

# Knowledge Brief

*Health, Nutrition and Population Global Practice*

## SOCIOECONOMIC DIFFERENCES IN ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH: SEXUALLY TRANSMITTED INFECTIONS

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### KEY MESSAGES:

- Sexually transmitted infections (STIs), including HIV, present a serious challenge to the health and well-being of adolescents, particularly young women, who are at greater risk of infection than men.
- An analysis of data from six countries namely, Bangladesh, Burkina Faso, Ethiopia, Nepal, Niger, and Nigeria found that self-reported STIs and symptoms are low among adolescent females. Although less than a third of adolescent women in any of the countries have comprehensive knowledge about HIV/AIDS, more never-married adolescent women have comprehensive knowledge about HIV transmission and prevention than their ever-married counterparts. Knowledge of STIs is higher in urban than rural areas.

### Introduction

Adolescent Sexual and Reproductive Health (ASRH) is one of five areas of focus of the World Bank's Reproductive Health Action Plan 2010–2015 (RHAP), which recognizes the importance of addressing ASRH as a development issue with important implications for poverty reduction.

Sexually transmitted infections (STIs), including HIV, present a serious challenge to the health and well-being of adolescents, particularly young women, who are at greater risk of infection than men (WHO, 2004). Untreated, STIs can cause cervical cancer, infertility, perinatal complications, and death (Brady, 2003; Low et al., 2006). In addition, untreated STIs may increase the transmission of HIV/AIDS (Darj, Mirembe, and Rassjo, 2010) and represent a significant economic burden (Mayaud and Mabey, 2004). While prevention, testing, and treatment for HIV have gained considerable support, similar efforts for other STIs remain low in most developing countries (Dehne and Riedner, 2001).

Using data from the most recent Demographic and Health

Surveys (DHS) on female respondents ages 15–19, this brief examines the current status of STIs/STI symptoms, including HIV/AIDS, as well as knowledge of HIV/AIDS and HIV testing among adolescent women, and compares these indicators by socioeconomic status (SES) in 6 countries: Bangladesh, Burkina Faso, Ethiopia, Nepal, Niger, and Nigeria. Cross tabulations between socioeconomic characteristics and STI-related outcomes for never-married and ever-married adolescents within each country were completed if at least 10 percent of the subpopulation (for example, never-married women in Nepal) reported ASRH outcomes. Pearson's chi-squared tests were used to assess the statistical significance of differences in STI-related outcomes by rural/urban residence, education level, employment status, and household wealth quintile. Throughout the report, only differences significant at the 0.05 level (two-tailed tests) are discussed. All data in this report are weighted.

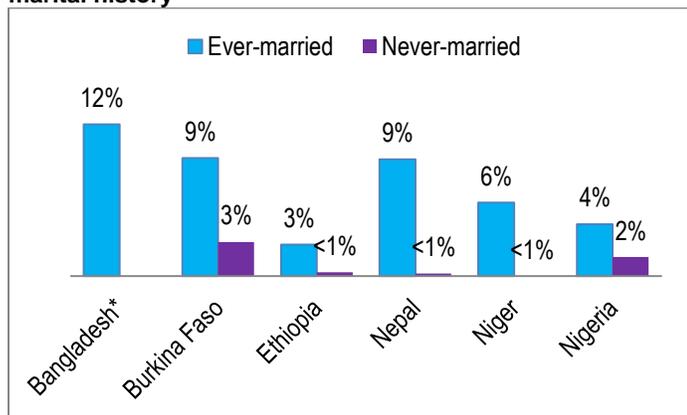
### Study Findings

#### STI/STI SYMPTOMS IN THE LAST 12 MONTHS

Results indicate that STIs/STI symptoms are more common among ever-married adolescents in the

countries studied, which is to be expected given the differences in sexual activity by marital history (Figure 1). STIs/STI symptoms are most common among ever-married adolescents in Bangladesh (12 percent), followed by Burkina Faso (9 percent) and Nepal (9 percent). The incidence of STIs/STI symptoms is less common in Niger (6 percent), Nigeria (4 percent), and Ethiopia (3 percent). Among never-married adolescents, less than 1 percent had an STI/STI symptom in Ethiopia, Nepal, and Niger. About 3 percent of never-married adolescents have had an STI/STI symptom in Burkina Faso and 2 percent in Nigeria.

**Figure 1. Percentage of women aged 15–19 who had an STI/STI symptom in the last 12 months, by country and marital history**



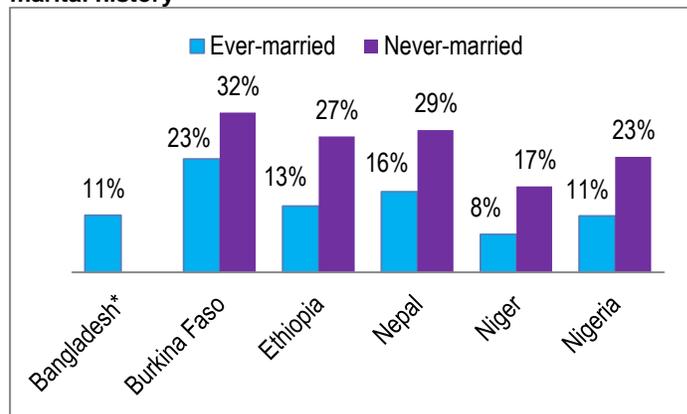
\*Only ever-married women were surveyed in Bangladesh.  
**Source:** Bangladesh DHS 2011; Burkina Faso DHS 2010; Ethiopia DHS 2011; Nepal DHS 2011; Niger DHS 2012; and Nigeria DHS 2008.

### COMPREHENSIVE KNOWLEDGE OF HIV/AIDS

Comprehensive knowledge of HIV/AIDS is more common among never-married than ever-married women in all countries studied (Figure 2). However, less than one-third of adolescents have comprehensive HIV/AIDS knowledge regardless of marital history or country. Among ever-married adolescents, comprehensive HIV/AIDS knowledge is highest in Burkina Faso (23 percent), followed by Nepal (16 percent), Ethiopia (13 percent), Nigeria (11 percent), and Niger (8 percent). Similarly, comprehensive HIV/AIDS knowledge among never-married adolescents is highest in Burkina Faso (33 percent), followed by Nepal (29 percent), Ethiopia (27 percent), Nigeria (23 percent), and Niger (17 percent).

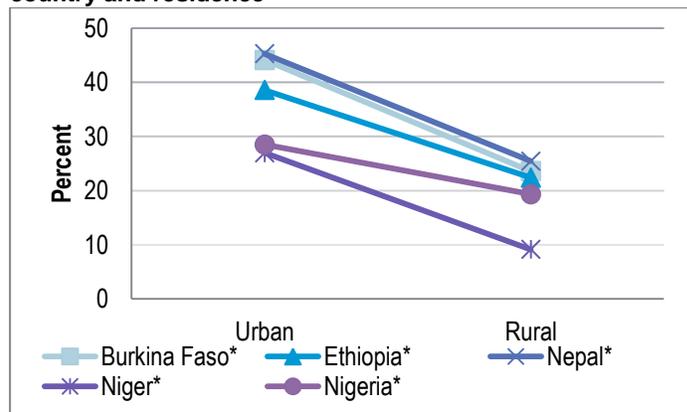
We examined group differences in comprehensive HIV/AIDS knowledge for ever-married adolescents in all countries studied, except Niger, and for never-married adolescents in all countries, except Bangladesh. In Bangladesh, Burkina Faso, and Nigeria, ever-married adolescents in urban areas are more likely to have comprehensive HIV/AIDS knowledge than those in rural areas. Comprehensive HIV/AIDS knowledge is also more prevalent among never-married adolescents living in urban than rural areas (Figure 3).

**Figure 2. Percentage of women aged 15–19 who have comprehensive knowledge about HIV/AIDS, by country and marital history**



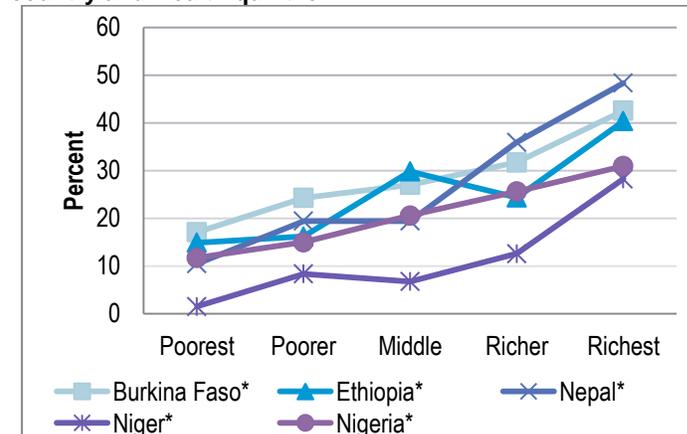
\*Only ever-married women were surveyed in Bangladesh.  
**Source:** Bangladesh DHS 2011; Burkina Faso DHS 2010; Ethiopia DHS 2011; Nepal DHS 2011; Niger DHS 2012; and Nigeria DHS 2008.

**Figure 3. Percentage of never-married women aged 15–19 who have comprehensive knowledge about HIV/AIDS, by country and residence**



\*Statistically significant difference ( $p < .05$ )  
**Source:** Burkina Faso DHS 2010; Ethiopia DHS 2011; Nepal DHS 2011; Niger DHS 2012; and Nigeria DHS 2008.

**Figure 4. Percentage of never-married women aged 15–19 who have comprehensive knowledge about HIV/AIDS, by country and wealth quintile**

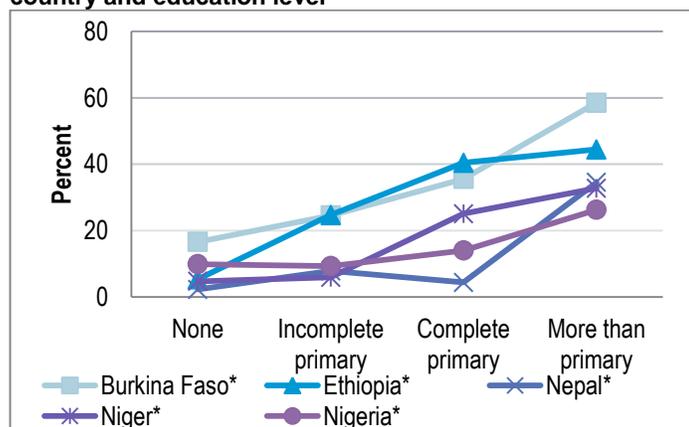


\*Statistically significant difference ( $p < .05$ )  
**Source:** Burkina Faso DHS 2010; Ethiopia DHS 2011; Nepal DHS 2011; Niger DHS 2012; and Nigeria DHS 2008.

Adolescents from wealthier households are more likely to have comprehensive HIV/AIDS knowledge in the countries studied. Among ever-married adolescents, the wealth knowledge gap is greatest in Nepal, where only 6 percent in the poorest households have comprehensive HIV/AIDS knowledge, compared with 51 percent in the wealthiest households. Only 11 percent of never-married adolescents in the poorest households in Nepal have comprehensive HIV/AIDS knowledge, compared with 48 percent in the wealthiest households (Figure 4).

Across all countries studied, ever-married and never-married adolescents with higher education are more likely to have comprehensive HIV/AIDS knowledge. The knowledge gap between never-married adolescents with no education and those with more than primary education is greatest in Burkina Faso (Figure 5).

**Figure 5. Percentage of never-married women aged 15–19 who have comprehensive knowledge about HIV/AIDS, by country and education level**



\*Statistically significant difference (p<.05)  
 Source: Burkina Faso DHS 2010; Ethiopia DHS 2011; Nepal DHS 2011; Niger DHS 2012; and Nigeria DHS 2008.

Among ever-married adolescents in Burkina Faso, 18 percent of those with no education have comprehensive HIV/AIDS knowledge, compared with 61 percent of those with more than basic primary education. Similarly, among never-married adolescents in Burkina Faso, 17 percent of those with no education have comprehensive HIV/AIDS knowledge, compared with 59 percent of those with more than basic primary education.

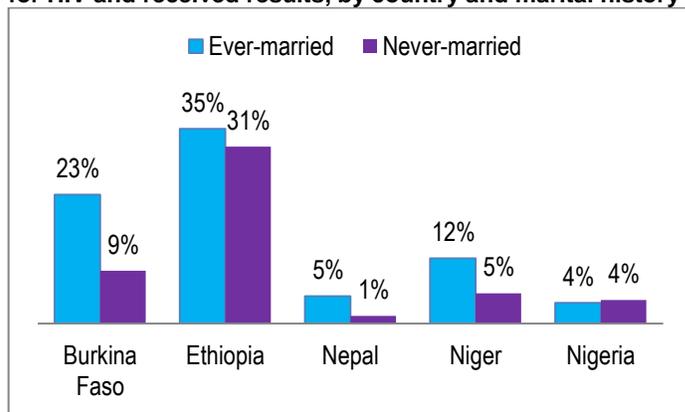
**EVER TESTED FOR HIV AND RECEIVED RESULTS**

The percentage of adolescents who have been tested and received results is higher among ever-married than never-married women in all countries studied, except Nigeria (Figure 6). The difference between ever-married and never-married women is greatest in Burkina Faso where 23 percent of ever-married adolescents have been tested and received results, compared with 9 percent of never-married adolescents. Among never-married and ever-

married adolescent women, the percentage that has been tested for HIV and received results is greatest in Ethiopia (35 percent and 31 percent, respectively) and lowest in Nepal (5 percent and 1 percent, respectively).

Group differences in comprehensive HIV testing and receiving results for ever-married women in Burkina Faso, Ethiopia, and Niger were examined. The differences in HIV testing and receiving results mirror those of comprehensive HIV/AIDS knowledge. In all 3 countries, ever-married adolescents in urban areas are more likely to have been tested for HIV and received results than those in rural areas.

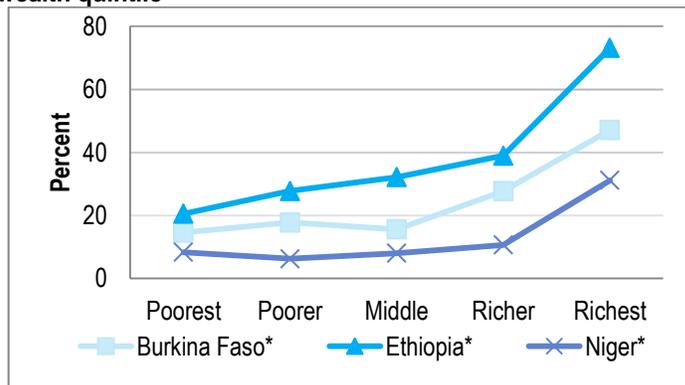
**Figure 6. Percentage of women aged 15–19 who have tested for HIV and received results, by country and marital history\***



\*Data on HIV testing is not available for Bangladesh  
 Source: Burkina Faso DHS 2010; Ethiopia DHS 2011; Nepal DHS 2011; Niger DHS 2012; and Nigeria DHS 2008.

Also, wealthier households are more likely to have been tested for HIV and received results than poorer households. The testing gap from the poorest and richest households is greatest in Ethiopia, where 21 percent in the poorest households have been tested for HIV and received the results, compared with 73 percent of those in the wealthiest households (Figure 7).

**Figure 7. Percentage of ever-married women aged 15–19 who have tested for HIV and received results, by country and wealth quintile**



\* Statistically significant difference (p<.05)  
 Source: Burkina Faso DHS 2010; Ethiopia DHS 2011; Niger DHS 2012.

The testing gap between those with no education and those with more than primary education is again greatest in Ethiopia, where 17 percent of ever-married adolescents with no education had been tested for HIV and received results, compared with 71 percent of their counterparts with more than primary education.

In Ethiopia and Niger, ever-married adolescents who are employed are more likely to have been tested for HIV and received results (56 percent and 17 percent, respectively) than their unemployed counterparts (30 percent and 11 percent, respectively).

We also examined group differences in comprehensive HIV testing for never-married women in Ethiopia. In Ethiopia, never-married adolescents who live in urban areas are more likely to have been tested and received the results (42 percent) than those living in rural areas (27 percent). The incidence of HIV testing and receiving results is twice as high among never-married adolescents from the richest households (40 percent) than among those from the poorest households (20 percent). In Ethiopia, more than half of never-married adolescents who have completed primary education or have more than primary education have been tested for HIV and received the results, compared to only 27 percent of those with incomplete primary education and 7 percent of those with no education.

## Policy Challenges

STIs and HIV/AIDs are associated with stigma, embarrassment, and denial among health care personnel and adolescents alike, adding to the challenges that young people face in receiving correct information about STI prevention, care, and treatment. The World Bank is working to improve ASRH through its RHAP by supporting better access to, and provision of, affordable ASRH services and strengthening monitoring and evaluation of these services and interventions. Post-2015, the WBG is working to ensure Universal Health Coverage (UHC) of SRH by helping countries build healthier, more equitable societies. To do this requires the following, adapted to each country's unique needs: (i) scaling up the most effective ways to incentivize demand for ASRH, including family planning at the country level; (ii) delivering on the continued need to strengthen country capacity; (iii) ensuring full leverage of the World Bank's multisectoral advantage to improve ASRH outcomes, including leveraging SRH as a tool for women's empowerment; and (iv) reaching the poorest, marginalized, and vulnerable populations to facilitate access to health services and promote UHC and equity.

## Conclusion

This brief highlights the socioeconomic disparities associated with young people's limited knowledge about STIs, including HIV/AIDs, and testing. Despite low self-reporting of STI symptoms among adolescents, STI prevalence may be much higher due to low levels of awareness of symptoms, asymptomatic infections, and limited availability of testing or treatment. Investments should be made in more syndromic screening and treatment, and integrating STI services with HIV testing and treatment, as well as family planning, focusing on rural areas and vulnerable populations. Preventive measures include increasing access and information to barrier methods and explore the development of efficacy of other dual-purpose microbicides. Efforts to improve knowledge of HIV and other STIs should focus on reaching those with limited education, from poorer households, and those living in rural areas, which are all highly correlated. Recommended approaches include media campaigns using radio and low-literacy materials, increasing health provider knowledge and training involving males.

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