Research Article

Vol.8, No 1, 2025
ISSN 2591–6769
eISSN 2953–2663

East African Journal
of Applied Health
Monitoring and Evaluation

Experiences of Providing Family Planning Services to Women with Disabilities Attending Public Health Facilities at Ubungo Municipal Council in Dar es Salaam Region: Healthcare Providers and Client Perspectives

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Received: July 9, 2024 Accepted: March 26, 2025 Published: March 31, 2025

Background

Women with disabilities suffer from limited access to and low utilisation of family planning services. This study assessed the experiences of providing family planning services to this population group from the perspectives of healthcare providers and clients because the information on their experiences is generally lacking.

Methods

The study involved in-depth interviews, first with eight healthcare providers and second with six women with disabilities, to understand their experiences with providing family planning services. The latter were follow-up interviews on issues described by the healthcare workers. The study used thematic analysis with the support of the Nvivo12 software.

Findings

Healthcare providers reported providing family planning information and education, and women with disabilities affirmed receiving education and advice on family planning options. However, healthcare providers experienced communication challenges with some women due to their limited skills in sign language use; they had to communicate loudly, use written and visual aids, or rely on a person who cared for the woman as an interpreter. Women with disabilities were prioritised for service provision. The choice and autonomy to decide on methods to use rested on the women. The feeling of being stigmatised, discriminated against, and negatively perceived by healthcare providers existed among the women. Health facilities lacked the basic amenities to support the inclusive provision of family planning services to women.

Conclusion

Healthcare providers provided information and education on family planning services to women to inform the choice of methods to use. The women felt stigmatised and discriminated against by the healthcare providers, and the facilities lacked the basic amenities to support women's access to inclusive family planning services provision. There is a need to address these challenges and strengthen health facilities' responsiveness to women with disabilities family planning needs to boost their access to and inclusive utilisation of quality sexual and reproductive health services.

Keywords*:* *Women with disabilities, Family planning, Experiences, Healthcare provider, Inclusion*

INTRODUCTION

Family planning helps couples enjoy their sexuality without dreading unwanted pregnancies and abortions or maternal and child mortality-related risks (Choi et al., 2015). It efficiently manages fertility by enabling couples to plan for the number of children they want and when to have them. Moreover, family planning also improves mother-and-child health in addition to lessening the prevalence of unwanted pregnancies and unsafe abortions (AlHamawi et al., 2023). Furthermore, it promotes women's autonomy and aptitude in making health decisions about their reproductive health (Kassim & Ndumbaro, 2022) . Improving access to and use of family planning is central to the Sustainable Development Goal (SDG) indicator 3.7, which underscores universal access to family planning by 2030. Specifically, the target is to guarantee that everyone has access to a wide range of safe and secure family planning methods for couples to respect their sexual reproductive rights and make informed decisions on family size and spacing of their children (Starbird et al., 2016). However, the current statistics show that it is only 62% of reproductive-age women use family planning, with the low-income countries accounting for half the rate reported for the higher-income countries, 34% versus 67, respectively (Abeid et al., 2023).

In sub-Saharan Africa, the overall prevalence of modern contraceptive use is 22%, with regional variations ranging from 3.5% in the Central African Republic to 49.7% in Nambia (Boadu, 2022). Family planning use in Tanzania remains relatively low despite a notable rise from 7% in 1999 to 31% in 2022 (Ministry of Health (MoH) [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of & Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF. 2023, n.d.)**,** far below the national target of 60% (United Republic of Tanzania, Ministry of Health, Community Development, Gender, Elderly and Children, n.d.). More than 21% of married and 32% of unmarried sexually active women have an unmet family planning need. Geographical variance and disparities across various socioeconomic and marginalised population groups are characteristics of family planning usage, putting certain women at risk of the adverse effects of unintended pregnancy (Kassim & Ndumbaro, 2022)To promote women's health and welfare, it is critical to comprehend the background influencing discrepancies in family planning use and remove identifiable barriers.

About 3.6 million Tanzanians are living with disabilities, representing 8% of the national population (*World Health Organization (WHO) , 2022: Universal Health Coverage (UHC)*, n.d.). The majority comprised of people with physical disabilities (47.9%), intellectual disabilities (16.3%), and multiple forms of disabilities (13%). People living with disabilities in the country are reported to experience extreme poverty and poor access to health services than their counterparts with no disabilities (Quinones et al., 2021). Although the available statistics on disabilities do not disaggregate disability by gender, women with disabilities are likely faced with more significant challenges because gender is one of the reported barriers to accessing health services (Mac-Seing et al., 2022). There is limited information on access and use of sexual and reproductive health services (SRHS) among women with disabilities in Tanzania (Mesiäislehto et al., 2021). However, the global report on health equity for persons with disabilities suggests that the right to health is far from being realized among persons with disabilities as they continue to die earlier, experience poor health, and have more limitations in accessing health services than others (*Global Report on Health Equity for Persons with Disabilities [EN/AR/RU/ZH] - World | ReliefWeb*, 2022). Efforts to ensure inclusive access and utilisation of health services are necessary for realising the progress towards the Sustainable Development Goals and global health priorities.

The Tanzanian government's commitment to ensuring the universal availability and accessibility of family planning services is evident through its alignment of national policies with regional and global agendas. The regional and international commitments include the 2030 Agenda on Sustainable Development Goals (SDGs); the African Union "Extended Maputo Plan of Action on Sexual and Reproductive Health and Rights" (2016-2030); the WHO 2022 call for actions to advance health equity for persons with disabilities (*Global Report on Health Equity for Persons with Disabilities [EN/AR/RU/ZH] - World | ReliefWeb*, 2022); the Family Planning 2020 commitment to ensuring access to voluntary, quality contraceptive information, services, and supplies; the 2019 Nairobi Statement on ICPD25: Accelerating the Promise; the Convention on the Rights of Persons With Disabilities (CRPD) (March 2007 and ratified 2009); the convention on Elimination of All Forms of Discrimination Against Women (CEDAW) (August 1985 and ratified 1986), the International Conference on Population and Development (ICPD) Programme of Action (1994); and the International Conference on Population and Development 1994, to which governments have committed to guarantee the realisation of reproductive rights when individuals and couples are equipped with the knowledge and resources to make responsible decisions about the number, spacing and timing of their children.

Tanzania's family planning service provision and expansion policies include the National Population Policy 2006, which emphasises providing education to women on family planning; the National Health Policy 2007, which highlights the commitment to continue providing free health services to pregnant women and users of family planning services; the Health Sector Strategic Plan IV 2015-2020 (Tanzania Mainland) that prioritises family planning to delay the age at first birth, to promote birth spacing and to give women the choice to decide on number of children to have. The National Plan of Action to End Violence Against Women and Children (2017/18-2021/22) emphasises the reinforcement of the legal system's responsiveness to the needs of vulnerable groups, including women and girls with disabilities. Also imperative is the One Plan 11 2016-2020, which outlines plans to respond to the need for and improve access to a full range of family planning services, particularly in rural and marginalised communities, including women with disabilities. The Five-Year Costed Implementation Plan for Family Planning 2018-2022 strives to realise VISION 2025 and is bent on achieving SDGs, including SDG 3 (i.e., good health and well-being) for everyone. SDG 3 also covers targets relating to maternal, infant, and child mortality, as well as access to family planning for all in need, which is an integral part of sexual and reproductive health services.

A key component of the government's commitment to family planning provision is raising public awareness of its value and the necessity of involving various stakeholders, including the non-profit private sector and development partners, to improve public and marginalised groups' access to currently free family planning services and contraceptives mainly delivered through Tanzania's public health facilities. Although data on family planning methods utilisation prevalence among people with disabilities in Tanzania is primarily limited, these women account for low family planning methods utilisation rates across different settings (Alem & Agegnehu, 2021; Burke et al., 2017; Mekonnen et al., 2020; Wu et al., 2017). Women with disabilities have far worse-off experiences in maternal health outcomes globally (Devkota et al., 2018) than other women. While some barriers to utilisation of family planning services are experienced by both women with and without disabilities (cost, travel time, long waits), they may have a greater impact on those with disabilities (Horner-Johnson et al., 2022) and more challenging to those residing in rural and hard-to-reach areas (Devkota et al., 2019; Mesfin Yesgat et al., 2020a; Tanabe et al., 2015).

Evidence shows that family planning service use among women with disabilities is, in fact, minimal (MAKAU, 2021) because of social stigma, the healthcare providers' attitudinal barriers, inadequate facility services, and the widespread misconception that women with disabilities are "asexual," not have sexual relations, and therefore, are not in need of family planning information and services (Mavuso & Maharaj, 2015). In Senegal, for example, the reported barriers to sexual and reproductive health services use, including family planning services, were discrimination by HCW, communication barriers, physical inaccessibility, and needing to be accompanied to seek care(Burke et al., 2017). Negative provider attitudes were also reported by women with disabilities living in humanitarian settings across Kenya, Nepal, and Uganda(Tanabe et al., 2015).

WHO global disability action plan states that women living with disabilities fail to use family planning because of the limited options, inaccessible contraception, poor quality family planning services, lack of disability-related clinical services—and stigma and discrimination (World Health Organization, 2015). The secret to obtaining universal access and using family planning techniques is to enhance the services provided while considering the need to leave no one behind (Hellwig & Barros, 2022). However, effective and efficient provision of family planning services to women with disabilities requires a thorough grasp of the experiences and background information to inform targeted value-adding interventions.

Tanzania's national family planning policy ensures inclusive access to family planning services for all, including women with disabilities. It recommends training healthcare providers in sign language, prioritising individuals with disabilities during service provision, and providing education about family planning methods. The policy also emphasises that the choice of family planning method should be appropriate for the persons with disabilities' physical and mental capabilities and—where necessary—approved by a responsible family member or guardian. Indeed, strengthening the health system's capability and ability to increase its degree of responsiveness to the sexual and reproductive health needs of women with disabilities is critical to ensure that women have access to and can realize their rights to enjoy quality sexual and reproductive health services (Addlakha et al., 2017; Pérez-Curiel et al., 2023).

Responsiveness of the health system to the population's needs is vital for reinforcing system operations, providing equitable and responsive services, and protecting the people's rights (Khan et al., 2021). Responsiveness is the "system's ability to respond to the legitimate expectations of potential users or clients about non-health enhancing aspects of care". It relates to the context and how healthcare services are provided to clients to meet their legitimate expectations (Darby et al., n.d.). The concept narrates more on the relational dimensions of quality of care, "process quality," than the technical quality (Khan et al., 2021). The "process quality" involves domains such as courtesy (prompt attention, waiting time); information provision or communication (clarity of communication), respect (respectful treatment and communication), choice (informed choices of service); autonomy (involved in decisions); and quality of basic amenities (quality of basic facilities)(Valentine et al., 2003)Understanding the health system's responsiveness and healthcare providers' experiences in providing family planning services would provide valuable insights into the quality of care provided, strengthening policies and implementation strategies.

The available literature on non-health enhancing quality of care aspects focused on specific diseases such as heart failure (Papanicolas & Smith, 2013), in-patient clients (29), and access to care among individuals on health insurance (Mohammed et al., 2013). Limited information is available about provider and client experiences in preventive services provision, especially sexual and reproductive health services. This study explored the experiences of providing family planning services to women with disabilities attending two public health facilities at Ubungo Municipal Council in Dar es Salaam Region, drawing from the perspectives of the healthcare providers and clients. The aim is to gain insights into the context shaping family planning services provision and ensure women with disabilities are protected and have access to inclusive family planning services. The findings will inform targeted interventions to improve health systems' responsiveness to inclusive family planning services provision and encourage its utilization among women with disabilities.

METHODOLOGY

Study design

The study was conducted at Ubungo Municipal Council in Dar es Salaam, Tanzania's business hub and most populous and fast-expanding city, between May and June 2023. About 44.1% of all sexually active women aged 15 – 49 years in the Dar es Salaam region are reported using family planning methods (Ministry of Health (MoH) [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of & Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF. 2023, n.d.)Administratively, the region is divided into five (5) Municipal Councils: Ubungo, Ilala, Temeke, Kinondoni, and Kigamboni. Ubungo Municipal Council was purposively selected for the study due to its highest rate of utilisation of family planning services compared with other district councils. In consultation with the Municipal Reproductive and Child Health Clinic, we selected two of the most attended public health facilities to participate in the study.

Sample size and sampling techniques

The healthcare providers were purposively recruited from the family planning clinics of the participating health facilities; four healthcare providers were recruited from each facility. To ensure providers had accumulated experience in family planning, consideration was given to those who had worked on providing family planning services for a minimum of six months. Furthermore, we recruited women with disabilities for in-depth interviews to follow up on issues described by the healthcare personnel regarding the family planning services they provide to them.

These women were conveniently recruited from the family planning clinics in consultation with the health care providers who attended to them. During the discussions with the reproductive and child health clinic management, it was learned that there are not many women with disabilities seeking family planning services. This context informed the choice of convenient sampling and recruitment process to allow the study to benefit from its strength in recruiting study participants whose population is small (Isaac, 2023). During the data collection day, the research team arrived at the clinic earlier than its daily operations to familiarise themselves with the setting and the women arriving at the health facility. After the clinical assessment and consultation, the clinic nurse linked the women with disabilities to the research team. The women were thereafter informed about the study and requested about their willingness to be engaged. For those who were not able to talk by themselves, the people who cared for them were involved as interpreters. After receiving their family planning services, interviews were conducted with the respective women. A total of six women with disabilities were recruited for the study: four from one health facility and two from the other health facility.

Data collection

The researcher (JM) collected the data with support from a research assistant trained on study objectives and research essentials including research ethics. Both JM and the Assistant have basic skills and knowledge of working with vulnerable populations such as the elderly, children, adolescent girls, and people with disabilities. The Assistant also has skills in sign language use. The researcher communicated directly to the woman and not the person who cared for her "interpreter." This enabled building a relationship between the woman and the researcher and provided an opportunity to learn from the woman herself before listening to the "interpreter." Also, the assistant was able to use sign language to ensure communication was captured correctly instead of relying fully on the interpretation from the person who cared for the woman. Obtaining informed consent preceded in-depth one-to-one interviews in private rooms of respective health facilities using the universally accessible Kiswahili language. An interview guide with open-ended questions facilitated these interviews. The interviews, lasting 40 – 55 minutes, were audio-recorded with prior permission obtained from the participants for transcription purposes.

In addition, an observation checklist was used to collect data from the study facilities. The checklist focused on observing, among others, the availability of ramps, toilets for clients with disabilities, disability-friendly equipment such as adjusted examination beds and wheelchairs, communication with women with disabilities, and privacy of the consultation room. Field notes were made during the observation, and the observation findings were recorded in the field diary. The data collection team met daily with the senior Social Scientist (EM) to discuss key findings, progress, and the relevance to data saturation. Audio-recorded interviews were transcribed into Word document files within 24 hours of being generated, cross-checked for quality, and imported into NVivo 12 software for subsequent coding and analysis.

The authors began the analysis by reviewing transcripts to identify the initial codes inductively. Discrepancies were resolved through consultation and discussion among them. The first author coded the data and held periodical consultations with the senior researcher during the coding until completion. After the coding, the codes were categorised into themes and family codes. After linking the emerging concepts and the domains on non-health enhancing quality of care, the following themes emerged: Provision of information and education on family planning methods; Choice and autonomy to decide on family planning method to use; Prioritizing women with disabilities in family planning service provision; Discrimination and stigma and Availability of basic amenities for people with disabilities. The observation notes helped the researcher gain a better understanding of the context of family planning provision and aided the interpretation of what was learned during the interviews.

Ethical considerations

The study obtained ethical clearance from the Muhimbili University of Health and Allied Sciences Institutional Ethical Review Board (MUHAS-REC-04-2023-1635). All the methods in this study were performed in accordance with the relevant guidelines and regulations (Declaration of Helsinki). Before enrolment, we explained the objectives and procedures of this study to the participants and obtained informed written consent from them.

RESULTS

Socio-demographic characteristics of respondents

Eight healthcare providers and six women with disabilities participated in the study. The healthcare workers comprised two doctors and six nurses with qualifications ranging from a diploma (6) to a medical doctor (2). All healthcare providers have more than two years of experience providing family planning services to women; however, none is trained in disability inclusion. The six women with disabilities in the study were all sexually active, with their ages ranging from 24 – 42 years; see Table 1 for additional demographic characteristics of the study participants.

Table 1: Study participants' demographic characteristics

Participant Characteristics	Frequency
Healthcare Providers	
Age of healthcare provider	
Below 30 years	1
30 years – 45 years	4
45 and above	3
Cadre of healthcare provider	
Nurse	6
Doctor	2
Healthcare Provider Education level:	
Diploma	6
Degree	2
Working experience	
Two to five years	5
Five years and above	3
Women with disabilities	
Age of the women:	
Below 25	1
25years to 35years	3
36years and above	2
Marital status	
Married/living with a partner	3
Not married	3
Education Level:	
No education	1
Primary education	2
Secondary education	3
Disability type:	
Physical disabilities	1
Intellectual disabilities	1
Visually impairment	2
Speech impairment	1
Hearing impairment	1
Use of family planning	
Current family planning users	4
New family planning users	2

Provision of information and education on family planning methods

The healthcare providers reported that they usually provide women with family planning information and health education, focusing on both long- and short-term family planning methods. They mentioned that this information is provided at the family planning clinic the first thing on the visiting day before the start of other clinic routine services to enable the women to make informed decisions on an appropriate method:

"The first thing we do is to provide the education on all family planning methods, both long-term and short-term, to help our clients understand them all and be able to make informed choices" (HCP, 05).

Information and education on family planning methods were provided in two separate sessions. At first, a group session is conducted to familiarise clients with all family planning methods and their pros and cons. The session includes a questions-and-answer part to help clarify the women's concerns. The group sessions were reported as inclusive of both clients with and without disabilities who attended the family planning clinic on the respective day. The second session is individualised during the one-to-one consultation with the healthcare providers in the consultation room. The healthcare provider clarified the client's lingering doubts and concerns during the one-on-one session as necessary. Those who never attended the group session are provided with similar information and treated as new clients and can inquire about any clarifications as wished:

"We first provide education in the morning about the short-term and long-term contraceptive methods, including their advantages and disadvantages, before we start the clinic services. And later in the room, when on one-to-one consultation, if a client has some questions or doubts, we discuss…. if the client did not attend the morning session, we still offer her education on similar content, treating the client as someone new, and she can ask any question on anything she wishes" (HCP, 01).

It was reported that the length of the one-to-one session depended on the client's needs. The providers voiced that during the one-to-one session, a client selected a suitable family planning method, and the continuing clients could opt for the familiar method or change to preferable contraception as wished. For clients with intellectual disabilities, the people who care for them get briefed on behalf of the client and, in consultation, help in selecting the most suitable method for her:

"For those women with intellectual disabilities, we provide information and education to the people who care for them [most cases are relatives] on their behalf, and in consultation, she chooses the suitable method for her" (HCP, 03).

On their part, the women with physical disabilities confirmed to receive information and education on family planning methods from the healthcare providers:

"Yes, healthcare providers provided education about pills, injections, IUD … they talked about all family methods before we even entered the doctor's room, and one is free to ask questions or anything about the methods for more clarification." (WWD, 06 Woman with Physical disabilities).

Similarly, a relative of a client with intellectual disabilities reported benefit from a healthcare provider's informative session and support in choosing an appropriate family planning method for her relative:

"My young sister has a mental disability and .... she is also HIV-positive, and she has one child already ... you see...eeh when I came here, the healthcare provider helped me a lot, I was informed and educated about family planning methods and was advised that I choose one for her. I chose for her a long-term method because I am in no position to raise another child for her" (WWD, 05 Woman with intellectual disabilities).

However, during the observations at the health facilities, it was noted that one of the study health facilities was not consistently providing group education sessions. This health facility had only two small open spaces shared with outpatient clients and for providing other health services. An informal conversation with the healthcare provider revealed that group information and education sessions are not routinely conducted in the facility due to space limitations and concerns of interfering with the other health facility service provision activities.

On the other hand, healthcare providers in the study facilities reported experiencing communication challenges, especially when providing information and education to clients with hearing and speech impairments. The providers related this challenge to their less familiarity with sign language use and the absence of sign language communicators in the health facilities.

"I have not received training on the use of sign language and, many times, we face a lot of difficulties to communicate with those clients who cannot hear or cannot talk it is a big challenge on how to attend them because we do not have a translator or sign language interpreter here" (HCP, O7).

To attend to those clients, healthcare providers reported using the person who cares for the woman as an intermediary between them and the client. Providers mentioned that women with hearing and speech impairments usually visit the facility accompanied by a caregiver, frequently a family member. For the unescorted women, they said, the provider had to opt on either writing, talking loudly, asking the client to read the lips, and, sometimes, using pictorial aids depending on the client's disability type in a bid to bridge the communication gap:

"Mmmh…. those who cannot hear usually come with their relatives, and we communicate with the relative, and he/she communicates back to the client… And for those who come alone, we usually close the door and try to talk loudly. If that does not work and the client knows how to read and write, we communicate with the client through writing. And if she does not know how to read and write… that becomes another challenge, and sometimes we even use pictures to ensure that she gets the message and understands, but this is a challenge; it is a struggle in a way" (HCP, 01).

Choice and autonomy to decide on family planning methods to use

Healthcare providers reported that the choice and autonomy to decide on the type of family planning method lies primarily at the client's discretion. The healthcare providers remain advisers and overseers of the process while providing crucial briefings for women to make informed choices. In this regard, the healthcare providers insisted that they respect each client's unique lifestyle, allow them to choose the method they are comfortable with in their day-to-day lives, and avoid imposition of options for them.

"When a client comes, I let her choose the method she wants, so I don't just decide a certain method for the client because they have different lifestyles and priorities, although I may advise accordingly." (HCP,03).

When the information was followed up with women with disabilities, it was affirmed that the women had the autonomy to choose a family planning method they deemed suitable for individualised needs:

"I selected the family planning method myself. Since I started coming here in 2020, I have been using the injection contraceptive. They ask me what I preferred, and I say the injection method…" (WWD, 02, Woman with visual impairment).

On the other hand, healthcare providers reported that in cases where the client has an intellectual disability is not in a position to make an independent, informed choice, the accompanying relatives, who are mostly the ones who take care of the person, shoulder this responsibility on behalf of the client:

"Clients with mental disabilities are usually brought by the people taking them care ... who at the end in consultation with the client choose a suitable method on her behalf because she knows the client better than anyone else and she will need to support her [based on the choice] ..." (HCP, 05).

It was further explained that the choice of a family planning method to use also considered the type of disability a woman had. Healthcare providers stated that when informing and advising on a suitable family planning method, they also consider the clients' type of disability. This is considered because, they said, not all family planning methods are appropriate for everyone. For instance, they said IUDs are most suitable for women with partners who can assist them in checking the string, and pills or condoms are not suitable for those who are handicapped or blind:

"I also look at their disability and advise them on the suitable method. For example. if the client is handicapped or blind, methods such as the pill or condom are not suitable at all...IUD also needs to be checked and re-checked regularly so it is suitable to those with partners to help them check" (HCP, 02).

Prioritising women with disabilities in family planning service provision

Healthcare providers reported that they usually prioritise providing family planning services to women with disabilities as soon as they arrive for the service at the family planning clinic. It was mentioned that when a woman with a disability comes for a family planning service, she is attended to promptly before the other women are attended to avoid keeping them for an elongated period of time. In most cases, according to the health providers, the clinics are overcrowded with long queues for the women with disabilities to wait for their turn:

"We prioritize them and ensure are promptly attended as they arrive ...you know the clinics are overly overcrowded, if you keep them, they will wait for a long time before their turn and the environment here is not that conducive for them" (HCP, 03).

Recounting how prioritized and promptly attended to the family planning services at the health facility, women with disabilities presented mixed opinions. Some women confirmed such prioritisation in terms of not staying in the queue to access the service; others dismissed such a gesture as just lip service to make the providers look good. One of those who affirmed benefiting from preferential treatment attested:

"When I came here, I found a long queue, but the healthcare provider called me first to receive the services… I was attended right away, I was so happy..." (WWD, 06 Woman with Physical disabilities).

On the other hand, those dismissive of such prioritisation in receiving family planning services reported long waits in queues like the other women. They insisted that they usually followed the regular waiting schedules because healthcare providers did not have means for determining those with disabilities, for example, those with visual impairment and communication disorders, who are hard to spot. In consequence, they reported being subjected to the same treatment as the rest of women:

"I have never been a priority, but I have disabilities, I do not see; we [with her relative] normally come here and wait in the lines like others. Healthcare providers do not even ask to recognise those with special needs so far…; for example, for those who have communication disabilities, how will the provider identify them so that she can prioritise them during services? They do not have such tools to recognise the disability because disability is of many types" (WWD, 01 Woman with visual impairment).

Nonetheless, during the data collection at the facilities, the research team observed healthcare providers selectively pointing out women identified to have disabilities from the long queues to attend to them first. However, it was impossible for the team to learn if all women with disabilities in the queue were pointed out since none of the providers used any tool to help with the identification.

Discrimination and stigma

Most of the healthcare providers hesitated to talk about discrimination and social stigma against women with disabilities at the family planning clinic. Some healthcare providers reported to have heard of some cases of women with disabilities facing discrimination at the hands of other providers. Interestingly, they reported such cases in a past event, noting that they have not heard of such issues recently. The providers claimed that women with disabilities are highly sensitive persons, who as healthcare personnel, need special skills to manage them properly:

"Women with disabilities are overly sensitive. They require special skills when attending to them, which some healthcare providers lack. I heard some cases here sometimes back that woman with disabilities reported to the management that they felt discriminated…. I have not heard of such issues recently" (HCP, 02).

On their part, the women with disabilities reported feeling discriminated against by some of the healthcare providers attending to them during the provision of family planning services. They further complained that some of the healthcare providers did not usually talk to them on friendly terms in the same way they witnessed them talking to the other women accessing the services:

"Sometimes, you feel discriminated by how the healthcare providers talk to you… they are not so friendly to us… You, sometimes, get that feeling that she is just attending to you [because] she does not have a choice [in the matter] although not all of them are like that" (WWD, 03 Woman with hearing impairment).

In addition, women with disabilities also reported that some of the healthcare providers use discriminatory words when serving them with family planning services, and that made them unhappy:

"One day, a nurse asked me why I was using family planning services, and she continued saying that if she were in my position, she could not bother to come all the way for family planning services …She said something like I needed to abstain from sex [altogether]…. I got incredibly angry that day" (WWD, 02 Woman with visual impairment).

The women with disabilities voiced that the stigma towards their use of family planning methods was not only from the healthcare providers but also from the colleagues without disability who visited the health facilities for the same service. One of them reported being embarrassed by the woman without disability who questioned why she needed to use family planning methods and whether she had a man.

"one of the women without disability there questioned my presence, asking what are you doing here? Why do you need to use family planning? Do you have a man? I felt very bad, I was very much embarrassed…" (WWD, 06 Woman with Physical disabilities).

Availability and basic amenities for people with disabilities

Healthcare providers expressed concerns that the environment at the health facilities is not suitable for people with disabilities.

"... because the environment here is not so conducive for them and suitable facilities for their condition are unavailable…in reality, we do not have, say, even [user-friendly] toilets for people with disabilities here..." (HCP, 07).

The providers further explained that, primarily, the structure and infrastructure of the health facilities did not consider the availability of the basic amenities necessary for prompt and efficient provision of services to people with disabilities. This was in line with the observation findings, which revealed that none of the facilities had ramps to support the people with disabilities who use wheelchairs, toilets appropriate for clients with disabilities, and adjustable examination beds in the consultation rooms. In addition, many of the consultation rooms did not have curtains or had curtains but were worn out, and none of the doors had locks.

DISCUSSION

The UN Convention on the Rights of Persons with Disabilities (UNCRPD) calls to ensure that existing human rights apply to persons with disabilities to "promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (United Nations Convention on the Rights of Persons with Disabilities - Employment, Social Affairs & Inclusion - European Commission, n.d.). Sexual and reproductive health rights (SRHR) are integral parts of the right to health for all and key elements of UNCRPD, the rights to which every human is entitled. According to the United Nations General Assembly Convention article 25, people with disabilities have equal rights to SRH, similar to those without disability, and it is critical for achieving the Sustainable Development Goal (SDG) and inclusive society. To realize this right, every individual must be able to make their own choices about their bodies and sexual and reproductive health (SRH), free from discrimination, stigma, violence, or coercion (Hagos et al., 2023), the right most denied to people with disabilities. The recent systematic review from 11 Sub-Saharan African countries showed that people with disabilities have the least access to and utilization of sexual and reproductive health services (Ganle et al., 2020), including family planning services. To ensure equality and equity in using these services, efforts to improve their availability and accessibility are critical.

Tanzania has demonstrated commitment to advancing disability rights by ratifying the United Nations Convention on the Rights of Persons with Disabilities (CRPD) and enacting national disability policies. In recent years, much progress has been made in addressing and recognizing disability rights and improving access to sexual and reproductive health services, including those for family planning in the country. However, many women with disabilities still lack access to sexual and reproductive health services in Tanzania. Promising is the government's ambition and commitment to providing equal and quality care for all population groups, which has been demonstrated through different strategies against social exclusion in health services, including sexual and reproductive health services (Silayo & Bano, 2019)Over time and with the necessary resources, this process will allow Tanzania to strengthen its health system in a way that is more inclusive and will also positively influence the provision of family planning to persons with disabilities.

With a focus on healthcare providers and clients, this study explored the experiences of providing family planning services to women with disabilities at public health facilities. The use of an in-depth interviewing strategy made it possible to obtain detailed insights into the circumstances considered to guarantee that women with disability access the needed family planning methods. There are not many studies assessing the experiences of offering family planning services to women with disabilities in Tanzania's public health facilities, integrating perspectives from both clients and providers. The results of this study, therefore, will help to clarify factors deserving consideration for reducing the unmet need for family planning among women with disabilities as well as promoting inclusive access to sexual and reproductive health services.

The healthcare providers reported providing family planning information and education to women and clarifying concerns to enable the women to make informed choices. Access to trustful information is among the crucial steps toward decisions for family planning use due to its ability to address the lack of knowledge and the prevailing misinformation that unnecessarily hinders its use (Bullington et al., 2020; Yadassa et al., 2023). Indeed, empowering women with disabilities for informed and free decision-making on the number, spacing, and time to have babies is in line with the SDG by 2030 (Colglazier, 2015) and not only a fundamental human right (Guracho et al., 2022) but also a reproductive health right (Colglazier, 2015) and is considered to facilitate improvement of the women quality of life. Collaborative efforts engaging different stakeholders, including organizations of persons with disabilities, are necessary for providing women with disabilities the needed information and education on family planning methods, a key to enjoying their sexual and reproductive health rights and inclusive family planning services provision. The healthcare providers reported experience in family planning services but lacked specific training in disability inclusion. It would be helpful to explore in more detail how lack of training affects the quality of care and identify potential training interventions or policy recommendations to address the gap.

However, the providers reported that they had trouble interacting directly with some of the women because they could not utilize sign language, particularly the women with speech and hearing impairments, instead using the women's caregivers as intermediaries. Limited proficiency in sign language use was reported in Ethiopia (Yimer & Modiba,

2019) and India (Casebolt et al., 2022) to halt access and utilization of family planning among women with disabilities. Similar to the recent systematic review findings (Horner-Johnson et al., 2019; Pérez-Curiel et al., 2023), communication challenges informed the healthcare provider practices to engage people who care for women with intellectual disabilities “as intermediaries” to choose the family planning method to use. Relying on those with power and authority over women with intellectual disabilities to communicate their sexual and reproductive health matters was also reported in other settings (Beltran-Arreche et al., 2024). Communicating through caregivers is reportedly prone to ethical concerns(Gichane et al., 2017) due to its potential to interfere with the women’s autonomy, privacy, and confidentiality about their sexual and reproductive health matters, as well as the confidentiality of the provider’s clientele. Lack of autonomy, privacy, and confidentiality are widely reported to prevent women and adolescents with disabilities from obtaining and using sexual and reproductive health services(Casebolt et al., 2022; Gichane et al., 2017; Wakjira & Habedi, 2022). This underlines the necessity of coordinated efforts to overcome communication obstacles between healthcare personnel and clients, facilitating professionals’ interpersonal interactions while granting women autonomy and inclusivity when it comes to family planning decisions.

In the study, healthcare providers reported devising approaches for communicating with non-accompanied women with hearing and speech impairments, such as speaking loudly, writing down on a piece of paper, and using pictures to facilitate such communication. Even though speaking loudly might not have the desired effect on a woman with hearing and speech impairments, using pictures and writing may not be as effective (Gichane et al., 2017). Understanding pictures and written communication involves cognitive processes, and ability may vary from one woman to another. Although the study did not explore the extent to which limited communication deterred family planning use among women with disabilities, in other settings, it has been reported to shape the women's satisfaction and limited use of the services (Dang et al., 2017). Such observation suggests that access to an interpreter can boost health facility service utilisation among women in this population category(Gichane et al., 2017). In other words, a feasibility study can help to assess acceptability, enablers, and barriers to sign language interpreter use in Tanzania’s public health facilities, specifically family planning service delivery, because sign language is crucial for people with disabilities to have positive healthcare experiences (Foltz & Shank, 2020).

There were mixed opinions regarding the prioritisation of women with disabilities for family planning services provision at the health facilities. Whereas the healthcare providers reported giving priority to the women to prevent them from a prolonged stay in queues at the facility, some women reported the contrary, complaining that they usually experience long waits in queues like the women with no disability. This discrepancy in information could be due to the providers’ lack of definitive tools or guidelines used in the facilities to identify the women with disability from the queue, especially the non-visible disabilities that may be had to spot. Challenges in identifying people with disabilities for social services were reported in other settings (Mapunda et al., 2017; Rugoho & Maphosa, 2017). For the government’s commitment to inclusive family planning services provision to be realized, concerted efforts are needed to strengthen the capacity of healthcare providers to identify women with disabilities for inclusive access to the services.

The study reported that the choice and autonomy for deciding which family planning methods to use depend on the woman's discretion, with a provider remaining to provide advice as required. The choice of the method also depends on the woman’s disability because not all family planning methods are a perfect fit for everyone. The women with disabilities affirmed that they chose a method to use alone, contrary to Ledger et al. (Ledger et al., 2016) observation from the UK-based survey that women with disabilities did not make decisions on using or not using family planning methods. This divergence in the findings could be attributable to the different population groups featured in the two studies, with the UK study involving people who care for women with disabilities and not the women themselves as study participants. Impliedly, there is a need for a detailed assessment to engage women with disabilities and learn about their experiences with family planning use, including how they decide to use specific family planning methods. This information is vital for informing targeted interventions to strengthen women with disabilities' decision-making power on family planning use and benefit from improved sexual and reproductive health services and maternal health outcomes (Belay et al., 2016).

Social stigma and discrimination are among the widely reported challenges women with disabilities contend with in accessing and utilising health facility services, including family planning services (Casebolt et al., 2022; Gichane et al., 2017; Mekonnen et al., 2020; Mesfin Yesgat et al., 2020b, 2020a). The women with disabilities in the study reported feeling stigmatised and subjected to discrimination when receiving medical services, including family planning services, similar to what was observed for adolescent girls with disabilities in Tanzania (Mesiäislehto et al., 2021). Stigma takes various forms, but the stigma attached to patients and healthcare professionals needs to be taken very seriously since seeking care can have unfavourable effects, particularly for vulnerable populations like women with disabilities. Research is recommended to examine the impact of stigma on women with disabilities' use of family planning services and healthcare services in general.

The women with disability in the study also mentioned that some healthcare professionals had attitudinal barriers and bad opinions of them and that they thought women with disabilities should not engage in sexual activities. There have also been reports elsewhere of unfavourable attitudes and perceptions toward women with disability who seek family planning services (Harris et al., 2016). However, little is documented to support the notion that women with disabilities should not engage in sexual activity or should not be sexually active (Mekonnen et al., 2020; Obasi et al., 2019). These viewpoints have societal and cultural roots (Mekonnen et al., 2020; Mosher et al., 2017), but, surprisingly, healthcare professionals have them as well, albeit their role in promoting an individual's health in terms of illness prevention, treatment, and wellness. After all, women with disabilities have equal rights to have healthy sexual and reproductive health without facing discrimination, just like other women do (Wickström et al., 2020) and everyone including health professionals, should respect these rights in line with the UNCPD 2017 call.

The study observed that the physical environment within the study health facilities was unsuitable for accessing family planning services among women with disabilities. None of the health facilities in the study, for example, had basic amenities for women with disabilities in place, including toilets and/or adjustable beds, which could facilitate access and provision of the services. Similar observations were reported elsewhere (Casebolt et al., 2022; Moscoso-Porras et al., 2019) on which physical barriers hindered people with disabilities from accessing and using health facility services. It should be noted that the physical infrastructure observed, including the lack of disability-friendly toilets, ramps, and adjustable examination beds, is not unique to the study health facilities rather, it is a characteristic nature of most health facilities in the country (Kapologwe et al., 2020) and other settings (Wakjira & Habedi, 2022) suggesting that accessibility of family planning services to women with disabilities is a shared concern. Improving the health facilities' physical amenities is critical for inclusive sexual and reproductive health services, including family planning provisions. This is an important ingredient towards achieving "universal access to sexual and reproductive health-care services, including for family planning" and "universal access to sexual and reproductive health rights," SDG 3.7 and 5.6, respectively (Colglazier, 2015).

LIMITATIONS OF THE STUDY

This is the first study to examine the experiences of providing family planning services to women with disabilities in Tanzania's public health facilities. Data collection from multiple sources, healthcare providers, and women with disabilities enriched the study findings' credibility and trustworthiness. The application of the non-health enhancing aspects of care enabled a detailed description of the provider and client experiences of family planning services provision. It gained insights into the health system's responsiveness to the family planning needs of women with disabilities. The findings could inform targeted interventions to improve experiences of family planning provision and promote accessibility and use among women with disabilities. However, the study has limitations as it was restricted to a particular group of people in purposively selected settings; the findings should be generalised considering settings with similar characteristics. Future research could cover public and private health facilities to comprehensively understand the scope and magnitude of reported experiences quantitatively.

CONCLUSION

Healthcare providers provided information and education on family planning services to women to inform their choice of methods. However, challenges in communication were also highlighted due to healthcare providers' limited proficiency in sign language use and skills to communicate with people with intellectual disability. The women felt stigmatised and discriminated against by the healthcare providers, and the health facilities lacked the basic amenities to support women's access to inclusive family planning services provision. Efforts are needed to address these challenges, enrich the experiences of providing family planning services, and further motivate women with disabilities to access and utilize the services. This will facilitate the women to gain the associated health benefits and ultimately improve their sexual and reproductive health experiences.

Acknowledgment

The authors acknowledge the support received from the health facility authorities, the healthcare providers and the women with disabilities, who participated in and enriched this study.

Conflicts of interest

The authors declare that they have no competing interests.

Authors` contributions

JM conceptualized and designed the study, collected and analysed the data, wrote the first manuscript draft and reviewed the subsequent versions. EM conceptualized and designed the study, supervised data collection, participated in analysing the data and reviewing the several versions of the manuscript. Both authors approved the final version of the manuscript for publication.

REFERENCES

Abeid, Rehema Abdalla, Emmanuel Izack Sumari, Chunxiang Qin, Ally Abdul Lyimo, and Godrian Aron Luttaay. "Uptake of modern contraceptive methods among women of reproductive age in Chake District-Pemba Tanzania: a descriptive crossectional study." *Contraception and Reproductive Medicine* 8, no. 1 (2023): 35.

Addlakha, R., Price, J., & Heidari, S. (2017). Disability and sexuality: Claiming sexual and reproductive rights. *Reproductive Health Matters, 25*(50), 4–9. https://doi.org/10.1080/09688080.2017.1336375

Alem, A. Z., & Agegnehu, C. D. (2021). Magnitude and associated factors of unmet need for family planning among rural women in Ethiopia: A multilevel cross-sectional analysis. *BMJ Open, 11*(4), e044060. https://doi.org/10.1136/bmjopen-2020-044060

AlHamawi, R., Khader, Y., Al Nsour, M., AlQutob, R., & Badran, E. (2023). Family planning interventions in

Jordan: A scoping review. *Women's Health*, *19*, 17455057231170977. https://doi.org/10.1177/17455057231170977

Belay, A. D., Mengesha, Z. B., Woldegebriel, M. K., & Gelaw, Y. A. (2016). Married women's decision making power on family planning use and associated factors in Mizan-Aman, South Ethiopia: A cross sectional study. *BMC Women's Health*, *16*(1), 12. https://doi.org/10.1186/s12905-016-0290-x

Beltran-Arreche, M., Fullana Noell, J., & Pallisera Díaz, M. (2024). Perspectives of Women with Intellectual Disabilities Regarding Affective Sexual Relationships: A Systematic Literature Review. *Sexuality Research and Social Policy*, *21*(1), 263–278. https://doi.org/10.1007/s13178-023-00911-2

Boadu, I. (2022). Coverage and determinants of modern contraceptive use in sub-Saharan Africa: Further analysis of demographic and health surveys. *Reproductive Health*, *19*(1), 18. https://doi.org/10.1186/s12978-022-01332-x

Bullington, B. W., Aristide, C., Abha, Y., Kiwango, H., Nzali, A., Peter, D., Lee, M. H., Mwakisole, A. H., Downs, J. A., & Reif, L. K. (2020). Preferences for family planning education among men and women in rural, highly religious Tanzanian communities: A discrete choice experiment. *Sexual and Reproductive Health Matters*, *28*(1), 1850198. https://doi.org/10.1080/26410397.2020.1850198

Burke, E., Kébé, F., Flink, I., van Reeuwijk, M., & le May, A. (2017). A qualitative study to explore the barriers and enablers for young people with disabilities to access sexual and reproductive health services in Senegal. *Reproductive Health Matters*, *25*(50), 43–54. https://doi.org/10.1080/09688080.2017.1329607

Casebolt, M. T., Singh, K., Speizer, I. S., & Halpern, C. T. (2022). Use of modern contraceptives by women with disabilities in Rajasthan, India: An analysis of the annual health survey. *Sexual & Reproductive Healthcare*, *31*, 100699. https://doi.org/10.1016/j.srhc.2022.100699

Choi, Y., Fabic, M. S., Hounton, S., & Koroma, D. (2015). Meeting demand for family planning within a generation: Prospects and implications at country level. *Global Health Action*, *8*(1), 29734. https://doi.org/10.3402/gha.v8.29734

Colglazier, W. (2015). Sustainable development agenda: 2030. *Science*, *349*(6252), 1048–1050. https://doi.org/10.1126/science.aad2333

Dang, B. N., Westbrook, R. A., Njue, S. M., & Giordano, T. P. (2017). Building trust and rapport early in the new doctor-patient relationship: A longitudinal qualitative study. *BMC Medical Education*, *17*(1), 32. https://doi.org/10.1186/s12909-017-0868-5

Darby, C., Valentine, N., Murray, C. J., & de Silva, A. (n.d.). *World Health Organization (WHO): Strategy on Measuring Responsiveness.*

Devkota, H. R., Kett, M., & Groce, N. (2019). Societal attitude and behaviours towards women with disabilities in rural Nepal: Pregnancy, childbirth and motherhood. *BMC Pregnancy and Childbirth*, *19*(1), 20. https://doi.org/10.1186/s12884-019-2171-4

Devkota, H. R., Murray, E., Kett, M., & Groce, N. (2018). Are maternal healthcare services accessible to vulnerable group? A study among women with disabilities in rural Nepal. *PLOS ONE*, *13*(7), e0200370. https://doi.org/10.1371/journal.pone.0200370

Foltz, A., & Shank, C. (2020). Deaf Sign-Language Using Patients' Experiences in Health Emergencies in Wales: Perspectives for Improving Interactions. *Frontiers in Communication*, *5*. https://www.frontiersin.org/articles/10.3389/fcomm.2020.572855

Ganle, J. K., Baatiema, L., Quansah, R., & Danso-Appiah, A. (2020). Barriers facing persons with disability in accessing sexual and reproductive health services in sub-Saharan Africa: A systematic review. *PLOS ONE*, *15*(10), e0238585. https://doi.org/10.1371/journal.pone.0238585

Gichane, M. W., Heap, M., Fontes, M., & London, L. (2017). "They must understand we are people": Pregnancy and maternity service use among signing Deaf women in Cape Town. *Disability and Health Journal*, *10*(3), 434–439. https://doi.org/10.1016/j.dhjo.2017.03.016

Global report on health equity for persons with disabilities [EN/AR/RU/ZH]—World | ReliefWeb. (2022, December 2). https://reliefweb.int/report/world/global-report-health-equity-persons-disabilities-enarruzh

Guracho, Y. D., Belay, B. Y., Alemayehu, A., Birhanie, G., Gelaw, Y. M., Agaje, M., Ayana, D., & G/Meskel G/Eyesus, T. (2022). Women's Decision-Making

Power on Modern Family Planning Use and Its Associated Factors in Northwest Ethiopia. *BioMed Research International*, *2022*, e9060809. https://doi.org/10.1155/2022/9060809

Hagos, N., Taqi, I., & Singh, S. (2023). *How Universal Health Coverage Can Increase Access to Sexual and Reproductive Health Services in Sub-Saharan Africa*. https://doi.org/10.1363/2023.300337

Harris, S., Reichenbach, L., & Hardee, K. (2016). Measuring and monitoring quality of care in family planning: Are we ignoring negative experiences? *Open Access Journal of Contraception*, *7*, 97–108. https://doi.org/10.2147/OAJC.S101281

Hellwig, F., & Barros, A. J. (2022). *Learning from success cases: Ecological analysis of pathways to universal access to family planning care in low- and middle-income countries*. (No. 6:59). Gates Open Research. https://doi.org/10.12688/gatesopenres.13570.2

Horner-Johnson, W., Klein, K. A., Campbell, J., & Guise, J.-M. (2022). "It Would Have Been Nice to Have a Choice": Barriers to Contraceptive Decision-making among Women with Disabilities. *Women's Health Issues*, *32*(3), 261–267. https://doi.org/10.1016/j.whi.2022.01.001

Horner-Johnson, W., Moe, E. L., Stoner, R. C., Klein, K. A., Edelman, A. B., Eden, K. B., Andresen, E. M., Caughey, A. B., & Guise, J.-M. (2019). Contraceptive knowledge and use among women with intellectual, physical, or sensory disabilities: A systematic review. *Disability and Health Journal*, *12*(2), 139–154. https://doi.org/10.1016/j.dhjo.2018.11.006

Isaac, E. (2023). *Convenience and Purposive Sampling Techniques: Are they the Same?*

Kapologwe, N. A., Kibusi, S. M., Borghi, J., Gwajima, D. O., & Kalolo, A. (2020). Assessing health system responsiveness in primary health care facilities in Tanzania. *BMC Health Services Research*, *20*(1), 104. https://doi.org/10.1186/s12913-020-4961-9

Kassim, M., & Ndumbaro, F. (2022). Factors affecting family planning literacy among women of childbearing age in the rural Lake zone, Tanzania. *BMC Public Health*, *22*(1), 646. https://doi.org/10.1186/s12889-022-13103-1

Khan, G., Kagwanja, N., Whyle, E., Gilson, L., Molyneux, S., Schaay, N., Tsofa, B., Barasa, E., & Olivier, J. (2021). Health system responsiveness: A systematic evidence mapping review of the global literature. *International Journal for Equity in Health*, *20*(1), 112. https://doi.org/10.1186/s12939-021-01447-w

Ledger, S., Earle, S., Tilley, E., & Walmsley, J. (2016). Contraceptive decision-making and women with learning disabilities. *Sexualities*, *19*(5–6), 698–724. https://doi.org/10.1177/1363460715620576

Mac-Seing, M., Zarowsky, C., Yuan, M., & Zinszer, K. (2022). Disability and sexual and reproductive health service utilisation in Uganda: An intersectional analysis of demographic and health surveys between 2006 and 2016. *BMC Public Health*, *22*(1), 438. https://doi.org/10.1186/s12889-022-12708-w

MAKAU, P. (2021). Utilization Of Family Planning Services And Associated Factors Among Women Aged 18-49 Years Living With Disability In Kajiado County. *Kenya (Doctoral Dissertation, Kenyatta University)*.

Mapunda, P. H., Omollo, A. D., & Bali, T. A. L. (2017). Challenges in identifying and serving students with special needs in Dodoma, Tanzania. *International Journal of Child Care and Education Policy*, *11*(1), 10. https://doi.org/10.1186/s40723-017-0036-8

Mavuso, S. S., & Maharaj, P. (2015). Access to sexual and reproductive health services: Experiences and perspectives of persons with disabilities in Durban, South Africa. *Agenda*, *29*(2), 79–88. https://doi.org/10.1080/10130950.2015.1043713

Mekonnen, A. G., Bayleyegn, A. D., Aynalem, Y. A., Adane, T. D., Muluneh, M. A., & Asefa, M. (2020). Level of knowledge, attitude, and practice of family planning and associated factors among disabled persons, north-shewa zone, Amhara regional state, Ethiopia. *Contraception and Reproductive Medicine*, *5*(1), 8. https://doi.org/10.1186/s40834-020-00111-y

Mesfin Yesgat, Y., Gebremeskel, F., Estifanous, W., Gizachew, Y., Jemal, S., Atnafu, N., & Nuriye, K. (2020a). Utilization of Family Planning Methods and Associated Factors Among Reproductive-Age Women with Disability in Arba Minch Town, Southern Ethiopia. *Open Access Journal of Contraception*, *11*, 25–32. https://doi.org/10.2147/oajc.s240817

Mesfin Yesgat, Y., Gebremeskel, F., Estifanous, W., Gizachew, Y., Jemal, S., Atnafu, N., & Nuriye, K. (2020b). Utilization of Family Planning Methods and

Associated Factors Among Reproductive-Age Women with Disability in Arba Minch Town, Southern Ethiopia. *Open Access Journal of Contraception*, *11*, 25–32. https://doi.org/10.2147/OAJC.S240817

Mesiäislehto, V., Katsui, H., & Sambaiga, R. (2021). Disparities in Accessing Sexual and Reproductive Health Services at the Intersection of Disability and Female Adolescence in Tanzania. *International Journal of Environmental Research and Public Health*, *18*(4), 1657. https://doi.org/10.3390/ijerph18041657

Ministry of Health (MoH) [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of & Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF. 2023. (n.d.). *Tanzania Demographic and Health Survey and Malaria Indicator Survey 2022 Key Indicators Report. Dodoma, Tanzania, and Rockville, Maryland, USA: MoH, NBS, OCGS, and ICF*.

Mohammed, S., Bermejo, J. L., Souares, A., Sauerborn, R., & Dong, H. (2013). Assessing responsiveness of health care services within a health insurance scheme in Nigeria: Users' perspectives. *BMC Health Services Research*, *13*(1), 502. https://doi.org/10.1186/1472-6963-13-502

Moscoso-Porras, M., Fuhs, A. K., & Carbone, A. (2019). Access barriers to medical facilities for people with physical disabilities: The case of Peru. *Cadernos de Saúde Pública*, *35*, e00050417. https://doi.org/10.1590/0102-311X00050417

Mosher, W., Bloom, T., Hughes, R., Horton, L., Mojtabai, R., & Alhusen, J. L. (2017). Disparities in receipt of family planning services by disability status: New estimates from the National Survey of Family Growth. *Disability and Health Journal*, *10*(3), 394–399. https://doi.org/10.1016/j.dhjo.2017.03.014

Obasi, M., Manortey, S., Kyei, K. A., Addo, M. K., Talboys, S., Gay, L., & Baiden, F. (2019). Sexual and reproductive health of adolescents in schools for people with disabilities. *The Pan African Medical Journal*, *33*, 299. https://doi.org/10.11604/pamj.2019.33.299.18546

Papanicolas, I., & Smith, P. (2013). *Health System Performance Comparison: An Agenda for Policy, Information and Research*. McGraw-Hill Education (UK).

Pérez-Curiel, P., Vicente, E., Morán, M. L., & Gómez, L. E. (2023). The Right to Sexuality, Reproductive Health, and Found a Family for People with Intellectual Disability: A Systematic Review. *International Journal of Environmental Research and Public Health*, *20*(2), Article 2. https://doi.org/10.3390/ijerph20021587

Quinones, S., Palermo, T. M., Lukongo, T. M., Luchemba, P., Mitti, R., Devries, K., de Groot, R., Khurshid, A., & Kuper, H. (2021). Disability status and multi-dimensional personal well-being among adolescents in the Southern Highlands Region of Tanzania: Results of a cross-sectional study. *BMJ Open*, *11*(5), e044077. https://doi.org/10.1136/bmjopen-2020-044077

Rugoho, T., & Maphosa, F. (2017). Challenges faced by women with disabilities in accessing sexual and reproductive health in Zimbabwe: The case of Chitungwiza town. *African Journal of Disability*, *6*(1), 1–8. https://doi.org/10.4102/ajod.v6i0.252

Silayo, D., & Bano, W. (2019, February 6). Social Inclusive Health Care Strategies in Tanzania. *International Conference on Financial Inclusion, Inclusive Growth and Social Development: Performance and ChallengesAt: Kannur University Thalassery Campus, Palayad, Kerala 670661, India*.

Starbird, E., Norton, M., & Marcus, R. (2016). Investing in Family Planning: Key to Achieving the Sustainable Development Goals. *Global Health: Science and Practice*, *4*(2), 191–210. https://doi.org/10.9745/GHSP-D-15-00374

Tanabe, M., Nagujjah, Y., Rimal, N., Bukania, F., & Krause, S. (2015). Intersecting Sexual and Reproductive Health and Disability in Humanitarian Settings: Risks, Needs, and Capacities of Refugees with Disabilities in Kenya, Nepal, and Uganda. *Sexuality and Disability*, *33*(4), 411–427. https://doi.org/10.1007/s11195-015-9419-3

United Nations Convention on the Rights of Persons with Disabilities—Employment, Social Affairs & Inclusion—European Commission. (n.d.). Retrieved June 17, 2024, from https://ec.europa.eu/social/main.jsp?catId=1138

United Republic of Tanzania, Ministry of Health, Community Development, Gender, Elderly and Children. (n.d.). *Tanzania National Family Planning Costed Implementation Plan 2029-2023*. https://tciurbanhealth.org/wpcontent/uploads/2019/07/National-Family-Planning-Costed-Implementation-Plan-2019-2023-INSIDE-%E2%80%A2-F....pdf

USAID, P. 2019 Family Planning Data Sheet Highlights Family Planning Method Use Around the World. Retrieved November 3, 2023, from https://www.prb.org/resources/2019-family-planning-data-sheet-highlights-family-planning-method-use-around-the-world/

Valentine, N., de Silva, A., Kawabata, K., Darby, C., Murray, C., & Evans, D. (2003). Health System Responsiveness: Concepts, Domains and Operationalization. *Health System Performance, Debates, Methods and Empiricism*.

Wakjira, D. B., & Habedi, D. (2022). Barriers to access and utilisation of sexual and reproductive health services among adolescents in Ethiopia: A sequential mixed-methods study. *BMJ Open*, *12*(11), e063294. https://doi.org/10.1136/bmjopen-2022-063294

Wickström, M., Larsson, M., & Höglund, B. (2020). How can sexual and reproductive health and rights be enhanced for young people with intellectual disability? – Focus group interviews with staff in Sweden. *Reproductive Health*, *17*(1), 86. https://doi.org/10.1186/s12978-020-00928-5

World Health Organization. (2015). *WHO global disability action plan 2014-2021: Better health for all people with disability*. World Health Organization. https://iris.who.int/handle/10665/199544

World Health Organization (WHO) , 2022: Universal health coverage (UHC). (n.d.). Retrieved June 17, 2024, from https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)

Wu, J. P., McKee, K. S., McKee, M. M., Meade, M. A., Plegue, M. A., & Sen, A. (2017). Use of Reversible Contraceptive Methods Among U.S. Women with Physical or Sensory Disabilities. *Perspectives on Sexual and Reproductive Health*, *49*(3), 141–147. https://doi.org/10.1363/psrh.12031

Yadassa, F., Debelew, G. T., & Birhanu, Z. (2023). The Effect of Family Planning Education on Knowledge, Attitude and Practice Toward Family Planning Methods Among Married Couples in Kersa and Goma Districts of Jimma Zone, South West Ethiopia. *Risk Management and Healthcare Policy*, *16*, 2051–2062. https://doi.org/10.2147/RMHP.S427176

Yimer, A. S., & Modiba, L. M. (2019). Modern contraceptive methods knowledge and practice among blind and deaf women in Ethiopia. A cross-sectional survey. *BMC Women's Health*, *19*(1), 151. https://doi.org/10.1186/s12905-019-0850-y

.