/male dominance/patriarch;
- Fear of rejection and/or humiliation by community;
- Domestic violence;
- Lack of trust in health care system;
- Belief in supernatural powers and their role in health status;
- Belief in alternative health remedies and treatment;
- Immigration-related issues/undocumented status/fear of becoming public charge and losing ability to acquire green card if HIV positive/difficulty to travel back and forth to Haiti if HIV positive and thus isolation from family and friends;
- Limited knowledge about HIV/AIDS and denial of risk;
- Provider insensitivity/culturally inappropriate prevention services; and
- Limited knowledge regarding what services are available and how to access them.

According to the recent Haitian Health Institute needs assessment, the most commonly reported barriers to providing HIV prevention services include:

- Limited staff and money to conduct outreach;
- Outdated information;
- Language barriers;
- Difficulty in accessing groups of Haitians in order to conduct outreach;
- Schools and churches where groups of Haitians can commonly be found may not provide effective locations to conduct HIV outreach due to conflicting beliefs regarding pre-marital sex, sex education and the use of condoms;
- Outreach does not effectively cover Brockton, Everett, Waltham, and Malden, all with growing Haitian populations;
- Increased one-on-one outreach needed but more resource intensive;
- Difficulty in extending outreach to less educated community members; and
- Increasing knowledge does not always translate into changing risky behaviors.

Overall, HIV prevention providers felt that relationships must be developed between families and providers that foster respect. Providers must be open to beliefs other than their own and exhibit more patience. More education is needed to help Haitians living with HIV disclose to their immediate families. And assistance to affected family members is crucial in both caring for the positive family member, as well as destigmatizing HIV in the community and thus fostering prevention activities.

## **Specific Mental Health & Substance Abuse Considerations**

### **Mental Health Needs**

Providers noted the following mental health/psychological needs of Haitians that are crucial to address either prior to or concurrently with HIV prevention interventions:

- Free counseling service;
- Education and awareness of the importance of mental health and counseling services;
- Demystification of the belief that only crazy people need mental health services;
- Development of coping skills;
- Self-esteem building;
- Combating isolation;
- Increased support network for mentally ill Haitians;
- Decreased financial hardship;
- Increasing mental health resources that are culturally competent and take seriously cultural approaches to health and healing;
- Culturally competent counseling;
- Increased availability of linguistically and culturally competent services; and
- Increased trust of the mental healthcare system/explaining and assuring confidentiality.

For children and adolescents, poor self-esteem and personality disorders were noted as particularly large risk factors for high-risk behavior.

### **Substance Abuse Treatment Needs**

Providers noted the following substance abuse treatment needs among Haitians that are crucial in addressing either prior to or concurrently with HIV prevention interventions:

- Culturally competent programs;
- Demystification of substance users and more education on the risks associated with all drugs (e.g., cocaine, alcohol, injecting drugs, etc.); and
- Research on factors that sustain drug abusing habits.

## **HIV Prevention Interventions**

Current HIV prevention interventions targeting Haitians in Massachusetts include the following:

### **One-On-One Interventions**

- HIV antibody testing;
- Individual education and counseling;
- Skills building & risk reduction;
- Outreach;
- Home-based presentations;
- Materials distribution/training (e.g., condoms, bleach kits, needle exchange, etc.)
- Technical assistance to Haitian providers;
- Financial assistance to conduct education; and
- Financial resources to do primary and secondary interventions.

### **Group Interventions**

- Health education & skills building;
- Small group discussions and counseling;
- Peer counseling and peer education;
- Role modeling and mentoring;
- Education to CBOs and agencies that serve Haitians; and
- HIV prevention to college students and teens via guest speaker presentations/lectures and as part of health/medical class curriculum.

### **Community Interventions**

- Drop-in centers;
- School-based interventions;
- Faith-based interventions;
- Community building/mobilization through media and radio;
- Collaboration with Haitian area-providers;
- Allocation of funding for services to the Haitian community; and
- Conferences & trainings.

Potentially effective interventions that are NOT currently in use for the Haitian community in Massachusetts include:

- Individual street outreach;
- Bar outreach;
- Public sex environment outreach;
- Harm reduction & behavior change street outreach; and
- Group and community social marketing of HIV prevention.

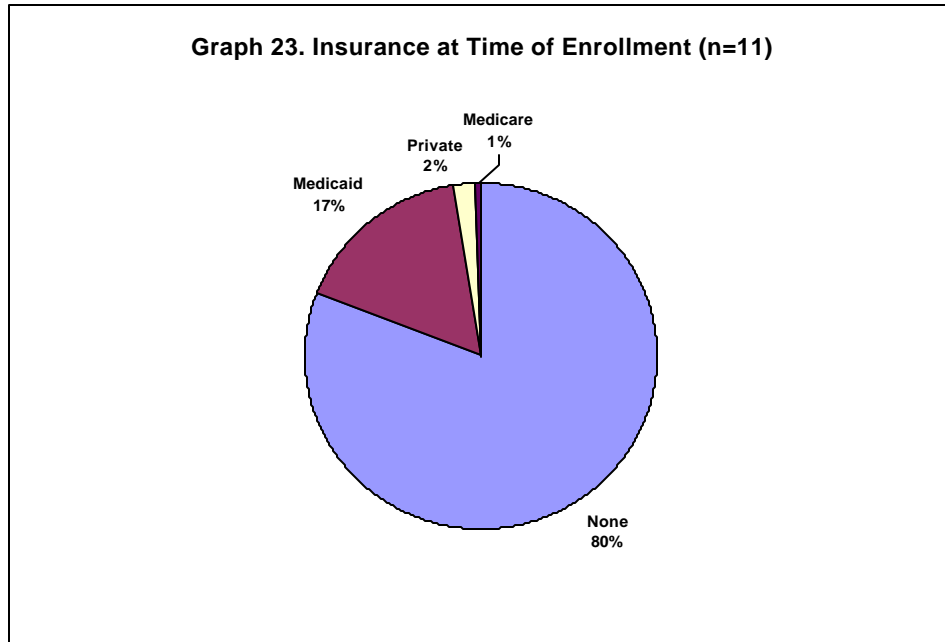
Providers generally felt that a combination of group and one-on-one interventions are most effective in preventing HIV infection among Haitians. However, according to the Haitian Health Institute study, the role of Haitian media and radio stations in HIV prevention is important and effective. The South Shore Haitian United for Progress study also found that 44% of Haitians interviewed felt that radio was the most effective means of disseminating information and 29% felt cable community television was most effective. There are 20 Haitian radio programs and one Haitian radio station. HHI/TDC suggested that the popularity and importance of Haitian radio programs in HIV prevention stems from the fact that many Haitians cannot read or write in English or Creole.

The HHI/TDC recommended that communication between Haitian radio and media and Haitian service agencies be improved. Media and agencies should work together to develop and disseminate clear, accurate and uniform HIV prevention messages in the community. The media must then be updated regularly regarding agency resources and referrals.

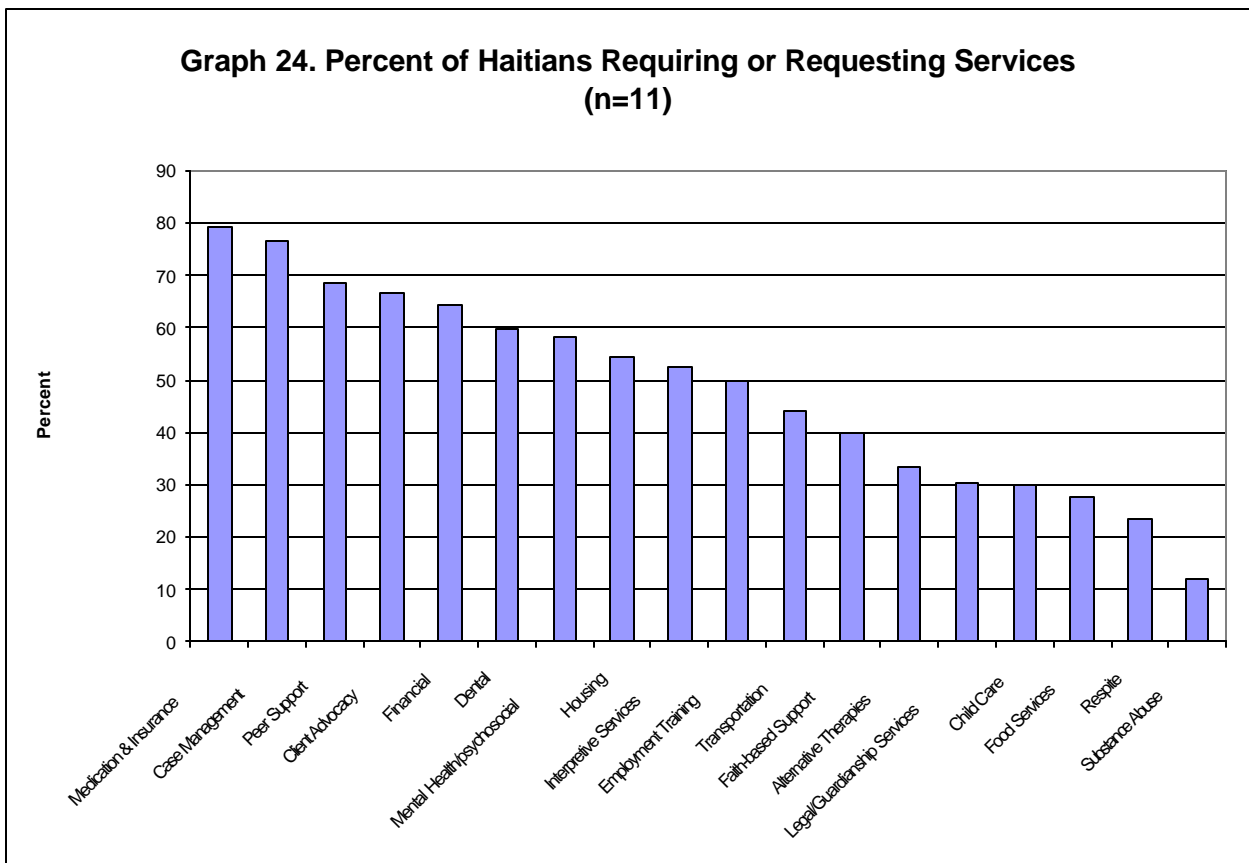
# HIV Care

## HIV Care Needs and Barriers (AS OF APRIL 27, 2000)

The following graph shows the type of insurance Haitians have at time of enrollment into HIV care. An overwhelming 80% do not have insurance.



Graph 24 illustrates services that Haitians requested from or were referred to by providers.



According to the HIV care providers surveyed, in addition to the above service needs, Haitians also require:

- Financial counseling;
- Social workers;
- Support groups;
- Providers who respect rights to confidentiality, information and options;
- Culturally-appropriate and sensitive services;
- Linguistically-appropriate services;
- Increase access to services;
- Immigration status-specific services;
- Education to address concerns, fears, & stigmas about HIV/AIDS; and
- Increased family and community support (e.g., childcare, transportation services, housing).

According to interviewed key informants, pediatric needs are underestimated in the state epidemiological data since the AIDS case definition is not always accurate or appropriate for children.

Providers also listed the following barriers among Haitians to accessing HIV care and services:

- Lack of information on health care system (e.g., who can help, where are they and how to access them, the relation of the INS to the health care system);
- Stigmatization, fear of retribution, rejection, isolation from family/friends;
- Confidentiality and disclosure;
- Shame and Guilt (guilt is reportedly a particular problem among HIV-positive parents with positive adolescents and children who face a difficult time in informing their child of their status);
- Gender relations;
- Depression;
- Political and personal trauma;
- Exploitation and oppression making it difficult for Haitians to trust providers;
- Lack of privacy—shared housing;
- Religion, language, culture and literacy level;
- Cultural beliefs about diseases and ways to treat them (e.g., homeopathic alternatives) and beliefs in alternative routes of HIV transmission;
- Belief in supernatural power—out of the control of humans;
- Care unavailable in Creole;
- Lack of follow-up support;
- HMOs referring Haitian patients out because they don't want to care for them;
- Insufficient numbers of Haitian providers;
- Insensitive providers;
- Undocumented immigration status or fear of being listed as a public charge/lack of health insurance; and
- If testing positive prior to securing a green card, it will not be issued. No green card means it is very difficult to go to school or get a good job.

## **Specific Mental Health & Substance Abuse Considerations**

According to providers, there are no mental health or substance abuse services that specifically target Haitians.

### **Mental Health Needs**

Specific mental health/psychological needs include culturally and linguistically appropriate status assessment and services that address stress, depression, anxiety, trauma and adjustment problems in adults. There are also needs for on-site mental health clinicians who speak Creole, and assistance with access, finances and medications. For children and adolescents with HIV, the list of mental health conditions for which services are needed was much greater, and includes:

- Depression;
- Anxiety;
- Adjustment problems;
- Behavioral problems;
- Acting-out/aggressive behaviors;
- Anger/frustration;
- Separation problems;
- Attention problems; and
- Somatic concerns.

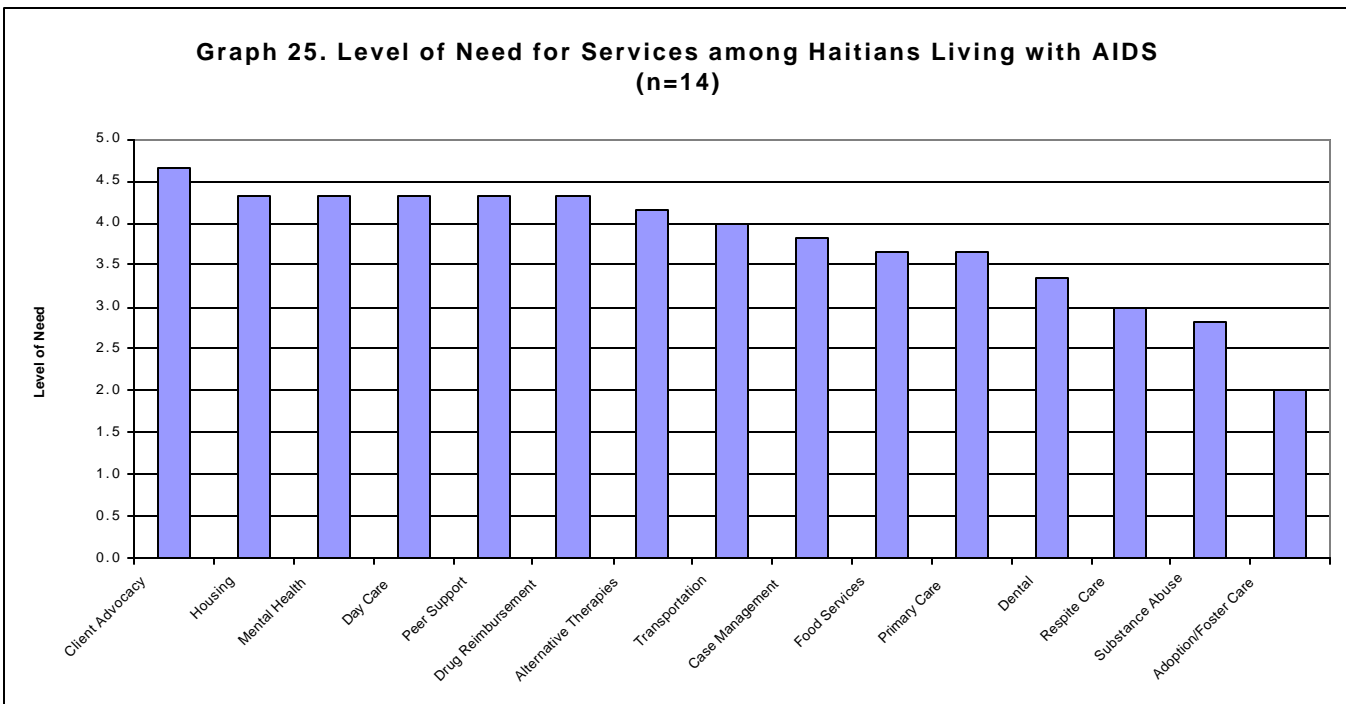
### **Substance Abuse Needs**

Providers stated that a general denial regarding substance use and abuse exists (both individually and on the community level) and needs to be addressed. Specifically, providers noted that there are not enough Creole-speaking providers offering addiction treatment. Services needed by the Haitian community include detox, halfway houses for education and skills training as well as shelter, and culturally and linguistically appropriate residential treatment.

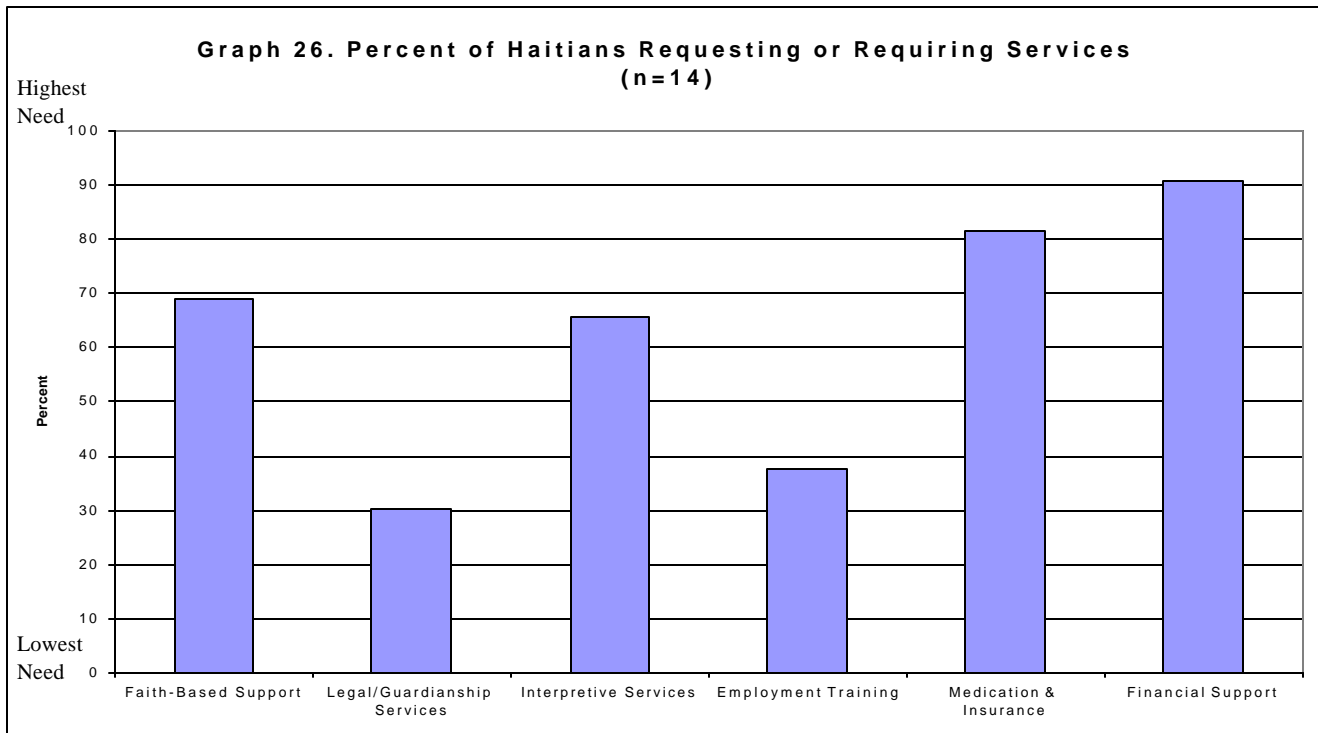
Suggested ways of encouraging access to care included integrating care into one site, increasing confidentiality and trust in providers, increasing community support of services and the availability of quality affordable services, assuring respect for the recipients' language and culture, increasing financial support, and assuring accessible location of services. In addition, providers should increase their cultural competency by increasing the number of Creole-speaking staff, developing written materials in Creole, training staff and increasing funding for culturally sensitive clinical services and research programs.

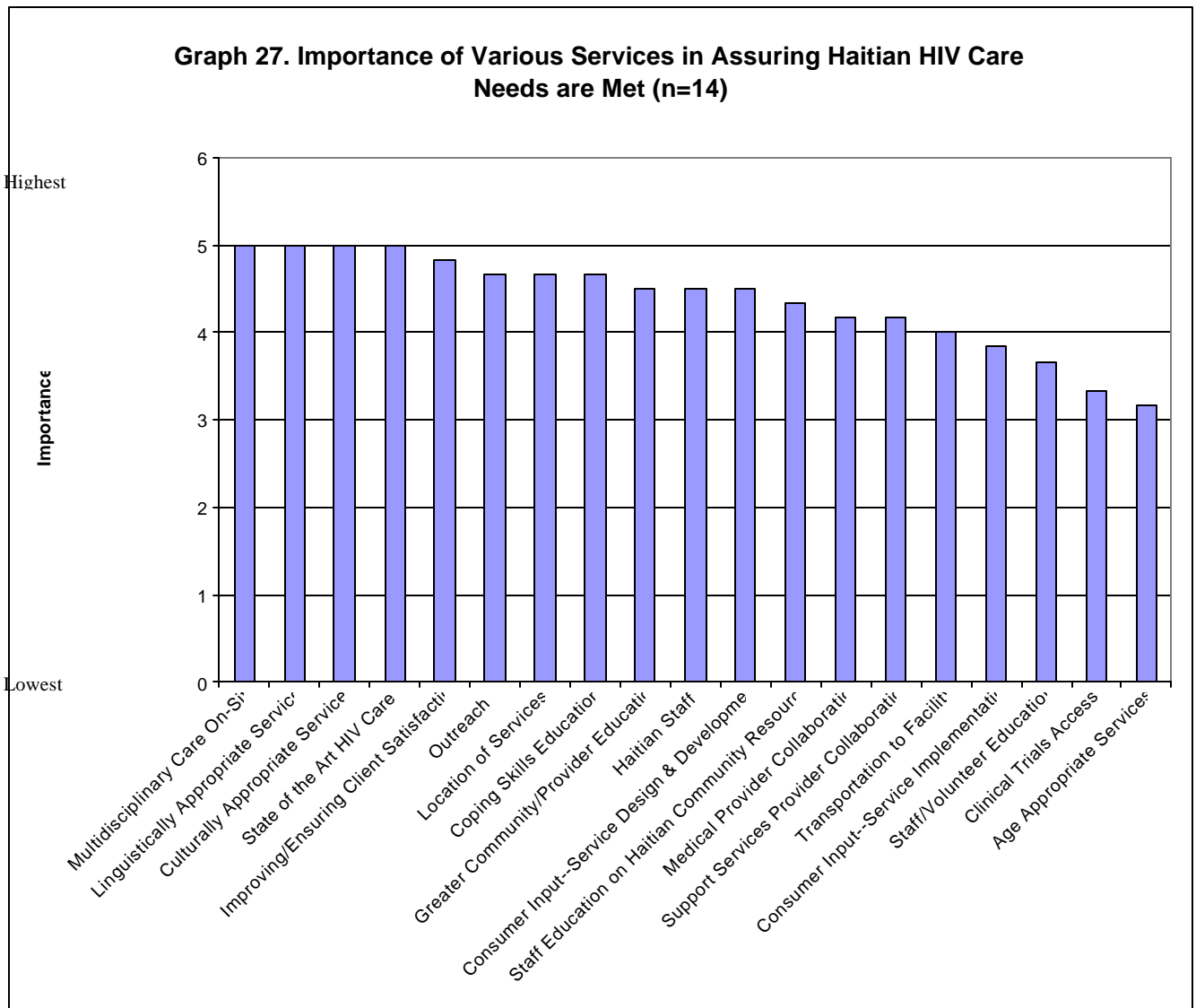
**HIV Care Provider Interview Results (AS OF APRIL 27, 2000)**

Graph 25 illustrates the level of need for services among Haitians living with AIDS according to interviewed HIV providers.



Interviewed providers noted that their Haitian clients either request or require the services listed in Graph 26. The highest requests/referrals are for financial assistance, and medication and insurance.





Interviewed providers ranked the importance of various services in assuring that the HIV care needs of Haitians are met. Graph 27 illustrates that providers feel multidisciplinary on-site care, culturally and linguistically appropriate services, and state of the art HIV care are the most important. Age appropriate services are least crucial according to providers.

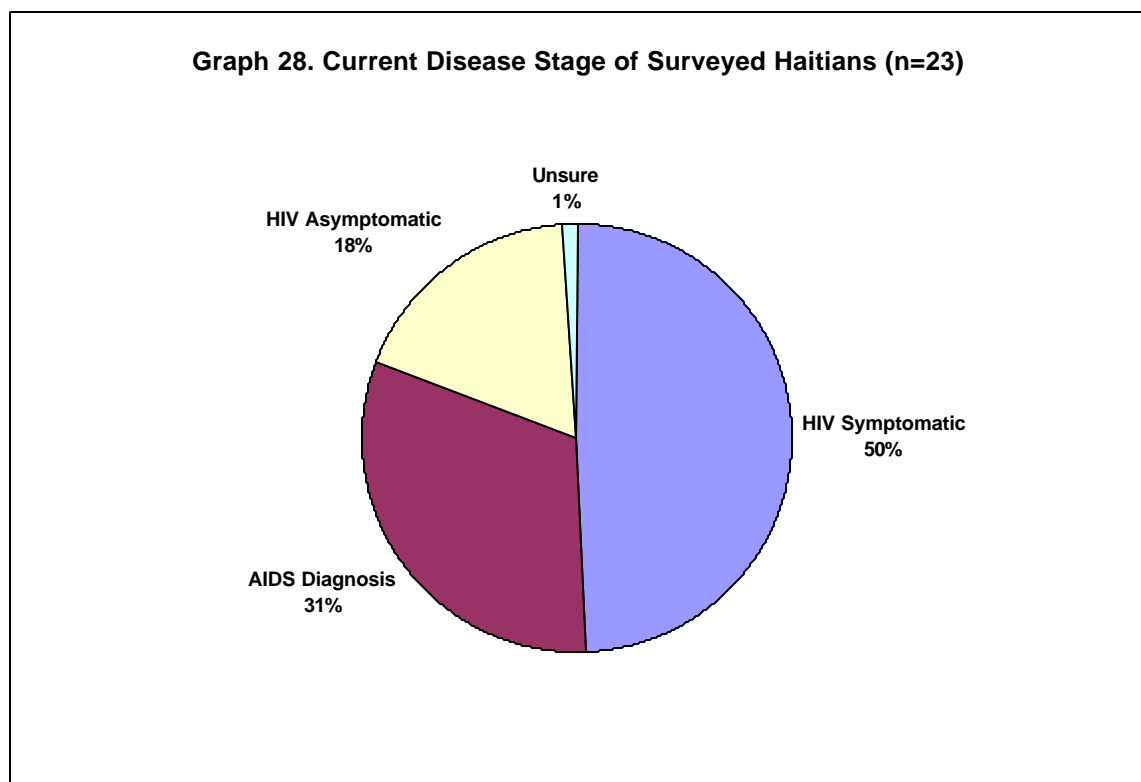
## **Voices of Experience 2000 Results**

Voices of Experience is a study that included a peer survey of persons living with HIV/AIDS in the Ryan White Title I Boston Eligible Metropolitan Area (EMA) in 1996-1997, and a follow-up survey of the same cohort of individuals in 2000. The surveys studied consumers' experiences in accessing and using Ryan White and other HIV/AIDS services. Voices of Experience (VOE) was conducted by Suffolk University through Ryan White CARE Act Title I funding.

Suffolk University interviewed 23 Haitian consumers living with HIV in 1996-1997 and again in 1999-2000. All surveyed consumers were currently in care (i.e., receiving services through the formal health care system). Regionally, 86% were from Boston, 9% from south of Boston and 4% from west of Boston. The mean age was 39 years, and 68% were women. The mean month and year of testing HIV positive was in June 1994 and the mean time between testing positive and accessing care was 8 ½ months. The majority, 94% still receive care from the agency in which they first sought care. On average, Haitian consumers have accessed services at 2 to 3 different agencies. They learned about these agencies through their doctor/health care provider (61%), case manager (39%), family member/friend (22%), support group (16%), and through their own research (11%).

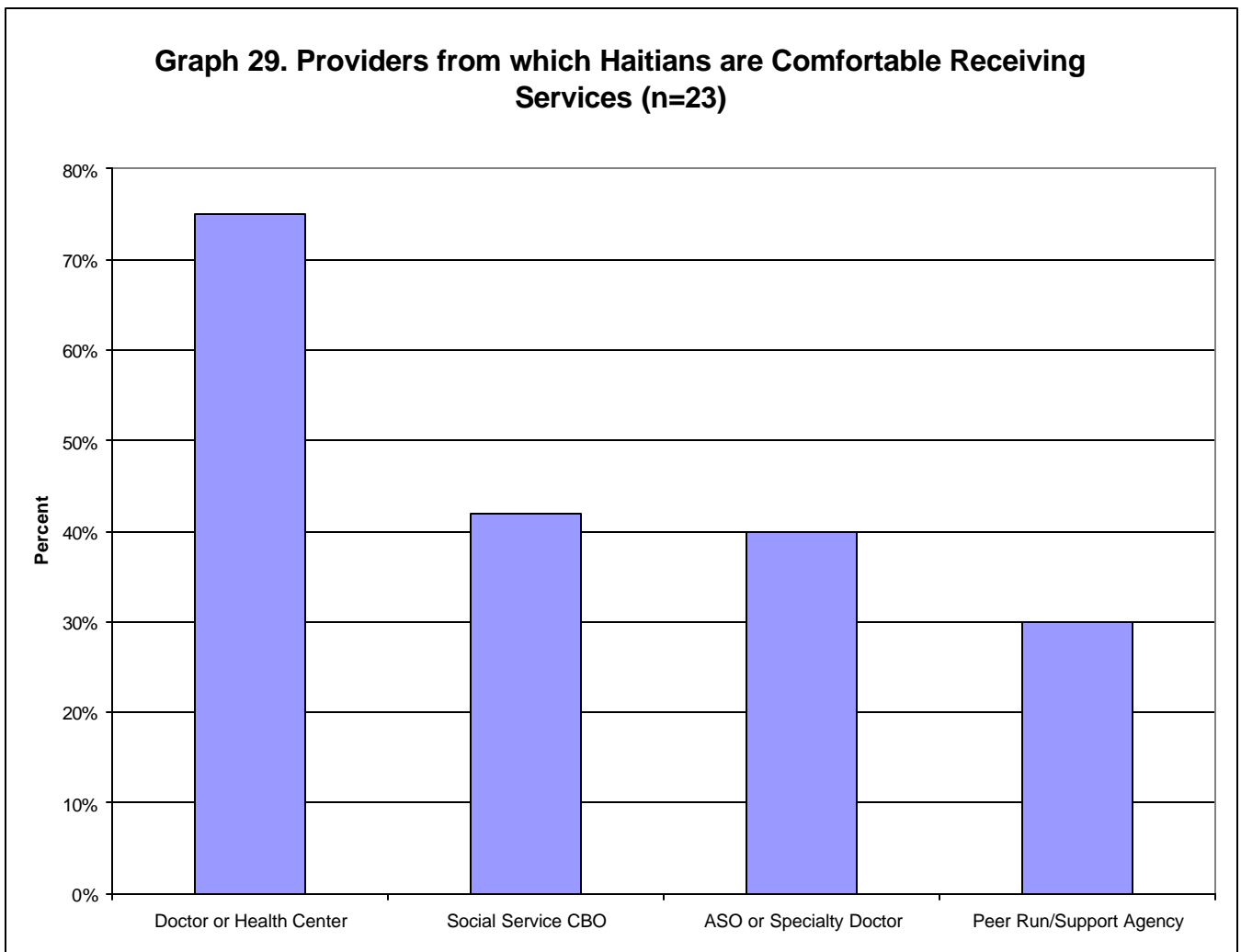
The majority (83%) of surveyed Haitian consumers currently had a primary care doctor. Of those, 89% felt that their primary HIV/AIDS provider was very knowledgeable and 11% felt their primary HIV/AIDS provider was somewhat knowledgeable.

Sixty-one percent of Haitians surveyed said they paid for their health care through Medicaid, 17% through Medicare and 22% reported not paying for health care.



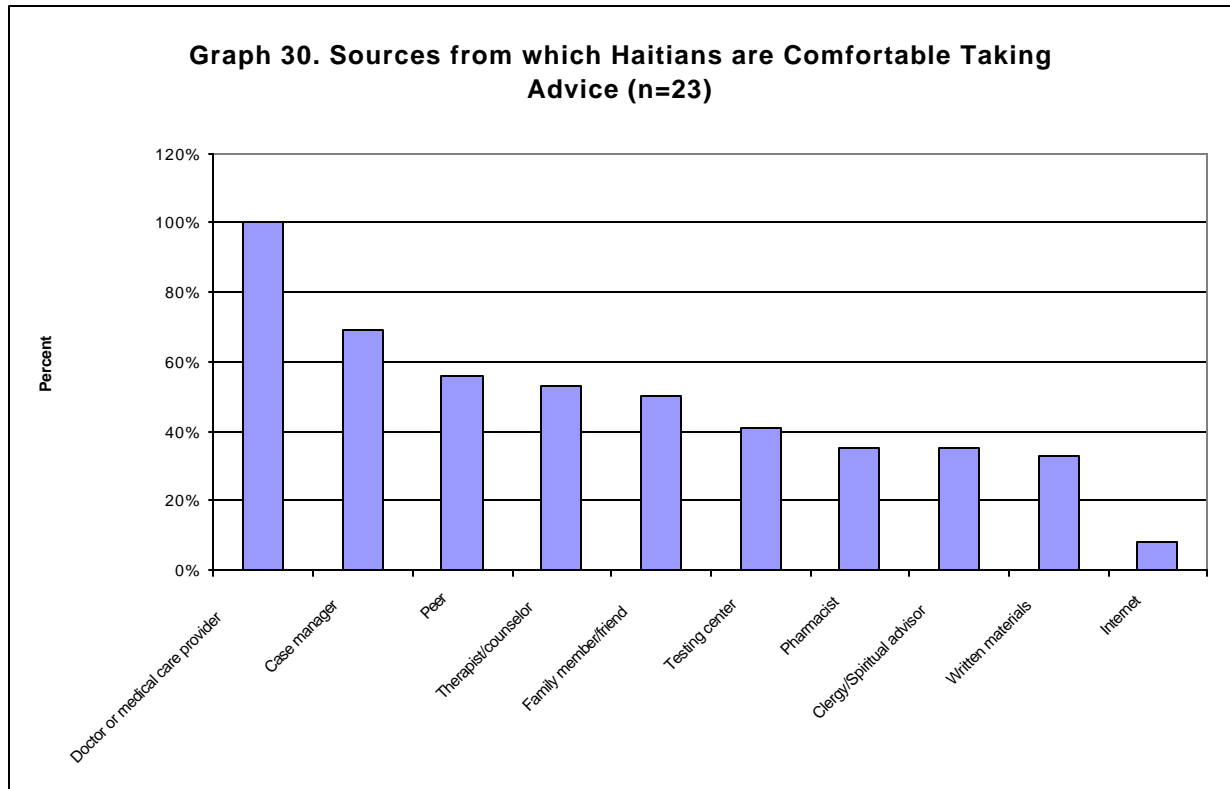
Ninety-four percent of Haitians surveyed are currently or have been in the past year on protease inhibitors. Thirty-three percent feel they are able to do all the things they used to, 17% say they are able to do some of the things they used to, 17% say they are able to do very few of the things they used to, and 33% say it varies a lot, sometimes they can and sometimes they cannot. Of the 23 Haitian consumers interviewed in Voices of Experience 2000, 44% reported having engaged in unsafe sex practices in the past two years.

According to Voices of Experience 2000, 75% of Haitians were most comfortable receiving Services from their doctor or health care provider, with smaller proportion comfortable receiving services through community based organizations (CBOs), AIDS service organizations (ASOs) or specialty doctors, and peer support agencies. (See Graph 29).



Regarding the availability of HIV/AIDS services, 41% of Haitians surveyed state that they were not sure if they know all the services that are available to them; 35% state that they know that other services exist but that they have trouble getting access to and information about them. Regarding other services such as SSI, transportation, housing and nutrition, 41% of Haitians surveyed said they are fully informed and can access the services when they need them, 24% said they are not sure if they know all that is available to them, 24% said they know that other services exist but that they have a hard time accessing them or obtaining information about them, and 12% said that they have all the information they need, though they still cannot access services at times.

The following graph shows the sources from which Haitians were comfortable taking advice about HIV/AIDS:



The Voices of Experience study found that HIV services are most commonly not accessed by Haitians living with HIV because of:

- 56% Mistrust of doctors or agencies;
- 38% Difficulty accessing service providers/providers were not helpful;
- 35% Fear of disclosure;
- 35% Not having a doctor, case manager or health provider;
- 32% Embarrassment from family/friends;
- 32% Complicated voice mail delays;
- 31% Agency language or cultural barriers;
- 29% Family or community cultural barriers;
- 27% Not knowing where to go for services;
- 22% Providers not open evenings/weekends/holidays;
- 18% Not feeling sick and managing on their own;
- 13% Lack of money or insurance to pay for services/medications;
- 9% Having other more important issues;
- 4% Lack of services in their area; and
- 0% Transportation.

HIV services are most commonly not accessed by other people known by the Haitians interviewed owing to:

- 58% Mistrust of doctors or agencies;
- 41% Agency language or cultural barriers;
- 41% Complicated voice mail delays;
- 35% Family or community cultural barriers;
- 29% Difficulty accessing service providers/providers were not helpful;
- 29% Not having a doctor, case manager or health provider;
- 29% Providers not open evenings/weekends/holidays;
- 24% Not knowing where to go for services;
- 24% Embarrassment from family/friends;
- 24% Fear of disclosure;
- 18% Not feeling sick and managing on their own;
- 12% Lack of services in their area;
- 12% Lack of money or insurance to pay for services/medications;
- 6% I have other more important issues; and
- 6% Transportation.

The Voices of Experience study asked about adherence, medication and drug protocols and found that doctors and medical staff were most likely to be consulted regarding drug protocols and the internet was the least likely. (See Table 1).

**Table 1.**  
**Percent Haitian consumers Consulted Provider Regarding Medical & Drug Protocols**

(n=23)	Frequently	Occasionally	Rarely	Never
Case Manager	41%	29%	29%	0%
Doctors or medical persons	72%	28%	0%	0%
Family/Friends/Partners	56%	22%	6%	17%
Internet	7%	0%	7%	86%
Magazines/other literature	17%	33%	16%	33%
Peers	56%	28%	11%	6%
Support Groups	50%	17%	11%	22%

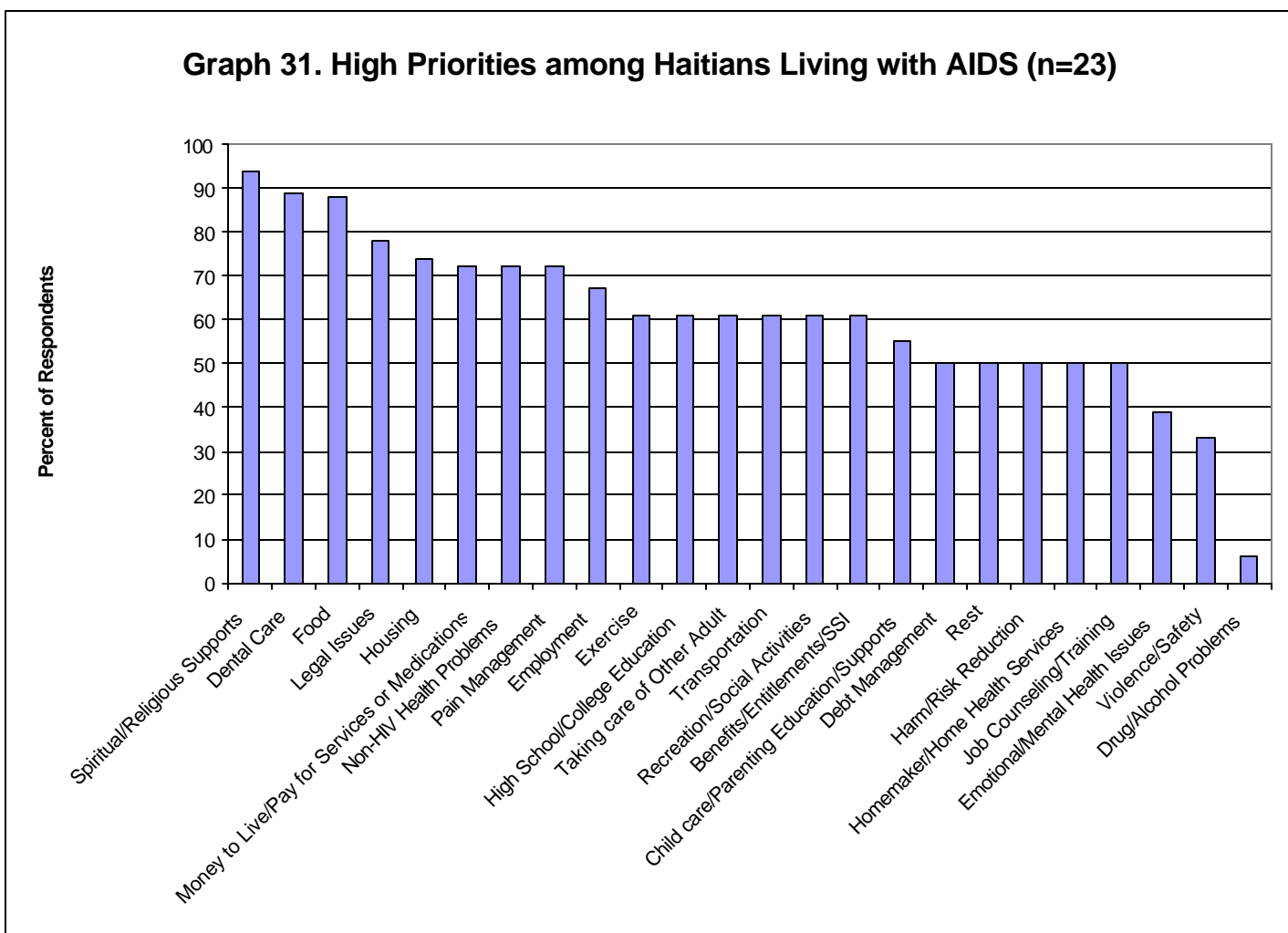
Of those surveyed, 83% regularly take their medications, 11% do it some of the time and 6% do not regularly take their medications. Of those who do not follow their HIV regimen regularly, the reason for not doing so were as follows:

- 100% Forgot;
- 100% Bad experience with drugs;
- 50% Regimens too hard or complicated to follow or keep; and
- 33% Drug intolerance or side effects.

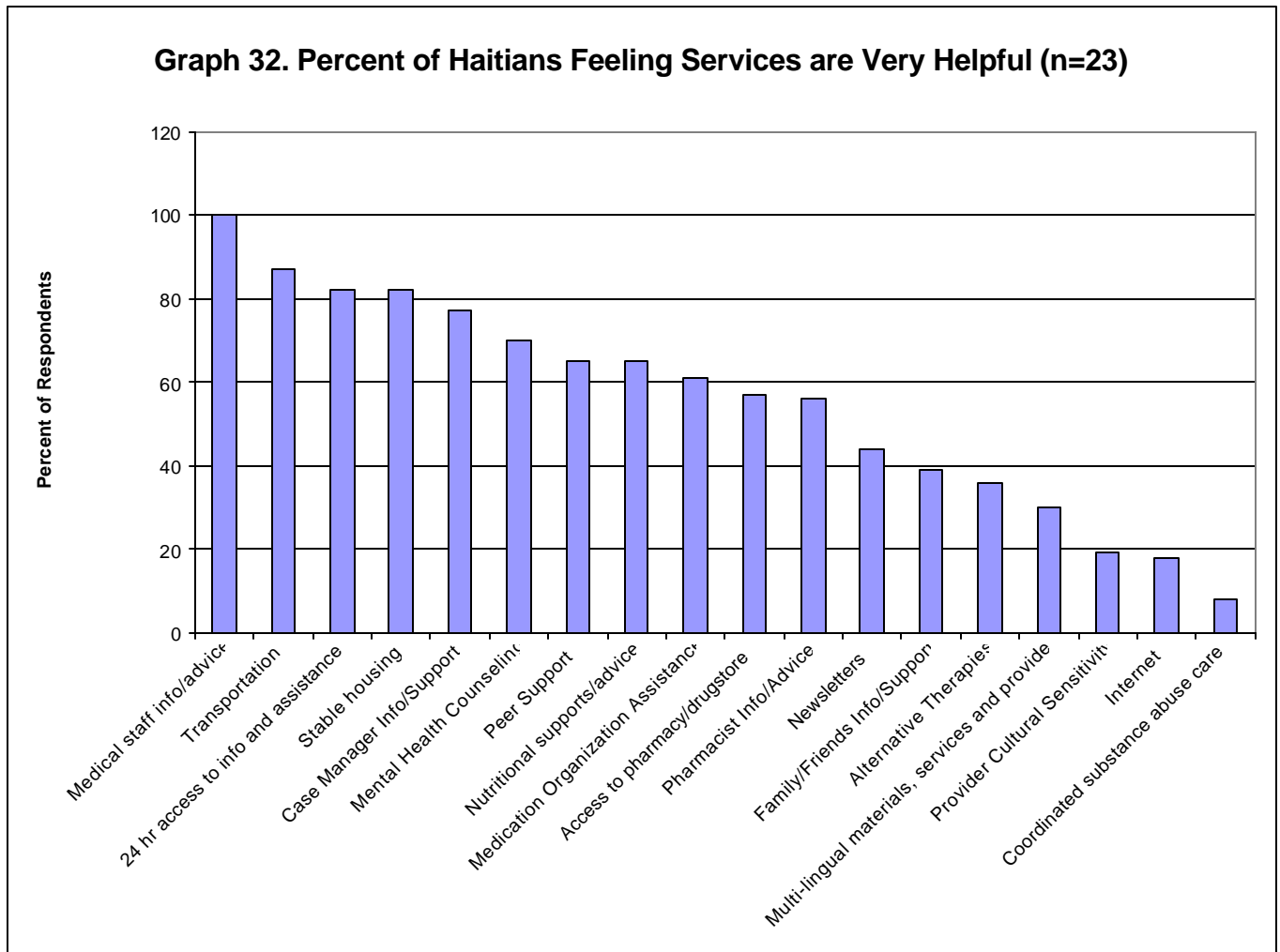
Overall, 22% of Haitian consumers said they experience side effects from their medications, 78% said they do not experience side effects. Of those that experience side effects, 100% said that they have a big impact on their daily life. Fourteen percent reported that side effects prevent them from doing things they like/need to do all of the time, 7% said some of the time and 79% said that side effects never prevent them from doing things they like/need to do.

Haitian consumers reported that they get side effect management information from their doctor or other health care provider 94% of the time, peers 47%, publications 47%, case manager 35%, family/friend 12%, internet 12%, spiritual advisor 6% and holistic therapies 6% of the time.

The Voices of Experience study also asked Haitian consumers to list the top priorities among Haitians living with AIDS in Massachusetts. Graph 31 illustrates the variety of services prioritized by Haitian consumers in Massachusetts.



Finally, the Voices of Experience study asked Haitian consumers surveyed which HIV/AIDS-related services were most helpful. Graph 32 illustrates that 100% of respondents felt information and advice from medical staff was the most helpful service, whereas only 8% felt substance abuse services were very helpful to them.



## Recommendations

The following recommendations are intended for both providers and funders of HIV prevention and care to Haitians in Massachusetts.

It appears that there is generally a good knowledge in the Haitian community of how HIV is transmitted and how to prevent it. There is not, however, an accurate sense of risk within the community. Despite disproportionately high rates of AIDS diagnoses among Haitians, many Haitians feel that HIV/AIDS are not priorities for them or for the Haitian community. This may be due to a lack of information on the actual prevalence of HIV within the Massachusetts Haitian community and/or due to competing priorities such as requiring basic housing, food, financial assistance and employment.

### Overall Recommendations

The overall recommendations are as follows:

- Develop, improve and increase recommendations that address overall social, emotional and physical health and wellbeing rather than just HIV.
- Distribute a variety of information including, but not limited to HIV prevention and care information throughout the Haitian community via schools, churches, hospitals and clinics, television, radio and pamphlets in order to reach all segments of the at-risk Haitian community;
- Increase the availability of culturally appropriate and competent providers who understand class and gender issues, Haiti's history of oppression and exploitation, and the acculturation process into United States' society including potentially different cultural and religious belief systems (including voodoo);
- Increase communication and collaboration among providers that serve Haitians including HIV/AIDS prevention and care providers, other health and social service providers, educators, clergy, the media and consumers;
- Provide clear accurate HIV prevention messages through the Haitian media, including information on where to find out more information, and explaining and assuring confidentiality;
- Involve Haitians in the design and implementation of programs;
- Work with local, state and federal government agencies to better understand the Haitian community
- Advocate for HIV and AIDS reporting by racial *and* ethnic group;
- Bring Haitians into care using more intensive, culturally appropriate outreach, specifically targeted at recent immigrants and at long term residents;

- Provide community-wide education regarding the US health care system, benefits and entitlements, insurance, and how accessing each these services may affect immigration status;
- Destigmatize the health care system, specifically, mental health, substance abuse and preventive and primary care services (such as counseling and testing);
- Improve incentives and encouragement for Haitians to return to obtain results of their HIV test (74% Haitians that tested positive in 1998 returned versus 84% of Whites who tested positive);
- Improve and increase comprehensiveness of case management services, assuring clients have one well-informed case manager rather than a different case manager for each service. (This also decreases duplication of services that is both costly and a disincentive for clients to remain in care).
- Educate fully the faith-based/spiritual leaders about HIV/AIDS related resources for Haitians and promote education through the churches;
- Improve outreach to the Haitian men who have sex with men, injecting drug users, and untested Haitians living with HIV; and
- Address basic, competing survival needs such as food, housing, immigration/legal, community safety, and employee training and counseling.
- Develop, improve and increase interventions aimed at couples, including discordant couples (e.g., 5 meetings with an overall health and wellness focus—one or two with men alone and women alone and the remaining ones with couples together).
- Since an estimated 93% of Haitians living with HIV have children living in their home, a suggested method of getting them into care is by getting their children into care.

## **Specific Gender & Age-Related Characteristics**

### **Females**

- Address cultural and gender based power and equity dynamics that affect a woman's ability to negotiate safer sex and her likelihood of accessing and remaining in care;
- Address feelings of guilt and shame among mothers living with HIV with children infected through perinatal transmission;
- Research further homelessness, substance use and abuse and prostitution among Haitian females; and
- Conduct HIV prevention outreach via radio and at places where Haitian women congregate without men (e.g., salon, clothing store, market, etc.).
- Increase rates of pregnant Haitian women living with HIV that take prophylaxes.

### **Males**

- Address stigmas of men who have sex with men (MSM). Haitian MSM may be especially reluctant to identify openly as gay or bisexual, which poses a barrier to identifying and meeting the needs of this population;
- Research into HIV transmission via MSM and IDU; and
- Research homelessness, substance use and abuse and solicitation of prostitution among Haitian males.
- Provide health and wellbeing education, including HIV prevention and care, in ESL classes (thus education on health topics as well as practice in English).
- Conduct HIV prevention outreach via radio and at places where Haitian men congregate without women (e.g., barbershop, etc.).

### **Adolescents & Young Adults (17-24 years old)**

- Conduct outreach targeting 19-24 year olds not in school.
- Develop, improve and increase interventions targeting youth via radio.

### **Pediatric, School and Family Issues**

- Research the needs of infected/affected children (disclosure to parents/care of child, resources available).

## Bibliography

### Community Planning & Evaluation Bibliography

Holtgrave, DR. (1995) "HIV Prevention: Community Planning Groups." *Journal of the American Medical Association*. October 25. 274(16):1270.

Holtgrave, DR, et al. (1996) "Methodological Issues in Evaluating HIV Prevention Community Planning." *Centers for Disease Control Public Health Report*. Supplement 1:108-14.

Holtgrave, DR, Valdiserri, RO. (1996) "Year One of HIV Prevention Community Planning: A National Perspective on Accomplishments, Challenges, and Future Directions." *Journal of Public Health Management Practice*. Summer. 2(3):1-9.

Jemmott, LS, Brown, EJ, Dodds, S. (1998) "Building Community Partnerships to Improve HIV Prevention Efforts: Implications for Nurses." *Journal of the Association of Nurses in AIDS Care*. May-June. 9(3):29-40.

Kreuter, MW, Lezin, NA, Young, LA. (2000) "Evaluating Community-Based Collaborative Mechanisms: Implications for Practitioners." *Health Promotion Practice*. January. 1(1):49-63.

Rogers, SJ, et al. (1996) "Evaluating HIV Prevention Community Planning." *Evaluate Health Professions*. December. 19(4):465-87.

Valdiserri, RO, Aultman, TV, Curran, JW. (1995) "Community Planning: A National Strategy to Improve HIV Prevention Programs." *Journal of Community Health*. April. 20(2):87-100.

Wells, Barbara and Richard Conviser. (1988) "Evaluating the Elimination of Disparities: Issues and Approaches to Health Status and Outcomes Assessment." *Journal of Health Education*. September/October. 29(5):S16-21.

### General Epidemiology, Knowledge, Attitudes, Beliefs and Practices Bibliography

----- (2000) "Voices of Experience 2000." Research project funded through the Ryan White CARE Act, Title I and conducted by Suffolk University, Boston, MA.

----- (1998) "Assessing the Needs of Haitians in the Brockton Area." Research funded and conducted through South Shore Haitians United for Progress (SHUP).

----- (1999) "Assessment Report: HIV/AIDS Needs of Greater Boston's Haitian Community." Prepared for the Haitian Health Institute by the Technical Development Corporation, Boston, MA.

----- (1987) "Risk Factors for AIDS among Haitians Residing in the United States. Evidence of Heterosexual Transmission. The Collaborative Study Group of AIDS in Haitian-Americans." *Journal of the American Medical Association*. February 6. (257(5):635-9.

Adrien, A, et al. (1994) "AIDS-related Knowledge and Practices in Migrant Populations: the Case of Montrealers of Haitian Origin." *Rev Epidemiol Sante Publique*. 42(1):50-7.

Adrien, A, et al. (1990) "Knowledge, Attitudes, Beliefs and Practices Related to AIDS among Montreal Residents of Haitian Origin." *Canadian Journal of Public Health*. March-April. 81(2):129-34.

Braun, MM, et al. (1990) "Acquired Immunodeficiency Syndrome and Extrapulmonary Tuberculosis in the United States." *Archive of Internal Medicine*. September. 150(9):1913-6.

Cohen, SI. (1988) "Voodoo Death, the Stress Response, and AIDS." *Advanced Biochemical Psychopharmacology*. 44:95-109.

Farmer, P. (1997) "Social Scientists and the New Tuberculosis." *Social Science and Medicine*. February. 44(3):347-58.

Halperin, Daniel. (2000) "Dry Sex: Increasing the Risk of HIV Infection?" *Global AIDS Link*. March-April, Global Health Council. Volume 60.

Marcias-Chapula, CA. (2000) "AIDS in Haiti: A Bibliometric Analysis." *Bulletin of the Medical Library Association*. January. 88(1):55-61.

Martin, MA, Rissmiller, P, Beal, JA. (1995) "Health-illness Beliefs and Practices of Haitians with HIV Disease Living in Boston." *Journal of the Association of Nurses in AIDS Care*. November-December. 6(6):45-53.

Pape, JW, et al. (1990) "Prevalence of HIV Infection and High-Risk Activities in Haiti." *Journal of Acquired Immune Deficiency Syndrome*. 3(10):995-1001.

Pierre, JA, Fournier, AM. (1999) "Human Immunodeficiency Virus Infection in Haiti." *Journal of the National Medical Association*. March. 91(3):165-70.

Purohit, A, et al. (1994) "Pre- and Post-test Counseling to a Diverse Group of HIV Infected Population." *International Conference on AIDS*. August 7-12. 10(2):394.

Stone, VE, Mauch, MY, Steger, KA. (1998) "Provider Attitudes Regarding Participation of Women and Persons of Color in AIDS Clinical Trials." *Journal of Acquired Immune Deficiency Syndrome Human Retrovirology*. November 1. 19(3):245-53.

### **Women Bibliography**

Behets, FM, et al. (1995) "Control of Sexually Transmitted Diseases in Haiti: Results and Implications of a Baseline Study among Pregnant Women Living in Cite Soleil Shantytowns." *Journal of Infectious Disease*. September. 172(3):764-71.

Craven, DE, et al. (1992) "Public Health Impact of HIV Infection in Parturients and Clients in the Outpatient Women's Clinics at Boston City Hospital (BCH)." *International Conference on AIDS*. July 19-24. 8(2):C356.

Lauby, Jennifer L, et al. (2000) "A Community-level HIV Prevention Intervention for Inner-city Women: Results of the Women and Infants Demonstration Projects." *American Journal of Public Health*. February. 90(2):216-22.

Malow, RM, et al. (2000) "Relationships of Psychological Factors to HIV Risk among Haitian Women." *AIDS Education and Prevention*. 12(1):79-92.

Wingerd, JL, Page, JB. (1997) "HIV Testing among Haitian Women: Lessons in the Recognition of Risk." *Health, Education and Behavior*. December. 24(6):736-45.

**Adolescent & Young Adults Bibliography**

Chittick, JB. (1996) "Cross-cultural Experiences in Promoting Effective Prevention among Youth in Developing Countries and as New Immigrants." *International Conference on AIDS*. July 7-12. 11(1):246.

Hingson, RW, et al. (1991) "Knowledge about HIV and Behavioral Risks of Foreign-born Boston Public School Students." *American Journal of Public Health*. December. 81(12):1638-41.

Strunin, L. (1999) "Alcohol Use and Sexual Behavior among 'Black' Adolescents." *Substance Use and Misuse*. October. 34(12):1665-87.

Strunin, L. (1999) "Drinking Perceptions and Drinking Behaviors among Urban Black Adolescents." *Journal of Adolescent Health*. October. 25(4):264-75.

**Pediatric, School and Family Issues Bibliography**

Gay, CL, et al. (1995) "The Effects of HIV on Cognitive and Motor Development in Children Born to HIV-seropositive Women with No Reported Drug Use: Birth to 24 Months." *Pediatrics*. December. 96(6):1078-82.

Hasley, NA, et al. (1990) "Transmission of HIV-1 Infections from Mothers to Infants in Haiti. Impact on Childhood Mortality and malnutrition. The CDS/JHU AIDS Project Team." *Journal of the American Medical Association*. October 24-31. 264(16):2088-92.

Jean, SS, et al. (1999) "The Natural History of Human Immunodeficiency Virus 1 Infection in Haitian Infants." *Pediatric Infectious Disease Journal*. January. 18(1):58-63.

Jean, SS, et al. (1997) "Clinical Manifestations of Human Immunodeficiency Virus Infection in Haitian Children." *Pediatric Infectious Disease Journal*. June. 16(6):600-6.