



USAID
FROM THE AMERICAN PEOPLE



UTILIZATION OF HIV AND RELATED SERVICES FROM THE PRIVATE HEALTH SECTOR: MULTICOUNTRY ANALYSIS

November 2009

This publication was produced for review by the United States Agency for International Development. It was prepared by Wenjuan Wang, Sara Sulzbach, and Susna De for the Private Sector Partnerships-One project.



PSP-One

PRIVATE SECTOR PARTNERSHIPS FOR BETTER HEALTH

Global Research Report No. 6

Global Research Report Series: PSP-One's Global Research Series promotes a greater understanding of the role of the private sector in improving reproductive health and family planning in developing countries. The papers are disseminated to a broad reproductive health audience, including donor agency representatives, commercial and private sector partners, policy makers, technical advisors, and researchers. PSP-One research staff and external reviewers review all papers in the series.

Recommended Citation: Wang, Wenjuan, Sara Sulzbach, and Susna De. November 2009. *Utilization of HIV and Related Services from the Private Health Sector: Multicountry Analysis*. Bethesda, MD: Private Sector Partnerships-One project, Abt Associates Inc.

Download: Download copies of PSP-One publications at: www.psp-one.com

Contract/Project No.: GPO-I-00-04-00007-00

Submitted to: Shyami De Silva, CTO
Bureau of Global Health/Office of HIV/AIDS
United States Agency for International Development



Abt Associates Inc. ■ 4550 Montgomery Ave, Suite 800 North ■
Bethesda, Maryland 20814 ■ Tel: 301/913-0500 ■ Fax: 301/913-9061
■ www.psp-one.com ■ www.abtassoc.com

In collaboration with:

Banyan Global ■ Dillon Allman and Partners ■ Family Health
International ■ Forum One Communications ■ IntraHealth International
■ O'Hanlon Health Consulting ■ Population Services International
■ Tulane University's School of Public Health and Tropical Medicine

UTILIZATION OF HIV AND RELATED SERVICES FROM THE PRIVATE HEALTH SECTOR: MULTICOUNTRY ANALYSIS

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government.

CONTENTS

Acronyms	v
Acknowledgments	vii
Executive Summary	1
1. Introduction	5
2. Methodology	9
3. Results	13
3.1 General and Private Utilization of HIV Testing and STI Care	13
3.1.1 General Utilization of HIV Testing	14
3.1.2 General Utilization of STI Care	16
3.1.3 Utilization of STI Care in the Private Sector	16
3.2 The Role of Household Wealth Status in Seeking Care from the Private Sector.....	18
3.2.1 Use of the Private Sector for HIV Testing by Different Wealth Groups.....	18
3.2.2 Utilization of the Private Sector for STI Care by Different Wealth Groups.....	21
4. Discussion	23
References	25

LIST OF TABLES

Table 1: Summary of DHSs and AISs in the Analysis	10
Table 2: Selected Health and Demography Data by Country	11
Table 3: Percent of Population Ever Undergoing an HIV Test.....	13
Table 4: Percentage of Population Undergoing Most Recent HIV Test, by Source.....	14
Table 5: Percentage of Population Seeking Care of STIs in Last 12 Months.....	16
Table 6: Percentage of Population Seeking Care of Sexually Transmitted Infections, by Source.....	17

LIST OF FIGURES

Figure 1: Percentage of Family Planning Users Obtaining Their Method from the Private Sector, Sub-Saharan Africa.....	6
Figure 2: Proportion of Caregivers from the Poorest Quintile Seeking Curative Care from the Private Sector for Sick Child, Sub-Saharan Africa.....	6
Figure 3: Percentage of Men and Women Undergoing Most Recent HIV Test in the Private Sector	15
Figure 4: Utilization of Private Sector-Provided HIV Testing by Household Wealth Status (Women).....	19
Figure 5: Utilization of Private Sector-Provided HIV Testing by Household Wealth Status (Men).....	20
Figure 6: Utilization of Private Sector-Provided STI Care by Household Wealth Status (Women).....	21
Figure 7: Utilization of Private Sector-Provided STI Care by Household Wealth Status (Men).....	22

ACRONYMS

AIDS	Acquired Immunodeficiency Virus
AIS	AIDS Indicator Survey
ART	Antiretroviral Therapy
CT	Counseling and Testing
DHS	Demographic and Health Surveys
FP	Family Planning
GFATM	Global Fund to Fight AIDS, TB, and Malaria
HIV	Human Immunodeficiency Virus
LAC	Latin America and Caribbean
MAP	World Bank Multi-country AIDS Program
NGO	Nongovernmental Organization
PEPFAR	President's Emergency Program for AIDS Relief
STI	Sexually Transmitted Infection
VCT	Voluntary Counseling and Testing

ACKNOWLEDGMENTS

The authors Wenjuan Wang, Sara Sulzbach and Susna De of the United States Agency for International Development supported PSP-*One* project wish to thank Shyami De Silva for her careful review, insightful comments and guidance in producing this publication. They also wish to thank Kathryn Banke and Oyunbileg Magvanjav for their valuable input and technical review.

EXECUTIVE SUMMARY

INTRODUCTION

The continued spread of the human immunodeficiency virus (HIV) is burdening the health care system in many developing countries. Recent global commitment has led to unprecedented levels of funding for the HIV response, of which a substantial proportion is directed toward governments and nongovernmental organizations (NGOs). Despite its potential to be an effective partner in national AIDS responses, the private sector has been largely overlooked.

In light of the global goal of “universal access to comprehensive prevention programs, treatment, care and support by 2010”¹ and public sector capacity constraints, the increased participation of private providers may be beneficial in meeting the growing demand for HIV and related services.

Mounting evidence points to the expanding role of the private sector in providing health services such as family planning (FP) and child health services. Yet, little is known about the extent to which the private sector delivers HIV/AIDS services. To understand the role of the private health sector in this vital area and thus inform policy decisions, it is important to document the current utilization of private sector–provided HIV and related services and explore the profiles of the clients seeking such services.

METHODOLOGY

The private health sector is commonly defined as a mix of for-profit and not-for-profit private entities. With a dearth of knowledge about the private for-profit subsector, this study set out to learn more about the role of this subsector in delivering HIV and related health services.

The analysis began with an extensive scan of comparable, publicly available data that contained sufficient information on the utilization of private sector–provided HIV and related services. The analysis identified two data sources: Demographic and Health Surveys (DHS) and AIDS Indicators Surveys (AIS). Data from 12 countries in Africa, Asia, and Latin America were available to explore the utilization of HIV-related services provided by the private for-profit sector.

Based on the available data, the study analyzed two types of service utilization variables: HIV testing and sexually transmitted infections (STIs) care. For both services, we grouped the source of care into public, private for-profit, NGO, and other categories. We conducted data analysis by using STATA 10.0 Statistical Software and applied sampling weights to all the analyses, enabling us to generalize the results to the population from which the sample was drawn.

RESULTS

PRIVATE SECTOR UTILIZATION OF HIV AND STI SERVICES

In the 12 countries studied, among individuals receiving an HIV test, the large share of people underwent

¹ United Nations General Assembly, *Political Declaration on HIV/AIDS*. New York, United Nations, 2006.

HIV testing at a public facility; utilization of private services was generally low. In Africa, Ethiopian women and Chadian men accounted for the highest use of private services, with 24 percent undergoing HIV testing in the private sector. Two countries in the Latin American and Caribbean (LAC) region reported relatively higher utilization of the private sector for HIV testing than did other countries. For instance, Haiti reported that 45 percent of women and 42 percent of men turned to private providers for HIV testing. The choice of provider varied with gender. In most of the 12 countries, men were more likely than women to have HIV testing at private facilities.

Compared to HIV testing, the 12 countries relied more on the private sector for STI care. In Benin, Uganda, Haiti, and Guyana, private utilization was high and ranged from 41 percent in Benin to 53 percent in Haiti among women seeking STI care. In other countries, though, such as Tanzania, Zimbabwe, and Vietnam, the public sector delivered most STI care. Gender differences also factored into choice of provider for STI care. In all 12 countries except Haiti, men were more likely than women to seek STI care from the private sector.

We also examined the treatment-seeking patterns for both HIV and STI services within the same country to identify consistent patterns of low or high use of the private sector. In the LAC region, we found high use of the private sector for both services. In Africa, no clear pattern emerged.

THE ROLE OF HOUSEHOLD WEALTH STATUS IN SEEKING PRIVATE SECTOR HIV AND STI SERVICES

Given the lack of knowledge about the relationship between wealth and use of the private sector for HIV services, we examined the relationships between wealth status and care seeking in the private sector for both services. With regard to HIV testing, in the majority of countries, reliance on the private sector increased with household wealth. In all 12 countries, individuals living in the richest households accounted for the highest use of the private sector. In countries with high overall use of HIV testing services (e.g., Haiti), women and men reported high use of the private sector across wealth groups. In countries with low overall utilization of HIV testing (e.g., Rwanda), poorer individuals made limited use of the private sector.

As with HIV testing, women living in the top wealth quintile in all 12 countries reported the highest use of private services for STIs. In most of the countries, utilization of the private sector increased with wealth, although a substantial proportion of women from the poorest households sought STI care from the private sector in Benin, Uganda, Guyana, Haiti, and Vietnam. Evidence is lacking on the association between wealth status and men seeking STI care in the private sector, possibly because of small sample sizes.

DISCUSSION

The study provides a first step in determining the extent to which private health providers deliver HIV and AIDS-related services. The analysis indicated that the private health sector is active in HIV service delivery, although the level of participation varies by region and country. In LAC countries, the levels of private utilization are relatively high. In the case of Haiti, such utilization may reflect the deterioration of publicly provided services. Large variations in private utilization of HIV-related services were apparent in the African countries studied. Those variations may be linked to country-specific socioeconomic conditions, such as different levels of private sector development and external funding for HIV and AIDS.

For example, in Tanzania, there were indications that the influx of donor funds (10-fold increase in external funding for HIV between 2002 and 2005) allocated primarily to the public and NGO sectors is crowding out the private sector.

Our efforts to identify data sources relevant to private sector provision of HIV services revealed limited data availability. Advocacy efforts should be emphasized to encourage the inclusion and continuation of questions pertinent to the private sector in large population-based surveys.

Accordingly, this analysis is primarily descriptive and may well overlook important variables. The level of detail in the data does not allow for sophisticated analysis. While DHS and AIS provide relatively high-quality and comparable information, the data are self-reported and thus introduce potential bias. Moreover, the lack of currently available data restricts the ability to generalize the results; for example, data from only one country in Asia make it impossible to generalize the results of the analysis to the entire region.

As the global response to AIDS continues to evolve from an emergency response to a sustained effort, it is critical to explore options for efficiently engaging all sectors of the health system in maximizing the response. The private health sector is a relatively untapped resource that should not be ignored. Private providers should be viewed as a resource for increased access to essential HIV prevention, care, and treatment services through partnerships with governments and donors. Such partnerships may relieve current bottlenecks that result from insufficient infrastructure and a shortage of human resources in the public sector. Partnerships offer the potential to help countries reach the ambitious goal of universal access to HIV services.

I. INTRODUCTION

The number of people infected by the human immunodeficiency virus (HIV) has grown immeasurably over the past two decades. By the end of 2007, an estimated 33.2 million people worldwide were living with HIV, with 2.5 million people newly infected and 2.1 million deaths from acquired immune deficiency syndrome (AIDS) in that year alone.² The epidemic has generated tremendous demand for HIV-related health services, and the burden on the health care system will grow only larger as more HIV-positive individuals gain access to antiretroviral therapy (ART) and require regular health care to monitor progression of the disease.

In recent years, the global HIV response has expanded in terms of both the commitment to addressing the epidemic and the level of funding. Expenditures in support of the global AIDS response have reached an unprecedented level, reflected in major programmatic initiatives such as the President's Emergency Program for AIDS Relief (PEPFAR), the Global Fund to Fight AIDS, TB, and Malaria (GFATM), and the World Bank Multi-country AIDS Program (MAP). Donor funding has permitted the successful scaling up the response to HIV, saving an estimated 3 million lives through the provision of ART.³

The most significant share of resources earmarked for HIV in developing countries has targeted governments and non-governmental organizations (NGOs). Most investments have focused on building the public sector's capacity to provide HIV-related services. While these efforts have greatly increased access to and the quality of essential health services, they have largely overlooked the private health sector. Indeed, the private health sector is active in many African countries, the region hardest hit by the epidemic, and has the potential to be an effective partner in national AIDS responses. In fact, a 2004 study of Malawi, Mozambique, Swaziland, and South Africa found that a lack of human resources for health, rather than a lack of financial resources, was the main bottleneck to expanding access to ART.⁴ In light of public sector capacity constraints and the global goal of "universal access to comprehensive prevention programs, treatment, care and support by 2010,"⁵ the increased participation of private providers may help meet the growing demand for HIV-related services.

Evidence suggests that the private sector provides a significant portion of other health services such as family planning and child health services. For example, a study using Demographic and Health Survey (DHS) data from 19 sub-Saharan African countries found that up to 51 percent of family planning (FP) users (Gabon) obtained their contraceptive methods from a private sector source, with an average of 32 percent of FP users across the countries reporting a private sector source (Figure 1).⁶

² UNAIDS, 2008.

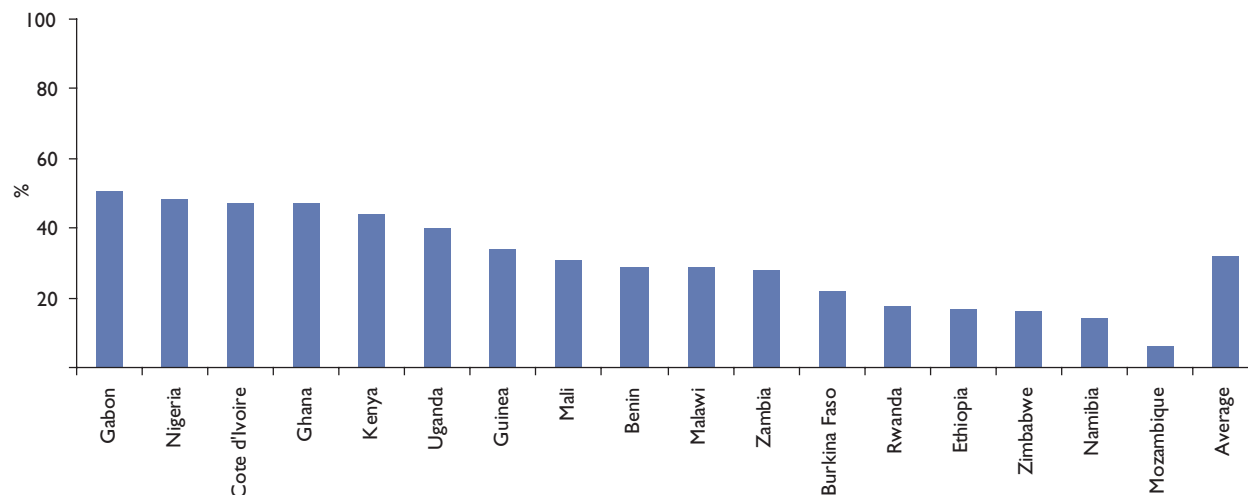
³ UNAIDS, 2008.

⁴ Kober and Van Damme, 2004.

⁵ United Nations General Assembly. *Political Declaration on HIV/AIDS*. New York, United Nations, 2006.

⁶ PSP-One. *State of the Private Health Sector Wall Chart*, 2005.

FIGURE 1: PERCENTAGE OF FAMILY PLANNING USERS OBTAINING THEIR METHOD FROM THE PRIVATE SECTOR, SUB-SAHARAN AFRICA



It is also worth noting that not only the wealthy seek health care from the private sector. Figure 2 shows that almost half of caregivers from the poorest households sought care from a private sector source when their child was sick.⁷

FIGURE 2: PROPORTION OF CAREGIVERS FROM THE POOREST QUINTILE SEEKING CURATIVE CARE FROM THE PRIVATE SECTOR FOR SICK CHILD, SUB-SAHARAN AFRICA



⁷SARA Project, 2004.

Despite the private sector's expanding role in the provision of other health services, little is known about the extent to which it delivers HIV/AIDS services. Not only is the private sector largely independent of government and donor financial support, but it also offers several advantages over other types of facilities. For example, its longer operation hours make it more accessible, its service quality is perceived as superior to that of the public sector, and it ensures privacy protection.⁸ Increasingly, many governments are recognizing the important role played by the private sector and are considering how to engage private providers to help achieve national public health goals.

To understand the role of the private sector in providing HIV/AIDS services and accordingly to inform policy decisions, it is important to document current private sector–provided utilization of HIV-related services and to describe the socioeconomic profile of clients seeking such services. We use publicly available and internationally comparable data to document the role of the private health sector in delivering HIV and related services and to examine the relationship between wealth status and preference for private providers.

We outline the process of identifying existing data, describe our analytic methods, and present the results. Finally, we discuss the implications of the findings in light of current constraints faced by many developing countries (e.g., public sector bottlenecks) and offer recommendations for further engaging the private health sector in addressing HIV/AIDS service delivery needs.

⁸ PSP-One Ethiopia report.

2. METHODOLOGY

The private health sector comprises both private for-profit and private not-for-profit entities. Earlier studies exploring the utilization of the private health sector largely combined both types of facilities (Brugha 2003). This study, however, focuses on the private for-profit subsector; little is known about the extent to which this subsector contributes to the AIDS response. Thus, references to the private sector may be interpreted as the private for-profit sector.

The analysis began with an extensive scan of comparable, publicly available data with information on utilization of private sector–provided HIV services. Eventually, we identified two sources of data on utilization of private HIV and related services: DHSs and AIDS Indicator Surveys (AIS). Other data sources do not capture the source of HIV services or do not distinguish between private for-profit and private not-for-profit facilities. The scan revealed a lack of data on private provision of HIV services. Even the two sources identified above contain a limited number of variables related to HIV services and only recently began asking source of care; for example, DHSs and AISs started asking for source of HIV testing in 2004 and 2005, respectively.

DHSs are nationally representative household surveys that cover about 80 countries and provide data for a wide range of indicators on population and health. Since the early 1990s, the surveys have added special modules on HIV/AIDS and other sexually transmitted infections (STIs). Questions address sexual knowledge, behavior, and care-seeking behaviors. AISs are also nationally representative and provide estimates of HIV prevalence as well as information on HIV/AIDS-related knowledge, attitudes, and behaviors. The surveys collect data for monitoring and evaluation of national HIV/AIDS programs. Five AISs had been conducted at the time of our analysis. In addition to the overall high quality of the DHSs and AISs, the surveys' sampling methodology and instruments are standardized, allowing comparisons of indicators across countries over time.

We examined recent DHS and AIS data from all countries (when available) to identify relevant variables that would permit analysis of the utilization of HIV-related services provided by the private for-profit sector. We included in the analysis 12 countries in Africa, Asia, and Latin America whose data sets contained the information essential for the analysis. Table 1 summarizes the characteristics of the DHSs and AISs in the 12 countries, including 9 from sub-Saharan Africa, 2 from Latin America and the Caribbean (LAC), and 1 from Asia. Data from an AIS conducted in Kenya in 2007 were not available in time for inclusion in the analysis.

Given sensitivities about HIV status, no DHS or AIS asked for information on the source of ART. Instead, based on the available data, the analysis focused on two types of service utilization variables: HIV testing and STI care. While several recent DHSs and AISs asked about source of HIV testing and STI care, many did not distinguish between private for-profit and not-for-profit providers, thereby limiting the number of countries in the analysis. With the exception of Tanzania, the 12 countries selected for the study all provided detailed data on source of HIV testing for men and women. Four countries--Ethiopia, Rwanda, Chad, and Guinea--did not include sufficient information on source of STI care and were excluded from the relevant analysis.

TABLE 1: SUMMARY OF DHSs AND AISs IN THE ANALYSIS

Country	Year	Survey	Respondents
Africa Region			
Benin	2006	DHS	All women, age 15–49; all men, age 15–64
Chad	2004	DHS	All women, age 15–59; all men, age 15–59
Cote d'Ivoire	2005	AIS	All women, age 15–49; all men, age 15–49
Ethiopia	2005	DHS	All women, age 15–49; all men, age 15–59
Guinea	2005	DHS	All women, age 15–49; all men, age 15–59
Rwanda	2005	DHS	All women, age 15–49; all men, age 15–59
Tanzania	2004	DHS	All women, age 15–49; all men, age 15–49
Uganda	2006	DHS	All women, age 15–49; all men, age 15–54
Zimbabwe	2005	DHS	All women, age 15–49; all men, age 15–54
LAC Region			
Guyana	2005	AIS	All women, age 15–49; all men, age 15–49
Haiti	2005	DHS	All women, age 15–49; all men, age 15–59
Asian Region			
Vietnam	2005	AIS	All women, age 15–49; all men, age 15–59

For HIV testing, the analysis centered on women and men who reported ever undergoing an HIV test. The survey provided a list of options from which respondents selected the source of their last HIV test. According to the country context, we categorized the sources as public, private for-profit, NGO, and other. In general, public providers included government hospitals, government health centers, public voluntary counseling and testing (VCT) centers, health posts, FP clinics, and other government providers; private providers included private hospitals, private clinics, private health centers, and private standalone VCT centers; and the NGO category included NGO health centers, clinics, and NGO standalone VCT centers. When necessary, we consulted experts familiar with specific country health systems to ensure the accurate classification of source of HIV test.

Table 2 presents country-specific demographic data relevant to the analysis, providing a picture of the broader context for the 12 countries.

TABLE 2: SELECTED HEALTH AND DEMOGRAPHIC DATA BY COUNTRY

Country	Population (thousands) ¹	GDP per Capita (constant 2000 US\$) ¹	HIV Prevalence Rate (percent) ²	Physicians per 10,000 Population ¹	Private Expenditure as Percentage of Total Health Expenditure ³
Africa Region					
Benin	9,025	328	1.2	0.4	46.7
Chad	10,764	260	3.5	0.4	64.4
Cote d'Ivoire	19,268	554	3.9	--	77.0
Ethiopia	79,087	174	2.1	0.3	39.6
Guinea	9,380	404	1.6	1.1	87.7
Rwanda	9,736	271	2.8	0.5	36.3
Tanzania	40,432	354	6.2	0.2	40.8
Uganda	30,916	324	5.4	0.8	73.1
Zimbabwe	13,403	428	15.3	1.6	47.4
LAC Region					
Guyana	739	1,062	2.5	4.8	15.5
Haiti	9,612	411	2.2	2.5	32.4
Asian Region					
Vietnam	85,155	617	0.5	5.6	67.6

¹ World Development Indicators, 2009.

² UNAIDS, 2008.

³ World Health Organization, Statistical Information System, 2008.

The sample for the analysis of STI care included respondents seeking STI care among those reporting STI or STI symptoms in the last 12 months. In the DHS and AIS, respondents who had ever had sex were asked whether they had an STI in the past 12 months or whether they experienced STI symptoms, such as a genital sore or ulcer or genital discharges. Women and men who reported an STI or STI symptoms in the past 12 months were asked if they sought advice and/or treatment. Care seekers were then asked the sources of care, with several source responses allowed. We created four categories of sources: public, private, NGO, and other. The classification criteria aligned with those for source of HIV testing within the same country; typically, respondents reported a greater variety of sources for STI care than for HIV testing. For example, respondents commonly pointed to private pharmacies as a source of STI care but not of HIV testing. Respondents also reported traditional healers, relatives, and friends as sources of STI care. For consistency, we classified traditional healers as “private” and families, friends, and relatives as “other.”

We conducted data analysis by using STATA 10.0 Statistical Software and performed separate analyses for women and men. We applied sampling weights in all the analyses to enable us to generalize to the population from which the sample was drawn. We used the pre-existing weight variable in the DHS or AIS data sets.

3. RESULTS

This section summarizes the overall service utilization findings. It also reports on women's and men's reliance on the private sector for HIV testing and STI care. In addition, we examined private sector utilization for both services for potential patterns by gender or wealth status.

3.1 GENERAL AND PRIVATE UTILIZATION OF HIV TESTING AND STI CARE

Knowledge of one's HIV status is critical to both prevention and treatment. With counseling and testing (CT), individuals who test positive for HIV can learn about care and treatment options, and individuals who test negative for HIV can learn how to continue protecting themselves against the virus. Although global efforts have made HIV counseling and testing increasingly available, uptake of these services remains low.

Table 3 describes the overall utilization of HIV testing in the 12 study countries. Despite the higher prevalence of HIV in versus other regions, the rate of HIV testing in Africa is low to moderate. Rwanda, Uganda, and Zimbabwe did not account for higher utilization of testing despite the countries' high HIV prevalence. On the other hand, fewer than 14 percent of people underwent HIV testing in Tanzania, a country whose HIV prevalence reached 6.5 percent in 2006. Ethiopia and Chad are noteworthy for the lowest rates of HIV testing and relative low HIV prevalence (1.4 and 4.8 percent, respectively). Gender differences are evident but not consistent across the region.

TABLE 3: PERCENT OF POPULATION EVER UNDERGOING AN HIV TEST

Country	Women (percent)	Men (percent)
Africa Region		
Benin	17.7	13.1
Chad	2.1	3.9
Cote D'Ivoire	12.6	9.6
Ethiopia	4.1	5.1
Guinea	2.5	6.6
Kenya	21.4	26.4
Rwanda	24.0	20.9
Tanzania	13.7	13.6
Uganda	29.4	23.1
Zimbabwe	25.8	18.6
LAC Region		
Guyana	28.7	21.1
Haiti	18.3	10.5
Asia Region		
Vietnam	5.0	5.8

Compared with Africa, the two LAC countries reported generally higher levels of HIV testing despite relatively lower HIV prevalence, with testing somewhat higher among women than men.

Although Vietnam is the only country in the study classified as experiencing a concentrated epidemic (i.e., the virus is concentrated in high-risk populations), HIV is now expanding rapidly into the general population. Nevertheless, overall utilization of HIV testing remains low; only 5 percent of women and 5.8 percent of men reported that they ever underwent HIV testing.

3.1.1 GENERAL UTILIZATION OF HIV TESTING

For individuals who have undergone HIV testing, Table 4 presents the percentage of respondents receiving their last HIV test from a public, private, or NGO source. Table 4 omits the “other” category, which was applicable in only two countries where more than 5 percent of people reported an HIV test provided by “other.”

TABLE 4: PERCENTAGE OF POPULATION UNDERGOING MOST RECENT HIV TEST, BY SOURCE

Country	Women			Men		
	Public Sector	Private Sector	NGO Sector	Public Sector	Private Sector	NGO Sector
Africa Region						
Benin	82.0	14.9	0.5	87.3	11.0	0
Chad ¹	44.7	10.0	0	64.2	23.7	0
Cote d'Ivoire	88.0	8.5	0.4	79.9	13.6	0.7
Ethiopia	67.8	23.6	5.1	71.8	18.6	6.0
Guinea ²	53.0	14.6	0.0	71.1	20.2	0
Rwanda ³	55.2	7.9	1.7	82.4	14.3	3.3
Tanzania [*]	--	--	--	57.0	6.4	27.8
Uganda	71.5	17.2	7.0	63.6	17.9	16.2
Zimbabwe	69.6	11.2	16.7	39.3	12.7	38.8
LAC Region						
Guyana ⁴	39.4	18.2	12.2	50.8	29.9	13.7
Haiti	40.0	44.5	13.2	33.2	42.0	18.5
Asia Region						
Vietnam	94.0	6.0	0	92.9	6.7	0

* Data not available.

¹ In Chad, 39 percent of women ever testing did not report the source.

² In Guinea, 27 percent of women ever testing did not report the source.

³ In Rwanda, 35 percent of women ever testing did not report the source.

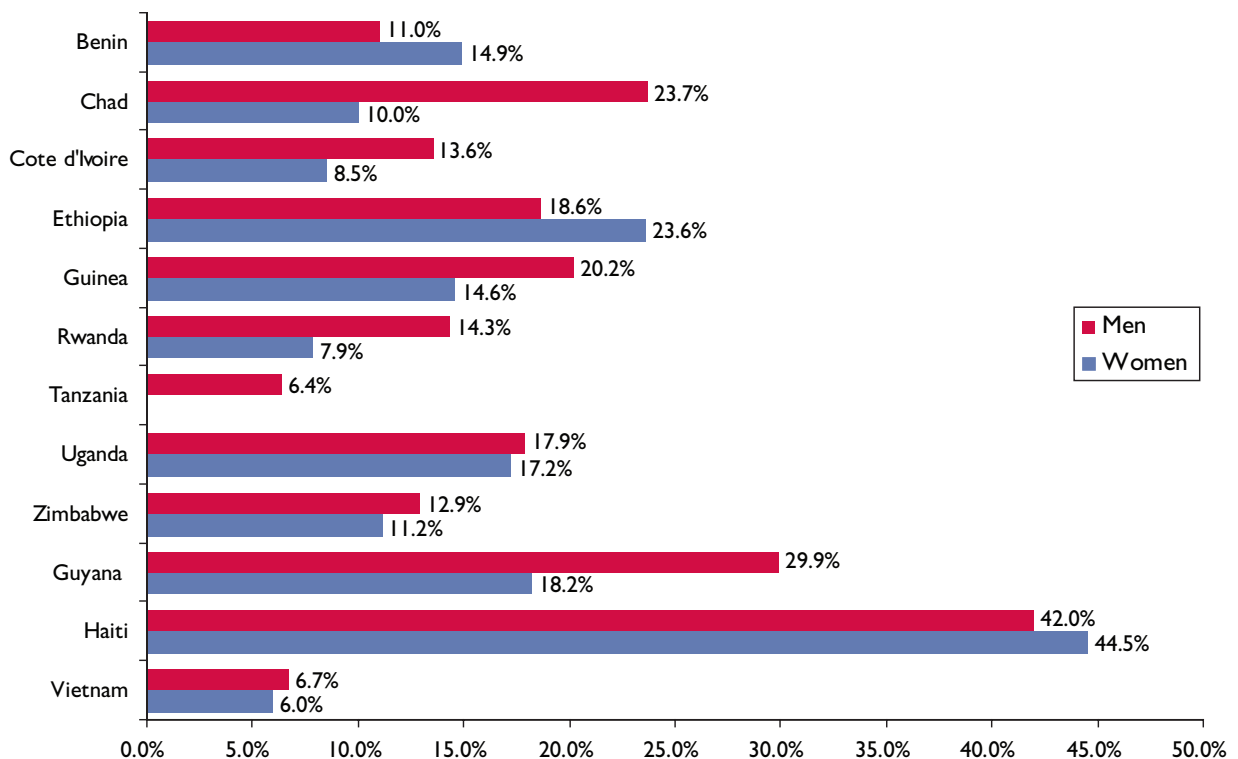
⁴ In Guyana, 18 percent of women did not report the source of testing.

In all countries except Haiti, the majority of people underwent HIV testing at a public facility, and use of private services was generally low. In the Africa region, the highest use of the private sector was reported among Ethiopian women and Chadian men, with 24 percent receiving an HIV test in a private facility. While overall utilization of HIV testing services was low in Ethiopia (Table 3), private service utilization was relatively high compared to other African countries.

In the LAC region, Haiti reported that 44.5 percent of women and 42.0 percent of men turned to private providers for HIV testing, which was the highest among all study countries. Guyana also reported a significant level of private use: 30 percent of men and 18.2 percent of women received an HIV test at a private facility. In Vietnam, public sector providers were the predominant source of HIV testing; only 6 percent of women and 6.7 percent of men underwent HIV testing in the private sector.

The choice of provider varied by gender. Figure 3 highlights differential reliance on the private sector by men and women. In all study countries except Benin, Ethiopia, and Haiti, men were more likely than women to patronize the private versus public sector for HIV testing. While the use of NGO services was low across the board, men were also more likely than women to undergo HIV testing by NGO providers. Frequently reported NGO providers included VCT centers (i.e., NewStart centers), NGO mobile clinics, and faith-based clinics. For example, in Zimbabwe, 38.8 percent of men and 16.7 percent of women underwent HIV testing at a NewStart center.

FIGURE 3: PERCENTAGE OF MEN AND WOMEN UNDERGOING MOST RECENT HIV TEST IN THE PRIVATE SECTOR



3.1.2 GENERAL UTILIZATION OF STI CARE

Prevention and treatment of STIs is important not only for overall health but also for preventing HIV transmission and the synergistic effects of STIs and HIV/AIDS. Table 5 shows that a significant percentage of both women and men who reported an STI or STI symptoms in the last 12 months sought advice or treatment. In Africa, with the exception of Ethiopia, half or more of respondents sought care for STIs. Generally, men were more likely to report seeking care than women, except in Guyana and Vietnam.

TABLE 5: PERCENTAGE OF POPULATION SEEKING CARE FOR STIs IN LAST 12 MONTHS

Country	Women	Men
Africa Region		
Benin	48.5	83.1
Chad	63.7	87.9
Cote D'Ivoire	48.9	69.3
Ethiopia	36.6	42.6
Guinea	69.2	81.0
Rwanda	49.1	52.2
Tanzania	71.1	84.0
Uganda	67.1	80.5
Zimbabwe	63.8	72.5
LAC Region		
Guyana	53.8	29.1
Haiti	49.0	54.3
Asia Region		
Vietnam*	82.7	21.1

*In Vietnam, only 35 men reported an STI in the last 12 months, and 7 reported that they sought care.

3.1.3 UTILIZATION OF STI CARE IN THE PRIVATE SECTOR

In 8 of the 12 countries, DHS or AIS data included the source of care for STIs. Chad, Ethiopia, Rwanda, and Guinea were excluded from the analysis because of insufficient data for disaggregating private sources.

Table 6 shows the percentage of respondents seeking STI care from each type of provider. With respondents allowed to report more than one source, the sum of the percentages in each country may exceed 100 percent. Responses such as family, friends, or relatives were classified as “other”; the data are not presented. For example, in Cote d'Ivoire, 28 percent of women and 26 percent of men reported “other” as their source of care but without further specification; in Haiti, 42 percent of men reported their source as friends, relatives, or other.

Compared to HIV testing, respondents evidenced greater reliance on the private sector for STI care in all countries analyzed. The explanation may lie in the curative nature of STI, for which the private sector typically plays a greater role. In addition, fewer regulatory restrictions govern the provision of STI service as compared to HIV services. In some countries, such as Tanzania, Zimbabwe, and Vietnam, the public sector delivers the large share of STI care. However, in Benin, Uganda, Haiti, and Guyana, private care utilization was high, ranging from 40.8 percent in Benin to 52.6 percent in Haiti among women seeking care. In these four countries, more men also used the private versus public sector.

Use of NGO providers for STI care is generally low. Less than 10 percent of women and men sought STI care from an NGO source, except in Tanzania and Haiti, where 13 percent of women and 17 percent of men sought advice or treatment from an NGO source.

As for gender differences in the choice of provider for STI care, men in all countries except Haiti were more likely than women to seek STI care from the private sector. For example, in Uganda, 57.6 percent of men, compared to 48.8 percent of women, reported reliance on the private sector.

TABLE 6: PERCENTAGE OF POPULATION SEEKING CARE FOR SEXUALLY TRANSMITTED INFECTIONS, BY SOURCE

Country	Women			Men		
	Public Sector	Private Sector	NGO Sector	Public Sector	Private Sector	NGO Sector
Africa Region						
Benin	54.0	40.8	5.0	41.9	44.2	2.3
Cote D'Ivoire	54.9	15.8	5.2	51.0	19.1	6.1
Kenya	67.5	34.1	0	50.7	50.3	0
Tanzania	62.9	24.7	13.2	--	--	--
Uganda	53.8	48.8	7.4	44.8	57.6	1.1
Zimbabwe	83.5	15.5	0	68.8	29.2	0
LAC Region						
Guyana	44.1	51.0	0	46.1	52.3	0
Haiti	33.3	52.6	2.7	27.1	29.6	17.2
Asia Region						
Vietnam	75.0	39.3	0	54.4	45.6	0

Given that DHS and AIS do not ask about care seeking for HIV (respondents are not asked about their HIV status), we used STI care as a proxy for HIV treatment. STI symptoms are also indicative of risk for HIV in that both HIV and STIs are transmitted through unprotected sex. Use of STI care may be viewed as an entry point for access to HIV prevention practices, such as CT and education on risk reduction. Therefore, it makes sense to examine the patterns for *both* HIV-related services within the same country to identify any consistent patterns of low or high reliance on the private sector.

In the LAC region, we found high utilization of the private sector for both HIV testing and STI care services. Within that region, Haiti accounted for the highest level of HIV testing within the private sector among both women and men as well as the highest level of private sector–provided STI care among women. Guyana reported relatively high levels of private sector use for both services compared to African and Asian countries.

In the Africa region, we observed substantial variation. Uganda reported a high level of private provision of STI care, but not a high level of private sector–provided HIV testing. In Benin, the public sector was the predominant provider of HIV testing, but the private sector provided a significant percentage of STI care.

3.2 THE ROLE OF HOUSEHOLD WEALTH STATUS IN SEEKING CARE FROM THE PRIVATE SECTOR

A variety of factors can affect health care–seeking behaviors, including types of illness, availability of health services, demographic characteristics, attitudes, beliefs, and proximity to providers (Anderson 1995). Poor populations face an additional obstacle to accessing health services: financial constraints. Previous studies have shown that socioeconomic status is one of the most important predictors of whether and where people seek care for illness (Ahmed 2005; Larson 2006). Research also indicates that differences in care-seeking behavior by socioeconomic status vary significantly by country, with small differences between rich and poor in some countries and large differences in others.

The cost of services in the private sector is perceived as higher than the cost of services in the public and NGO sectors while reliance on private sector providers for health care has been shown to increase with income (Makinen et al. 2000). After controlling for other factors, a study in Afghanistan found that those in the richest quintile were 1.6 times more likely to utilize private providers for illness compared to those in the poorest quintile (Steinhardt 2008). However, current knowledge about the relationship between wealth and use of the private sector for HIV-related services is limited.

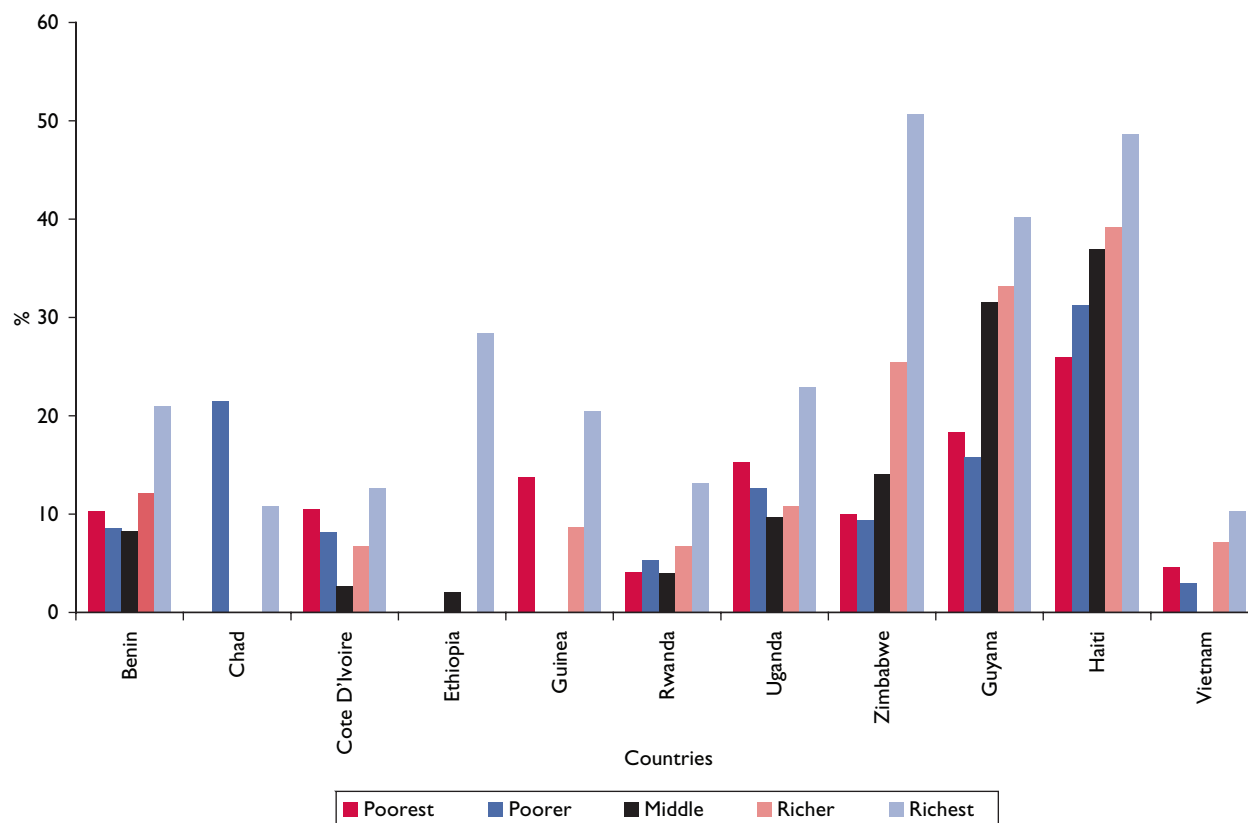
DHSs and AISs collect data on a range of household assets and utility services (such as electricity and source of drinking water) and then develop a wealth index based on these variables by using principal components analysis. The wealth index has been a reliable socioeconomic proxy used by researchers, particularly those who study the ability to pay for services and the distribution of services to the poor (Rustein 2004; Filmer 2001). We used the wealth index as a measure of socioeconomic status to examine the relationship between wealth and the utilization of the private sector for HIV testing and STI services.

3.2.1 USE OF THE PRIVATE SECTOR FOR HIV TESTING BY DIFFERENT WEALTH GROUPS

Figure 4 shows the percentage of women in 11 countries who received their most recent HIV test in the private sector⁹ by household wealth status. For the majority of countries, reliance on the private sector for HIV testing increases with household wealth. In all countries, reliance on the private sector is highest among individuals residing in the richest households. In Chad, the small sample size explains women’s high utilization of the private sector in the second (i.e., poorer) wealth quintile.

⁹Tanzania was excluded due to inability to distinguish between types of private sector facilities.

FIGURE 4: UTILIZATION OF PRIVATE SECTOR–PROVIDED HIV TESTING BY HOUSEHOLD WEALTH STATUS (WOMEN)



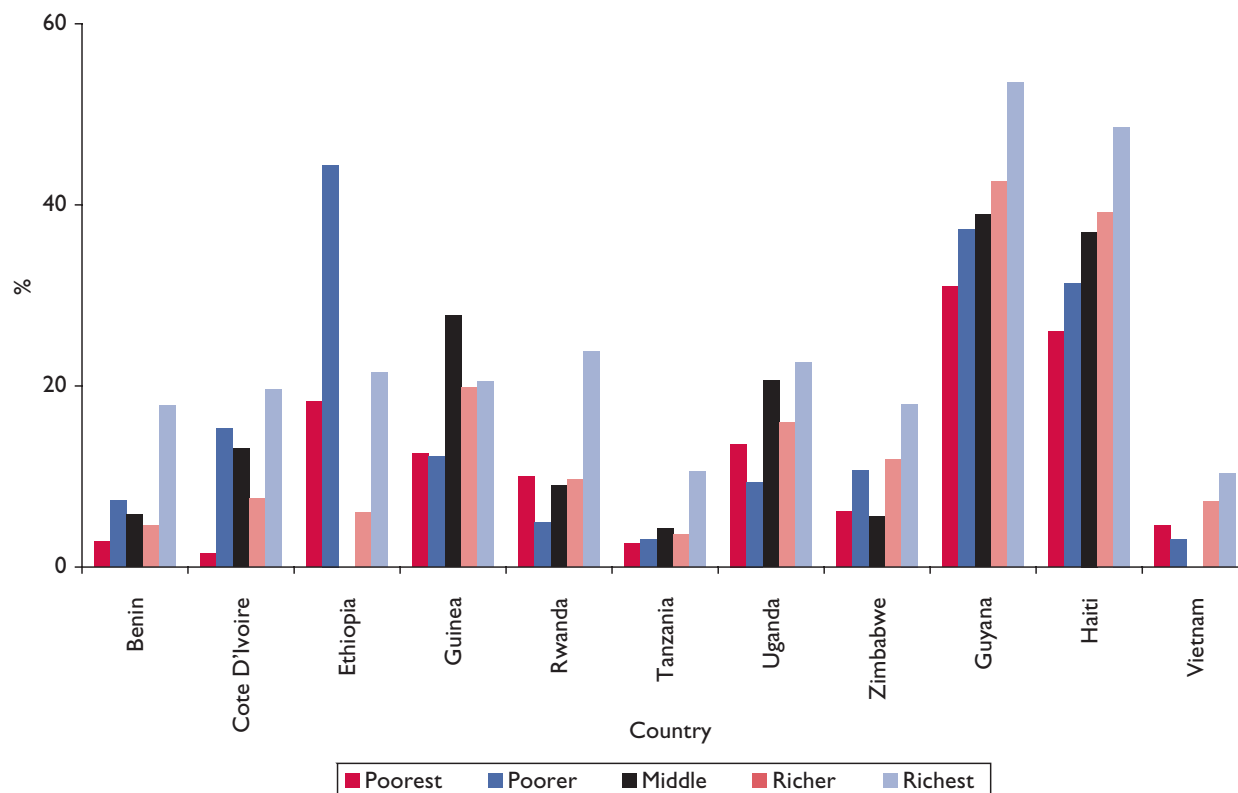
The figure shows that a significant proportion of the poorest women turned to the private sector for HIV testing in countries such as Cote d’Ivoire, Guinea, and Uganda. In these three countries, women living in the poorest households reported the second-highest use of the private sector for HIV testing. In Uganda, a country with a generally high reliance on private services, about 15 percent of 357 women from the poorest households underwent their last HIV test in a private hospital or clinic.

In the LAC region, while use of the private sector increased with household wealth, both countries reported high use of the private sector by women across wealth groups. For instance, in Haiti, half of women from the wealthiest households relied on private providers for an HIV test; similarly, a substantial proportion of women from the other wealth groups used private providers: 26 percent of the poorest group and 49 percent of the second-poorest group.

The results indicate different use patterns in countries with high general use of the private sector (e.g., Haiti and Guyana) compared with countries exhibiting low use of the private sector (e.g., Rwanda). Haiti and Guyana represent universal utilization of the private sector across all wealth groups while Rwanda exhibits limited use of the private sector for HIV testing among women in the poorest households, with only 4 percent of the poorest women turning to the private sector for HIV testing. Despite relatively high use of private HIV testing services in Ethiopia, more than 95 percent of people who ever tested for HIV were members of wealthiest group, thereby limiting our ability to examine variations by wealth status.

Similarly, men from the richest households in the majority of countries reported the highest use of the private sector (Figure 5). Although Ethiopian men in the second wealth quintile and Guinean men in the middle wealth group reported the highest use of the private sector for HIV testing, few men in these groups had undergone HIV testing.

FIGURE 5: UTILIZATION OF PRIVATE SECTOR-PROVIDED HIV TESTING BY HOUSEHOLD WEALTH STATUS (MEN)



The results indicate different use patterns by wealth status for countries with high overall use of the private sector as opposed to countries with more modest reliance on the private sector. For instance, in Haiti, where 45 percent of women underwent HIV testing in the private sector, utilization was high across all wealth groups, ranging from 26 percent of women in the poorest group to 49 percent of women in the wealthiest group. Conversely, in Tanzania, which reported the lowest reliance on the private sector, all wealth groups except the wealthiest group reported 4 percent or less utilization of private sector services. Thus, it appears that, where overall use of the private sector is high, utilization among the poor is also relatively high.

In some countries, the relationship between household wealth and use of private providers was not clear. Rwanda reported substantial use of the private sector by the poorest group of male respondents, more so than among those in the second-poorest and middle groups. In Uganda, the poorest group used private sector services more than the second-poorest group but less than other groups.

3.2.2 UTILIZATION OF THE PRIVATE SECTOR FOR STI CARE BY DIFFERENT WEALTH GROUPS

Figure 6 shows private health sector utilization of STI care among women by household wealth status. As with HIV testing, women in the top wealth quintile reported the highest use of private services in all countries. In most of the countries, utilization of the private sector increased with wealth, although a substantial proportion of women from the poorest households sought STI care from the private sector in Benin, Uganda, Guyana, Haiti, and Vietnam. In Uganda and Haiti, women from all wealth levels reported high use of the private sector for STI care. For example, in Uganda, about 55 percent of women from the richest households and 30 percent from the poorest households reported reliance on a private sector provider for STI advice or treatment.

FIGURE 6: UTILIZATION OF PRIVATE SECTOR-PROVIDED STI CARE BY HOUSEHOLD WEALTH STATUS (WOMEN)

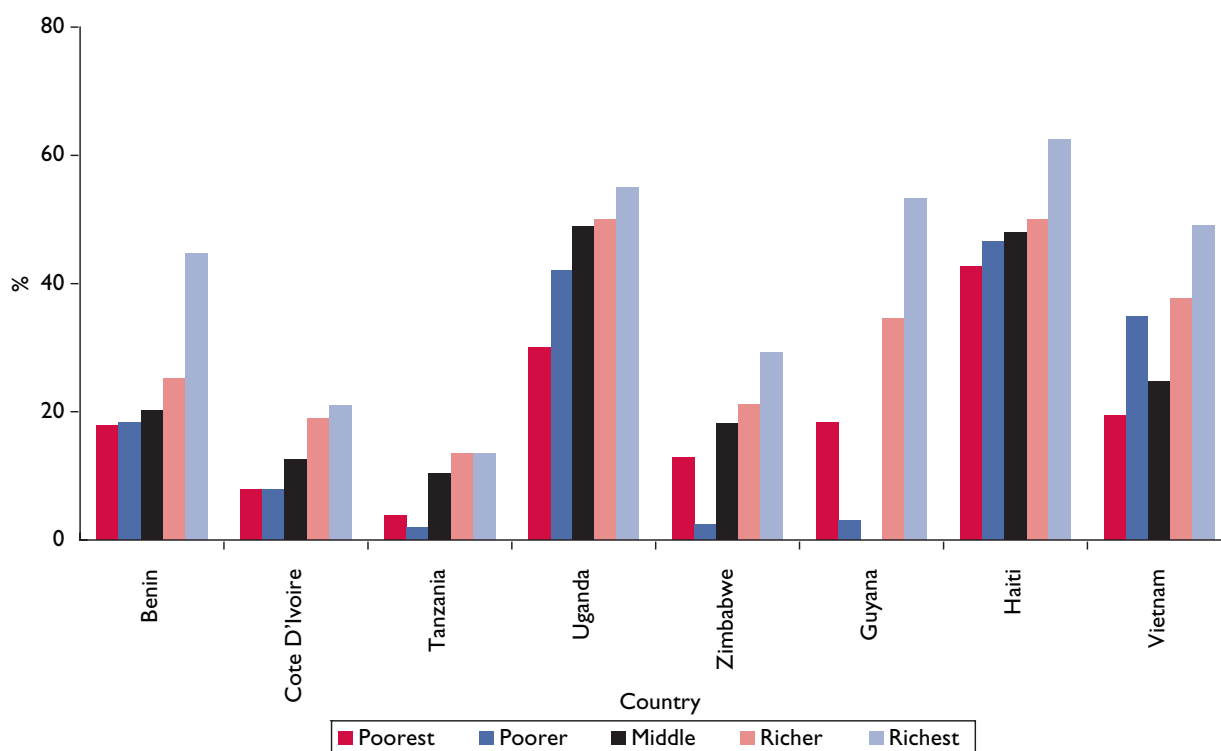
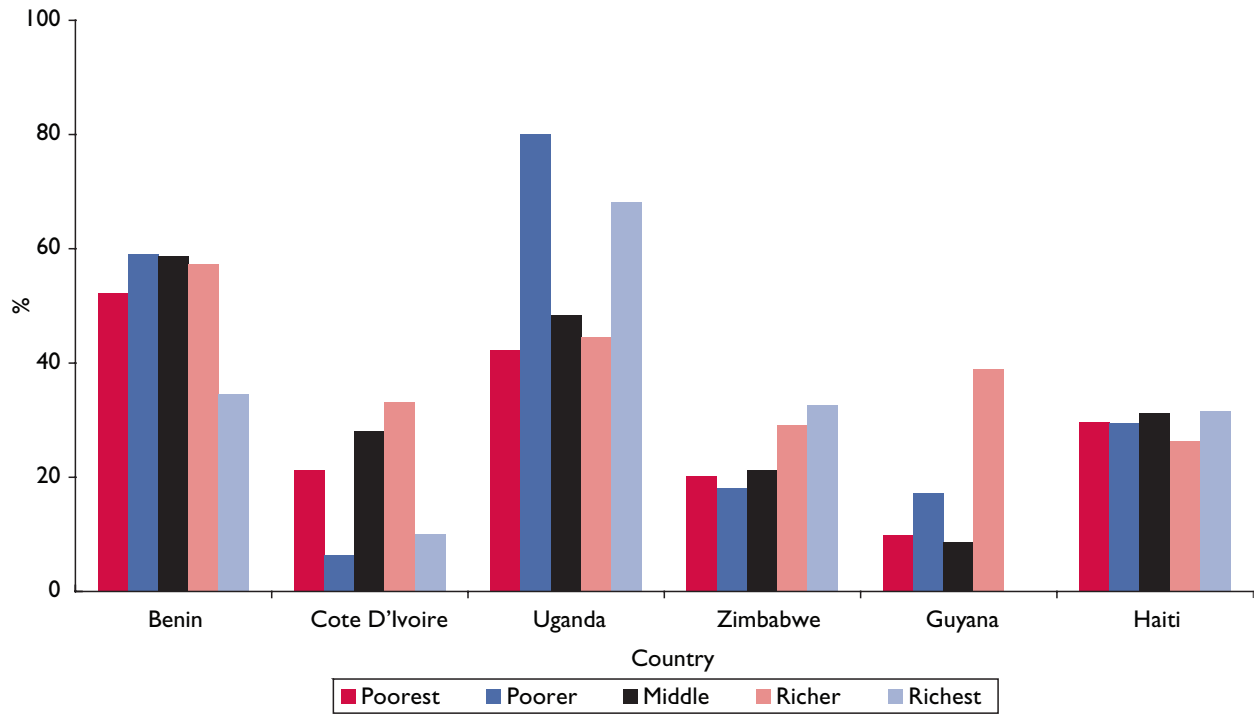


Figure 7 presents the proportion of men who reported reliance on a private sector source for STI advice and treatment by wealth group. Due to the small sample size, we excluded Vietnam from this analysis. Unlike the case of women, we lacked evidence for a consistent association between wealth status and men seeking care for STIs in the private sector. In Cote d'Ivoire, the richest group reported relatively low utilization of the private sector for any service; in Haiti, all men reported similar use of private services regardless of wealth status.

FIGURE 7: UTILIZATION OF PRIVATE SECTOR-PROVIDED STI CARE BY HOUSEHOLD WEALTH STATUS (MEN)



4. DISCUSSION

Using DHS and AIS data from 12 developing countries, we examined the role of the private health sector in delivering HIV testing and STI care services. Both services are considered critical for preventing HIV transmission and ensuring the availability of care and support. Before this analysis, relatively little was known about the extent to which people seek these services from the private health sector. In light of growing demand for HIV and AIDS services, further exploration of the private health sector's current and potential contributions to HIV/AIDS prevention and treatment is warranted. This analysis is a first step in examining the extent to which private providers deliver HIV/AIDS-related services.

The review of available data and literature pertaining to private sector delivery of HIV/AIDS services reveals that the private health sector has not generated sufficient attention in terms of its role in the overall global response to AIDS. Most national, population-based surveys do not ask about source of HIV-related services and/or do not distinguish between private for-profit and private not-for-profit sources of care. Given the differences between these two components of the private health sector, particularly as related to their objectives (social mission versus profitability) and revenue goals (donor-supported versus self-sustaining), the inability to distinguish types of private sector providers limits our ability to measure the unique contributions of each. Moreover, in light of the shift toward sustainable programs in the HIV response, there is considerable interest in the role of the private for-profit sector. Although DHSs and AISs now include detailed source options for questions on health care-seeking behavior, it is not yet possible to examine changes in utilization patterns over time. Advocacy efforts should encourage the inclusion of such questions in large population-based surveys.

Despite the limited availability of data, the results of this analysis add to the small but growing body of evidence on the role of the private sector in health service delivery. The analysis indicates that the private health sector is active in HIV service delivery, although the level of participation varies by region and country. In two Latin American countries, levels of private utilization are relatively high. In Haiti, however, such utilization may reflect the deterioration of publically provided services, a likely side effect of the nation's ongoing political instability.

The analysis found large variations in private utilization of HIV-related services in African countries. These variations may be linked to country-specific socioeconomic conditions, different levels of private sector development, and the degree of external funding for HIV and AIDS. In fact, donor funding directed to NGOs may discourage reliance on private for-profit providers. For example, Tanzania demonstrated relatively low utilization of private providers for HIV testing but high reliance on NGO services—a pattern supported by the nation's 10-fold increase in donor funding—largely directed to NGOs—for HIV services between 2002 and 2005.¹⁰ In such countries, funds primarily allocated to the public and NGO sectors likely crowd out the private sector.

The international health community recognizes increasing reliance on the private sector, even among the poor. In fact, the results of the analysis revealed that the poor are indeed using private sector-provided HIV-related services, though at a lower rate than wealthier individuals. Generally, use of the private

¹⁰ Sara Sulzbach, Wenjuan Wang, Susna De. August 2009 From Emergency Relief to Sustained Response: Examining the Role of the Private Sector in Financing HIV/AIDS Services. Bethesda, MD: Private Sector Partnerships-One project, Abt Associates Inc.

health sector for HIV testing and STI care increases with wealth. Further analysis of the association between wealth and the demand for private sector–provided HIV services is needed and will be possible as future DHS and AIS data become available.

Given limited data availability, this analysis is primarily descriptive and cannot account for some potentially important variables. For example, other individual or household characteristics may also influence care-seeking behaviors and preferred sources of HIV-related services. Perceptions of the quality and availability of private sector services likely play an important role in determining utilization of different types of facilities. Unfortunately, the level of detail in the data does not allow for analyzing such considerations. While DHSs and AIS provide relatively high-quality and comparable information, the data are self-reported, thereby introducing potential bias. Moreover, the lack of currently available data restricts the ability to generalize the results; for example, the availability of data from only one Asian country makes it impossible to generalize the results of the analysis to the entire region.

This analysis provides a basis for assessing trends in the utilization of private sector–provided HIV and related services. Many countries' increased tracking of expenditures for HIV/AIDS services through National Health Accounts should soon make it possible to compare financing and utilization trends for HIV/AIDS for a given country. However, few countries currently collect both financing and utilization data, thus preventing such a comparison at present.

As the global response continues to evolve from an emergency response to a sustained effort and current levels of donor funding become less certain due to the global economic crisis, it is critical to explore options for efficiently engaging all sectors of the health system in maximizing the AIDS response. The private health sector is a relatively untapped resource that should not go overlooked. Private providers may be viewed as resource for increasing access to essential HIV prevention, care, and treatment services through partnerships with governments and donors. Such partnerships may relieve current bottlenecks created by the public sector's insufficient infrastructure and shortage of human resources while helping countries reach the ambitious goal of universal access to HIV services.

REFERENCES

Ahmed S, Tomson G, Petzold M, Kabir Z.

Socioeconomic status overrides age and gender in determining health-seeking behaviour in rural Bangladesh. *Bulletin of the World Health Organization* (2005) 83:109–117.

Andersen R M.

Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior* (1995) 36(1):1-10.

Brugha, Ruairi, and Pritze-Aliassime, Susanne.

Promoting safe motherhood through the private sector in low- and middle-income countries. *Bulletin of the World Health Organization* (2003), 81.

Filmer, Deon, and Pritchett, Lant.

Estimating wealth effects without expenditure data--or tears: An application to educational enrollments in states of India. *Demography* (2001) 38(1):115-132.

Larson C, Saha UR, Islam R, Roy N.

Childhood diarrhea management practices in Bangladesh: Private sector dominance and continued inequities in care. *International Journal of Epidemiology* (2006) 35:1–10.

Makinen M, Waters H, Rauch M et al.

Inequalities in health care use and expenditures: Empirical data from eight developing countries and countries in transition. *Bulletin of the World Health Organization* (2000) 78:55–65.

PSP-One.

State of the private health sector wall chart. Bethesda, MD: Private Sector Partnerships-One Project, Abt Associates, Inc., 2005.

Rutstein, Shea O., and Johnson, Kiersten.

The DHS wealth index. DHS Comparative Reports No. 6. Calverton, MD: ORC Macro, August 2004.

UNAIDS (United Nations Programme on HIV/AIDS).

2008 Report on the global AIDS epidemic, UNAIDS 2008.

