

## Healthcare Workers' Perceptions and Attitude towards Sexuality and Pregnancy of Disabled Women in Nairobi: Implications for Sustainable Development Goals

Brezhnev Henry Otieno<sup>1</sup>  
Sahaya Selvam<sup>2</sup>  
Stephen Ouma Akoth<sup>3</sup>

<sup>1</sup>brezhnevo@gmail.com

<sup>2</sup>selvamsdb@gmail.com

<sup>3</sup>ismmpha@tangaza.ac.ke

<sup>1,2,3</sup>Tangaza University, Kenya

### ABSTRACT

*The Sustainable Development Goals (SDGs) focus on inclusivity and have a specific reference to 'leave no one behind'. But disabled women are discriminated against, particularly in the context of sexual and reproductive health and rights, which has negative effects on Kenya's and global efforts towards inclusive development. This study aimed to explore perceptions and attitudes of healthcare workers on sexuality and pregnancy of disabled women in Nairobi. The study used a cross-sectional study design, surveying 145 healthcare workers, specifically doctors, nurses, clinical officers, and community health workers. Data collection involved a perception questionnaire, and the Attitude Toward Disabled Persons (ATDP) scale. Statistical analyses included descriptive and inferential statistics were conducted, including chi-square tests and one-way ANOVA. It was established in the study that the majority of health care workers posited that women with disabilities are sexually active, have sexual drives, and possess functional sexual organs, thus breaking the conception of total asexuality as previously thought. The mean ATDP score of 117.77 (SD=19.25) of the respondents was found to be positive; private healthcare providers displayed more positive attitudes towards disabled women than those employed in public institutions. The study findings highlight the need for comprehensive disability sensitivity training that promotes the dignity and autonomy of disabled women. The study recommends policy initiatives that mandate comprehensive disability sensitivity training, particularly in public facilities, to foster inclusive attitudes and behaviours. Multi-level interventions should prioritize equitable healthcare access, supporting disabled women's reproductive autonomy and well-being.*

**Keywords:** Disability, Healthcare Workers, Disabled Women, Sexuality, Pregnancy, Sustainable Development Goals

### I. INTRODUCTION

World leaders' commitment to combating long-standing issues like poverty, inequality, and social exclusion was significantly highlighted further by the adoption of the Sustainable Development Goals (SDGs) in 2015. The assurance to "leave no one behind" resonates with a collective purpose to ensure that the fruits of development are enjoyed by all people, irrespective of their economic status, gender, race, religion or any other social identity (United Nations, 2015). This commitment, therefore, reflects an acceptance that the previous development initiatives models had, in many cases, failed or contributed to increasing the gap between the haves and the have-nots, worsening health indicators especially in the less developed parts of the world, and disadvantaged already disadvantaged groups like people with disabilities.

At the heart of this inclusive agenda is SDG 5, which emphasizes gender equality as well as the empowerment of women and girls. This goal has various targets to end discrimination and abuse in addition to mandating the protection of sexual and reproductive health and rights for all. While these targets do not directly address the pregnancy or sexuality of disabled women, they are radical and in a way advocate on behalf of these women's rights to such sexual and reproductive health. Disabled women have the right to the same body and reproductive options as all women. However, the unique attributes of relationship of being women, having disabilities and other social identities, such as those related to social status create additional barriers for them (Rade et al., 2023; Beninger, 2021; Hameed et al., 2020).

This intersectionality puts disabled women at a disadvantage where they face discrimination and bias in the community on top of dealing with health care system barriers. These barriers include lack of disability training for health professionals and healthcare services that are not physically accessible. In addition, stigma together with deep-rooted gender and disability stereotypes forms and maintains negative societal attitudes and ostracization of disabled women experiencing pregnancy (Nguyen et al., 2022; Fletcher et al., 2023; Heideveld-Gerritsen et al., 2021). This vicious cycle of neglect and discrimination of the sexual and reproductive rights of disabled women hampers the progress towards inclusive and sustainable development, thereby contradicting the UN's universal call that strives to "leave no one behind".

Across Africa, regional initiatives like the African Union's Agenda 2063 prioritise inclusive health; but disabled women still face structural, cultural and policy barriers to access reproductive health services (Rugoho & Maphosa, 2017; Mapuranga & Musingafi, 2019). Research shows that in Zimbabwe and Ghana, health infrastructure and policy implementation fail to address the needs of disabled women, and there are huge gaps in provider training and awareness that perpetuate negative attitudes towards the reproductive rights of disabled women (Badu et al., 2018; Kwadwo et al., 2014).

In East Africa, it's the same. Disabled women in Tanzania and Uganda report discrimination, biased treatment and institutional barriers to accessing sexual and reproductive health services. Despite supportive policies, lack of implementation and inclusive infrastructure continues to hinder their access (Ahumuza et al., 2014; Mesiäislehto et al., 2021).

In Kenya there is limited research on the sexual and reproductive health rights of disabled women, most studies are on the broader disabled population. Findings show that disabled women face many barriers such as negative social attitudes, exclusion from health services and poorly tailored programmes (Makau et al., 2021; Khisa et al., 2023). Despite Kenya's legal framework that promotes equality, there are huge gaps in policy implementation that affect disabled women particularly in rural areas where cultural and infrastructure barriers are more pronounced (Kamundia, 2013; Bukhala, 2022).

Gender and disability discrimination across Africa and indeed Kenya means there is need for customised, disability inclusive health approaches especially in sexual and reproductive health. Health workers must be inclusive through extensive training and understanding of the cultural and structural barriers faced by disabled women. This study explores health workers' perspectives in Nairobi on the sexuality and pregnancy of disabled women, in line with broader objectives of highlighting the gaps and opportunities within Kenya's health system. This will inform policies and practices that achieve the SDG principle of "leave no one behind".

### 1.1 Statement of the Problem

The Sustainable Development Goals (particularly Goal 5), the Convention on the Rights of Persons with Disabilities (CRPD), and Kenya's national legal frameworks, including the 2010 Constitution and the revised 2003 Persons with Disabilities Act, collectively champion the dignity, rights, and full participation of individuals with disabilities (The Constitution of Kenya, 2010). Ideally, these measures are meant to ensure that disabled women receive respect and equitable access to all facets of life, including maternal and reproductive healthcare. However, in practice, disabled women continue to face persistent discrimination, stigmatization, and prejudice, especially concerning their sexuality and pregnancy (Shakespeare, 2018; Devkota et al., 2017). Deep-rooted social attitudes and structural barriers foster misunderstandings and biases within healthcare systems, significantly limiting these women's access to appropriate and inclusive maternal healthcare services (Matin et al., 2022; Ganle et al., 2016). This dissonance underscores a critical gap between the rights guaranteed by legal and policy frameworks and the lived experiences of disabled women. This study aims to explore and analyze healthcare workers' perceptions and attitudes toward sexuality, and pregnancy among disabled women, shedding light on factors that may either obstruct or facilitate positive perceptions and attitudes, dignified treatment and their access to care.

### 1.2 Research Objectives

- i. To examine perceptions of different categories of healthcare workers towards the sexuality of disabled women.
- ii. To investigate perceptions of different categories of healthcare workers towards the fertility and presence of pregnant disabled women at health facilities.
- iii. To assess the attitudes of different categories of healthcare workers towards disabled women.

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

#### 2.1.1 Utu philosophy and Critical Disability Theory

Utu philosophy and Critical Disability Theory (CDT) provide the theoretical frameworks employed in the present study. Proponents of CDT argue that the main causes of marginalization for disabled individuals are discriminating circumstances and behaviours rather than personal limitations. Institutionalized barriers and societal expectations are the root causes of disability as a socially constructed condition (Oliver, 2009; Devlin and Pothier, 2006). CRT stresses the need for confronting systematic injustice and considers how strongly intersecting identities—such as poverty and gender—influence the experiences of disabled women. Utu philosophy emphasizes equitable treatment, empathy, and respect for one another while placing disability within a community and values-driven perspective (Mbiti, 1969; Bongmba, 2016). Utu highlights the need for the society to support its most vulnerable members since everyone's inherent dignity and communal care define its well-being (Chigangaidze, 2021). Combining

CDT with Utu, this study explores the interconnected institutionalized and cultural aspects that promote discrimination, therefore impacting the sexuality, and pregnancy experiences of disabled women.

## 2.2 Empirical Review

### 2.2.1 Perceptions of Different Categories of Healthcare Workers towards the Sexuality of Disabled Women

Cultural attitudes, institutional barriers and educational disparities all impact on healthcare workers' perceptions of the sexuality of disabled women which in turn affects the quality and inclusivity of sexual and reproductive health (SRH) services to this population. Across different healthcare roles – doctors, nurses, social workers and support staff – implicit and explicit biases marginalize disabled women, deny them access to comprehensive SRH care and perpetuate stereotypes that ignore their sexual autonomy and rights.

Cultural attitudes play a big role in shaping healthcare providers' views. For example, Akasreku et al (2018) describe how in Ghana, healthcare providers and the community at large view disabled women as asexual or not interested in sexual relationships. This view is based on cultural beliefs that disability means lack of agency and self-determination especially in the area of sexuality. As a result, healthcare providers do not offer SRH education, counselling or preventive care to disabled women assuming these services are not needed. Tugut et al (2016) found similar trend among Turkish nursing students. These students were uncomfortable and unsure when talking to disabled women about SRH, mainly because of societal beliefs that disability means non-sexuality. This discomfort often translates to clinical practice where women with disabilities about are left out of SRH discussions, such as contraception, sexual activity and preventive health measures.

Healthcare providers often adopt a paternalistic approach which reinforces the view of disabled women as asexual. Deffew et al. (2021) found that support staff working with intellectually disabled women assumes a “protective” role, they justify this as protecting these women from harm. But this paternalistic approach restricts the sexual rights and autonomy of these women as staff avoid discussing sexual health and relationships, they see these topics as irrelevant or inappropriate. Schmidt et al (2021) found similar trend among United States based healthcare providers who report discomfort and inadequacy in providing SRH information to intellectually disabled women. This avoidance behaviour, framed as protection, denies women with disabilities about access to critical SRH information and perpetuates a culture of exclusion that marginalises them from essential health services.

Institutional and systemic barriers also perpetuate these exclusionary practices. Taouk et al (2018) found that US obstetricians and gynaecologists lack training and adaptive resources such as accessible examination tables and SRH educational materials to provide inclusive care to intellectually disabled women. This lack of resources sends a message to healthcare providers that SRH needs of intellectually disabled women are not a priority, that their sexual health is secondary or unimportant. Tugut et al (2016) found that nursing curricula rarely include disability focused SRH training, resulting in a workforce that is not equipped to meet the SRH needs of disabled patients.

### 2.2.2 Perceptions of Different Categories of Healthcare Workers towards the Fertility and Presence of Pregnant Disabled Women at Health Facilities

Complex cultural biases, professional attitudes and systemic flaws all impact on disabled women's access to perinatal care by influencing healthcare providers' views on fertility and their presence at health facilities if pregnant. . Studies show that healthcare providers – obstetricians, midwives and childbirth educators – view pregnancy in disabled women as too risky or not advisable, based on assumption that disability means not being able to be a good mother. These views affect the level and quality of perinatal care and discourage disabled women from exercising their reproductive rights fully.

In Ghana, Seidu et al (2023) found that healthcare providers perceived pregnancies in disabled women as “unnecessary risks”, a perception rooted in cultural beliefs that disability means physical weakness and dependency. This view is more prevalent among providers from conservative backgrounds who believe disabled women lack the physical and emotional capacity to be mothers. This translates to clinical practice where pregnant disabled women receive less comprehensive care as providers are reluctant to engage with their perinatal needs. Similarly in the United States, Smeltzer et al (2022) found that childbirth educators de-prioritise prenatal education for disabled women, assuming pregnancy and childbirth will be “insurmountable challenges”. This assumption means there are no disability specific prenatal resources and support as educators and other healthcare providers unconsciously consider these women's reproductive needs as less urgent.

Moreover, healthcare providers in different cultural contexts question the reproductive choices and autonomy of disabled women. Huang et al (2022) found in Taiwan that clinicians often question the decisions of disabled women such as albinism to become mothers. These interactions imply that disability is seen as not compatible with being a responsible parent, disabled women appear stigmatised and marginalised in their reproductive health choices. This questioning undervalues their reproductive rights and often discourages them from seeking perinatal care or exercising their reproductive autonomy.

Smeltzer (2007) and Saeed et al (2022) found that lack of infrastructure and resources in health facilities in an indication of these distorted view about disabled women . They observed that many facilities lack accessible equipment such as adjustable height examination tables and disability specific prenatal educational materials which are crucial for accommodating the need of disabled women. These infrastructural gaps reinforce providers' views that their pregnancies are too difficult and further marginalise disabled women from comprehensive care. This lack of structural support limits physical access and sends a silent message to healthcare providers that disabled women's reproductive needs are of lower priority in the healthcare system.

### 2.2.3 Attitudes of Different Categories of Healthcare Workers Towards Women with Disabilities

Attitudes of healthcare workers towards disabled women affect both patient care and inclusivity in healthcare settings. Recent studies using the Attitudes Toward Disabled Persons (ATDP) scale have looked at healthcare providers across different settings and found key demographic, professional and cultural factors that influence these attitudes.

One common thread is that younger healthcare providers have higher ATDP scores, meaning more positive attitudes towards disability. Woodman et al (2024) found this in Saudi Arabia where younger providers scored higher than older colleagues, possibly due to more inclusive education and social media representation. Devkota et al (2017) in Nepal found that younger, non-Dalit providers were more accepting, but here age and caste interacted to introduce a cultural layer. This generational trend across different contexts means healthcare institutions can tap into these progressive attitudes among younger staff as a foundation for building more inclusive care environments.

Gender also plays a part in determining attitude of healthcare workers towards disabled women. Şimşek et al (2020) found in a study of healthcare providers in Istanbul that female providers scored higher on the ATDP scale, especially in social care roles. Other studies that link caregiving roles (often held by women) with more accepting attitudes towards disabled people confirm this trend. But gender-based empathy is not always straightforward. In Nepal, Devkota et al (2017) found that while female health volunteers had positive attitudes, cultural factors like caste biases complicated the picture. This shows that gender related differences in empathy towards disability are influenced by multiple social and cultural factors which need to be addressed to create a truly inclusive healthcare environment.

Professional role and exposure are also key factors that determine attitudes. Studies show that healthcare providers directly involved in social and psychological care (social workers, psychologists, nurses) may have higher ATDP scores than administrative staff. Pelleboer-Gunnink et al (2017) highlighted this divide by saying that healthcare providers in caregiving roles have more positive cognitive attitudes. But despite intellectually endorsing disability rights, there is a gap in practice, so there is need for hands on training that goes beyond theoretical learning. In line with this, Öksüz et al (2023) found that nursing students in Turkey who had disability focused education had higher ATDP scores, so direct experience-based learning can build empathy and understanding.

On the other hand, structural and cultural biases cannot be ignored. Dorji and Solomon (2009) found in Bhutan that healthcare workers, especially nurses, had low ATDP scores, so disability was not viewed well in this context. The study by Satchidanand et al (2012) also observed that collaborative, interdisciplinary training can help combat these biases and promote inclusive attitudes across healthcare roles. These studies show a bigger problem: cultural and institutional norms still reinforce stigmatizing views which can be addressed by structured interventions and system changes.

The findings from these studies give us a layered understanding of how disability attitudes are shaped in healthcare environments. A clear picture emerges that training and exposure are key. While general positive attitudes are more common among younger providers and those in patient facing roles, the persistence of cultural and structural biases means more needs to be done. To bridge the gap between attitudes and practice, healthcare education programs should include experiential learning opportunities that challenge personal and systemic biases. These interventions should be culturally sensitive, addressing specific prejudices like caste or gender-based biases to create a healthcare environment that is inclusive and equitable.

Drawing on the empirical evidence, this study explored the perceptions and attitudes of different categories of healthcare workers towards the sexuality and pregnancy of disabled women, by means of both the Attitude Toward Disabled Persons (ATDP) Form B questionnaire and a perception questionnaire.

## III. METHODOLOGY

### 3.1 Study Setting

The study was conducted in Kibra, an informal settlement in Nairobi, Kenya. Kibra is a densely populated area in Nairobi County, Kenya, with a land area of approximately 2.5 square kilometres, with a population of 185,777. It is divided into four administrative units: Kibra, Sarang'ombe, Laini Saba, and Woodley. There is no readily available data on the number of healthcare workers in Kibra Sub County because most of the statistics on the health workforce are national in scope. However, information from the Ministry of Health (MoH) indicates that Kibra has eighty-eight



(88) functional health facilities that are owned by private entities (43), government agencies (22), faith-based organizations - FBOs (5) and non-governmental organizations - NGOs (18).

### 3.2 Target Population

In research, the target population consists of all instances that satisfy particular inclusion criteria, therefore ensuring that participants have pertinent traits fundamental to the aims of the study. Polit and Hungler (2004) underline the need for precisely stated eligibility criteria since such criteria strictly describe the characteristics of the population of the study, therefore improving the validity and accuracy of the research results.

Since centralized data on workforce numbers was unavailable, the researcher defined the target population as all cadres of healthcare providers—including doctors, nurses, clinical officers, and community health workers—across private, public, faith-based, and non-governmental health facilities in Kibra Sub-County.

### 3.3 Sample Size and Sampling Procedure

Using stratified random sampling, the researcher selected participants from health facilities for the study, which was done in three phases. In phase I, the researcher developed a stratum for each health facility category (public, private, FBO and NGO) to obtain proportional representation. The researcher sampled fifty per cent of these four categories of facilities and selected thirty-four (34) health facilities. Eighteen (18) private health institutions declined to participate in the study, whereas five (5) NGOs and two (2) FBOs consented to the data collection. All eight (8) public health institutions were visited and consented to the study were included in the sample. In phase II, a stratified sampling approach was employed to select healthcare workers from various cadres across healthcare facilities, including doctors, clinical officers, nurses, and community health workers (CHWs). For each selected facility, at least a quarter of the declared numbers of healthcare personnel were included in the sample. In cases where facilities did not provide specific information on staff composition and numbers, the researcher made estimations. In total, 216 healthcare workers were selected for the study spread across public (162), private (18), FBO (11) and NGO (25) health facilities as well as encompassing doctors (9), clinical officers (27), nurses (38), and community health workers (142). The response rate was 67% for all healthcare workers (145 respondents).

### 3.4 Data Collection Tools and Procedures

The study utilized quantitative research techniques and surveyed healthcare workers using a close-ended perception questionnaire and the Attitude Toward Disabled Persons (ATDP) scale. The perception questionnaire comprised two primary sections, encompassing 12 questions. The first section, comprising seven questions gathered information on the socio-demographic attributes of the respondents, including sex, age, health facility type, exposure to disability training, years of service, professional cadre and the level of interaction with disabled individuals. The second segment, with a total of six questions, centered on subjective viewpoints regarding sexuality (sexual organs, feelings and activity) and pregnancy of disabled women. The ATDP Form B with 30 statements of six ratings on a Likert-type scale ( +3 = agree very much, +2 = agree pretty much, +1 = agree a little, -3 = disagree very much, -2 = disagree pretty much, -1= disagree a little) was employed to assess the attitude of healthcare workers toward disabled women. The original ATDP scale of this study included both positive and negative statements. During the initial analysis phase, the positive statements in items 17, 19, 20, 23, 24, and 26 on the ATDP tool had their algebraic signs reversed. Following this, the ATDP scores were calculated, and the algebraic sum of each score was also reversed, changing them from positive to negative and vice versa. A fixed value of +90 was added to the resultant scores to address any negative scores, resulting in only positive scores. The ATDP score range was from 0 to 180, with higher scores indicating a more positive attitude towards women with disabilities. The internal consistency of the 30-item ADTP scale was assessed and yielded a Cronbach's alpha coefficient of 0.717, which is considered acceptable.

### 3.5 Data Analysis and Presentation

The study's data was analyzed using SPSS version 29.0, employing frequency distribution tables, means, percentages, and cross-tabulations to summarize and present the findings. To examine relationships between healthcare workers' perceptions and various demographic characteristics—such as sex, age, type of health facility, exposure to disability training, years of service, professional cadre, and level of interaction with disabled individuals—the chi-square test of independence was utilized.

Additionally, the Attitude Toward Disabled Persons (ATDP) score was calculated to assess healthcare workers' attitudes toward disabled women. The ATDP scores were examined in relation to demographic variables, including sex, age, health facility type, disability training exposure, years of service, professional cadre, and interaction level with disabled individuals. The Shapiro-Wilk test indicated that ATDP scores were normally distributed ( $W = 0.99$ ,  $p = 0.275$ ). Based on these statistical results, a one-way ANOVA was used to look at the average differences in ATDP scores across demographic groups. This was done to find out how these factors affecting the attitude of healthcare workers towards disabled women.

### 3.6 Validity and Reliability

Validity and reliability are essential metrics for assessing the quality of research data collection instruments (Drost, 2011). Reliability is described as the ability of research instruments to consistently provide comparable results if used with the same type of subjects and within the same setting, or "consistency of measure" (Heale & Twycross, 2015).

The researcher utilised the Cronbach alpha model to test the internal consistency of the ATDP scale. When the Alpha coefficient is above 0.9, it is considered excellent; when 0.8, it is regarded as good; when it is 0.7, it is considered acceptable; and when it is less than 0.6, it is seen as poor. In this study, Cronbach's Alpha was calculated to be 0.717 for the 30-item ATDP scale, showing an acceptable level of internal consistency (Cronbach, 1951).

Validity is the level an instrument can measure as intended (Sullivan, 2011). To ensure that the study's instruments accurately measured their corresponding intended elements, the researcher utilized a content validity technique. The evaluation process compared data from in-depth interviews and surveys with other evidence gathered through comparable analytical means. The researcher also engaged senior faculty members for feedback purposes during the data collection and analysis phases.

### 3.7 Ethical issues

Before conducting the research, the researcher secured ethical approval from Tangaza University and acquired a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI), Kenya's regulatory body for research (Approval number 558428). In addition, consent was sought and approved by the County Government of Nairobi, and the targeted health facilities and respondents. Data collected in the field were processed per the guidelines outlined in the Kenya Data Protection Act (Republic of Kenya, (2019). The confidentiality and privacy of respondents' details, including their names, ages, and locations, were strictly maintained.

## IV. FINDINGS & DISCUSSION

### 4.1 Findings

#### 4.1.1 Background Characteristics of Study Respondents

The survey revealed a higher proportion of female healthcare workers than male healthcare workers (68.5% to 31.5%). Most participants were between 26 and 35 (40%), while the minority were 56 and older (4.1%). The remaining respondents' ages ranged from 36 to 45 (29%), 46 to 55 (20%), and 56 and 18 to 25 (6.2%). In addition, 76.6% of respondents reported working in a public health institution, while 16.6%, 5.5%, and 1.4% were affiliated with NGO-owned, private, and faith-based facilities, respectively. Most survey respondents (65.5%) were community healthcare workers (volunteers), whereas just 4.2% of the sample comprised medical doctors. The sample consisted of 18.6% nurses and 11.7% clinical officers. When asked where they had received training or awareness on disability, 50.3% of respondents said they had attended such training, but 49.7% said they had not. Most respondents (42.1%) had worked in the health sector for less than five years, while only 2.8% had more than twenty-one years of experience. Moreover, 31%, 17.9%, and 6.2% of the healthcare workers had served between 6 and 10 years, 11 to 15 years, and 16 to 20 years, respectively. Regarding the nature of their encounters with disabled women, 49% and 17.2% of respondents said it was through the provision of general and specialized services, respectively. However, 33.8% of respondents said that their interactions with Disabled women were casual. This information is captured in Table 1.

**Table 1**  
*Distribution of Healthcare Workers by Demographic Characteristics*

Background characteristics	Frequency	Percentage
<b>Sex</b>	<b>145</b>	<b>100</b>
Female	99	68.7
Male	46	31.7
<b>Age category</b>	<b>145</b>	<b>100</b>
18-25	9	6.2
26-35	58	40.0
36-45	42	29.0
46-55	30	20.7
56+	6	4.1
<b>Distribution by health facility type</b>	<b>145</b>	<b>100</b>
Public	111	76.6
Private	8	5.5
NGO	24	16.6



FBO	2	1.4
<b>Professional cadre</b>	<b>145</b>	<b>100</b>
Doctor	6	4.2
Nurse	27	18.6
Clinical Officer	17	11.7
Community Health Volunteer	95	65.5
<b>Exposure to Disability training</b>	<b>145</b>	<b>100</b>
Yes	73	50.3
No	72	49.7
<b>Years of service</b>	<b>145</b>	<b>100</b>
1-5	61	42.1
6-10	45	31.0
11-15	26	17.9
16-20	9	6.2
21+	4	2.8
<b>Type of encounter with disabled person</b>	<b>145</b>	<b>100</b>
General services	71	49.0
Specialized services	25	17.2
Casual contact	49	33.8

#### 4.1.2 Perceptions of Different Categories of Healthcare Workers towards the Sexuality of Disabled Women

This research examined healthcare workers' perceptions of the sexuality of disabled women, including their sexual feelings, sexual organs and sexual activity. The analysis indicated that there was no statistically significant association between demographic variables and healthcare workers' perceptions of sexual feelings, sexual organs and sexual activity of disabled women (Tables 2, 3 and 4)

**Table 2**

*Demographic characteristics of healthcare workers and perceptions of sexual feelings among disabled women*

Variable	What is your opinion on the sexual feelings of disabled women? They...				$\chi^2$	P - value
	N	Have sexual feelings %	Lack sexual feelings %			
<b>Sex</b>	<b>145</b>					
Female	99	98	2	1.91	0.167	
Male	46	93.5	6.5			
<b>Age category</b>	<b>145</b>					
18-25	9	100	0	4.76	0.313	
26-35	58	96.6	3.4			
36-45	42	95.2	4.8			
46-55	30	100	0			
56+	6	83.3	16.7			
<b># of healthcare workers per health facility type</b>	<b>145</b>					
Public	111	97.3	2.7	2.26	0.520	
Private	8	87.5	12.5			
NGO	24	95.8	4.2			
FBO	2	100	0			
<b>Professional cadre</b>	<b>145</b>					
Doctor	6	100	0	0.99	0.803	
Nurse	27	96.3	3.7			
Clinical Officer	17	100	0			
Community Health Volunteer	95	95.8	4.2			
<b>Exposure to disability training</b>	<b>145</b>					
Yes	73	97.3	2.7	0.22	0.638	
No	72	95.8	4.2			
<b>Years of service</b>	<b>145</b>					



1-5	61	96.7	3.3	2.08	0.721
6-10	45	97.8	2.2		
11-15	26	92.3	7.7		
16-20	9	100	0		
21+	4	100	0		
<b>Encounters with disabled people</b>	<b>145</b>				
General services	71	97.2	2.8	2.03	0.362
Specialized services	25	100	0		
Casual contact	49	93.9	6.1		

*Pearson chi-square test of independence*

**Table 3**

*Demographic characteristics of healthcare workers and perceptions of the sexual organs of disabled women*

Variable	What is your opinion on the sexual organs of disabled women? They have...				$\chi^2$	P - value
	N	Normal sexual organs %	Abnormal sexual organs %			
<b>Sex</b>	<b>145</b>					
Female	99	97	3	0.16	0.686	
Male	46	95.7	4.3			
<b>Age category</b>	<b>145</b>					
18-25	9	88.9	11.1	1.95	0.746	
26-35	58	96.6	3.4			
36-45	42	97.6	2.4			
46-55	30	96.7	3.3			
56+	6	100	0			
<b># of healthcare workers per health facility type</b>	<b>145</b>					
Public	111	97.3	2.7	2.26	0.520	
Private	8	87.5	12.5			
NGO	24	95.8	4.2			
FBO	2	100	0			
<b>Professional cadre</b>	<b>145</b>					
Doctor	6	100	0	0.99	0.803	
Nurse	27	96.3	3.7			
Clinical Officer	17	100	0			
Community Health Volunteer	95	95.8	4.2			
<b>Exposure to disability training</b>	<b>145</b>					
Yes	73	95.9	4.1	0.19	0.660	
No	72	97.2	2.8			
<b>Years of service</b>	<b>145</b>					
1-5	61	96.7	3.3	0.62	0.961	
6-10	45	95.6	4.4			
11-15	26	96.2	3.8			
16-20	9	100	0			
21+	4	100	0			
<b>Encounters with disabled people</b>	<b>145</b>					
General services	71	97.2	2.8	0.17	0.920	
Specialized services	25	96	4			
Casual contact	49	95.9	4.1			

*Pearson chi-square test of independence*





**Table 4**

*Demographic characteristics of healthcare workers and perceptions of the sexual activity of disabled women*

Variable	What is your opinion on the sexual activity of disabled women? They are...				$\chi^2$	P - value
	N	Sexually active %	Sexually inactive %			
<b>Sex</b>	<b>145</b>					
Female	99	96	4	0.42	0.516	
Male	46	93.5	6.5			
<b>Age category</b>	<b>145</b>					
18-25	9	100	0	1.41	0.842	
26-35	58	94.8	5.2			
36-45	42	92.9	7.1			
46-55	30	96.7	3.3			
56+	6	100	0			
<b># of healthcare workers per health facility type</b>	<b>145</b>					
Public	111	95.5	4.5	1.17	0.759	
Private	8	100	0			
NGO	24	91.7	8.3			
FBO	2	100	0			
<b>Professional cadre</b>	<b>145</b>					
Doctor	6	100	0	1.60	0.660	
Nurse	27	92.6	7.4			
Clinical Officer	17	100	0			
Community Health Volunteer	95	94.7	5.3			
<b>Exposure to disability training</b>	<b>145</b>					
Yes	73	93.2	6.8	1.31	0.253	
No	72	97.2	2.8			
<b>Years of service</b>	<b>145</b>					
1-5	61	95.1	4.9	1.05	0.903	
6-10	45	93.3	6.7			
11-15	26	96.2	3.8			
16-20	9	100	0			
21+	4	100	0			
<b>Encounters with disabled people</b>	<b>145</b>					
General services	71	94.4	5.6	1.55	0.461	
Specialized services	25	100	0			
Casual contact	49	93.9	6.1			

*Pearson chi-square test of independence*

**4.1.3 Perceptions of Different Categories of Healthcare Workers towards the Fertility and presence of Pregnant Disabled Women at Health Facilities.**

This research also examined the perceptions of healthcare workers of fertility and presence of pregnant disabled women at health facilities. The analysis indicated that there was no statistically significant association between demographic variables and healthcare workers' perceptions of fertility and the presence pregnant disabled women (Tables 5 and 6).

**Table 5**

*Demographic characteristics of healthcare workers and perceptions of the fertility of disabled women*

Variable	Do you agree or disagree with the statement that disabled women can become pregnant?						$\chi^2$	P - value
	N	SA %	A %	N %	D %	SD %		
<b>Sex</b>	<b>145</b>							
Female	99	62.6	27.3	3.0	1.0	6.1	6.92	0.140
Male	46	56.5	17.4	4.3	0	21.7		
<b>Age category</b>	<b>145</b>							
18-25	9	44.4	22.2	22.2	0	11.1	24.21	0.085
26-35	58	53.4	31	3.4	0	12.1		
36-45	42	64.3	23.8	2.4	0	9.5		
46-55	30	70	13.3	0	3.3	13.3		



56+	6	83.3	16.7	0	0	0		
<b># of healthcare workers per health facility type</b>	<b>145</b>							
Public	111	61.3	24.3	2.7	0	11.7	7.39	0.831
Private	8	62.5	25	0	0.	12.5		
NGO	24	62.5	25	4.2	4.2	4.2		
FBO	2	50	50	0	0	0		
<b>Professional cadre</b>	<b>145</b>							
Doctor	6	50	16.7	0	0	33.3	12.70	0.391
Nurse	27	55.6	25.9	11.1	0	7.4		
Clinical Officer	17	52.9	35.3	5.9	0	5.9		
Community Health Volunteer	95	64.2	22.1	1.1	1.1	11.6		
<b>Disability training</b>	<b>145</b>							
Yes	73	60.3	24.7	1.4	1.4	12.3	2.60	0.626
No	72	61.1	23.6	5.6	0	9.7		
<b>Years of service</b>	<b>145</b>							
1-5	61	50.8	31.1	4.9	0	13.1	14.37	0.571
6-10	45	62.2	22.2	2.2	2.2	11.1		
11-15	26	76.9	15.4	3.8	0	3.8		
16-20	9	55.6	22.2	0	0	22.2		
21+	4	100	0	0	0	0		
<b>Encounter with disabled people</b>	<b>145</b>							
General services	71	66.2	18.3	1.4	0	14.1	14.80	0.063
Specialized services	25	36	36	12	0	16		
Casual contact	49	65.3	26.5	2	2	4.1		

*Pearson chi-square test of independence*

**Key:** SA: Strongly agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree

**Table 6**

*Demographic characteristics of healthcare workers and perceptions of presence of pregnant disabled women at health facility*

Variable	Do you agree or disagree with the statement that the image of pregnant women with disability at the healthcare facility is abnormal?						$\chi^2$	P value
	N	SA %	A %	N %	D %	SD %		
<b>Sex</b>	<b>145</b>							
Female	99	12.1	18.2	10.1	12.1	47.5	1.39	0.847
Male	46	15.2	15.2	10.9	15.2	43.5		
<b>Age category</b>	<b>145</b>							
18-25	9	33.4	0.0	22.2	0	44.4	21.15	0.173
26-35	58	12.1	24.1	12.1	17.2	34.5		
36-45	42	7.2	21.4	7.1	11.9	52.4		
46-55	30	16.7	6.7	10	6.7	60		
56+	6	16.7	0.0	0	33.3	50		
<b># of healthcare workers per health facility type</b>	<b>145</b>							
Public	111	14.4	18.9	9.9	10.8	45.9	13.93	0.305
Private	8	12.5	12.5	0	25	50		
NGO	24	8.3	12.5	12.5	16.7	50		
FBO	2	0	0	0	50	50		
<b>Professional cadre</b>	<b>145</b>							
Doctor	6	0	0	33.3	16.7	50	16.38	0.174
Nurse	27	3.7	22.2	18.5	14.8	40.7		
Clinical Officer	17	5.9	23.5	11.8	23.5	35.3		
Community Health Volunteer	95	17.9	13.7	6.3	11.6	50.5		
<b>Disability training</b>	<b>145</b>							
Yes	73	13.7	13.7	5.5	11.0	56.2	7.48	0.113
No	72	12.5	20.8	15.3	15.3	36.1		
<b>Years of service</b>	<b>145</b>							



1-5	61	13.1	19.7	13.1	13.1	41	11.05	0.806
6-10	45	15.6	17.8	8.9	13.3	44.4		
11-15	26	11.5	15.4	0	11.5	61.5		
16-20	9	11.1	11.1	22.2	22.2	33.3		
21+	4	0	0	25	0	75		
<b>Encounter with disabled people</b>	<b>145</b>							
General services	71	9.9	19.7	8.5	11.3	50.7	7.96	0.438
Specialized services	25	16	4	16	24	40		
Casual contact	49	16.3	20.4	10.2	10.2	42.9		

*Pearson chi-square test of independence*

**Key:** SA: Strongly agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree

#### 4.1.4 Attitudes of Different Categories of Healthcare Workers towards Disabled Women.

The ATDP Form B was used to assess attitudes of healthcare workers towards disabled women, and requisite ATDP scores were obtained. ATDP scores range from 0 to 180 and are the algebraic sum of the health workers' attitude ratings. A higher ATDP score indicates a positive attitude toward disabled women, whereas a lower score suggests a negative attitude. The mean ATDP score for healthcare workers was 117.77, with a standard deviation of 19.25. The lowest and highest scores recorded were 54 and 165, respectively. The average ATDP score for female healthcare workers was 118.22 (SD = 19.34), ranging from 54 to 165. In comparison, the average ATDP score for male healthcare workers was 119.93 (SD = 19.14), with the highest and lowest scores being 78 and 153, respectively.

**Table 6**

*Bivariate analysis of demographic characteristics of healthcare workers' and ATDP scores*

Variable	n	Mean	SD	Min	Max	df	F	P - value
<b>Gender</b>	<b>145</b>							
Female	99	118.22	19.34	54	165	(1,143)	0.247	0.620
Male	46	119.93	19.14	78	153			
<b>Age category</b>	<b>145</b>							
18-25	9	121.78	16.20	95	149	(4,140)	0.766	0.549
26-35	58	117.83	21.50	54	165			
36-45	42	122.17	17.18	87	152			
46-55	30	114.63	17.42	70	144			
56+	6	120.17	24.00	89	155			
<b># of healthcare workers per health facility type</b>	<b>145</b>							
Public	111	117.11	18.93	54	165	(3,141)	3.517	0.017
Private	8	137.63	15.98	111	155			
NGO	24	121.33	18.93	87	158			
FBO	2	104.50	14.85	94	115			
<b>Professional cadre</b>	<b>145</b>							
Doctor	6	121.67	5.82	114	128	(3,141)	0.649	0.585
Nurse	27	119.63	20.04	63	155			
Clinical Officer	17	124.06	15.61	94	147			
CHV	95	118.77	20.14	54	165			
<b>Disability training</b>	<b>145</b>							
Yes	73	120.03	19.31	70	165	(1,143)	0.630	0.429
No	72	117.49	19.24	54	158			
<b>Years of service</b>	<b>145</b>							
1-5	61	117.26	20.19	54	149	(4,140)	1.136	0.342
6-10	45	120.82	18.69	84	165			
11-15	26	115.85	16.48	87	144			
16-20	9	119.67	23.30	70	146			
21+	4	135.50	15.59	119	155			
<b>Encounters with disabled people</b>	<b>145</b>							
General services	71	119.06	20.57	54	165	(2,142)	0.267	0.766
Specialized services	25	120.72	20.89	70	158			
Casual contact	49	117.35	16.51	87	152			

*One-way analysis of variance (ANOVA)*

One-way analysis of variance (ANOVA) was conducted to assess the influence of demographic variables (sex, age, health facility type, professional cadre, exposure to disability training, years of service, and encounters with disabled people) on ATDP scores. The means, standard deviations, minimum and maximum values for the ATDP scores, and the F values and P values of the ANOVA tests are presented in Table 7.

The statistical analysis revealed that only health facility type had a significant effect on ATDP scores at the 0.05 significance level ( $F(3, 141) = [3.517]$ ,  $p = 0.017$ ). Post hoc tests conducted using Tukey's honestly significant difference (HSD) test revealed a statistically significant difference in ATDP scores between healthcare workers from private and public health facilities ( $p = 0.017$ , 95% CI = [38.38, 2.66]). As a result, the null hypothesis stating that there is no significant difference in ATDP values between different health facility types (public, private, NGO and FBO) is rejected.

## 4.2 Discussion

This study highlights the multifaceted perceptions of healthcare workers on the sexuality and pregnancy of disabled women. The findings reveal a gradual shift among healthcare workers, therefore challenging long-standing preconceptions about the sexuality of disabled women. The majority of individuals agreed that disabled women had normal sexual anatomy, have sexual feelings and are sexually active. The development runs counter to earlier research by Joseph, Joseph et al. (2018) and Sharma and Sivakami (2019), which revealed persistent preconceptions of asexuality surrounding disabled women in Canada and India. Likewise, Tugut et al. (2016) observed that Türkiye's nursing students frequently had biased opinions and considered disabled people as less ideal sexual partners. The results of the present study not only challenge these preconceptions but also highlight the need of disability-sensitive healthcare approaches that safeguard the sexual health of disabled women. It is noteworthy, nevertheless, that a minority of the healthcare workers in this survey still considered disabled women as asexual. This draws attention to a gap that requires focused education programs to increase cultural competency and fight ingrained prejudices in the healthcare sector. Policies ought to mandate disability-sensitive education that gives healthcare workers the knowledge and sensitivity to properly address the needs of disabled women in issues of sexual health, therefore supporting equal opportunity.

The survey indicates a good awareness among healthcare workers of the reproductive potential of disabled women; a good number of the respondents acknowledge the possibility of conception. This openness shows a good direction toward a more inclusive healthcare environment. Exposure in providing services to disabled women in diverse environments seemed to inspire a more realistic and sympathetic view of their abilities and choices in life, therefore promoting a departure from the norm. This result contrasts with research from Uganda, Ghana, and Zambia (Emoru et al., 2022; Ganle et al., 2016; Smith et al., 2004), where health care workers sometimes displayed negative opinions and even criticism directed against pregnant disabled women. Furthermore, Nguyen et al. (2022) noted that many healthcare workers still have negative opinions about pregnancies among disabled women, usually linking such pregnancies to adverse outcomes. The present results suggest that significant encounters between healthcare workers and disabled women might reverse these harmful perceptions and reframe disabled women as persons with agency to make reproductive health decisions. The findings underline the need of recognizing disabled women as autonomous individuals with distinct life experiences and reproductive rights, thereby supporting the inclusion of disability-oriented programs within medical education.

With a mean ATDP score of 117.77 (SD = 19.25) out of a maximum score of 180, healthcare workers generally showed rather positive attitudes toward disabled women. This points to an implicit culture of acceptance and inclusiveness among healthcare workers that may be leveraged to enhance the inclusiveness and quality of care for disabled women. The study also found a notable variation in attitudes depending on the type of healthcare facility; private facility personnel showed more favourable attitudes than those at public facilities. This could be explained by variations in resources and training since private hospitals sometimes have the wherewithal to fund programs aimed at raising awareness of disabilities and give more weight on patient-centered care. These results highlight how organizational culture and resources affect the attitudes of healthcare workers and suggest that private institutions could be models of inclusive, positive settings. Policies must support multi-level interventions aiming at raising disability awareness, encouraging positive attitudes, and guaranteeing inclusive behaviours within public institutions and across all healthcare settings.

## V. CONCLUSIONS & RECOMMENDATIONS

### 5.1 Conclusion

Disabled women frequently encounter difficulties and obstacles in their interactions with healthcare workers and in navigating the healthcare system. These challenges arise from prejudices, misconceptions and condescending attitudes towards disability and disabled women. These adverse encounters erode their dignity and humanity, limiting their access to sexual and reproductive health services. As a result, their general well-being and quality of life are often



jeopardized. However, the results of this study show that the majority of healthcare workers generally have a positive outlook and supportive views towards disabled women, particularly regarding their sexuality and, pregnancy. This is demonstrated by their belief, as highlighted in the research findings, that disabled women have sexual desires and reproductive capabilities similar to those of other women and are fully capable of engaging in intimate relationships. Additionally, the study revealed that most healthcare professionals believe that women with disabilities can conceive and that it is not uncommon to encounter pregnant disabled women in health facilities. This apparent positive attitude and demeanour of healthcare workers could be leveraged to ensure access and delivery of disability-sensitive, dignified and universal sexual and reproductive health services for all disabled women. This would give the necessary momentum towards the achievement of the ambitious target of sustainable development goal 5 around gender equality and women's empowerment. The pledges made by global leaders in 2015, expressing their commitment to not neglect anyone and prioritizing focus on the most marginalized, should not be mere rhetorical embellishments. Instead, they must be turned into tangible, concrete, actionable, and transformative policy measures that bring about significant, lasting change, particularly for disabled women.

## 5.2 Recommendations

The findings from this study provide a basis for actionable changes in healthcare policy and practice. To address the mixed perceptions and attitudes observed, there is a need for comprehensive training that fosters both cultural competence and empathy toward disabled women. Institutional policies must promote interactions between healthcare providers and disabled individuals as a core part of healthcare training, helping to dismantle stereotypes and biases. Furthermore, multi-level interventions targeting organizational culture and resource allocation, particularly within public healthcare facilities, could help bridge the gap in attitudes between public and private healthcare settings. Collectively, these efforts could foster a more inclusive and supportive healthcare environment, enhancing the quality of care for disabled.

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