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HIV Testing Among Women with Disabilities in Ghana

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Abstract

Women with disabilities often face unique barriers to accessing healthcare, potentially increasing their vulnerability and reducing engagement with vital health services, including human immunodeficiency virus (HIV) testing. This study assessed the prevalence and associated factors of HIV-testing among women with disabilities in Ghana. Cross-sectional data from the 2017–2018 Ghana Multiple Indicator Cluster Survey, encompassing 819 women with disabilities, were analysed both descriptively and inferentially. The overall prevalence of HIV testing was 48.0% (95%CI = 44.6–51.4). Educational attainment, marital status, and geographical region were key determinants of HIV testing uptake. Women possessing a Senior High School or Tertiary level education demonstrated higher odds of HIV testing compared to those with no formal education. Women residing in Greater Accra, Volta, Brong Ahafo, and Upper West regions were more likely to have undergone HIV testing than those in the Western Region. Never-married women exhibited lower odds of HIV testing uptake than their married counterparts. No statistically significant association was found between various disability types and HIV testing uptake. Less than half of women with disabilities in Ghana had ever tested for HIV, highlighting a substantial unmet need and underscoring the urgent need for targeted interventions, including enhanced, region-specific educational and health promotion initiatives, and tailored support for never-married women with disabilities.

Keywords: disabilities; Ghana; HIV testing; women

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1. Introduction

Disability affects over one billion people worldwide with the majority residing in low- and middle-income countries [1]. This demographic frequently encounters substantial barriers to accessing healthcare, including essential sexual and reproductive health services [2,3]. These challenges are often exacerbated for women with disabilities, who also face an elevated risk of sexual violence, consequently increasing their vulnerability to HIV infection [4,5]. Globally, individuals with disabilities are nearly twice as likely to experience sexual violence compared to the general population, with women facing particularly elevated risks across diverse settings [6]. While data from low- and middle-income countries remain limited, a study in Ghana's Ashanti Region revealed that 68.3% of women with disabilities reported being survivors of sexual violence, emphasising the severity of the issue in local contexts [7]. These findings highlight the compounded vulnerabilities that heighten HIV risk and reinforce the need for targeted interventions.

Existing evidence consistently demonstrates that women with disabilities bear a disproportionate burden of HIV infection compared to women without disabilities [8–11]. Despite this heightened vulnerability, they exhibit lower rates of access to vital HIV prevention and treatment services [8,9,11]. Research identifies various barriers impeding access to HIV testing services for this population, including geographical distance to facilities, insufficient knowledge about HIV, negative attitudes from healthcare providers, high service costs [9,12,13], and a pervasive lack of comprehensive disability-disaggregated data [13,14].

Previous studies have identified several factors associated with HIV testing uptake among women with disabilities, such as age, specific disability status, socioeconomic status, marital status, educational attainment, geographical location, and HIV/AIDS knowledge [15–18]. In the Ghanaian context, dedicated research on HIV testing among people with disabilities remains limited, often integrated within broader global studies [15]. For example, while Seidu et al. explored sexual behaviour and reproductive health outcomes, their investigation into HIV testing was confined to only two districts [16]. Cognisant of this critical research gap, the present study uses nationally representative data to assess the prevalence and identify the predictors of HIV testing uptake among women with disabilities in Ghana. The findings of this research are anticipated to provide crucial insights, thereby informing the development of targeted HIV education programmes and interventions for women with disabilities, and for the broader disability community.

2. Materials and Methods

2.1. Study Design and Data Source

The original study adopted a cross-sectional study design. Specifically, we used a cross-sectional dataset from the 2017–2018 Ghana Multiple Indicator Cluster Survey (MICS 6). The MICS, an internationally recognised household survey programme, was initiated by United Nations Children's Fund (UNICEF) in the 1990s. It aims to gather comparable data on key indicators pertaining to children and women, supporting national development planning, policy formulation, and the monitoring of progress towards the Sustainable Development Goals (SDGs) and other international agreements. The survey was implemented by governmental statistical agencies in Ghana with financial and technical support from UNICEF and other international donors. This design was appropriate for examining population-level patterns and predictors of HIV testing uptake among women with disabilities, given the nationally representative scope and standardised data collection procedures of the MICS.

2.2. Data Collection Procedure

The MICS 6 employed a robust multi-stage, stratified cluster sampling methodology to ensure national representativeness. Initially, the survey delineated sampling strata based on urban and rural areas within each administrative region across Ghana. In the first stage of sampling, enumeration areas (EAs) were randomly selected as primary sampling units (PSUs) from within these strata. Subsequently, a comprehensive listing of all households within the selected EAs was conducted. In the second stage, a systematic random sampling technique was applied to select a sample of households from these lists. While the MICS dataset encompasses a broad range of demographic characteristics, this study focused on data from 819 women with disabilities to address the research objectives. Although the dataset is from 2017–2018, it remains the most recent nationally representative survey in Ghana that includes both HIV testing and disability data disaggregated for women.

For this study, we extracted data on women aged 15–49 years who were identified as having a disability based on responses to the Washington Group Short Set of questions. Disability was defined as reporting "cannot do at all" or "a lot of difficulty" in at least one of six

functional domains: seeing, hearing, walking, remembering/concentrating, self-care, and communication. Inclusion criteria were: (1) female respondents aged 15–49 years, (2) valid responses to the disability module, and (3) valid responses to the HIV testing question. Respondents who did not meet these criteria or had missing data on key variables were excluded from the final analytic sample, resulting in a total of 819 women with disabilities.

2.3. Study Variables

2.3.1. Outcome Variable

The primary outcome variable for this study was HIV testing uptake. This was operationalised by a single-item question, measuring the self-reported history of having ever been tested for HIV and knowing the results of the most recent test [13].

2.3.2. Independent Variables

The independent variables incorporated in this study included disability status, which was assessed using the Washington Group Short Set of questions. Women aged 15–49 years were categorised as having a functional difficulty if they reported "cannot do at all" or "a lot of difficulty" in at least one of the following six domains: (1) seeing, (2) hearing, (3) walking, (4) remembering/concentrating, (5) self-care, and (6) communication.

Other independent variables were selected based on their availability within the MICS 6 dataset and their established relevance in previous research concerning HIV testing uptake [13–16]. These included age, education, marital status, health insurance, household wealth index, rural-urban residence and region of residence, and media exposure (radio, TV, and newspaper). The categorisations are reported in Table 1.

Table 1. Demographic Characteristics and HIV Testing Uptake.

Variables	Frequency	Percentage	HIV Testing (%)		X^2 (*p*-Value)
			No	Yes	
Total	819	100	52.0	48.0	
Age					20.0 ($p < 0.001$)
<20	37	4.6	83.5	16.5	
20–29	133	16.3	55.8	44.2	
30–39	236	28.8	41.1	58.9	
40+	413	50.4	54.2	45.8	
Education Attainment					22.9 ($p < 0.001$)
Pre-primary or none	219	26.8	69.8	30.2	
Primary	183	22.3	48.9	51.1	
JSS/JHS	308	37.6	46.2	53.8	
Senior Secondary or Higher	107	13.1	45.5	54.5	
Marital Status					26.6 ($p < 0.001$)
Currently married	561	68.5	50.4	49.6	
Formerly married	144	17.6	44.6	55.4	
Never married/in union	114	13.9	68.8	31.2	
Health Insurance					3.5 (0.062)
With insurance	394	48.1	47.7	52.3	
Without insurance	425	51.9	55.9	44.1	
Wealth Index					33.5 ($p < 0.001$)
Poorest	132	16.1	65.4	34.6	
Second	178	21.7	61.9	38.1	
Middle	1945	23.8	56.4	43.6	
Fourth	161	19.6	44.9	55.1	
Richest	154	18.8	30.9	69.1	

Table 1. *Cont.*

Variables	Frequency	Percentage	HIV Testing (%)		X^2 (*p*-Value)
			No	Yes	
Residence					23.7 ($p < 0.001$)
Urban	422	51.6	43.2	56.8	
Rural	397	48.4	61.3	38.7	
Region					40.1 ($p < 0.001$)
Western	115	14.1	59.0	41.0	
Central	84	10.3	54.8	45.2	
Greater Accra	89	10.9	26.6	73.4	
Volta	103	12.6	55.5	44.5	
Eastern	126	15.3	52.7	47.3	
Ashanti	157	19.2	48.4	51.6	
Brong Ahafo	65	8.0	45.4	54.6	
Northern	38	4.6	80.5	19.5	
Upper East	32	3.9	73.2	26.8	
Upper West	10	1.2	53.6	46.4	
Type of Disability					
Difficulty Seeing					0.003 (0.955)
No	364	44.4	52.7	47.3	
Yes	455	55.6	51.4	48.6	
Difficulty Hearing					1.23 (0.269)
No	695	84.8	50.5	49.5	
Yes	124	15.2	60.4	39.6	
Difficulty Walking					0.51 (0.476)
No	298	36.4	49.6	50.4	
Yes	521	63.6	53.3	46.7	
Difficulty Remembering					1.91 (0.167)
No	304	37.1	46.3	53.7	
Yes	515	62.9	55.4	44.6	
Difficulty with Selfcare					
No	781	95.4	51.8	48.2	
Yes	38	4.6	55.3	44.7	
Difficulty Communicating					0.11 (0.743)
No	778	95.0	51.8	48.2	
Yes	41	5.0	56.4	43.6	

JSS = Junior Secondary School; JHS = Junior High School.

2.4. Ethics and Data Availability

This study utilised secondary data analysis of publicly available, anonymized information from the 2017–2018 Ghana MICS 6. Since the dataset does not include any personally identifiable details and is accessible to the public, it qualifies for exemption from Institutional Review Board (IRB) review under institutional policies governing the use of de-identified secondary data. Nonetheless, no formal IRB exemption was obtained. Access to the dataset is granted through the UNICEF MICS website https://mics.unicef.org/surveys (accessed on 14 October 2022) upon request and approval. For this study, the necessary permissions were requested and received prior to data access.

2.5. Data Preparation and Statistical Analysis

Data cleaning and recoding of variables were performed using Stata statistical software, version 18 (StataCorp, College Station, TX, USA). To ensure accurate representation of the population and account for the complex sampling design of the MICS, all analyses incorporated survey weights. Initially, univariate analysis was conducted to generate descriptive statistics, presenting frequencies and percentages for all study variables. Subse-

quently, bivariate and multivariable analyses were performed. Given the complex survey design, the 'svyset' command in Stata was declared prior to analyses to properly account for clustering, stratification, and sample weights. This approach, as recommended by West, Sakshaug, and Aurelien [17], is crucial for mitigating potential analytical errors that can arise when analysing secondary data collected through complex sampling designs [19]. Bivariate analyses, employing the chi-square test, were conducted to examine the association between each independent variable and HIV testing uptake. Following this, multivariable analyses were performed using binary logistic regression (Stata command: logistic or svy: logit). The adjusted odds ratios (AORs) from the multivariable logistic regression model are reported to quantify the independent associations between the selected predictors and the likelihood of HIV testing uptake, while controlling for other variables in the model.

3. Results

3.1. Demographic Characteristics and HIV Testing Uptake Among Women with Disabilities in Ghana

Table 1 presents the demographic profile and HIV testing prevalence among women with disabilities in Ghana. The sample exhibited a substantial proportion (approximately 50%) of respondents aged 40 years and above. Regarding educational attainment, 37.5% had completed Junior Secondary School (JSS), Junior High School (JHS), or Middle School. Most participants were married (68.5%), lacked health insurance (51.9%), and belonged to the middle wealth quintile (23.8%). Geographically, the sample was largely represented by women residing in urban areas (51.6%) and particularly in the Ashanti Region (19.2%).

In terms of disability types, the most prevalent reported difficulties included walking (63.6%), remembering (62.9%), and seeing (55.6%). Difficulty with self-care was the least common type of disability, affecting 4.6% of the respondents. Overall, less than half of the women with disabilities (48.0% (95%CI = 44.6–51.4)) reported ever having been tested for HIV. Notably, no statistically significant variations were observed in HIV testing uptake across the various types of disabilities (refer to Table 1).

3.2. Multivariable Analysis of Factors Associated with HIV Testing Uptake Among Women with Disabilities in Ghana

Table 2 displays the multivariable logistic regression analysis, identifying factors independently associated with HIV testing uptake among women with disabilities in Ghana. Higher educational attainment demonstrated a significant positive association with HIV testing. Specifically, women with Senior High School (SHS) or tertiary education levels exhibited significantly greater odds of HIV testing (AOR = 3.33; 95% CI = 1.77–6.26; $p < 0.001$) compared to those with no formal education. Marital status also emerged as a significant predictor. Women who had never been married had substantially lower odds of undergoing HIV testing compared to their married counterparts (AOR = 0.19; 95% CI = 0.10–0.36; $p < 0.001$). Regional disparities in HIV testing uptake were evident. Compared to women residing in the Western Region, those in Greater Accra (AOR = 3.12; 95% CI = 1.59–6.15; $p = 0.001$), Volta (AOR = 1.95; 95% CI = 1.10–3.46; $p = 0.021$), Brong Ahafo (AOR = 2.02; 95% CI = 1.05–3.90; $p = 0.036$), and Upper West (AOR = 2.68; 95% CI = 1.08–6.68; $p = 0.034$) were significantly more likely to have tested for their HIV status. Consistent with the univariate analysis, the multivariable model confirmed that there was no statistically significant association between any specific type of disability and HIV testing uptake.

Table 2. Multivariable Analysis of Factors Associated with HIV Testing Uptake among Women with Disabilities in Ghana.

Variable	AOR	95% Confidence Interval		*p*-Value
		Lower Bound	Upper Bound	
Age				
<20	Ref			
20–29	1.71	0.70	4.13	0.237
30–39	2.49	0.95	6.52	0.064
40+	1.33	0.51	3.50	0.563
Education				
None	Ref			
Primary	1.51	0.95	2.40	0.084
JSS/JHS	2.33	1.49	3.64	<0.001
SSS/SHS/Tertiary	3.33	1.77	6.26	<0.001
Marital Status				
Married	Ref			
Formerly married/in union	1.00	0.67	1.51	0.983
Never married/in union	0.19	0.10	0.36	<0.001
Insurance Subscription				
Insurance				
Without insurance	0.90	0.66	1.22	0.486
Wealth Status				
Poorest	Ref			
Second	1.17	0.71	1.94	0.535
Middle	1.29	0.74	2.24	0.369
Fourth	1.33	0.73	2.42	0.349
Richest	1.84	0.97	3.51	0.062
Residence				
Urban	Ref			
Rural	0.75	0.52	1.09	0.126
Region				
Western	Ref			
Central	1.06	0.55	2.06	0.858
Greater Accra	3.12	1.59	6.15	0.001
Volta	1.95	1.10	3.46	0.021
Eastern	1.76	0.94	3.27	0.077
Ashanti	1.39	0.74	2.61	0.312
Brong Ahafo	2.02	1.05	3.90	0.036
Northern	0.91	0.38	2.15	0.827
Upper East	0.99	0.49	2.00	0.989
Upper West	2.68	1.08	6.68	0.034
Type of Disability				
Difficulty seeing (Ref = No)	0.84	0.61	1.16	0.282
Difficulty hearing (Ref = No)	1.06	0.68	1.63	0.809
Difficulty walking (Ref = No)	0.82	0.59	1.14	0.243
Difficulty remembering (Ref = No)	0.96	0.68	1.36	0.806
Difficulty in self-care (Ref = No)	1.22	0.54	2.77	0.627
Difficulty communicating (Ref = No)	0.64	0.33	1.26	0.197

AOR = Adjusted Odds Ratio; Ref = Reference Category.

4. Discussion

This study aimed to ascertain the prevalence and associated factors influencing HIV testing uptake among women with disabilities in Ghana. Our findings indicate that 48% of the study population had undergone HIV testing. Key predictors of uptake included educational attainment, marital status, and geographical region of residence. Notably, no

statistically significant associations were identified between specific disability types and HIV testing uptake.

The observed HIV testing prevalence of 48% among women with disabilities in Ghana is consistent with national estimates for the general population, such as the 44% reported by Seidu et al. [3]. However, this prevalence is comparatively lower than those documented in other settings, including Ethiopia and Zambia, where testing uptake among people with disabilities was 56.1% [17] and 66% [12], respectively. Several interconnected factors likely contribute to Ghana's relatively subdued uptake. Limited access to HIV-related information in accessible formats may impede awareness and engagement with testing services. Furthermore, the pervasive stigma and discrimination associated with both HIV and disability can deter individuals from seeking care due to apprehension of judgement or exclusion [12,15,20]. Structural impediments, such as the physical inaccessibility of healthcare facilities and pervasive transportation challenges, are also likely to reduce participation in screening programmes, particularly for those with mobility impairments [21,22].

Additionally, economic constraints may exacerbate these disparities, as individuals with disabilities often encounter financial difficulties [23], potentially hindering their ability to afford HIV testing and treatment. In contrast, countries with higher uptake rates may benefit from more robust disability-inclusive HIV policies or enhanced integration of testing services within accessible healthcare frameworks. The study further revealed that the odds of HIV testing uptake significantly increased with higher levels of education, with individuals possessing junior high school or secondary/higher education demonstrating a greater likelihood of testing compared to those with no formal education. This aligns with previous studies that have consistently reported a positive correlation between educational attainment and HIV testing uptake [24–27]. This association underscores the crucial role of education in enhancing awareness of HIV transmission, prevention strategies, and the importance of testing. Individuals with higher educational qualifications may possess improved access to health information, greater health literacy, and enhanced autonomy in making informed decisions regarding their health [28,29]. Moreover, the formal education system can serve as an effective conduit for HIV awareness campaigns, ensuring that individuals are exposed to information that promotes proactive health behaviours, including routine HIV testing.

Our findings also indicate that women with disabilities who had never been married were less likely to undertake HIV testing. Marital status often influences healthcare-seeking behaviour, as married individuals may benefit from social support networks that encourage engagement with health services, including HIV testing. This observation is consistent with prior research conducted in Ghana [30], Ethiopia [31], Tanzania [32], and Zambia [33], where being married was associated with higher odds of HIV testing uptake. This effect may be particularly pertinent in contexts where partners actively promote preventive health behaviours. Furthermore, married women may have increased engagement with healthcare facilities through routine medical check-ups, antenatal care, or family planning services, which can incidentally facilitate access to HIV testing [32]. Conversely, never-married individuals may have fewer touchpoints with the healthcare system and may experience reduced motivation or encouragement to seek testing.

Significant regional differences in HIV testing uptake were also evident, with women residing in the Volta, Brong Ahafo, and Greater Accra regions demonstrating a two- to three-fold higher likelihood of undergoing HIV testing. This finding corroborates studies in Ghana and other developing countries that have documented regional disparities in HIV testing rates [12,30,34,35]. Such regional variations may stem from disparities in healthcare infrastructure, service availability, and the intensity of public health interventions across different geographic areas. Regions boasting more robust healthcare systems, enhanced

accessibility to HIV testing centres, and more proactive HIV awareness programmes are likely to facilitate higher uptake rates. Greater Accra, for instance, exhibits the highest concentration of healthcare facilities in Ghana, which likely improves access to HIV testing for its residents [12,34]. The proliferation of health centres may mitigate logistical barriers and enhance service accessibility, thereby contributing to higher testing uptake. Additionally, socio-cultural factors and regional policies may influence health-seeking behaviours, emphasising the need for geographically tailored interventions to ensure equitable access to HIV testing services nationwide.

Nevertheless, the absence of statistically significant associations between various disability types and HIV testing uptake suggests that systemic barriers may exert a uniform impact across different disability categories, rather than specific impairments leading to differential testing behaviours. This finding underscores the importance of addressing broader, overarching healthcare accessibility challenges rather than exclusively focusing on disability-specific interventions. Negative attitudes towards disability can disempower individuals and foster social exclusion, thereby creating an environment where accessing healthcare, including HIV testing, becomes more arduous [36]. Rather than presuming that specific disability types create distinct barriers to testing, these findings highlight the necessity of tackling systemic factors that universally affect all individuals with disabilities, ensuring that HIV services are genuinely inclusive and accessible to all.

4.1. Implications for Policy and Practice

The findings of this study underscore critical deficiencies in HIV testing access among individuals with disabilities in Ghana, necessitating the development of more inclusive health policies and targeted interventions. Given the substantial influence of education on testing uptake, policymakers should prioritise integrating comprehensive HIV education into disability-inclusive curricula across all educational levels. Ensuring that HIV-related information is provided in accessible formats, such as Braille, sign language interpretation, and simplified materials, is crucial to bridging the existing knowledge gap. Furthermore, the pronounced regional variations in testing uptake highlight the urgency for localised approaches to service delivery, aimed at ensuring equitable access in regions with suboptimal testing rates. Expanding the reach of mobile testing units and community-based outreach initiatives could effectively mitigate geographical barriers and enhance overall testing engagement among people with disabilities.

Achieving meaningful improvements in HIV testing uptake among women with disabilities also requires strong political will and strategic policy action. Government commitment is essential to ensure that disability-inclusive health services are not only designed but adequately funded and implemented. Inclusive health planning must integrate disability considerations into national HIV strategies, while budget allocations should reflect the additional resources needed to make services accessible. Ghana's Disability Act (Act 715), for instance, explicitly mandates in Section 31 of Part Five that the Ministry of Health shall provide free general and specialist medical care, rehabilitative treatment, and appropriate assistive devices for persons with total disability. However, the National Health Insurance Scheme (NHIS) remains silent on this provision, highlighting a critical gap between legislative intent and implementation. Similarly, Ghana's National Health Policy acknowledges the need to eliminate barriers to care for persons with disabilities, including discrimination and stigmatisation, yet operational mechanisms to enforce these commitments remain limited. Drawing lessons from countries that have successfully implemented disability-sensitive health interventions, such as Uganda's integration of disability indicators into its national health information system [37], could inform more effective approaches. Strengthening accountability mechanisms and involving persons with disabili-

ties in policy design are also critical to ensuring that interventions are responsive, equitable, and sustainable.

Beyond addressing issues of accessibility and awareness, it is imperative to confront systemic biases within the healthcare system to improve HIV testing rates. Healthcare providers require comprehensive training on disability-inclusive HIV services to facilitate equitable and respectful healthcare interactions. The implementation of stigma reduction campaigns, targeting both HIV and disability-related discrimination, is essential for cultivating a more supportive environment, thereby encouraging individuals to seek testing without fear of social judgement. Additionally, bespoke financial assistance programmes tailored for individuals with disabilities may be necessary to alleviate economic impediments to accessing care. By implementing these policy and practice modifications, Ghana can make substantial progress towards improving HIV testing rates and ensuring that individuals with disabilities receive the requisite support to effectively engage with HIV prevention and treatment services. Future research should further investigate how disability-responsive interventions can be seamlessly integrated into national and global health strategies to accelerate progress towards these crucial targets.

4.2. Strengths and Limitations

This study benefits significantly from the utilisation of nationally representative data derived from a rigorous sampling design and standardised disability measurement, which collectively enhance the generalisability and internal validity of the findings. The meticulous application of complex survey weighting further ensures analytical precision, while robust statistical methods provide valuable insights into the predictors of HIV testing uptake among women with disabilities in Ghana.

However, certain limitations warrant consideration. The inherent cross-sectional nature of the study precludes the inference of causal relationships between identified factors and HIV testing uptake. Furthermore, reliance on self-reported data introduces the potential for recall bias and social desirability bias, which may influence the accuracy of reported behaviours. While the Washington Group Short Set offers a standardised approach to disability assessment, it may not comprehensively capture the nuanced and diverse experiences of individuals across all disability categories. In particular, emerging research highlights that individuals reporting "some difficulty" in multiple functional domains may also face significant barriers to healthcare access, yet were not included in the current analysis. Future studies could explore this subgroup to better understand gradients of functional limitation and their implications for HIV testing uptake. Additionally, the analysis may be influenced by unmeasured confounders, such as the actual accessibility of healthcare facilities and individual perceptions of HIV risk, which were not explicitly accounted for in the statistical models. This study did not incorporate direct lived experience input from women with disabilities during the design or interpretation phases. As such, the findings and recommendations may not reflect the perspectives of those most affected. Future studies should adopt a mixed-methods approach to provide a more comprehensive understanding of the issue. Despite these acknowledged limitations, the findings unequivocally underscore the urgent need for the development and implementation of disability-inclusive health policies to improve HIV testing access in Ghana.

5. Conclusions

This study provides evidence into HIV testing uptake among women with disabilities in Ghana, identifying key socio-demographic predictors and structural barriers that impede access to essential testing services. With nearly half of the study population reporting having undergone HIV testing, the findings reveal both commendable progress and persistent

disparities in achieving equitable healthcare access for this vulnerable group. Addressing these disparities is paramount for Ghana and other low- and middle-income countries in advancing global commitments, particularly SDG3 (Good Health and Well-being), which prioritises universal access to essential health services, including comprehensive HIV prevention and treatment. The study's emphasis on regional differences in testing uptake further highlights the necessity for geographically tailored interventions to ensure that no population is marginalised, a fundamental tenet of Universal Health Coverage. Beyond national priorities, enhancing HIV testing uptake among women with disabilities directly aligns with international HIV control targets, including Joint United Nations Programme on HIV/AIDS' (UNAIDS) 95-95-95 strategy, which advocates for 95% of people living with HIV to be aware of their status, 95% of diagnosed individuals to receive antiretroviral treatment, and 95% of treated individuals to achieve viral suppression.

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Data Availability Statement: The dataset used in this study is publicly available and freely accessible from the UNICEF MICS website https://mics.unicef.org/surveys (accessed on 14 October 2022) upon formal request and granted permission from UNICEF.

Conflicts of Interest: The authors declare no conflicts of interest.

Disability Language/Terminology Positionality Statement: In this study, person-first language (e.g., "women with disabilities") was used to align with international standards such as those promoted by the United Nations and the Washington Group on Disability Statistics. This choice reflects the terminology used in the original MICS dataset and is consistent with Ghana's legal and policy frameworks, including the Disability Act (Act 715), which emphasises inclusion and dignity. The use of person-first language also supports the study's public health orientation, which prioritises respectful, non-stigmatising communication.

Abbreviations

The following abbreviations are used in this manuscript:

HIV	Human Immunodeficiency Virus
UNICEF	United Nations Children's Fund
MICS	Multiple Indicator Cluster Survey
UNAIDS	Joint United Nations Programme on HIV/AIDS
SDGs	Sustainable Development Goals

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