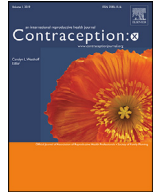




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Original Research Article

# Health providers' perspectives on contraceptive use in rural Northwest Tanzania: A qualitative study

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## ABSTRACT

**Objectives:** In Tanzania, contraceptive use is limited, particularly in rural communities and even among women who would like to delay childbearing. This paper aims to present health providers' perspectives on populations seeking contraception and barriers that could be addressed to increase access to and uptake of contraception, given their interface with large portions of their communities.

**Study Design:** We conducted 18 in-depth interviews with providers stationed at health dispensaries in six rural villages in northwest Tanzania. Two investigators independently coded interviews using a stepwise process to achieve consensus on prevalent topics.

**Results:** Three topics emerged from our analysis: (1) nature of clients seeking contraception; (2) barriers to uptake of contraception; and (3) the role of secrecy in obtaining and using contraception. Health providers reported that married women with children were the most frequent users of contraception, alongside some single women, men, sex workers, and students. Barriers to contraception included lack of supplies and trained staff, misconceptions and fears, stigma, and unsupportive partners. Providers observed that contraception was often used secretly. They reported surreptitious visits and described clients' preferential use of discreet methods. Providers respected and supported clients' desires to keep visits confidential.

**Conclusion:** Our data suggest maintaining high stocks of discreet contraceptive methods and deploying more trained staff to dispensaries could increase availability and access to contraceptives. At the community level, more education campaigns are warranted to address barriers, especially those related to stigma.

**Implications:** Our work highlights the need for additional contraceptive methods that are easy to administer and discreet for women who must maintain secrecy. Future studies of the effectiveness of interventions and new contraceptives should obtain healthcare providers' perspectives, as they can provide important insights to service provision.

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Contraception improves maternal and child health, advances gender equity and empowerment, and contributes to economic growth [1]. Healthcare providers in rural Tanzania have previously identified structural barriers to accessing contraception including

low supply, high provider workload, and lack of trained providers [2]. They also noted unsupportive partners as an important barrier, and suggested that disadvantages may be greatest amongst rural Sukuma and Maasai Tanzanian women due to patriarchal cultural norms of these tribes [2–4]. In contrast to multiple reports on barriers, few studies have focused on provider perspectives and fewer have sought providers' suggestions for addressing these barriers.

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Our group conducted a cluster randomized trial (clinicaltrials.gov/NCT03594305) from 2018–2021 in northwest Tanzania to determine whether education for religious leaders in rural communities can improve uptake of modern contraception for those who want to use it to space or prevent pregnancies. We have previously investigated perspectives of community members and leaders [5,6]. In this qualitative study, we explore rural health workers' experience with contraceptive provision and their ideas for improvement. We collected data from communities that were assigned as control sites and will receive the intervention after the trial is complete. Our goal was to describe providers' perspectives on which populations seek contraception and their reasons for doing so, local facilitators and inhibitors of contraceptive uptake, effective strategies they currently use increase access to and uptake of contraception, and ideas that could be implemented to better provide contraception to women who want to use it in rural communities.

## 1. Materials and methods

### 1.1. Study design and recruitment

In October 2019, we conducted 18 qualitative interviews with healthcare providers stationed at dispensaries that provide basic health services, including prenatal care and deliveries, in six villages in northwest Tanzania. The villages are spread over an area that is approximately 3500 km<sup>2</sup> and, due to poor infrastructure for communication and travel, are isolated from one another. For this study, we visited the dispensary in each village and asked the head clinician to identify three to four providers who were most frequently responsible for providing contraceptive services. We then invited these providers to participate in an in-depth interview. We included providers of different ages, genders, and training whenever possible to obtain a diversity of perspectives. All participants were 18 years or older and provided written informed consent. We obtained ethical approval from the Tanzanian National Institute for Medical Research (NIMR/HQ/R.8a/Vol.IX/2284) and Weill Cornell Medicine (IRB#1604017171).

### 1.2. Interviews

Based on prior focus group discussions that we had conducted among community members [6], our research team developed a list of open-ended questions with follow-up probes (available from the authors upon request). Questions explored providers' perspectives on contraceptive use in their dispensaries, and addressed the following topics: background information on the interviewee, their role in the provision of contraceptives, how and when they provide contraceptives, who in the community seeks contraception and why, barriers to accessing contraception, and recommendations to increase access to contraception in their communities.

Two experienced Tanzanian female qualitative researchers, who are employed and trained by the National Institute for Medical Research (NIMR) in Mwanza, conducted one-on-one interviews in the local language, Kiswahili. Interviewers were not involved in the cluster randomized trial, were not healthcare workers themselves, and did not know the providers in order to minimize subjective interpretation as well as to decrease respondents' propensity toward social desirability bias. The interviewers informed the respondents that their responses would be completely anonymized and would not be shared with their superiors. Interviews lasted approximately one hour and were digitally recorded. A professional translator at NIMR transcribed and translated the interviews to English.

Independently of the interviews, another member of our data collection team visited each dispensary to collect programmatic data from dispensary records and to complete a structured questionnaire with the head clinician. These data included details of

overall care provided, health provider training, and contraceptive availability (Table 1).

### 1.3. Data analysis

To begin analysis, two study team members (CA, BWB) independently reviewed 3 transcripts and each developed a preliminary list of codes, guided by these first transcripts and by the a priori codes that were anticipated based on the interview guide (available from the authors upon request). The research team reviewed the list to achieve consensus. Using the consensus codes, these investigators then coded all transcripts independently. They identified additional in vivo codes during coding, which included codes such as role of parents in contraceptive use, postabortion contraception, and contraception provided secretly. The two investigators then compared coded texts, grouped texts into pertinent topics, and selected illustrative quotations to provide examples. All study team members reviewed the final coding framework for accuracy and clarity. The study team members performing the primary coding were not from Tanzania. Therefore, in order to increase the reliability of our analysis, senior members of the team performed periodic review and led discussions of cultural context during coding. These reflexive practices, guided by co-investigators who are Tanzanian and/or who have lived and worked in Tanzania for 15 or more years, enhanced reliability of the analysis. We coded and analyzed data using NVivo Version 12 (Doncaster, Australia).

## 2. Results

We interviewed a total of 3 male clinical officers and 15 female nurses. The median age of providers was 32.1 years (interquartile range, 28–32). Table 1 summarizes programmatic data from the six dispensaries from which providers were interviewed.

We organized our results into 3 sections: (1) typical clients seeking contraception at dispensaries; (2) barriers to accessing contraception; and (3) secrecy surrounding contraceptive use.

### 2.1. Who seeks contraception, and why?

Providers reported that the majority of those seeking contraception are married women with children who desire to recuperate between births, particularly if they have previously had challenging pregnancies or deliveries. A female nurse explained that the “challenges” a woman faces during pregnancy could cause her to seek contraception “to do something about it, like ‘let me rest from having kids.’”

Several also noted that divorced or separated women commonly used contraception to avoid the expense of raising and educating children alone because “they complain that life is tough. Men don't provide for them [and their families]. Men don't care for them. They find it better to use [contraceptives]” (Female Nurse).

Most providers (16 of 18) mentioned that men sought out condoms. Providers consistently stated that married partners rarely used condoms, but that most men “use them outside their marriages” (Male Clinical Officer) to prevent children out of wedlock. A female nurse further explained that a male client will take condoms so that he “can have what he wants without getting anyone pregnant. He tells you that's the reason he takes the condoms.” A male doctor reported that young men frequently sought condoms to prevent sexually transmitted infections and some were accompanied by a friend: “teenage boys even come some of them two at the same time.”

A small number of providers noted that parents would occasionally bring in schoolgirls for contraception: “The parent will say, ‘This is my child and I want her to study, but as the way I see her, she may get pregnant at any time’” (Female Nurse). In these

**Table 1**

Characteristics of six dispensaries in rural Northwest Tanzania (2019–2020): village population, number of antenatal visits and deliveries per month, number of providers, types and availability of contraceptives

Parameter	Median (IQR) or Number (Percent)	
<b>Village population (catchment area of each dispensary)</b>	12,738 (10,284–16,556)	
<b>Number of antenatal visits per month</b>	35 (20–48)	
<b>Number of deliveries per month</b>	32 (25–42)	
<b>Number of providers working at each dispensary</b>		
4	3 (50%)	
6	1 (17%)	
12	1 (17%)	
13	1 (17%)	
<b>Number of providers at each dispensary who have been trained in contraceptive provision</b>		
1	2 (33%)	
2–4	2 (33%)	
>4	2 (33%)	
<b>Number of providers trained in contraceptive provision present per day</b>		
1	1 (17%)	
2	5 (83%)	
<b>Types of contraceptives and durations for which dispensaries have had stock-outs<sup>a</sup></b>	<b>≥1 but &lt;2 months</b>	<b>≥2 months</b>
Condoms	1 (17%)	1 (17%)
Injections	1 (17%)	0
Oral contraceptive pills	0	1 (17%)
Progestin-only oral contraceptive pills	0	3 (50%)
Implants (Jadelle, Implanon, NXT)	0	0
Intrauterine devices (IUD)	0	0
Emergency contraception	1 (17%)	2 <sup>b</sup> (33%)

<sup>a</sup> All dispensaries always had at least 3 types of contraceptives available at any given time.

<sup>b</sup> One clinic reported never stocking emergency contraception.

instances, providers reported supportive attitudes toward parental efforts to prevent possible pregnancy and school drop-out for their daughters.

Providers also reported consistently providing contraception to women who need care after abortions. A female nurse explained that providing these women with contraceptives is “a must” to prevent a future pregnancy, because “she has got pregnant out there, and she has taken pills to terminate the pregnancy,” which is criminalized in Tanzania except when done to preserve a pregnant woman’s life or health [7,8].

## 2.2. Barriers to contraceptive use

Providers reported numerous barriers that prevented people in their communities from using contraception. We classify these barriers as structural, interpersonal and intrapersonal and discuss each below. We subsequently present the providers’ strategies for addressing each of these barriers, when applicable.

### 2.2.1. Structural barriers: Lack of essential supplies and trained staff

Providers reported that health system barriers contribute to the ongoing challenge of access to contraception. They reported being limited by shortages of contraceptives, including injections, condoms and oral contraceptive pills. One out of six sites reported stock-outs of injections, which providers indicated as the preferred method for women desiring discreet use. One nurse also reported that having insufficient intrauterine device (IUD) equipment limited the number of patients who could receive IUDs:

*Maybe they could fund us with IUDs. We have only one machine [device used to insert IUDs] so when you serve one patient it means you need to give the other appointment in the evening or morning [...] so you find that most of the clients of IUD, we lose them because of [lacking] the equipment. (Female Nurse)*

Providers mentioned that another challenge was the lack of personnel with training to provide the full spectrum of contraceptives. Only some providers are trained to insert and remove IUDs and implants, while others lack training in counseling about contraceptive options. Providers expressed a sense of helplessness that those who receive training are frequently overburdened with responsibilities, such that particularly on the busiest clinic days “one person may act as the doctor, RCH [reproductive and child health nurse], pharmacist, and midwife all at the same time” (Female Nurse).

### 2.2.2. Interpersonal barriers: Community stigma, lack of partner support

Providers observed that both men and women feared using contraception due to stigma and perceived associations with promiscuity. Providers consistently stated that their communities widely perceived condoms to be for pregnancy and disease prevention only in extra marital affairs. Some providers reported that a woman who uses contraceptives is seen “as a woman who doesn’t want to give birth, they see her as a prostitute” (Female Nurse).

Providers also identified a lack of support from husbands as a major barrier to contraceptive use, saying that husbands “forbid them” because “they married their wives so as to bear children and not for them to plan how many to have” (Female Nurse). Most providers valued an open discussion about contraceptive use between couples, and encouraged men and women make family planning decisions together. A female nurse reported that it would give her “peace [of mind]” if the decision to seek contraception “has been consented by both parties.”

Some providers additionally mentioned specifically trying to counsel skeptic husbands about FP. A female nurse reported that talking to patients’ husbands “makes it easier for me to find out what are reasons for him to disagree with the service, and after I have asked him a couple of questions concerning his understanding [about contraceptives], I would then know what areas he failed to understand.” Another female nurse stressed the high need to ed-

ucate men, noting that if they are “instructed, educated and understand everything about family planning,” it would be “much easier to increase uptake” of contraceptives.

### 2.2.3. Intrapersonal barriers: Misconceptions and medical fears

Providers recognized widespread misconceptions and medical fears surrounding use of contraceptives as additional barriers to uptake. A prominent example was community members’ belief that contraceptives cause “the babies [to] come out deformed” (Female Nurse). Nurses frequently reported educating women about contraceptives at postpartum visits and on baby-clinic days by providing a general overview of spacing children via contraceptive use, benefits and risks including addressing misconceptions, and different methods available. Nurses reported that their counseling could strongly impact women’s uptake of contraception, and expressed pride in their ability to be very good “influencers.”

### 2.3. Secrecy surrounding contraception

A major topic that emerged during analysis was the importance of secrecy in obtaining and using contraception. Healthcare providers consistently noted that women most often requested contraception on baby check-up and vaccination days both for convenience and, importantly, so that their husbands and the community would not find out. One nurse explained that “Mondays are for vaccinations, especially for measles, so you find a lot of mothers coming for that and also for family planning.” Providers reported that women also seek contraception when their husbands are traveling: “In the Sukuma community... the men [leave] their wives at home [to go work in mines], so the woman thinks it best to come [at that time] and get [contraceptives] so that she can protect herself” (Female Nurse). Additionally, providers reported that many women prefer methods of contraception that are undetectable by their husbands or other community members, such as injections because “they don’t show, so you just help her” (Female Nurse).

Understanding the importance of secrecy, female nurses reported working with the women in their communities to maintain confidentiality. Many made their schedules flexible to meet patients outside of regular business hours in order to help “others that come in secret, so you set a separate day which does not collide with clinic” (Female Nurse). Similarly, others reported helping younger women obtain contraception: “[Students] do come, but they hide themselves. But they come and meet me. I will give them the service because they are like any other client” (Female Nurse). A male clinical officer also described providing contraceptives to students “in secret.” Further, nurses reported receiving direct requests from women to guard their secret so that even “if their husbands ask, I [nurse] should not tell them” (Female Nurse).

Secretive use of contraception was also important for men who sought condoms surreptitiously in an effort to guard their reputation in the community. One nurse reported a married man telling her that if community members learned that he used condoms he would be “perceived badly.” At many dispensaries, providers described placing condoms in open areas where men can take them freely without interacting with anyone. At other dispensaries, nurses stated that young men “call [condoms] malaria pills. ... It’s their way of hiding it because there might be people present [who would hear the request].”

## 3. Discussion

Health providers identified several barriers to providing contraception including lack of supplies and staff, individual misconceptions and medical fears, and community stigma or unsupportive partners. These findings are consistent with previous studies done to identify barriers to use of contraception in Tanzania

[4] and much of sub-Saharan Africa [9], suggesting the representativeness of our data. Qualitative studies in Kenya and Tanzania have similarly found fear of side effects and contraception’s association with promiscuity to be major barriers to uptake of contraception [5,10]. A systematic review conducted in Nigeria reported that major barriers include health service-related factors (difficulty accessing or procuring contraception) and client-related factors (education, partner or community disapproval, embarrassment) [11]. While previous work has identified barriers and provided detailed, contextualized data, our work provides ideas for ways to move forward and increase reproductive choice by improving access to contraceptive services.

Our data suggest that a major innovative role that health providers can play is to counsel not only women but also their male partners about contraception in ways that women are often not empowered to do themselves. Providers in this study and community members in other studies consistently envision that optimal strategies to promote modern contraception will engage and educate men [4–6,12–15]. We also recently reported that rural men and women prefer receiving education about contraceptives in mixed-gender groups [16], further substantiating the intuitive efforts of providers in this study to educate couples whenever possible.

Further, our data illustrate the ongoing need for secrecy surrounding contraceptive use and highlight ways that providers adapt to ensure contraception needs in their communities are met. Providers in our study, motivated to help women with unmet needs in their communities, took it upon themselves to offer women avenues for confidential access to contraception, sometimes working on evenings and weekends to meet these needs. Some clinics in the United States have formally implemented extended hours and guarantees of confidentiality to increase accessibility to contraception for adolescents [17]. This approach may be particularly important for youth [18] and for women whose partners forbid use of contraception [3–5,19].

This work demonstrates the importance of including healthcare providers in community health research. Providers offered insights into barriers they experience when providing contraception, some of which parallel the barriers reported by the community members themselves [6]. When provider views on provision of contraception services are combined with user insight, we gain a fuller picture of the needs and concerns of individuals seeking contraception. This allows researchers to better understand and serve communities [20,21] and can inform future efforts to address barriers to women’s reproductive autonomy.

Despite the potential advocacy role for healthcare workers, some data suggests that many health providers across Africa hold biases that limit contraceptive choice and access for some women [22]. In Nigeria, younger, unmarried women are often offered short-term contraceptives, whereas married women are recommended longer-acting methods [23]. In Kenya, over half of providers reported imposing minimum age restrictions on one or more methods, including injections, a popular method in urban areas. Young, single, and women with fewer children were more frequently denied services [24]. In a “mystery client” study in Tanzania, adolescents faced challenges in accessing contraceptives because of providers’ paternalistic attitudes and lack of confidentiality [25]. In our own data, a nurse described herself as a good “influencer” due to her ability to convince women to use modern contraception. This assertion underscores the potential power dynamics of clinical encounters and merits the observation that such influence can inadvertently lead to coercive counseling and negatively impact reproductive decision-making [26,27].

Providers interviewed for our study did not disclose turning away any woman seeking contraception, but we recognize that this could be due to social desirability bias, a limitation of our study.



Social desirability bias may also have led providers to report more vigorous efforts to teach about contraception or to protect clients' secrecy than they actually provide. Moreover, due to conducting these interviews in one region of Tanzania, it is possible that our data is less broadly applicable than we have suggested. However, similar barriers reported elsewhere in sub-Saharan Africa suggest that our data will be relevant in many other contexts [9–11].

Moving forward, our data suggests that maintaining high stocks of discreet contraceptive methods and deploying more trained staff to dispensaries, particularly on busy baby clinic days, would increase the capacity of clinics to meet the high demand for contraception. One innovative possibility would be for clinics located near one another to stagger their baby clinic days and send one additional trained staff member to rotate between clinics and provide contraceptives for mothers on those busy days. At the community level, additional educational activities are warranted to address knowledge gaps amongst potential contraceptive users, as suggested by our prior work [6] and by healthcare providers themselves. In the longer term, our work highlights a persistent need for additional, or potentially new, contraceptive methods that are discreet and easy to prescribe or self-administer for women who must maintain secrecy [28–31]. It will be critical that future studies of new interventions or new contraceptives obtain community healthcare providers' perspectives when assessing impact as we strive together to improve maternal and child health.

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**Conflicts of interest:** The authors whose names are listed immediately below certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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