



# International Journal of Maternal and Child Health and AIDS

BRIEF RESEARCH ARTICLE HIV AND AIDS

## Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome Knowledge and Attitude among Myanmar Women

Chaw Hay Thar, MBBS<sup>1</sup>, Young Hwa Lee, PhD<sup>2</sup>, Young June Choe, MD, PhD<sup>2</sup>

<sup>1</sup>Department of Social and Preventive Medicine, College of Medicine, Hallym University, Chuncheon, <sup>2</sup>Department of Pediatrics, Korea University Anam Hospital, Seoul, Korea.



**\*Corresponding author:**  
Young June Choe, MBBS,  
Department of Pediatrics,  
Korea University Anam  
Hospital, Seoul, Korea.  
Tel: +82-02-920-5090

choey@korea.ac.kr

**Received:** 09 November 2023

**Accepted:** 28 January 2024

**Published:** 14 March 2024

**DOI**  
10.25259/IJMA\_623

**Quick Response Code**



### ABSTRACT

The global challenge posed by the human immunodeficiency virus (HIV) and its manifestation as acquired immunodeficiency syndrome (AIDS) is underscored by the prevalence of 5.9 million people living with HIV in the Asia-Pacific region in 2018. Myanmar, among Asian nations, faces a particularly high burden with a prevalence of 0.7% among adults aged 15–49. Despite the disproportionate impact on at-risk populations, including injection drug users and commercial sex workers, there is a scarcity of data on public awareness of HIV/AIDS in Myanmar. This study utilizes the 2015–2016 Myanmar Demographic Health Survey to assess the impact of socioeconomic factors on the knowledge and attitudes of women toward HIV/AIDS. The analysis encompasses 12,885 respondents, revealing that while 91.6% were aware of AIDS, <60% possessed accurate knowledge of HIV transmission. The study identifies significant variations in knowledge and attitudes based on age, region, residence type, education, wealth index, and media exposure. Notably, younger women aged 15–19 exhibited the lowest HIV/AIDS knowledge scores. Wealth and education emerged as key determinants influencing both knowledge and attitudes. The findings emphasize the need for tailored public health interventions to address the knowledge gap among women in different settings in Myanmar. However, it is crucial to acknowledge the temporal limitation of the study, as the data were collected in 2015–2016. Caution is advised in generalizing the results to the present day, emphasizing the necessity for ongoing research to capture the evolving landscape of HIV/AIDS awareness. This study contributes valuable insights that can inform targeted interventions, promoting awareness and prevention strategies in Myanmar's dynamic public health context.

**Keywords:** Myanmar, HIV/AIDS, Knowledge, Attitude

### INTRODUCTION

The human immunodeficiency virus (HIV) and its clinical manifestation of acquired immunodeficiency syndrome (AIDS) are major public health challenges worldwide.<sup>[1]</sup> In 2018, the Asia-Pacific region had an estimated 5.9 million people living with HIV. Among Asian countries, Myanmar has the second highest prevalence of HIV (0.7%) among adults aged 15–49 years. The disproportionate burden among at-risk populations, including injection drug users, commercial sex workers, and men who have sex with men,<sup>[2]</sup> warrants a targeted approach in public health interventions. Further, adequate knowledge and healthy attitudes toward HIV/AIDS are important to adequately prevent HIV transmission. However, there is a paucity of data regarding public awareness of HIV/AIDS in Myanmar. This study aims to assess the effect of socioeconomic factors on the knowledge and attitude of women in Myanmar toward HIV/AIDS.

## METHODS

### *Survey and Sampling Design*

The exclusive implementation of the Myanmar Demographic and Health Survey (DHS) in 2015–2016, conducted by the Ministry of Health and Sports of the Republic of the Union of Myanmar, marks a pivotal source of data for our study. Funded by the United States Agency for International Development and the Three Millennium Development Goal Fund, this national survey is comprehensive, covering various aspects such as fertility, marriage, family planning, child feeding practices, nutrition, mortality, awareness and attitudes toward HIV/AIDS, women's empowerment, and domestic violence. Our target population comprises men and women aged 15–49 residing in randomly selected households across Myanmar, with the survey providing both national and regional estimates. The sampling frame encompasses 76,990 primary sampling units (PSUs), including census enumeration areas or sensitive wards/village tracts. Each PSU is meticulously described with cartographic details, administrative subordinations, residence type, and estimated household numbers. Institutional populations are excluded, while internally displaced population camps are included, as detailed in a comprehensive survey publication.

### *Description of Variables*

The study's dependent variable centers on women's knowledge of and attitudes toward HIV/AIDS. Women's knowledge is gauged through 11 questions concerning transmission modes, while attitudes are assessed through five distinct questions. Respondents employ a binary response system ("yes," "no," or "do not know"), with correct responses scoring 1 and incorrect or "do not know" responses scored as 0. Explanatory variables, guided by a literature review and dataset relevance, encompass age groups, regions, residence types, education levels, wealth indices, and media consumption habits (newspaper/magazine, radio, and television).

### *Data Analysis*

SAS version 9.4 (SAS Institute, Cary, North Carolina) was employed for data analysis. Correct answers on knowledge and positive responses on attitude were presented with 95% confidence intervals. Sample characteristics and associations between HIV/AIDS knowledge, attitude scores, and socioeconomic variables were examined using a linear regression model. Results were presented as exponentiated coefficients or odds ratios, with statistical significance set at  $P < 0.0001$  in all analyses.

### *Ethical Considerations*

The study relies on publicly available data from the DHS, ensuring transparency, and adherence to ethical standards.

Ethical oversight was the responsibility of the commissioned, funded, and managed surveys. Approval from International Classification of Functioning, Disability and Health (ICF) and Institutional Review Boards in respective countries was obtained, ensuring compliance with United States Department of Health and Human Services regulations for the protection of human subjects.

## RESULTS

### *Descriptive Statistics*

The survey elicited responses from a total of 12,885 women, and the findings, as presented in Table 1, provide a comprehensive overview of their knowledge of and attitudes toward HIV/AIDS. Notably, a high awareness rate was observed, with 91.6% of respondents having heard of AIDS. However, the study revealed a substantial gap in accurate knowledge about HIV transmission, as <60% demonstrated precise understanding. Specific misconceptions were evident, with approximately 40% of participants inaccurately believing that HIV cannot be transmitted through mosquito bites, and 57.4% incorrectly asserting that sharing food with infected individuals does not pose a risk. The knowledge regarding condoms as a protective measure was notably low, with only 59.4% accurately recognizing their role in reducing HIV transmission. Moreover, a significant proportion of respondents held misconceptions about HIV transmission during pregnancy or delivery, with 70.9% and 60.9%, respectively, believing it to be improbable. On a positive note, the study identified a high level of empathy, as 73.2% expressed willingness to care for relatives with HIV/AIDS. Confidentiality was also valued, with 68.9% preferring to keep their knowledge of HIV/AIDS infection private. Intriguingly, 32.1% of respondents reported that they would refrain from buying vegetables from a vendor with HIV/AIDS. Additional insights into regional, residential, educational, economic, and media-related variations are summarized in Supplemental Table 1, shedding light on the nuanced differences in mean scores across these parameters.

### *Factors Associated with Knowledge of and Attitude toward HIV/AIDS*

In our analysis, a linear regression model was employed to scrutinize the socioeconomic factors linked to the knowledge of and attitudes toward HIV/AIDS among women in Myanmar, as outlined in Table 2. Notably, the findings underscored older women who exhibited significantly higher HIV/AIDS knowledge and attitude scores in comparison to their younger counterparts aged 15–19 years. Furthermore, disparities were evident across different regions, with notable variations observed between rural and urban areas. Educational attainment and wealth index emerged

**Table 1:** Correct responses to questions on attitude toward and knowledge of HIV/AIDS among women in Myanmar, 2015–2016.

S. No.	Questions	N	Percentage of correct response	95% CI	
Knowledge about transmission					
1	Ever heard of AIDS	11,742	91.6	91.0	92.1
2	Reduce risk of getting HIV: Have only 1 sex partner	8,948	70.3	69.4	71.2
3	Can get HIV from mosquito bites	4,971	38.0	37.0	39.0
4	Reduce risk of getting HIV: always use condoms during sex	7,608	59.4	58.4	60.4
5	Can get HIV by sharing food with a person who has AIDS	7,413	57.4	56.4	58.4
6	Can get HIV by witchcraft or supernatural means	8,616	69.0	68.1	70.0
7	A healthy looking person can have HIV	7,481	58.7	57.7	59.8
8 (1)	HIV transmitted during pregnancy	9,207	70.9	69.9	71.8
8 (2)	HIV transmitted during delivery	7,874	60.9	59.9	61.9
8 (3)	HIV transmitted by breastfeeding	8,615	67.1	66.2	68.1
8 (4)	Drugs to avoid HIV transmission to baby during pregnancy	7,471	59.0	58.0	60.0
Attitude toward people who have HIV					
1	Would buy vegetables from a vendor with HIV	4,282	32.1	31.1	33.1
2	Would want HIV infection in family to remain a secret	8,757	68.9	7.0	69.9
3	Willing to care for relatives with AIDS	9,253	73.2	72.3	74.1
4	A female teacher infected with HIV, but not sick, should be allowed to continue teaching	6,230	48.7	47.7	49.7
5	Children should be taught about condoms to avoid contracting AIDS	5,042	40.0	39.0	41.0
AIDS: Acquired immunodeficiency syndrome, CI: Confidence interval, HIV: Human immunodeficiency virus, N: number of participants.					

as positive determinants, indicating that higher levels of education and greater economic well-being were associated with increased HIV/AIDS knowledge and more positive attitudes. Importantly, the study identified a significant positive correlation between the frequency of media usage, including newspapers/magazines, radio, and television, and higher scores in both HIV/AIDS knowledge and attitudes. This emphasizes the influential role of the media in shaping awareness and fostering positive attitudes towards HIV/AIDS among women in Myanmar. These findings contribute valuable insights for tailoring targeted interventions aimed at enhancing HIV/AIDS awareness and attitudes, particularly focusing on education, economic empowerment, and leveraging media channels for effective communication strategies.

## DISCUSSION

This study's findings have important implications for research and policy development. The knowledge of and attitude toward HIV/AIDS among women in Myanmar appeared to be a factor of various demographic, geographic, socioeconomic, and the media uses statuses. This study revealed a significant difference in HIV/AIDS knowledge and attitudes among women in Myanmar living in different settings: Region,

residence type, education, economic status, and access to media. In 2019, there were 240,000 people living with HIV in Myanmar, and there was a continued high incidence of new HIV infections.<sup>[3]</sup> In the context of disproportional disparities and health and healthcare in Myanmar, our findings suggest that a tailored approach is required to close the knowledge gap in HIV/AIDS among Myanmar's women living in different settings.<sup>[4]</sup> The knowledge of HIV/AIDS score was the lowest in younger women aged 15–19 years. This is consistent with findings from Tajikistan<sup>[5]</sup> and Nigeria,<sup>[6]</sup> which suggests an opportunity to promote knowledge and attitude through public health education among school-aged children.

Further, a significant difference in knowledge and attitude was noted among different regions: Kachin, Rakhine, Yangon, Shan, Chin, and Naypyidaw indicated significantly lower knowledge, whereas Sagaing and Ayeyarwaddy showed higher knowledge. Although we did not determine the geographical disparity in knowledge and attitude, findings from other studies showed that health indices have a huge health gap between geographical regions in Myanmar, which warrants further investigation.<sup>[7]</sup> Wealth and education, which have been shown to have a significant impact on both HIV/AIDS knowledge and attitude, are well-known predisposing factors

**Table 2:** Multiple linear regression models for the association between HIV/AIDS knowledge and attitude scores and socioeconomic factors among women in Myanmar during 2015–2016.

Variable	Knowledge OR (95% CI)			P-value	Attitude OR (95% CI)			P-value
Age groups (years)								
15–19	1.00				1.00			
20–24	1.66	1.35	2.03	<0.0001	1.35	1.22	1.49	<0.0001
25–29	2.93	2.39	3.60	<0.0001	1.66	1.50	1.82	<0.0001
30–34	3.48	2.85	4.26	<0.0001	1.64	1.49	1.81	<0.0001
35–39	3.46	2.81	4.26	<0.0001	1.61	1.45	1.78	<0.0001
40–44	3.11	2.51	3.85	<0.0001	1.61	1.45	1.79	<0.0001
45–49	2.90	2.32	3.63	<0.0001	1.62	1.45	1.80	<0.0001
Region								
Kachin	1.00				1.00			
Kayah	1.15	0.88	1.50	0.315	1.12	0.97	1.29	0.112
Kayin	0.68	0.51	0.90	0.007	0.87	0.75	1.00	0.051
Chin	0.18	0.13	0.24	<0.0001	0.56	0.48	0.66	<0.0001
Sagaing	1.70	1.32	2.19	<0.0001	0.97	0.85	1.11	0.628
Tanintharyi	0.97	0.73	1.28	0.8052	0.91	0.78	1.05	0.183
Bago	1.04	0.80	1.36	0.779	0.90	0.79	1.03	0.135
Magway	0.79	0.60	1.03	0.085	1.02	0.90	1.17	0.72
Mandalay	0.91	0.70	1.18	0.472	0.75	0.65	0.85	<0.0001
Mon	0.76	0.58	1.01	0.056	1.00	0.87	1.15	0.971
Rakhine	0.27	0.20	0.36	<0.0001	0.49	0.43	0.57	<0.0001
Yangon	0.51	0.39	0.67	<0.0001	1.19	1.04	1.36	0.009
Shan	0.15	0.11	0.20	<0.0001	0.51	0.44	0.59	<0.0001
Ayeyarwaddy	1.49	1.14	1.96	0.003	1.06	0.92	1.22	0.434
Naypyidaw	0.65	0.49	0.86	0.0028	0.71	0.61	0.82	<0.0001
Residence type								
Urban	1.00				1.00			
Rural	0.66	0.57	0.76	<0.0001	0.78	0.73	0.84	<0.0001
Education								
No education	1.00				1.00			
Primary	5.86	4.71	7.28	<0.0001	1.76	1.60	1.93	<0.0001
Secondary	17.72	14.02	22.42	<0.0001	2.49	2.23	2.77	<0.0001
Higher	31.90	24.50	41.54	<0.0001	3.60	3.15	4.11	<0.0001
Wealth index								
Poorest								
Poorer	1.40	1.15	1.70	0.0007	1.16	1.06	1.27	0.001
Middle	1.69	1.38	2.06	<0.0001	1.30	1.19	1.43	<0.0001
Richer	1.93	1.56	2.38	<0.0001	1.36	1.23	1.50	<0.0001
Richest	2.34	1.84	2.97	<0.0001	1.40	1.25	1.57	<0.0001
Newspaper/magazine								
Not at all								
<Once a week	2.07	1.82	2.35	<0.0001	1.27	1.19	1.36	<0.0001
Once a week	2.01	1.71	2.36	<0.0001	1.35	1.24	1.47	<0.0001

(Continued)

(Continued)

Variable	Knowledge OR (95% CI)			P-value	Attitude OR (95% CI)			P-value
Radio use								
Not at all	1.00				1.00			
<Once a week	1.40	1.21	1.61	<0.0001	1.08	1.01	1.16	0.026
Once a week	1.48	1.29	1.69	<0.0001	1.22	1.14	1.30	<0.0001
Television use								
Not at all	1.00				1.00			
<Once a week	1.65	1.38	1.98	<0.0001	1.19	1.09	1.30	<0.0001
Once a week	1.77	1.51	2.07	<0.0001	1.24	1.15	1.33	<0.0001
Adjusted r-squared (knowledge model) = 0.3292, Adjusted r-squared (attitude model) = 0.2488. CI: Confidence interval, OR: Odds ratio, HIV: Human immunodeficiency virus, AIDS: Acquired immunodeficiency syndrome.								

of HIV/AIDS awareness that are not readily modifiable in the health sector. Furthermore, utilizing community-based maternal healthcare services may help promote a better understanding of women expected to receive antenatal care services.<sup>[8]</sup> Finally, our results reveal a relationship between the frequency of media use and respondents' HIV/AIDS-related knowledge and attitudes, which indicates that mass media comprise an important channel for delivering sound messages to the public.

This study has some limitations. Primarily, it included a cross-sectional analysis. Hence, results indicate an association, rather than a causation. Therefore, future studies with different designs should examine the direction of the association. Subsequently, we used a secondary source, therefore, the analyses did not consider the measurement of certain variables of interest (i.e., household information). Furthermore, the study was prone to estimation bias, since a composite index was used to measure knowledge and attitude. One last limitation of our study lies in the temporal dimension of the data, as the information was collected between 2015 and 2016. Recognizing the dynamic nature of public health landscapes, especially concerning HIV/AIDS prevalence and awareness, we acknowledge that the conclusions drawn from our findings may reflect the situation at that specific juncture. Given the passage of six years since the data collection period, caution is warranted in extrapolating the results to the present day. As societal, healthcare, and educational landscapes evolve, the applicability of our conclusions to the current context may be influenced by these changes. Future research endeavors should consider reassessing the state of HIV/AIDS knowledge and attitudes among Myanmar women to provide a more up-to-date and nuanced understanding of the prevailing circumstances. Despite this, we used DHS, a nationally representative large dataset that provides data enabling in-depth analysis and examination of relationships between socioeconomic factors and HIV/AIDS knowledge

and attitudes among women in Myanmar. Regional disparities highlight the need for tailored interventions to address knowledge gaps effectively.<sup>[9]</sup> Our findings may contribute to enhancing the understanding of factors that may affect or improve awareness of HIV transmission, thereby promoting preventive strategies in Myanmar.

## CONCLUSION AND GLOBAL HEALTH IMPLICATIONS

Our study provides a comprehensive understanding of the multifaceted determinants influencing HIV/AIDS awareness and attitudes among women in Myanmar. These insights are vital for crafting targeted interventions, addressing regional disparities, and fostering widespread public awareness through strategic educational initiatives and media engagement.

### Key Messages

1. Demographic, geographic, socioeconomic, and media use factors contribute to variations in HIV/AIDS awareness and attitudes among women in Myanmar.
2. Addressing disparities in knowledge and attitude through targeted interventions is crucial for HIV/AIDS prevention and control efforts.
3. Regional disparities highlight the need for tailored interventions to address knowledge gaps effectively.

### Availability of data and materials

Data for this study were sourced from Demographic and Health Surveys (DHS) and are available at <https://dhsprogram.com/data/available-datasets.cfm>

### Acknowledgments

The authors thank the MEASURE DHS project for their support and free access to the original data.

## COMPLIANCE WITH ETHICAL STANDARDS

### Conflicts of Interest

The authors declare that they have no conflict of interest.

### Financial Disclosure

Nothing to declare.

### Funding/Support

There was no funding for this study.

### Ethics Approval

IRB approval was required for this study, which is based on the secondary analysis of public-use database.

### Declaration of Patient Consent

Patient's consent not required as patients identity is not disclosed or compromised.

### Use of Artificial Intelligence (AI)-Assisted Technology for Manuscript Preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

### Disclaimer

The views expressed are the authors' and not necessarily those of their institutions.

## REFERENCES

1. GBD 2019 Diseases and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: A systematic analysis for the global burden of disease study 2019. *Lancet*. 2020 Oct 17;396(10258):1204-22.
2. Thwe M. HIV/AIDS education and prevention in Myanmar. *AIDS Educ Prev*. 2004 Jun;16(3 Suppl A):170-7.
3. Avert HIV and AIDS in Myanmar-2019. Avert; 2021. [Accessed 2023 Nov 8]. Available from: <https://www.avert.org/professionals/hiv-around-world/asia-pacific/myanmar>
4. Zaw PP, Htoo TS, Pham NM, Eggleston K. Disparities in health and health care in Myanmar. *Lancet*. 2015 Nov 21;386(10008):2053.
5. Kasymova S. Awareness and knowledge about HIV/AIDS among women of reproductive age in Tajikistan. *AIDS Care*. 2020 Apr;32(4):518-21.
6. Yaya S, Ghose B, Udenigwe O, Shah V, Hudani A, Ekhloeneta M. Knowledge and attitude of HIV/AIDS among women in Nigeria: A cross-sectional study. *Eur J Public Health*. 2019 Feb 1;29(1):111-7.
7. Win HH, Ko MK. Geographical disparities and determinants of anaemia among women of reproductive age in Myanmar: analysis of the 2015-2016 Myanmar Demographic and Health Survey. *WHO South East Asia J Public Health*. 2018 Sep;7(2):107-13.
8. Thida T, Liabsuetrakul T, McNeil E. Disparity in utilization and expectation of community-based maternal health care services among women in Myanmar: a cross-sectional study. *J Public Health (Oxf)*. 2019 Mar 1;41(1):183-91.
9. Bain LE, Nkoke C, Noubiap JJ. UNAIDS 90-90-90 targets to end the AIDS epidemic by 2020 are not realistic: comment on "Can the UNAIDS 90-90-90 target be achieved? a systematic analysis of national HIV treatment cascades. *BMJ Glob Health*. 2017 Mar 7;2(2):e000227.

**How to cite this article:** Thar CH, Lee YH, Choe YJ. Human immunodeficiency virus/acquired immunodeficiency syndrome knowledge and attitude among Myanmar women. *Int J Matern Child Health AIDS*. 2024;13:e003. doi: 10.25259/IJMA\_623

## SUPPLEMENTAL MATERIALS

**Table 1:** Description of the independent variables, factors associated with HIV/AIDS knowledge and attitude among Myanmar women, 2015–2016.

	N	Mean score on knowledge % (95% CI)			Mean score on attitude % (95% CI)			Total Score % (95% CI)			
Age groups											
15-19	1,835	6.5	6.3	6.6	2.4	2.3	2.4	8.8	8.6	9.1	
20-24	1,893	6.9	6.8	7.1	2.6	2.6	2.7	9.6	9.3	9.8	
25-29	1,880	7.3	7.1	7.5	2.8	2.7	2.9	10.1	9.8	10.3	
30-34	1,971	7.4	7.2	7.5	2.7	2.6	2.8	10.1	9.9	10.3	
35-39	1,918	7.2	7.1	7.4	2.7	2.6	2.7	9.9	9.7	10.1	
40-44	1,746	7.0	6.8	7.1	2.6	2.5	2.7	9.6	9.4	9.8	
45-49	1,642	6.9	6.7	7.0	2.6	2.5	2.7	9.5	9.2	9.7	
Region											
Kachin	804	7.8	7.6	8.1	2.9	2.8	3.1	10.8	10.5	11.1	
Kayah	757	7.7	7.5	7.9	3.0	2.9	3.1	10.6	10.4	10.9	
Kayin	751	6.6	6.3	6.8	2.5	2.4	2.6	9.0	8.7	9.4	
Chin	750	5.5	5.2	5.7	2.1	2.0	2.3	7.6	7.3	8.0	
Sagaing	1,039	7.9	7.8	8.1	2.7	2.7	2.8	10.7	10.5	10.9	
Tanintharyi	717	7.6	7.4	7.8	2.7	2.6	2.9	10.4	10.1	10.6	
Bago	939	7.4	7.3	7.6	2.7	2.6	2.8	10.1	9.9	10.4	
Magway	947	6.9	6.8	7.1	2.7	2.7	2.8	9.7	9.5	9.9	
Mandalay	963	7.5	7.3	7.7	2.6	2.5	2.6	10.0	9.8	10.3	
Mon	789	7.3	7.1	7.5	2.9	2.8	3.0	10.2	9.9	10.4	
Rakhine	911	4.9	4.7	5.1	1.6	1.5	1.7	6.5	6.2	6.8	
Yangon	1,065	7.6	7.4	7.7	3.3	3.2	3.4	10.9	10.7	11.1	
Shan	778	4.6	4.3	4.9	1.8	1.7	1.9	6.4	6.1	6.8	
Ayeyarwaddy	919	7.7	7.5	7.9	2.8	2.7	2.9	10.5	10.2	10.7	
Naypyidaw	756	7.0	6.8	7.2	2.5	2.4	2.6	9.5	9.2	9.7	
Residence type											
Urban	3,785	8.1	8.0	8.2	3.2	3.2	3.3	11.3	11.2	11.4	
Rural	9,100	6.6	6.5	6.7	2.4	2.4	2.4	9.0	8.9	9.1	
Education											
No education	1,592	3.9	3.6	4.1	1.5	1.4	1.6	5.3	5.1	5.6	
Primary	5,129	6.6	6.5	6.7	2.4	2.4	2.5	9.1	8.9	9.2	
Secondary	4,838	7.9	7.9	8.0	2.9	2.9	3.0	10.9	10.8	11.0	
Higher	1,324	9.2	9.1	9.4	3.7	3.6	3.7	12.9	12.8	13.0	

(Continued)

(Continued)

	N	Mean score on knowledge % (95% CI)			Mean score on attitude % (95% CI)			Total Score % (95% CI)			
Wealth Index											
	Poorest	2,364	5.4	5.3	5.6	1.9	1.9	2.0	7.4	7.1	7.6
	Poorer	2,451	6.4	6.2	6.6	2.3	2.3	2.4	8.7	8.5	8.9
	Middle	2,633	7.0	6.9	7.2	2.6	2.6	2.7	9.6	9.5	9.8
	Richer	2,739	7.6	7.4	7.7	2.8	2.8	2.9	10.4	10.2	10.6
	Richest	3,698	8.3	8.2	8.4	3.2	3.2	3.3	11.6	11.4	11.7
Newspaper/Magazine											
	Not at all	7,398	6.2	6.1	6.2	2.3	2.2	2.3	8.4	8.3	8.6
	<once a week	3,501	8.1	8.0	8.2	3.0	2.9	3.0	11.0	10.9	11.2
	Once a week	1,986	8.5	8.4	8.6	3.3	3.2	3.4	11.8	11.7	12.0
Radio Use											
	Not at all	7,078	6.6	6.5	6.7	2.5	2.5	2.5	9.1	9.0	9.2
	<once a week	2,667	7.5	7.4	7.6	2.7	2.6	2.8	10.2	10.0	10.3
	Once a week	3,140	7.6	7.5	7.7	2.9	2.8	2.9	10.5	10.4	10.7
Television Use											
	Not at all	3,069	5.6	5.4	5.7	2.0	2.0	2.1	7.6	7.4	7.8
	<once a week	2,346	7.0	6.9	7.2	2.5	2.5	2.6	9.5	9.3	9.7
	Once a week	7,470	7.6	7.5	7.7	2.9	2.9	2.9	10.5	10.4	10.6
CI: Confidence interval, N: Number of participants, HIV: human immunodeficiency virus, AIDS: acquired immunodeficiency syndrome.											