ORIGINAL RESEARCH ARTICLE

Provider barriers to family planning access in urban Kenya

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Implications: Providers frequently impose medically unnecessary eligibility restrictions on young, unmarried, and nulliparous women in urban Kenya; restrictions are often higher for long acting and permanent methods. Private facility providers and those lacking in-service training on family planning provision are more likely to unnecessarily restrict contraceptive access.

Abstract

Objective: A better understanding of the prevalence of service provider-imposed barriers to family planning can inform programs intended to increase contraceptive use. This study, based on data from urban Kenya, describes the frequency of provider self-reported restrictions related

to clients' age, parity, marital status, and third party consent, and considers the impact of facility type and training on restrictive practices.

Study Design: Trained data collectors interviewed 676 service providers at 273 health care facilities in five Kenyan cities. Service providers were asked questions about their background and training and were also asked about age, marital, parity, or consent requirements for providing family planning services.

Results: More than half of providers (58%) reported imposing minimum age restrictions on one or more methods. **These restrictions were commonly imposed on clients seeking injectables, a popular method in urban Kenya, with large numbers refusing to offer injectables to women younger than twenty years.** Forty-one percent of providers reported they would not offer one or more methods to nulliparous women **and more than one in four providers reported they would not offer the injectable to women without at least one child.** Providers at private facilities were significantly more likely to impose barriers, across all method types, and those without in-service training on family planning provision had a significantly higher prevalence of imposing parity, marital, and consent barriers across most methods.

Conclusion: Programs need to address provider-imposed barriers that reduce access to contraceptive methods particularly among young, lower parity, and single women. Promising strategies include targeting private facility providers and increasing the prevalence of in-service training.

Keywords: Provider barriers/restrictions, contraceptive access, Kenya

1. Introduction

Family planning plays a critical role in protecting maternal and child health in many developing countries, yet the prevalence of contraceptive use often fails to keep pace with demand in resource constrained settings [1]. Sexually active women who wish to prevent or delay future pregnancy but are not using any method of contraception experience an unmet need for family planning [1-3]. In Kenya, approximately 39 percent of reproductive age women married or in union use modern contraceptive methods while another 26 percent have an unmet need for family planning. [4].

Women who are motivated to prevent pregnancy and able to reach a service delivery point may still encounter difficulty accessing family planning services due to medical barriers. Medical barriers are medically unnecessary restrictions that prevent or reduce access to family planning services [5, 6]. One way in which providers can impose medical barriers is through the use of eligibility criteria. Medically unnecessary restrictions placed on the eligibility of some clients to receive certain types of modern methods may prevent women from receiving their preferred method or any method at all [6]. Eligibility restrictions are often based on an individual's demographic characteristics such as age, marital status, or parity [5, 6].

Prior studies have documented the use of such eligibility criteria in parts of sub-Saharan Africa. Speizer et al. (2000) conducted a study among Tanzanian service providers and found that many providers restricted access to modern methods such as pills, injectables, and

70 intrauterine devices (IUCDs) based on age, with a minimum age restriction of 14-15 years and a
71 maximum age restriction of 43-44 years [7]. Results from a recent (2014) study in urban Senegal
72 found that approximately half of providers impose minimum age restrictions with a median
73 minimum age of 18 years [8]. In a study conducted in Ghana, Stanback and Twum-Baah (2001)
74 found that providers restricted the provision of injectables to those 30 years and older [9].
75 Restrictions based on parity were the most common eligibility criterion in the Ghana study where
76 many providers were concerned about infertility as a complication of using modern methods and
77 as such restricted provision to women with proven fertility – a minimum parity of three children
78 [9]. In the Tanzania study, providers had a mean parity restriction of about 2.5 children for pills,
79 condoms, IUCDs, and injectables [7]. Unmarried women also face barriers; in both the Ghana
80 and Tanzania studies, providers required marriage as an eligibility criterion for reversible
81 methods [7, 9] or required husband's consent for provision of any of the methods [7] and in the
82 Senegal study more than one-fifth of providers in private facilities were unwilling to provide
83 pills, injectables, or implants to unmarried women [8]. In Tanzania, the authors found that recent
84 in-service training did not reduce provider-imposed barriers [7].

85
86 To better understand **one of the possible factors affecting** the persistent unmet need for
87 family planning in Kenya, this study describes the prevalence of provider-imposed eligibility
88 barriers among Kenyan service providers in public and private health care facilities in select
89 urban areas of Kenya. Specifically, this study examines the frequency of restricted access to
90 modern contraception based on the client's age, parity, marital status, or consent by a third party
91 such as a husband or mother-in-law.

2. Materials and Methods

This analysis uses facility-level data collected in select urban areas of Kenya in 2011 by the Measurement, Learning & Evaluation Project as part of an evaluation of the Urban Reproductive Health Initiative (Urban RH Initiative) funded by the Bill & Melinda Gates Foundation and implemented in Kenya, Nigeria, Senegal, and Uttar Pradesh, India. The Kenya Urban RH Initiative is called *Tupange* and is led by Jhpiego, an affiliate of the Johns Hopkins University.

In Kenya, data were collected in five urban areas (Nairobi, Mombasa, Kisumu, Machakos, and Kakamega) between August and November 2011 and a total of 286 service delivery points were targeted for facility-level data collection. These service delivery points included hospitals, health centers, and clinics that offer family planning or maternal and child health services. Selected facilities included those where the *Tupange* initiative planned to implement quality improvement activities as well as those facilities identified by women in a 2010 individual-level survey as locations where they go for family planning services. Of the 286 selected facilities, a small number refused participation or had incomplete provider interviews; the final sample includes 273 facilities. Three types of facility-level data were collected: facility audits, provider interviews, and client exit interviews. This analysis utilizes data from the facility audits and provider interviews.

The facility audit was conducted by a trained data collector in collaboration with the facility manager. Data were collected on the types of services provided, integration of family planning into other health care services, and the provision and availability of different family planning

methods as well as method procurement procedures and current price. With respect to this analysis, facility managers were asked if their facility provides each of 12 available family planning methods and whether the facility has any requirements for another person's consent to provide the method.

Up to four health care providers at each facility were asked to participate in the survey through an informed consent process¹. These providers were asked questions on their background, pre- and in-service trainings, and numerous aspects of service delivery including any method provision requirements related to age, parity, marital status, or third party consent. A total of 692 providers were selected for interview; 676 providers offered at least one of the methods included in this study, had non-missing information, and are therefore included in this analysis.

This analysis investigates the prevalence of eligibility barriers related to age, parity, marital status, and third party consent with respect to seven modern methods in urban Kenya: pills, injectables, condoms, emergency contraceptive pills (ECP), implants, IUCDs, and female sterilization. Age and parity eligibility barriers for this analysis were defined based on the National Family Planning Guidelines for Service Providers published by Kenya's Ministry of Public Health and Sanitation [10]. According to these guidelines, all of the methods evaluated in this analysis are considered appropriate for women of reproductive age (15 to 49 years), irrespective of parity². Therefore, minimum and maximum age barriers for all methods included in this analysis were defined as occurring if providers reported refusing methods to women older than 14 years or younger than 50 years. Providers who reported imposing barriers based on a

¹ In facilities with five or more providers, four providers were chosen at random to participate.

² The guidelines recommend additional counseling and follow-up when providing the IUCD to nulliparous women or women under 20 years of age and when providing injectables to women younger than 18 or older than 45.

minimum number of children or marital status were considered to impose parity or marital barriers, respectively. Those who reported requiring permission from a third party, such as a husband or mother-in-law, were defined as imposing consent barriers. All statistical tabulations were performed using Stata 11 statistical software [11]. The University of North Carolina at Chapel Hill and the Kenya Medical Research Institute reviewed and approved the study protocol and the informed consent process.

3. Results

The health care providers included in this analysis were primarily female (72 percent) and, on average, 38 years of age (Table 1). The vast majority (95 percent) of providers identified as Catholic or Protestant/other Christian. Most (69 percent) were registered or community nurses, with only 3 percent of participating providers holding a medical degree. Half of all participants had 10 or more years of experience and 85 percent had received pre-service training that covered family planning counseling. About half (49 percent) of providers had received in-service training on family planning provision and only one third of these (35 percent) had received this training in the previous year. On average, participants received in-service training on family planning provision two years ago; however for 12 percent of providers, more than five years had passed since this training took place. For those providers whose in-service family planning training included family planning counseling (89 percent), the training took place, on average, three years ago. Participating providers were fairly evenly split between public (43 percent) and private (57 percent) facilities and most (84 percent) worked in Nairobi, Mombasa, or Kisumu.

Table 2 presents the percentage of providers who restrict available methods for reasons including age, parity, marital status, and lack of third party consent. Minimum age barriers for one or more methods were reported by 58 percent of providers and nearly 60 percent of providers who offer female sterilization report restricting to women above a certain age. For most methods, the average age below which a provider will not offer a method (among those who restrict on minimum age) ranges between 18 and 21 years (Table 2a). For female sterilization, the mean minimum age was 29 years. With respect to older women, 45 percent of providers restricted access to modern contraception based on a maximum age (not including women 50 years of age or older), with pills and injectables most commonly restricted for this reason (Table 2). For all methods, the average age above which providers reportedly will not offer a method ranged between 41 and 43 years (Table 2a).

Forty-one percent of providers restricted access to one or more methods based on parity, with large differences seen based on method type: less than two percent of providers restricted access to condoms or ECP while 60 percent restricted access to female sterilization based on parity (Table 2). Of those providers that restrict on parity, for most methods more than half of providers report that they require a minimum of one child before they will offer the method (Table 2b). For female sterilization, 46 percent of providers (among those that offer sterilization and restrict on parity) require a woman to have at least three or more children before receiving the method.

Approximately 22 percent of providers reportedly will not offer one or more methods to unmarried women (Table 2). With respect to method type, very few providers restricted access to pills, ECP, or condoms based on marital status. Approximately 10 percent report that they would

not provide injectables, IUCDs, or implants to unmarried women while 40 percent would not provide female sterilization to women who are not married.

Approximately 35 percent of providers require family planning clients to have permission from a third party before providing one or more methods (Table 2). Once again, this barrier was less commonly applied to condoms and ECP. Third party consent was more often required for long acting methods and female sterilization. When asking facility managers about requirements for third party consent, between two and seven percent of facilities reported such practices for all but one method in this analysis; 54 percent of facility managers report that third party consent is required for female sterilization (Table 2c).

We also considered whether certain characteristics of providers, such as facility type or in-service training, might result in a greater likelihood of imposing unnecessary eligibility criteria. When comparing providers working at public and private facilities, a significantly higher percentage of providers in private facilities imposed minimum age restrictions across all methods (Table 3). For example, close to 55 percent of providers in private facilities compared to about 27 percent of providers at public facilities reported imposing minimum age restrictions on implants and IUCDs. Differences were also observed between public and private facility providers for eligibility criteria related to maximum age, parity, marital status, and third party consent. For parity, marital, and consent requirements, differences in restrictions between public and private facility providers were consistently larger for implants and IUCDs compared to the other five methods measured.

Table 4 presents the prevalence of medical barriers, stratified by whether or not the provider ever received in-service training on family planning provision. With respect to age-related barriers, significant differences based on training were limited to long acting reversible methods. Significant differences emerged for restrictions related to parity, marital status, and third party consent; for all methods except condoms and ECP, providers without in-service training on FP provision were significantly more likely to impose restrictions based on marital status and consent. Significant differences were also observed in parity-related restrictions for most methods.

4. Discussion

In Kenya, unmet need for family planning remains high with about a quarter of women married or in union reporting a desire to delay or stop childbearing and being non-users of a family planning method [4]. The most common method used in urban Kenya is the injectable and this analysis shows that providers impose considerable barriers to providing this method that is particularly popular among younger users [12]. Our analysis demonstrates that about two-fifths of providers in public and private facilities impose minimum age restrictions on access to injectable contraceptives; this may have serious implications for young people's use of this method. Moreover, we demonstrate that about 20 percent of providers impose minimum age restrictions on access to condoms, the other important method for young people for unintended pregnancy and disease prevention. An additional barrier to injectable contraceptives, especially for young people, is the parity restriction whereby providers expect a woman to have had at least one child before adoption of injections. Minimum age barriers for the oral contraceptive pill are

also observed at similar levels to injectables, however, this likely has less influence on adolescents' and young peoples' use since this method is less common in urban Kenya than injectables [12].

On the other end of the reproductive-age spectrum, providers also restrict access to women in the latter part of the reproductive ages. About 45 percent of providers restricted access to pills and injectables based on a maximum age with many providers limiting use of these methods among women over age 41. While less common, restrictions based on parity and consent also influence these older women who may be seeking a long-acting or permanent method to delay or prevent a subsequent birth or may be seeking to use a method covertly if their husbands do not approve.

An important direction of programs in Kenya intended to reduce maternal mortality, unmet need, and rapid population growth is promotion of long-acting and permanent method use [13]. As seen here, these methods are not easily accessible to women who want to receive them due to provider imposed minimum and maximum age restrictions, parity restrictions, and marital status restrictions; these restrictions are particularly common among providers in private facilities and those without in-service training on family planning provision.

Our findings on provider imposed eligibility criteria based on age, parity, marital status and consent are similar to studies from Ghana [9], Senegal [8], and Tanzania [7]. As shown in those three contexts, providers in urban Kenya are imposing barriers to use, particularly for younger or unmarried women. In contrast to the Tanzania study, in-service training appears to reduce provider-imposed barriers related to parity, marital status, and third party consent.

253

254 This study is not without limitations. First, because the restrictions are based on self-reports, the

255 information provided may be biased. In particular, provider self-reports may reflect true

256 provider behaviors or may reflect behaviors providers believe are deemed socially acceptable.

257 Further, the information on maximum age is harder to interpret as some providers may be

258 referring to the age at which a woman is no longer fecund, since menopause was not offered as a

259 response option. That said, mean ages around 41 are clearly below the age of menopause. To

260 better know if restrictions exist, mystery client interviews or provider-client observations may be

261 necessary; the mystery client approach was used in an earlier mixed-methods study from the

262 urban area of Kisumu in Western Kenya and demonstrated the existence of eligibility restrictions

263 related to menstrual, age, and parity requirements [14]. Second, these data do not represent urban

264 Kenya generally. This is because the study did not include a census of facilities in Nairobi and

265 Mombasa and did not include facilities from other cities not among the five target study cities.

266 The sample included was selected to represent facilities where the *Tupange* program intended to

267 work and facilities where women in the household survey go for family planning services.

268 Finally, while the sample of providers included was a self-weighting sample such that larger

269 facilities had more providers (up to four) and smaller facilities had fewer, the providers included

270 represented those on duty during regular business hours and thus would not include those who

271 serve the facilities on overnight or weekend shifts. This will not bias the results significantly

272 since family planning services are usually provided as routine services; however, only a small

273 percentage of providers surveyed were doctors and medical or clinical officers.

274

To conclude, these findings demonstrate that in urban settings of Kenya, provider imposed eligibility restrictions **may contribute to unmet need** and are more frequently practiced in private facilities and among providers lacking in-service training in family planning provision. Programs seeking to increase contraceptive use, particularly for the unmarried and young, need to consider training providers that these young people should have access to injectables, IUCD, and implants without any restrictions. These types of provider training programs may lead to greater access to the most effective methods for young people to delay a first birth and to space births, increasing educational opportunities for young people and reducing unintended pregnancy and maternal mortality in Kenya.

Acknowledgements

This research was supported by a grant awarded to the Carolina Population Center (CPC) at The University of North Carolina at Chapel Hill by the Bill & Melinda Gates Foundation. We are also grateful to CPC (R24 HD050924) for general support. The contents of this article are solely the responsibility of the authors and do not necessarily represent the official views of CPC or the Bill & Melinda Gates Foundation.

References

- [1]. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: the unfinished agenda. Lancet 2006;368:1810-27.
- [2]. Darroch JE Singh S. Trends in contraceptive need and use in developing countries in 2003, 2008, and 2012: an analysis of national surveys. Lancet 2013;381:1756-62.

- 296 [3]. World Health Organization. Unmet need for family planning. 2013 [cited January 9,
297 2015]; Available from:
298 http://www.who.int/reproductivehealth/topics/family_planning/unmet_need_fp/en/.
- 299 [4]. Population Reference Bureau. Family Planning Worldwide: 2013 Data Sheet. 2013:
300 Washington, DC.
- 301 [5]. Bertrand JT, Hardee K, Magnani RJ, Angle MA. Access, quality of care and medical
302 barriers in family planning programs. *Int Fam Plan Perspect* 1995;21:64-74.
- 303 [6]. Shelton JD, Angle MA, Jacobstein RA. Medical barriers to access to family planning.
304 *Lancet* 1992;340:1334-5.
- 305 [7]. Speizer IS, Hotchkiss DR, Magnani RJ, Hubbard B, Nelson K. Do service providers in
306 Tanzania unnecessarily restrict clients' access to contraceptive methods? *Int Perspect Sex*
307 *Reprod Health* 2000;26:13-42.
- 308 [8]. Sidze EM, Lardoux Sn, Speizer IS, Faye CM, Mutua MM, Badji F. Young Women's
309 Access to and Use of Contraceptives: The Role of Providers' Restrictions in Urban
310 Senegal. *Int Perspect Sex Reprod Health* 2014;40:176-83.
- 311 [9]. Stanback J Twum-Baah KA. Why do family planning providers restrict access to
312 services? An examination in Ghana. *Int Perspect Sex Reprod Health* 2001;27:37-41.
- 313 [10]. Kenya Ministry of Public Health and Sanitation. National Family Planning Guidelines for
314 Service Providers. 4th ed. Nairobi, Kenya: Division of Reproductive Health; 2010.
- 315 [11]. StataCorp. Stata Statistical Software: Release 11. College Station, TX: StataCorp LP.
316 2009.
- 317 [12]. Kenya National Bureau of Statistics (KNBS) and ICF Macro. Kenya Demographic and
318 Health Survey 2008-09. Calverton, Maryland: KNBS and ICF Macro; 2010.

- 319 [13]. Ministry of Public Health and Sanitation Division of Reproductive Health. Strategy for
320 Improving the Uptake of Long-Acting and Permanent Methods of Contraception in the
321 Family Planning Program. 2008 [cited March 19, 2015]; Available from:
322 [https://www.k4health.org/sites/default/files/Kenya LAPM Strategy.pdf](https://www.k4health.org/sites/default/files/Kenya_LAPM_Strategy.pdf).
- 323 [14]. Tumlinson K, Speizer I, Archer L, Behets F. Simulated clients reveal programmatic
324 factors that may influence contraceptive use in Kisumu, Kenya. Glob Health Sci Pract
325 2013;1:407-16.
- 326
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TABLES

Table 1. Background and training characteristics of health care providers in 273 public and private health care facilities in select urban areas of Kenya, 2011.

	N=676	%
Age		
21-29	218	32%
30-39	196	29%
40-49	143	21%
50+	119	18%
Mean age in years (range)	38 (21 – 72)	
Gender		
Female	487	72%
Male	188	28%
Missing	1	0%
Religion		
Catholic	188	28%
Protestant/other Christian	457	68%
Muslim/none/other	31	5%
Cadre of Staff		
Doctor	18	3%
Medical or Clinical Officer	115	17%
Registered Nurse	282	42%
Community Nurse	184	27%
VCT Provider/other	77	11%
Years working as a health care provider		
Less than two years	71	11%
Two to four years	143	21%
Five to nine years	126	19%
10 to 19 years	135	20%
20 or more years	200	30%
Missing	1	0%
Mean years as a health care provider (range)	13 (0 – 50)	
Pre-service training covered FP counseling		
Yes	576	85%
No	84	12%
Missing	16	2%
Provider received in-service training on FP provision		
Yes	334	49%
No	342	51%
Years since in-service training on FP provision	n=334	%
Less than one year	117	35%
One to four years	157	47%
Five or more years	41	12%
Missing	19	6%
Mean years since in-service training on FP provision	2 (0 – 29)	
Provider received in-service training on FP counseling	n=334	%
Yes	296	89%
No	37	11%
Missing	1	0%
Years since in-service training on FP counseling	n=296	%

Less than one year	86	29%
One to four years	162	55%
Five or more years	41	14%
Missing	7	2%
Mean years since in-service training on FP counseling	3 (0 – 31)	
<hr/>		
Facility type		
Public	294	43%
Private	382	57%
<hr/>		
Location of facility		
Nairobi	299	44%
Mombasa	144	21%
Kisumu	125	18%
Machakos	53	8%
Kakamega	55	8%
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Table 2. Family planning providers' self-reported restrictions based on the client's age, parity, marital status, or the consent of a third party, by contraceptive method in select urban areas of Kenya, 2011.

Restriction/Method	Number of Providers	Percent of providers that restrict
Minimum Age		
Any method	676	57.5
Pills	605	40.7
Injectables	613	41.3
Condoms	646	19.5
ECP	592	21.0
IUCD	451	43.0
Implant	433	43.7
Female sterilization	230	57.4
Maximum Age		
Any method	676	44.7
Pills	604	41.2
Injectables	613	38.2
Condoms	644	5.4
ECP	592	21.5
IUCD	450	29.6
Implant	432	35.2
Female sterilization	230	21.7
Parity		
Any method	676	41.0
Pills	605	13.1
Injectables	608	27.0
Condoms	644	0.2
ECP	591	1.9
IUCD	446	19.5
Implant	428	21.0
Female sterilization	230	59.6
Marital Status		
Any method	676	22.3
Pills	602	6.8
Injectables	612	10.1
Condoms	638	0.9
ECP	590	2.2
IUCD	449	10.9
Implant	431	11.6
Female sterilization	230	40.0
Consent		
Any method	676	35.4
Pills	599	9.2
Injectables	611	9.8
Condoms	636	3.1
ECP	590	4.2
IUCD	447	17.5
Implant	432	16.9
Female sterilization	229	68.1

Note: Not all providers offer all methods of family planning; therefore sample sizes vary by method

Note: Variation in sample sizes within methods reflect nonresponse or missing data for some questions

Table 2a. Mean age restrictions, by method, in select urban areas of Kenya, 2011.

Method	Number of providers who offer and restrict on minimum age	Age below which providers will not offer this method		Number of providers who offer and restrict on maximum age	Age above which providers will not offer this method	
		Mean	Range		Mean	Range
Pills	246	19	(15-35)	249	41	(20-49)
Injectables	253	20	(15-36)	234	42	(25-49)
Condoms	126	18	(15-35)	35	41	(20-49)
ECP	124	18	(15-30)	127	42	(20-49)
IUCD	194	21	(15-35)	133	42	(20-49)
Implant	189	20	(15-35)	152	42	(30-49)
Female sterilization	132	29	(15-40)	50	43	(30-49)

Table 2b. Number of family planning providers who provide each method and who restrict clients' eligibility for reasons of parity, by method, in select urban areas of Kenya, 2011.

Method	Number of providers that provide method	Percent of providers that restrict method based on parity	Number of providers who restrict	Of the providers that restrict, percent that report the minimum number of children a client must have		
				One child	Two children	Three or more children
Pills	605	13.1	79	63.3	20.3	16.5
Injectables	608	27.0	164	58.5	27.4	14.0
Condoms	644	0.2	1	0.0	0.0	100.0
ECP	591	1.9	11*	50.0	50.0	0.0
IUCD	446	19.5	87 €	55.8	33.7	10.5
Implant	428	21.0	90 ¥	56.2	32.6	11.2
Female sterilization	230	59.6	137 £	22.0	32.6	45.5

*One of these providers has missing data; percent reporting minimum number reflects sample size of 10

€ One of these providers has missing data; percent reporting minimum number reflects sample size of 86

¥One of these providers has missing data; percent reporting minimum number reflects sample size of 89

£Five of these providers has missing data; percent reporting minimum number reflects sample size of 132

Table 2c. Number of health care facilities that provide each method and percent where facility manager reports restricting clients' eligibility to use a method without consent of a third party, by method type, in select urban areas of Kenya, 2011.

Method	Number of facilities that provide method	Percent of facilities that restrict method provision to clients with third party consent
Pills	250	5.2
Injectables	253	4.7
Condoms	240	2.1
ECP	221	5.0
IUCD	156	7.1
Implant	153	7.2
Female sterilization	52	53.9

Table 3. Family planning providers' self-reported restrictions based on the client's age, parity, marital status, or the consent of a third party, by contraceptive method and facility type in select urban areas of Kenya, 2011.

Restriction/Method	Public Facilities		Private Facilities		All Facilities	
	Number of Providers	Percent of providers that restrict	Number of Providers	Percent of providers that restrict	Number of Providers	Percent of providers that restrict
Minimum Age						
Any method	294	49.0	382	64.1***	676	57.5
Pills	274	30.3	331	49.2***	605	40.7
Injectables	277	31.8	336	49.1***	613	41.3
Condoms	289	14.2	357	23.8**	646	19.5
ECP	271	12.9	321	27.7***	592	21.0
IUCD	193	28.5	258	53.9***	451	43.0
Implant	179	26.3	254	55.9***	433	43.7
Female sterilization	79	46.8	151	62.9*	230	57.4
Maximum Age						
Any method	294	33.7	382	53.1***	676	44.7
Pills	273	28.9	331	51.4***	604	41.2
Injectables	277	30.0	336	44.9***	613	38.2
Condoms	289	4.2	355	6.5	644	5.4
ECP	271	14.0	321	27.7***	592	21.5
IUCD	193	18.1	257	38.1***	450	29.6
Implant	179	26.3	253	41.5**	432	35.2
Female sterilization	79	11.4	151	27.2**	230	21.7
Parity						
Any method	294	33.7	382	46.6**	676	41.0
Pills	274	9.9	331	15.7*	605	13.1
Injectables	276	22.1	332	31*	608	27.0
Condoms	288	0.0	356	0.3	644	0.2
ECP	270	0.4	321	3.1*	591	1.9
IUCD	191	8.4	255	27.8***	446	19.5
Implant	177	11.3	251	27.9***	428	21.0
Female sterilization	79	53.2	151	62.9	230	59.6
Marital Status						

Any method	294	14.3	382	28.5***	676	22.3
Pills	272	3.3	330	9.7**	602	6.8
Injectables	277	5.4	335	14***	612	10.1
Condoms	285	0.7	353	1.1	638	0.9
ECP	268	0.8	322	3.4*	590	2.2
IUCD	191	3.7	258	16.3***	449	10.9
Implant	179	4.5	252	16.7***	431	11.6
Female sterilization	79	30.4	151	45.0*	230	40.0
<hr/>						
Consent						
Any method	294	26.2	382	42.4***	676	35.4
Pills	271	5.9	328	11.9*	599	9.2
Injectables	276	5.8	335	13.1**	611	9.8
Condoms	284	2.5	352	3.7	636	3.1
ECP	269	3.7	321	4.7	590	4.2
IUCD	191	9.4	256	23.4***	447	17.5
Implant	179	5.0	253	25.3***	432	16.9
Female sterilization	79	60.8	150	72.0	229	68.1

*Chi-square test significant at $p < .05$; ** $p < .01$; *** $p < .001$ between public and private facilities

Note: Not all providers offer all methods of family planning; therefore sample sizes vary by method

Note: Variation in sample sizes within methods reflect nonresponse or missing data for some questions

Table 4. Family planning providers' self-reported restrictions based on the client's age, parity, marital status, or the consent of a third party, by contraceptive method and in-service training in family planning provision; select urban areas of Kenya, 2011.

Restriction/Method		Providers <i>with</i> in-service training		Providers <i>without</i> in-service training		All Providers	
		Number of Providers	Percent of providers that restrict	Number of Providers	Percent of providers that restrict	Number of Providers	Percent of providers that restrict
Minimum Age							
	Any method	334	56.6	342	58.5	676	57.5
	Pills	316	40.2	289	41.2	605	40.7
	Injectables	318	40.6	295	42.0	613	41.3
	Condoms	323	17.0	323	22.0	646	19.5
	ECP	309	21.0	283	20.9	592	21.0
	IUCD	265	35.9	186	53.2***	451	43.0
	Implant	252	38.1	181	51.4**	433	43.7
	Female sterilization	121	56.2	109	58.7	230	57.4
Maximum Age							
	Any method	334	44.9	342	44.4	676	44.7
	Pills	315	39.1	289	43.6	604	41.2
	Injectables	318	34.6	295	42.0	613	38.2
	Condoms	321	5.0	323	5.9	644	5.4
	ECP	310	19.7	282	23.4	592	21.5
	IUCD	264	25.4	186	35.5*	450	29.6
	Implant	251	31.5	181	40.3	432	35.2
	Female sterilization	121	21.5	109	22.0	230	21.7
Parity							
	Any method	334	37.7	342	44.2	676	41.0
	Pills	316	7.6	289	19.0***	605	13.1
	Injectables	315	22.9	293	31.4*	608	27.0
	Condoms	322	0.0	322	0.3	644	0.2
	ECP	308	2.0	283	1.8	591	1.9
	IUCD	260	16.2	186	24.2*	446	19.5
	Implant	250	16.0	178	28.1**	428	21.0
	Female sterilization	121	60.3	109	58.7	230	59.6
Marital							

Status							
	Any method	334	19.8	342	24.9	676	22.3
	Pills	313	4.5	289	9.3*	602	6.8
	Injectables	318	7.6	284	12.9*	612	10.1
	Condoms	319	1.6	319	0.3	638	0.9
	ECP	307	1.6	283	2.8	590	2.2
	IUCD	263	6.8	186	16.7**	449	10.9
	Implant	251	7.6	180	17.2**	431	11.6
	Female sterilization	121	33.9	109	46.8*	230	40.0
Consent							
	Any method	334	30.5	342	40.1*	676	35.4
	Pills	312	5.1	287	13.6***	599	9.2
	Injectables	318	5.4	293	14.7***	611	9.8
	Condoms	318	2.2	318	4.1	636	3.1
	ECP	308	3.3	282	5.3	590	4.2
	IUCD	263	11.8	184	25.5***	447	17.5
	Implant	252	11.9	180	23.9**	432	16.9
	Female sterilization	121	62.0	108	75*	229	68.1

*Chi-square test significant at $p < .05$; ** $p < .01$; *** $p < .001$ between those providers with and those without in-service training in family planning provision

Note: Not all providers offer all methods of family planning; therefore sample sizes vary by method

Note: Variation in sample sizes within methods reflect nonresponse or missing data for some questions