Do Service Providers in Tanzania Unnecessarily Restrict Clients' Access to Contraceptive Methods?

By Ilene S. Speizer, David R. Hotchkiss, Robert J. Magnani, Brian Hubbard and Kristen Nelson

Context: *Even where family planning services are physically accessible and economic barriers to access are few, medical barriers to contraceptive services—such as overspecialization, eligibility restrictions, process hurdles and provider bias—can limit women's use of services.*

Methods: *Data from the 1996 Tanzania Service Availability Survey are used to analyze the prevalence of medical barriers by type of provider, by type of facility and by urban-rural location.*

Results: *Relatively high proportions of providers restrict eligibility by age, particularly for oral contraceptives, the most widely used method among Tanzanian women. Between 79% and 81% of medical aides, trained midwives, maternal and child health aides and auxiliary staff (the most common types of family planning service providers in rural Tanzania) impose age restrictions for the pill. Among all providers, 10–13% report that there is at least one modern method they would never recommend, and 13% report having sent a client home until her next menses, an inappropriate process hurdle for the provision of most hormonal methods. In the aggregate, these restrictions severely limit access to contraceptives for certain groups of women. For example, young, unmarried women who are not menstruating at the time of their visit would encounter one or more barriers or process hurdles at more than 70% of urban facilities and at 80% of rural facilities.*

Conclusions: *If preservice and in-service training and supervisory visits placed greater emphasis on compliance with the Tanzanian National Family Planning Program's service guidelines and standards, providers' unnecessary restrictions on contraceptive use might be reduced, and ultimately eliminated.*

International Family Planning Perspectives, 2000, 26(1):13–20 & 42

At the beginning of the 1990s, Tanzanian women faced few physical obstacles to access to family planning service facilities: Estimates for 1991 indicate that the mean distance to the nearest health facility was about four kilometers.[1] Nor were there significant economic barriers to contraceptive use, as most family planning services were and continue to be offered free of charge. However, the contraceptive procurement and distribution system was largely dysfunctional, and few service providers at government health facilities had been trained to provide modern contraceptive services. Thus, despite nearly universal physical access to health facilities in Tanzania, actual access to modern family planning services and contraceptive supplies was limited.

Since 1992, when Tanzania implemented its National Population Policy, the situation has changed dramatically. The regular availability of multiple modern contraceptive methods at government health facilities has become the rule rather than the exception, and the number of health providers in government facilities who have received formal training in the provision of modern contraceptive methods has increased fourfold.[2]

Despite these improvements in the supply environment, unmet need and unmet demand for family planning services in Tanzania remain high. Estimates from the 1996 Demographic and Health Survey (DHS) indicate that 24% of currently married Tanzanian women want either to postpone their next birth by at least two years or to not have any additional children, but are not using a contraceptive method. In fact, despite improved availability of contraceptive methods and of trained service providers at government health facilities, unmet need has declined only slightly from the level of the early 1990s (about 30% of women of reproductive age).[3]

What might explain these persistently high levels of unmet need? One possible demand-side explanation is that fertility desires have declined over the period, resulting in a greater demand for family planning services.* A possible supply-side explanation is that service providers impose obstacles to the use of contraceptives. Examples of such obstacles include inappropriate contraindications, eligibility restrictions, unnecessary process hurdles, overspecialization of providers, bias and unnecessary regulations.[4]

Such obstacles are potentially important because they can affect both access to and the quality of family planning services: They can deny women access to services, increase women's psychic and time costs for using these services, and restrict their choice of methods.[5] While many of these obstacles result from practitioners' cultural attitudes and norms, recent studies have characterized such obstacles as "medical barriers," since they are restrictions that are imposed by family planning providers, often with unfounded medical justifications.[6]

The presence of medical barriers is not a new issue for the family planning community. In fact, a number of authors have made important conceptual contributions on how and why medical barriers might restrict access.[7] It is striking, though, how little empirical work has been done on this issue in developing countries. Among a small number of studies on medical barriers, blatant provider biases were found in Kenya and Nigeria, including denial of access to services on the basis of age, number of children and marital status.[8] Likewise, in Pakistan, about one-third of women would not have been eligible to use hormonal contraceptives as a result of popular misconceptions about age and parity requirements.[9] The study reported here represents one of the few attempts to quantify the extent to which provider barriers exist, using both the provider and the facility as the unit of analysis.

The issue of medical barriers is well known to Tanzanian family planning authorities. In 1994, the Family Planning Unit of the Ministry of Health instituted

*Over the period 1991–1996, currently married women's mean desired family size declined from 6.1 children to 5.5 children.

Ilene S. Speizer and David R. Hotchkiss are assistant professors, Robert J. Magnani is associate professor and Kristen Nelson is a graduate student in the School of Public Health and Tropical Medicine, Tulane University, New Orleans, LA, USA. Brian Hubbard is currently a University of Michigan development associate working at the Centers for Disease Control and Prevention, Atlanta, GA, USA. The study on which this article is based was funded by the U.S. Agency for International Development, under the Evaluating Family Planning Program Impact Project (The EVALUATION Project), Contract No. DPE-3060-C-00-1054-00.

the National Policy Guidelines and Standards for Family Planning Services and Training. These stipulate that "all males and females of reproductive age, including adolescents irrespective of their parity and marital status, shall have the right of access to family planning information, education, and services."[10] To date, however, the extent to which such barriers persist has not been assessed systematically. In this article, we attempt to fill this information gap by investigating the presence of medical barriers at government family planning service delivery points and by examining the consequences of these barriers for Tanzanian women seeking family planning services.

Data and Methods

The 1996 Tanzania Service Availability Survey (TSAS) was undertaken by the Government of Tanzania's Bureau of Statistics, with technical assistance provided by the EVALUATION Project, of the University of North Carolina at Chapel Hill. The survey included five instruments: a facility observation instrument, which gathered information on equipment and supplies; a facility interview; a questionnaire on facility procedures and practices; a service provider questionnaire; and an exit interview for female family planning clients.

The data used in this article were obtained primarily from the service provider questionnaire and the facility procedures and practices questionnaire.* These two instruments provide rich information on whether the facility provides family planning, and whether medical staff within facilities report certain types of medical barriers. The service provider questionnaire was administered to all willing service providers available on the day the facility was visited. Therefore, information from it is representative of providers from a facility, but does not necessarily characterize all providers at each facility.

The sampling strategy for the facility surveys is based on a cluster design. In all, 357 clusters in urban and rural areas were sampled, although we excluded 30 clusters from Zanzibar. Thus, our results are relevant only for the 327 mainland clusters. Using community informants, we identified the hospital, health center and dispensary closest to each cluster. The facilities identified were then compared to a 1992 master list of all health facilities in the country.

With respect to hospitals and health centers, the large majority of sampled facilities could be matched with those on the master list. However, in the case of dispensaries, there were many instances in which surveyed facilities were not included on the master list. It may be that, at least in Tanzania, community informants are more reliable than a government list in identifying service delivery points.[11]

The number of facilities in the sample was determined not by the number of clusters, but by the number of unique facilities contained in the final sample. Thus, instead of having 327 facilities of each type, the number was reduced by several factors. First, the nearest facility was not visited if it was not located within 30 kilometers of the sample cluster. Second, when two clusters were located near each other, the same facility was often identified as being the nearest to both clusters and, as a result, was only visited once. Third, there are instances in which a facility was visited, but the interview may not have taken place because the facility staff refused to be interviewed.

The facility samples were further restricted for this analysis to government service delivery points, which are the source of family planning methods for 74% of Tanzanian women who use modern family planning.[12] For urban areas, data were available from 123 government facilities providing family planning (36 hospitals, 37 health centers and 50 dispensaries). For rural areas, data were available for 238 government facilities that provide family planning (24 hospitals, 75 health centers and 139 dispensaries). At the provider level, data were available for 355 urban family planning providers and 546 rural providers.† We focus our attention in this article on doctors, nurses, maternal and child health aides, trained midwives, medical assistants and auxiliary staff.

Estimates of the prevalence of provider barriers based on TSAS data are likely to differ from estimates based on a random sample of facilities (e.g., situation analysis), as barriers vary by the type of provider and type of provider varies by the type of service delivery point. The TSAS collected information from the closest hospital, health center and dispensary (i.e., within 30 kilometers), providing information on all types of government service delivery points accessible to all women. Conversely, a situation analysis presents information on barriers from a random sample of facilities in the country; these are not necessarily representative of where women go. We view the TSAS data collection procedure as more suitable for this study because it provides information on provider barriers in government facilities nearest to a random sample of women.

For the purposes of this analysis, medical barriers are defined as practices, derived at least partly from a medical rationale, that result in a scientifically unjustifiable impediment to, or denial of, contraceptive use.[13] Medical barriers may be imposed at the national regulatory level, at the program policy level or at the individual provider level. Six types of medical barriers have been discussed in the literature:[14] contraindications; eligibility; process hurdles; overspecialized providers; provider bias; and regulation.

Contraindication barriers are based on misinformation concerning diseases that may be associated with use of a method. For example, many providers falsely believe that women with diabetes, varicose veins and epilepsy should not use hormonal methods, and they are thus unwilling to prescribe oral contraceptives to such women.

Eligibility barriers include prohibitions on the use of a family planning method based on age, parity, marital status and spousal consent. For example, some providers may consider it inappropriate to provide an IUD to a woman who has no children, even if she is not at risk of acquiring an STD. There is no medical justification for limiting any method on the basis of these characteristics, assuming that appropriate counseling is provided.[15]

Process hurdles include physical examinations and laboratory tests that are unjustifiable as a prerequisite for initiating or continuing use of a method. For example, a provider may require a woman to have a pelvic exam before she can obtain contraceptives, or may delay service provision until she has had her next menstrual period.

Overspecialization arises when providers are required to have a high level of formal education, such as being a doctor or nurse, to provide clinical methods, even though trained personnel with limited formal education are capable of performing most specialized procedures.[16] In rural areas, where specialists are less likely to practice, the availability of clinical methods may be lim-

*Although exit interview data might have been a useful addition to this analysis, we chose not to use these data, for two reasons. First, exit interviews were conducted with clients at only 15% of the government facilities studied here; in addition, women discouraged from seeking services would not be clients, and so would not be represented in the exit interviews.

†The numbers of providers and facilities shown in the tables sometimes differ, due to missing information from providers or facilities.

ited if only specialists are deemed appropriate to provide services.

Provider bias includes the practice of favoring some methods and discouraging others in the absence of a sound medical rationale, as well as failing to ascertain and consider the preferences of the client. Regulatory restrictions may be based on religious controls, health concerns or the government's failure to approve a particular contraceptive.

The data available for this article permit us to examine four of these six types of barriers: They do not provide adequate information to examine contraindication barriers and regulation barriers. However, given that Tanzania adopted national guidelines and standards in 1994, the remaining regulatory barriers are few.

The research described here has two limitations. First, we could only study the government facility of each type that was closest to the communities sampled in the DHS; in some instances, these may not reflect the full set of government service delivery alternatives, nor whether women actually visit these facilities. Second, we cannot assess the influence of provider barriers on contraceptive behavior. While provider barriers are likely to affect both the adoption of contraceptive methods and the mix of methods used, particularly among adolescents, estimating the magnitude of these relationships is beyond the scope of our study.

Background Data

In 1996, the total fertility rate in Tanzania was 5.8 lifetime births per woman, down from nearly 6.3 in 1991–1992. Eight percent of rural and 24% of urban women of reproductive age were using a modern method in that year. In general, about 75% of married women using modern contraceptives relied on the pill and injectables (Table 1). This pattern persists by age and parity (not shown), with two exceptions: Female sterilization is the leading modern method among women aged 40 and older, and condoms are the most important method among women with no children. For unmarried, sexually active women, the pill and condoms are the two most important methods.

To what extent are contraceptive methods available in public facilities? In both urban and rural areas, supply methods (the pill, injectables, condoms and foaming tablets) tend to be widely available in all three types of facilities (Table 2), while the IUD is available in most hospitals and in about two-thirds of health centers. Implants and both female and male sterilization are also predominantly available only in hospital settings. Because of the low availability of implants, diaphragms, and female and male sterilization, we focus our attention in this article on the remaining supply and clinical methods.

Utilization of supply methods requires women to return to the facility every 1–3 months, either to replenish their supply or to receive another injection. True availability of these methods depends on whether supplies are in stock, whether providers are trained to provide family planning services and whether the facilities have certain types of equipment. Among facilities that offer the pill, injectables and IUDs, availability in the last month was high: Only about 15% of facilities reported stock-outs of the pill, and 18% reported stock-outs of injectables (Table 3, page 16).* For the pill, there were no differences in availability by type of facility. For injectables, dispensaries were slightly more likely to report a stock-out than were health centers and hospitals. Stock-outs were rare among the few facilities that provide the IUD; such stock-outs were most common in dispensaries.

According to information gathered in the facility interview, among hospitals with each type of provider, the majority of providers were trained in family planning provision (Table 3). Medical assistants working in hospitals, however, were less likely to be trained than were all other providers. This does not represent a large barrier to family planning availability, since medical assistants are the least common type of provider in hospital settings (Table 4, page 16).

In health centers and dispensaries, the level of training demonstrates important barriers to access to family planning. For example, in dispensaries and health centers, maternal and child health aides are the most common type of provider (Table 4), but 30% have not received specific fam-

Table 2. Percentage of government health facilities offering a family planning method, by method, according to urban-rural status and type of facility

Method	Urban				Rural			
	Total (N=123)	Hospital (N=36)	Health center (N=37)	Dispensary (N=50)	Total (N=238)	Hospital (N=24)	Health center (N=75)	Dispensary (N=139)
Pill	98.4	94.4	100.0	100.0	100.0	100.0	100.0	100.0
Injectable	98.4	94.4	100.0	100.0	99.2	100.0	100.0	98.6
Implant	10.7	37.1	0.0	0.0	3.8	25.0	2.7	0.7
IUD	65.9	94.4	70.3	42.0	36.6	91.7	65.3	11.5
Condom	97.6	94.4	100.0	98.0	99.2	100.0	100.0	98.6
Foaming tablet	83.7	94.4	83.8	76.0	63.7	91.7	73.3	53.6
Diaphragm	14.6	27.8	10.8	8.0	3.8	8.3	2.7	3.7
Sterilization								
Female	26.0	86.1	2.7	0.0	9.8	75.0	6.7	0.0
Male	12.5	42.9	0.0	0.0	4.7	37.5	2.7	0.0
Natural family planning	67.2	80.0	64.9	60.0	59.7	79.2	71.6	49.6

Table 1. Among currently married women, percentage who are currently using a modern method and percentage distribution of current users, by type of method, according to age-group; and among sexually active unmarried women, percentage who are currently using a modern method and percentage distribution of current users, by type of method, Tanzania, 1996

Marital status and age-group	% using modern methods	% distribution					
		Pill	IUD	Injectables	Condom	Sterilization	Total
Currently married							
Total	13.3	41.4	4.5	33.8	6.0	14.3	100.0
15–19	4.4	50.0	11.4	18.2	15.9	4.5	100.0
20–24	12.6	54.8	3.2	31.7	9.5	0.8	100.0
25–29	14.4	55.6	2.1	31.9	9.0	1.4	100.0
30–34	13.9	43.9	8.6	38.1	2.2	7.2	100.0
35–39	15.8	27.2	5.7	41.8	4.4	20.9	100.0
40–44	16.9	20.7	2.4	30.2	4.7	42.0	100.0
45–49	9.3	16.1	3.2	24.7	0.0	55.9	100.0
Sexually active unmarried							
Total	21.4	44.8	4.7	17.9	29.7	2.8	100.0

Source: reference 3.

*These findings should be interpreted cautiously. While the depletion of supplies may be a result of inefficiency within the government sector, a facility may also experience stock-outs because demand is high. Sorting out the reasons for the frequency of facility stock-outs is beyond the scope of this analysis.

Table 3. Among government health facilities, percentage with consistent supplies over past 30 days and past year, percentage with staff that have been trained in certain areas and percentage with certain equipment available, by type of facility

Service	Hospital (N=60)	Health center (N=112)	Dispensary (N=188)
% with no pill stock-out*			
In last 30 days	84.9	83.9	84.5
In last year	70.4	77.7	70.1
% with no injectable stock-out*			
In last 30 days	83.0	81.1	77.7
In last year	64.2	59.5	53.0
% with no IUD stock-out*			
In last 30 days	100.0	95.8	88.9
In last year	96.2	90.1	81.1
% with family planning training†			
Doctors	73.6	12.5	50.0
Medical assts.	28.3	28.4	23.5
Nurses	85.7	50.0	24.1
Trained midwives	90.7	79.8	68.8
Maternal and child health aides	72.0	70.4	69.1
% with equipment			
Disposable gloves			
Currently	78.0	72.6	78.6
In last 6 months	21.7	31.7	53.7
Working sterilizer	91.5	94.6	83.6
Lamp	41.7	12.5	13.2
Blood pressure gauge	83.3	76.8	60.3
Speculum	93.3	94.6	63.0
Disposable needles	70.0	52.3	46.0

*Among facilities that carry each method. †Among facilities with each type of provider.

ily planning training (Table 3). Moreover, the other common providers in dispensaries (medical assistants) and health centers (trained midwives) often also lack adequate family planning training. In facilities that provide family planning, if a large percentage of providers are untrained, women's family planning needs may not be met consistently.

Table 3 also includes information on the availability of important equipment for family planning provision, by type of facility. While the majority of facilities report having disposable gloves (about 75%), stock-outs are a common problem, especially in hospitals and health centers. For the remaining types of equipment, hospitals and health centers are better equipped than dispensaries. Important gaps exist in equipment that is available: In particular, all facilities need lamps and needles, while dispensaries also need speculums. These equipment gaps may particularly limit new family planning patients' access to methods, but may also hinder women who want to obtain a clinical method.

Thus, while management of commodities and logistics was significantly improved during the early 1990s,[17] there is room for further improvement. Nevertheless, the majority of facilities appear to have a sufficient regular supply of the contraceptives used most frequently by Tanzanian women.

Medical Barriers

Provider Overspecialization

Because it is common for doctors and nurses to insert IUDs and implants,[18] the types of providers available at a particular facility are likely to be an important determinant of the choice of methods available there. In Tanzania, only a small fraction of providers in rural areas are doctors or nurses, while more than half (52%) of all providers are trained midwives or maternal and child health aides (Table 4). In rural areas, maternal and child health aides make up the largest share of providers, but medical assistants and auxiliary staff members are also important.

In urban areas, only a minority of staff are doctors or nurses, although the proportion of nurses is higher than in rural areas. Nurses, maternal and child health aides and trained midwives represent the largest proportion of total staff in urban hospitals, while maternal and child health aides make up a greater percentage of providers in urban health centers and dispensaries (a consequence of the emphasis on providing family planning and well-baby care within these facilities).

That doctors and nurses are located primarily in hospitals is one factor leading to restricted availability of IUDs and implants in health centers and dispensaries. Other factors include lack of equipment or supplies that are needed to provide these methods (as discussed earlier). Training less technical medical staff, including midwives, to provide IUDs and implants and improving facility infrastructure would make these methods more accessible outside the hospital setting. If IUD and implant training were provided to maternal and child health aides and to medical assistants, it would not be necessary to increase the number of doctors and nurses in health centers and dispensaries, because existing staff could provide a wider range of methods. Indeed, providers who participated between 1992 and 1996 in a family planning and reproductive health training course designed to increase compliance with the national policy guidelines were more likely to insert IUDs than providers who had not received this training (85% vs. 55%).[19]

Eligibility

• *Age barriers.* Even if a facility has the appropriate equipment, supplies and trained providers, a woman may be unable to obtain family planning if providers refuse to serve clients who do not meet certain criteria. A measure of age barriers (assessed as whether medical staff inappropriately restrict family planning access to clients who are between ages 12 and 55*) indicates that quite a high proportion of providers restrict eligibility by age, particularly for oral contraceptives—the method used most widely by Tanzanian women. Age restrictions for the pill are imposed by 79–81% of medical aides, trained midwives, maternal and child health aides and auxiliary staff (Table 5); these are the most common types of providers in rural areas. Restrictions are also imposed by staff with higher levels of formal training, with 53% of doctors and 71% of nurses reporting age restrictions.

Because the condom is a barrier method with no hormonal side effects, we might anticipate fewer restrictions on its provision. While this expectation is borne out by the data, more than one-third of providers

Table 4. Percentage distribution of government family planning facility staff, by type of provider on staff, according to urban-rural status and type of facility

Type of staff	Urban				Rural			
	Total (N=355)	Hospital (N=139)	Health center (N=103)	Dispensary (N=113)	Total (N=546)	Hospital (N=87)	Health center (N=171)	Dispensary (N=288)
Doctors	2.5	6.4	0.0	0.0	2.2	11.5	1.2	0.0
Medical assistants	7.9	3.6	10.7	10.6	18.0	2.3	14.0	25.0
Nurses	19.2	30.2	13.6	10.6	6.2	24.1	4.7	1.7
Trained midwives	22.8	25.2	30.1	13.3	15.6	31.0	24.6	5.6
Maternal and child health aides	36.3	28.8	34.9	46.9	36.6	27.6	44.4	34.7
Auxiliary staff	11.3	5.8	10.7	18.6	21.4	3.5	11.1	33.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Although this age range is wide, it may affect women's access to family planning if they are perceived by a provider as being younger (or older) than their actual age.

Table 5. Percentage of government family planning providers who restrict clients' eligibility to use a method for reasons of age, parity, marital status or husband's consent, by method and (for age barriers) urban-rural status, according to type of provider

Barrier and method	Doctors	Medical assistants	Nurses	Trained midwives	MCH aides	Auxiliaries
AGE						
Total	**(N=17)**	**(N=120)**	**(N=90)**	**(N=158)**	**(N=317)**	**(N=152)**
Pill	52.9	79.2	71.1	81.0	78.9	80.3
Condom	37.5	48.7	38.2	36.7	41.2	45.6
IUD	46.7	72.0	60.6	60.0	62.4	77.8
Injection	42.9	80.2	62.2	67.5	63.7	68.7
Urban	**(N=6)**	**(N=26)**	**(N=60)**	**(N=76)**	**(N=123)**	**(N=38)**
Pill	33.3	73.1	66.7	80.3	86.2	81.6
Condom	33.3	37.0	37.9	34.7	46.7	50.0
IUD	16.7	58.3	64.3	66.7	69.1	80.0
Injection	33.3	73.1	61.7	66.7	66.7	75.7
Rural	**(N=11)**	**(N=94)**	**(N=30)**	**(N=82)**	**(N=194)**	**(N=114)**
Pill	63.6	80.9	80.0	81.7	74.2	79.8
Condom	40.0	52.2	38.7	38.6	37.7	44.0
IUD	66.7	84.6	54.2	52.6	54.4	75.0
Injection	50.0	82.2	63.3	68.3	61.8	66.4
PARITY						
Total	**(N=17)**	**(N=120)**	**(N=90)**	**(N=158)**	**(N=317)**	**(N=152)**
Pill	11.8	21.7	6.7	12.7	18.9	29.0
Condom	0.0	4.2	0.0	1.9	3.9	7.5
IUD	6.7	0.0	4.6	0.0	4.0	22.2
Injection	14.3	34.5	17.8	23.6	23.9	32.0
MARITAL STATUS						
Total	**(N=16)**	**(N=120)**	**(N=89)**	**(N=158)**	**(N=317)**	**(N=145)**
Pill	25.0	19.2	9.0	5.7	12.9	21.4
Condom	20.0	16.1	13.6	2.5	10.7	13.4
IUD	23.1	28.0	12.5	18.8	17.5	22.2
Injection	15.4	28.7	18.0	12.2	20.1	26.9
HUSBAND'S CONSENT						
Total	**(N=16)**	**(N=120)**	**(N=89)**	**(N=157)**	**(N=316)**	**(N=143)**
Pill	6.3	25.8	4.5	7.6	15.2	37.1
Condom	13.3	17.0	6.9	9.5	14.0	31.4
IUD	15.4	16.0	1.6	5.0	7.1	33.3
Injection	16.7	25.9	5.6	7.7	14.5	34.9

Note: Ns may be smaller than shown, depending on availability of method and missing data from providers who did not report on barrier.

nevertheless reported age restrictions for condoms. The remaining methods all have similar levels of restrictions by type of provider and across rural and urban areas. These restrictions are not medically recommended, and thus represent social barriers placed in a medical context.

On average, maximum ages were roughly 43–44 years for most female reversible methods, with similar cutoffs for female and male sterilization (not shown). This may be an important barrier for older women who want to limit their family size. The minimum age averaged around 14–15 years, which limits young, sexually active women's access to most methods and puts them at risk of unwanted premarital births. While condoms have the lowest mean age restrictions (14 years), this cutoff may reduce access for adolescents, who tend to have infrequent sex and change partners often[20] and who thus need barrier methods to prevent sexually transmitted diseases and unwanted pregnancies.

• *Parity restrictions.* Service providers are considered to impose a parity barrier if they report that clients must have had some minimum number of children before they can use a contraceptive method. Unlike age restrictions, parity restrictions on the use of condom are few or nonexistent (Table 5). However, restrictions on female methods are more common. Based on parity, lower-level staff members—medical aides, maternal and child health aides and auxiliary staff—appear to be the most conservative in distributing methods. For example, 35% of medical aides, 24% of maternal and child health aides and trained midwives, and 32% of auxiliary workers reported using parity to restrict the provision of injectables. Urban-rural differences in parity restrictions for specific types of providers were negligible (not shown). Nevertheless, parity restrictions are more important in rural areas than in urban areas, largely because the most conservative types of staff tend to be the most important providers in rural health clinics.

The mean number of children required before a woman can use a method was about 2.5. Thus, parity restrictions can represent an important barrier for young women who have not yet begun childbearing and who want to avoid an unwanted or mistimed birth.

• *Marital status.* Provider restrictions based on marital status are less common than age barriers for the majority of female methods, with roughly 20% of all providers reporting such barriers (Table 5). This may affect the ability of young, sexually active unmarried women to delay pregnancies or avoid unwanted pregnancies. Generally, medical assistants, maternal and child health aides and auxiliary medical staff are the most likely to restrict methods to married women. This is especially a problem in rural areas and in urban dispensaries, where these are the most common providers of family planning.

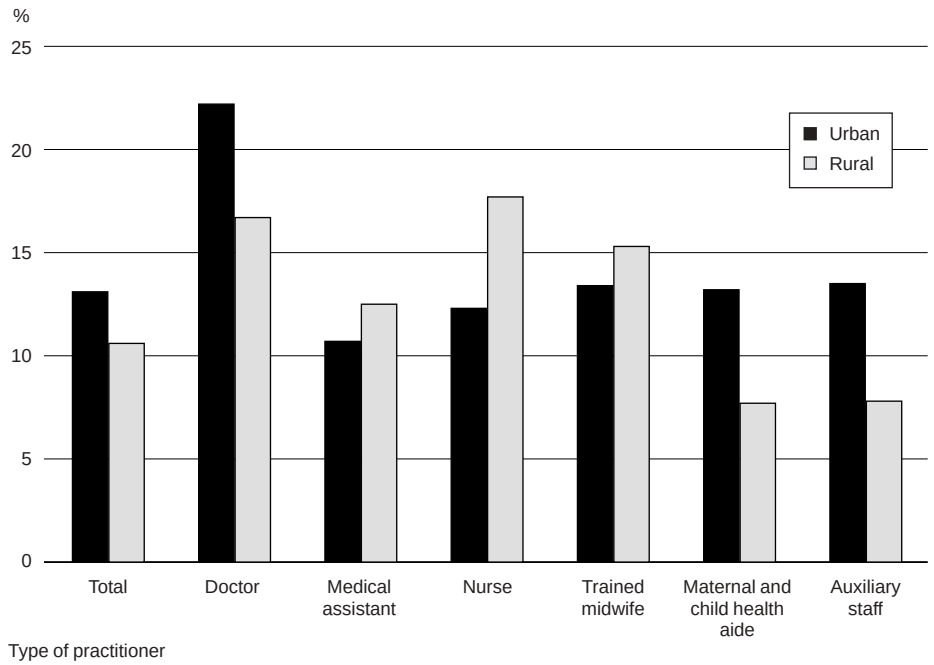
• *Spousal consent.* Generally, for most methods, few providers require spousal consent. Once again, medical aides and auxiliary medical staff are the most likely to report observing such requirements, followed by maternal and child health aides. Such requirements pose a particular problem in rural areas.

• *Training and eligibility barriers.* We also investigated whether lack of training might influence the likelihood that providers reported eligibility barriers. Among those in our sample, 25% had received in-service training in basic family planning clinical skills, comprehensive family planning training or a reproductive health update between 1992 and 1996. Maternal and child health aides were the most likely to have been trained (32%), followed by medical assistants (27%), nurses (24%) and trained midwives (21%). The least likely to have been trained were doctors (16%) and auxiliary staff (12%). (Low levels of training among doctors and nurses may reflect preservice training.)

Interestingly, provider-determined eligibility barriers appear not to be related to whether a provider received recent in-service training. For example, comparing providers with no family planning or reproductive health training in 1992–1996 to those with training in that time period, 83% and 82%, respectively, reported age barriers (not shown). Likewise, these percentages were 83% and 82% for any barrier to pill use and 28% each for any barrier related to marital status. There were no differences by urban-rural residence, by type of provider or by recency of training (1992–1993 vs. 1994–1996).

That the prevalence of eligibility barriers is not related to recency of training sug-

Figure 1. Percentage of family planning providers who report never having recommended at least one method, by type of practitioner, according to urban-rural residence



gests that these barriers are imposed by individual providers rather than at the national program level. To further investigate this issue, we analyzed facilities at which multiple providers were interviewed, to determine how frequently providers disagreed on whether access to family planning services should be restricted by age, parity, marital status or husband's consent.

The results indicate that disagreements among providers are common. For example, in 54% of facilities, providers disagreed on whether age should be used to restrict access to condoms. Comparable percentages for disagreement with respect to injectables and the pill were 51% and 43%, respectively. The percentages disagreeing were lower for method-specific marriage and consent barriers (roughly 30% each). The most variability of disagreement in provider responses was for method-specific parity barriers, as only 10% of providers disagreed on parity-related barriers to condom use, whereas 46% disagreed on such barriers to injectable use.

Provider Bias

Another way in which service providers may limit access to methods is through bias. To address this issue, we examined whether a provider reported never recommending at least one type of modern method that was offered at the facility where they work. Between 10% and 13% of providers reported that there is at least one modern method they never recommended (Figure 1). The higher percentages among doctors could be a consequence of the small number of physicians in the sample. (The difference between doctors and other providers was not statistically significant.) In urban areas, the percentage of providers who report never recommending a method is comparable across provider types, whereas in rural areas, providers with greater training (nurses and midwives) are more biased than those with less training (maternal and child health aides and auxiliary staff).

Among providers who report never recommending at least one method, we examined which methods were not recommended (not shown). These methods vary by urban-rural location. In urban areas, providers most commonly reported injectables, implants, IUDs and the pill as never recommended. There was less bias against female methods in rural facilities, where the method most commonly reported to be never recommended was the condom. Thus, despite greater physical availability of hormonal methods and higher levels of training in urban areas, provider bias may preclude women from using the method most appropriate for their specific needs.

Table 6. Percentage of family planning providers who report using screening strategies other than pregnancy tests when providing hormonal methods (N=417)

Strategy	Total	Urban	Rural
Ask client to return at next menses	34.5	25.0	40.2
Try to induce menses	19.7	21.2	18.8
Supply condoms and ask to return	31.9	35.9	29.5
Supply hormonal method	30.5	34.0	28.4
Supply hormonal method and condoms	18.7	29.5	12.3

Note: This sample is restricted to family planning providers who both work in a facility providing hormonal methods and report not pregnancy tests when providing hormonal methods.

Process Hurdles

Requiring a woman to wait until her next menstrual period before receiving the pill, having an IUD inserted or receiving her first contraceptive injection is an example of a process hurdle. Generally, such a waiting time is not appropriate if it is possible to confirm that a woman is not pregnant prior to prescribing these methods. This can be done with a simple pregnancy test or by obtaining from the woman a recent history of menses, sexual activity and pregnancy experience.[21] Asking all nonmenstruating clients to delay adopting these methods may reduce the acceptance rate because of cost and inconvenience.

To examine process hurdles, we used information on how providers screen patients who want hormonal methods or IUDs. Among providers who work in facilities where hormonal methods or IUDs are supplied, 60% report testing for pregnancy before providing the pill, another hormonal method or the IUD to a woman who is not menstruating—65% in urban areas and 57% in rural areas. This is an appropriate strategy for providing these methods during a nonmenstruating client's current facility visit.

Among 417 providers who did not mention using pregnancy tests before providing hormonal methods or the IUD (156 from urban areas and 261 from rural areas), the most common alternative strategy mentioned (35%, or about 13% of all providers) was to ask the client to return at her next menses (Table 6). When pregnancy tests are unavailable or expensive, such a strategy does not adequately meet the needs of women who do not want to have children but are at risk of a subsequent birth. The better option would be to obtain a history and try to rule out pregnancy, or (for women who want the pill) to provide pill supplies and condoms (mentioned by 19% of providers), with instructions to use condoms until menses begin and then to initiate the first pill cycle.[22] Alternatively, providers could simply provide condoms and ask the client to return (as did 32% of

providers). With this strategy, however, there is no guarantee that the client will use condoms in the interim until the next menses, or that she will return at all.

The other common practice mentioned by providers who do not report pregnancy testing was to supply the method (31% of providers). This option is not medically recommended for women who want an IUD, as IUD insertion and use can be dangerous if the woman is already pregnant. However, the majority of women in Tanzania use the pill and the injectable; since inadvertent provision of these methods to pregnant women has not been found to be associated with greater risks of birth defects,[23] this may be an appropriate strategy for method provision.

The majority of providers (60%) mentioned that ruling out pregnancy is a strategy that they employ. Among those providers who did not mention this strategy, process hurdles appear important, because clients either are required to return to the facility or are asked to temporarily use a method that may not meet their and their partner's needs. To reduce process hurdles, provider training would need to include a component on how to obtain a history from women to rule out a current pregnancy. This would make family planning services available to a greater proportion of women at their first family planning visit.

Implications of Provider Barriers

To this point, we have focused on the extent to which individual service providers restrict access to family planning. Next, we assess the aggregate consequences of these individual provider barriers, using health facilities as the unit of analysis. Our intent is to simulate what would happen to a hypothetical woman with specified characteristics who appeared at a public-sector facility in Tanzania seeking a particular contraceptive. As our interest is in provider-imposed barriers, we focus on the availability of methods that are offered by each sample facility.

The outcome measure used in this analysis is the proportion of facilities that are "barrier free"—i.e., that have no unjustified barriers given a client's characteristics and method choice, as measured across all service providers interviewed at each sample facility. In facilities with multiple service providers, the outcome of a client's visit will depend in some cases upon which service provider she sees. Thus, our estimates may overstate the likelihood that a given client would encounter unjustified barriers. However, as there is no guarantee that a given client would encounter service providers who do not impose barriers, the indicator used provides a reasonable measure of the risk of encountering barriers.

Because of space constraints, we will discuss in detail the scenario of a nonpregnant woman wanting to use oral contraceptives, the method used most widely by Tanzanian women. (The results are similar for other widely used methods.)

Consider first a 15-year-old adolescent who is unmarried and wants to obtain the pill at a government facility. At fewer than one-half of all facilities would this client encounter no provider who restricted access (Table 7). If the same woman were 20 years of age instead of 15, 59% of urban facilities and 54% of rural facilities would have no provider restricting that woman's access to the pill. If the 20-year-old woman was not menstruating at the time of her clinic visit, then in only 28% of urban and 19% of rural facilities would she encounter no barriers (as defined by age restrictions, parity restrictions and inappropriate screening prior to the provision of services).

Providers are more likely to provide services to married women. For example, more than 80% of facilities would be barrier-free for a 20-year-old married woman with one child who wants to use the pill, compared with 68% of urban and 61% of rural facilities for an unmarried woman with one child. However, if the same married woman lacks her husband's consent, she is not as likely to obtain oral contraceptives, as in this case fewer than two-thirds of facilities are without barriers (closer to the values for unmarried women).

Most married women in their 30s with several children are likely to be able to obtain the pill, because few providers would restrict their access. However, women in their 40s tend not to be as fortunate: For a married woman aged 30 who has four children and who wants to use the pill, the percentage of facilities without barriers is 95% in urban areas and 93% in rural areas; in contrast, for a 40-year-old woman with four children who wants to use the pill, only 49% of urban facilities and 60% of rural facilities are barrier-free.

Table 7. Percentage of government family planning facilities with no provider barriers for women with the specified characteristics, by urban-rural status

Characteristics	Urban (N=123)	Rural (N=238)
Nonpregnant woman who wants pill		
Age 15, unmarried, no children	43.9	43.3
Age 20, unmarried, no children	58.5	54.2
Age 20, unmarried, no children, not menstruating	28.4	19.3
Age 20, unmarried, one child	68.3	60.9
Age 20, married, one child	82.9	80.7
Age 20, married, one child, no consent from husband	64.2	58.8
Age 30, married, four children	95.1	93.3
Age 40, married, four children	48.8	59.7
Nonpregnant woman who wants injectable		
Age 15, unmarried, no children	36.6	35.3
Age 20, unmarried, no children	52.8	41.6
Age 20, unmarried, no children, not menstruating	23.6	17.6
Age 20, unmarried, one child	56.9	49.6
Age 20, married, one child	72.4	66.0
Age 20, married, one child, no consent from husband	60.2	50.0
Age 30, married, four children	88.6	90.3
Age 40, married, four children	74.0	75.2
Nonpregnant woman who wants condom		
Age 15, unmarried, no children	61.8	62.2
Age 20, unmarried, no children	74.0	75.6
Age 20, unmarried, one child	75.6	76.5
Age 20, married, one child	95.1	95.4
Age 20, married, one child, no consent from husband	73.2	68.1
Age 30, married, four children	99.2	98.7
Age 40, married, four children	95.9	96.2
Nonpregnant woman who wants IUD		
Age 15, unmarried, no children	43.1	55.0
Age 20, unmarried, no children	60.2	63.0
Age 20, unmarried, no children, not menstruating	24.4	24.4
Age 20, unmarried, one child	69.1	71.8
Age 20, married, one child	85.4	82.4
Age 20, married, one child, no consent from husband	74.0	75.2
Age 30, married, four children	95.1	94.1
Age 40, married, four children	77.2	81.5

Note: The above scenarios assume that a particular method is available at all facilities.

Discussion

During the 1990s, the government of Tanzania has taken a number of significant steps aimed at providing universal access to modern family planning services in Tanzania. At the policy level, the National Population Policy and the National Policy Guidelines and Standards for Family Planning Services and Training were introduced in 1991 and 1994, respectively. At the program or implementation level, improvements in the family planning commodities and logistics system significantly increased the availability of contraceptive methods at government health facilities. Moreover, large numbers of service providers have been trained in how to offer family planning services.

While these actions have reduced and even eliminated some barriers to contraceptive access, our findings indicate the

persistence of other barriers not typically reflected in physical indicators of accessibility (e.g., distance to facilities, number of methods offered or prevalence of stockouts). These barriers, which are imposed by individual service providers with neither government policy endorsement nor valid medical justification, serve to restrict access to contraceptive methods in Tanzania in important ways. The age barriers faced by young unmarried women merit special attention, as adolescents have been identified as a target population that should be guaranteed access to family planning services.[24] Similarly, the process hurdles faced by women of all ages seeking hormonal methods warrant consideration, given the high proportion of Tanzanian women who rely on hormonal methods.

Continued in-service training and reinforcement of official program guidelines and standards through supervision are logical programmatic responses to our findings. Efforts in these areas will be necessary as the Tanzanian National Family Planning Program evolves from the "take off" stage to the "consolidation" stage, and as the emphasis shifts from generating (and satisfying) demand for family planning to maintaining higher continuation and use-effectiveness rates.

However, the existence of unnecessary provider barriers is the result of a number of factors that go beyond merely the length and quality of training and supervision received by providers. The norms and attitudes that shape the social environment in which service providers practice are also important. Research in Ghana suggests that providers may impose service restrictions beyond those that are program-mandated in order to protect their society, culture or values.[25] If such is the case in other settings as well, this presents a formidable challenge for program training, as resistance to change is likely to be relatively strong in many settings, especially among older, more "entrenched" service providers. Nevertheless, influencing the perspectives and practices of providers is essential if national programs such as Tanzania's are to progress and satisfy the reproductive health needs of the populations they serve.

References

1. Beegle K, *The Quality and Availability of Family Planning Services and Contraceptive Use in Tanzania*, Living Standards Measurement Study No. 114, Washington, DC: World Bank, 1995.

2. United Republic of Tanzania, Bureau of Statistics, Planning Commission, *Tanzania Service Available Survey 1996*, Chapel Hill, NC, USA: The EVALUATION Project, 1997.

3. United Republic of Tanzania, Bureau of Statistics, Planning Commission, and Macro International, *Tanzania Demographic and Health Survey 1996*, Calverton, MD, USA: Macro International, 1997.

4. Shelton JD, Angle MA and Jacobstein RA, Medical barriers to access of family planning, *Lancet*, 1992, 340(28):1334–1335.

5. Bertrand JT et al., Access, quality of care and medical barriers in family planning programs, *International Family Planning Perspectives*, 1995, 21(2):64–69.

6. Ibid.

7. Shelton JD, Angle MA and Jacobstein RA, 1992, op. cit. (see reference 4); and Bertrand JT et al., 1995, op. cit. (see reference 5).

8. Askew I, Mensch B, and Adewuyi A, Indicators for measuring the quality of family planning services in Nigeria, *Studies in Family Planning*, 1994, 25(2):268–283; and Population Council and Kenyan Ministry of Health, *Quality of Care in Family Planning Service Delivery in Kenya: Client's and Provider's Perspectives*, Final Report, Africa Operations Research and Technical Assistance Project II, 1995.

9. Ministry of Population Welfare, A situation analysis of family welfare centers in Pakistan, draft manuscript, Ministry of Population Welfare, Islamabad, Pakistan, 1993.

10. United Republic of Tanzania, Ministry of Health, *National Policy Guidelines and Standards for Family Planning Service Delivery and Training*, Dar es Salaam, Tanzania: Ministry of Health, 1994.

11. United Republic of Tanzania, Bureau of Statistics, Planning Commission, and Macro International, 1997, op. cit. (see reference 3).

12. Ibid.

13. Shelton JD, Angle MA and Jacobstein RA, 1992, op. cit. (see reference 4), p. 1334.

14. Ibid.

15. Reduction of medical barriers to contraception, *IMCH Newsletter*, 1995, 22(211):5–6.

16. Ibid.

17. United Republic of Tanzania, Bureau of Statistics, Planning Commission, 1997, op. cit. (see reference 2).

18. Ibid.

19. Ibid.

20. Shelton JD, Angle MA and Jacobstein RA, 1992, op. cit. (see reference 4), p. 1334.

21. Stanback J et al., Menstruation requirements: a significant barrier to contraceptive access in developing countries, *Studies in Family Planning*, 1997, 28(3): 245–250.

22. Ibid.

23. Ibid.

24. United Republic of Tanzania, Ministry of Health, 1994, op. cit. (see reference 10).

25. Twum-Baah KA and Stanback J, Provider rationales for restrictive family planning service practices in Ghana, Accra, Ghana: Ghana Statistical Services; and Research Triangle Park, NC, USA: Family Health International, 1995.

Resumen

Contexto: *Aun en los casos en que los servicios de planificación familiar son accesibles y presentan pocos impedimentos de carácter económico, las barreras médicas para obtener anticonceptivos—tales como la especialización excesiva, las restricciones de elegibilidad, los obstáculos propios del procesamiento y los prejuicios de los proveedores del servicio—pueden limitar el acceso de la mujer a este servicio.*

Métodos: *Se utilizaron datos de la 1996 Tanzania Service Availability Survey (Encuesta sobre Disponibilidad de Servicios de Tanzania de 1996) para analizar la prevalencia de las barreras médicas según el tipo de proveedor, el tipo de instalación y lugar de residencia (urbana o rural).*

Resultados: *Un porcentaje relativamente elevado de proveedores restringe la elegibilidad de acuerdo con la edad de la clienta, particularmente con los anticonceptivos orales, el método más ampliamente utilizado por las mujeres de Tanzania. Entre el 79% y el 81% de los auxiliares médicos, parteras capacitadas, asistentes y personal auxiliar en salud materno-infantil (los tipos de proveedores de planificación familiar más comunes en la zona rural de Tanzania) imponen restricciones según la edad de la usuaria. Entre todos los proveedores, el 10–13% informaron que había por lo menos un método anticonceptivo moderno que ellos jamás recomendarían, y el 13% informaron que solían enviar a las pacientes a casa hasta que tuvieran la próxima menstruación, un obstáculo de procesamiento inadecuado para la mayoría de los métodos hormonales. Pues a nivel global, estas restricciones limitan seriamente el acceso a los servicios de anticonceptivos a ciertos grupos de mujeres. Por ejemplo, las mujeres jóvenes y no casadas que no tienen la menstruación en el momento de la visita encuentran una o más barreras u obstáculos en el procesamiento de obtener anticonceptivos en más del 70% de las instalaciones urbanas que ofrecen este servicio y en el 80% de las instalaciones de las zonas rurales.*

Conclusiones: *Si la capacitación para proveedores realizada previo al empleo y durante el suministro de servicios, y así las visitas de supervisión, se les asignaran un mayor énfasis en el cumplimiento de las directrices y normas de servicio del Programa Nacional de Planificación Familiar de Tanzania, las restricciones innecesarias que imponen los proveedores para el uso de anticonceptivos pueden ser reducidas y finalmente eliminadas.*

Résumé

Contexte: *Même en présence de services de planning familial physiquement accessibles et d'obstacles économiques rares, les obstacles médicaux aux prestations contraceptives—surspécialisation, restrictions d'admissibilité, obstacles de procédure et parti pris du prestataire, par exemple—peuvent limiter le recours des femmes aux services.*

Méthodes: *Les données de l'enquête sur la disponibilité de services (Service Availability Survey) menée en Tanzanie en 1996 servent*

(continued on page 42)

Service Providers in Tanzania...?
(continued from page 20)

à l'analyse de la prévalence des barrières médicales par type de prestataire, type d'organisme et emplacement urbain ou rural.
Résultats: *Des proportions relativement élevées de prestataires limitent l'admissibilité en fonction de l'âge, surtout en ce qui concerne les contraceptifs oraux, méthode la plus largement pratiquée parmi les Tanzaniennes. Entre 79% et 81% des aides médicales, accoucheuses formées, aides à la santé de la mère et de l'enfant et des effectifs auxiliaires (types de prestataires de planning familial les plus courants en Tanzanie rurale) soumettent la pilule à des restrictions d'âge. De tous les prestataires, 10% à 13% ont déclaré qu'il existait au moins une méthode moderne qu'ils ne recommanderaient jamais, tandis que 13% disaient renvoyer une cliente chez elle jusqu'à ses règles suivantes, imposant ainsi un obstacle de procédure inapproprié à la prestation de la plupart des méthodes hormonales. Dans l'ensemble, ces restrictions limitent sérieusement l'accès de certains groupes de femmes à la contraception. Par exemple, les jeunes femmes célibataires non réglées au moment de leur visite se sont avérées rencontrer au moins une barrière ou un obstacle de procédure dans plus de 70% des centres de prestations urbains et dans 80% des centres ruraux.*
Conclusions: *Si les visites de formation et de contrôle mettaient davantage l'accent sur l'observation des directives et normes de prestation du programme national tanzanien de planning familial, les restrictions inutiles des prestataires à la pratique contraceptive pourraîent être réduites et, en fin de compte, éliminées.*