

Quality of services offered to women with female genital Mutilation across health facilities in a Kenyan County

Samuel Kimani (✉ tkimani@uonbi.ac.ke)

University of Nairobi

Chantalle Okondo

Population Council-Kenya

Jacinta Muteshi

Options UK

Jaldesa Guyo

Africa Coordinating Centre for the Abandonment of Female Genital Mutilation /Cutting (ACCAF)

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Abstract

Background

Female genital mutilation (FGM) is a challenge to women's health, human rights and development. Health as a critical pillar for social justice is key in addressing FGM while executing its core mandate of disease prevention and management. By leveraging opportune moments, events and experiences involving client-provider interactions, relevant FGM-related communications, behavior change and management interventions can be implemented at health facility or community level. It is unclear whether health system is maximizing this strategic position to address FGM in Kenya.

Objective

Determine the quality of services offered to women with FGM across health facilities in West Pokot county.

Methods

A mixed quantitative data collection strategies were used. These included: client-provider interactions observations (61) with health care workers (HCWs) and women with FGM seeking services on content and quality of FGM-related care; client-exit interviews (360) with women with FGM seeking services to determine content and services received during consultation with HCWs; and service data abstractions (10) from facility records on services sought/offered.

Results

A large (76%) proportion of women visiting health facilities experienced FGM at 11-15 years, were married aged 15-19 years (39%), had primary (47.5%) or no education (33%) and income of ≤30 USD/month (43%). Only 14.8% HCWs identified FGM and its related complications (11.5%) during consultations. Few FGM-related prevention interventions were implemented but IEC materials (4.9%) for reinforcing preventive messages were lacking. Adequate (88.5%) infrastructure supporting reproductive health services albeit limited human resources (14.8%) and capacity (42.6%) for FGM prevention and management existed; few health facilities and workers explained the negative consequences of FGM (16%) and need to stop it (15.3%); and data on clients who sought ANC, PNC and FP services were available but no information on women with FGM or those with FGM complications.

Conclusion

Health systems in high prevalent settings are actively interfacing with women with FGM, despite the primary reason for seeking services not being FGM. Despite high number of women with FGM, diagnosis, prevention and care services, documentation of FGM and its related complications are suboptimal. This underscores the need for health system strengthening in response to FGM with consideration on development of training kits for HCWs, training of HCWs, anchoring of FGM indicators in the HMIS, documentation and IEC material to support FGM prevention at service delivery points, and overall integration of FGM into ongoing health programs.

Introduction

Continued practice of female genital mutilation (FGM) in over 90 countries globally portends perpetuation of gender inequality, negative health consequences, human rights abuse and violation, discrimination and compromise the achievement of full potential for women and girls [1, 2]. FGM is commonly practiced in 28 African countries spanning from West through Central to East and the Horn of Africa (FGM belt) as well as in the Middle East, Latin America, Asia and among the diaspora communities [1–4]. So far, it is estimated that more than 200 million girls and women have undergone some form of FGM, with over 4.1 million girls at risk of being cut every year [1]. In Kenya, the national FGM prevalence among women 15-49-year-old was 21% as of 2014 with most ethnic groups practicing it [5]. However, despite cycles of Kenya demographic health surveys demonstrating consistent decline in FGM, regional and ethnic variations exist with some communities in Rift Valley and North Eastern counties posting prevalence of over 90% percent [5]. This prevalence is in addition to evidence that the number of girls exposed to FGM have been exacerbated by COVID-19 pandemic-related disruptions to the protection and school systems since the year 2020 [6–8]. Therefore, as countries are prioritizing COVID-19 interventions, equally FGM-related programs should be escalated and accelerated.

Defined as all procedures that involve partial or total removal of external female genitalia or other injuries for non-therapeutic reasons [9], FGM is associated with a number of health complications [10, 11]. These range from immediate, short and/or long-term including the immediate physical, gynecologic, obstetric, and sexual complications [9, 11]. Women and girls also suffer FGM-related psychological consequences characterized by anxiety, depression, post-traumatic stress disorder and low self-esteem [12]. The physical complications are related to the extent of cutting, poor knowledge of anatomy of the performer and/or use of crude/non-sterilized instruments during the procedure [9, 11]. The FGM-related complications require a robust health system manned by knowledgeable and skillful health care workers (HCWs) capable of responding before cutting happens through prevention or through quality care services for those who undergo the practice.

In fulfilling the mandate of response to prevention and management of FGM, the health system should align the interventions to the national and sector-specific legal/policy documents that are anchored on; global call for protection of human rights for women and girls articulated in the international treaties and reiterated by World Health Organization, ratified and domesticated by member countries [13, 14]; sustainable development goals target 5.3 on eradication of harmful practices by 2030 [15];

recommendations of the treaty monitoring bodies (TMBs) for health care providers to spearhead human rights protection through FGM-related prevention and care services [9, 13]. Despite, the progress achieved in addressing FGM at international and national levels, the WHO-led health sector FGM interventions have been commendable in providing policy leadership and developing tools for addressing FGM-related complications as well as prevention including medicalization of the practice [9, 16–19]. These efforts should translate into practical solutions and services provided to women and girls within the health facilities and communities where these problems are encountered.

Kenya health sector specific FGM-related interventions have gained traction at policy level with a policy statement banning medicalization issued by the minister [20, 21], a training manual for health care providers developed [22], a training package for capacity building of in-service health workers as well as for trainees in medical and allied health training colleges being underway courtesy of funding from WHO, UNFPA and FCDO [23]. Despite these efforts challenges persist including limited knowledge and skills for health workers to meaningfully participate in FGM prevention and care, lack of FGM related data collection at service points that can be escalated to the policy makers for decision making and investment, and absence of integration of FGM into existing reproductive health services [24]. There is minimal evidence of ongoing health sector-led FGM awareness campaigns either at the facility, in the community or through outreaches. Furthermore, there is lack of data at health facility on how many women present with FGM, the type of complications they present with and services offered to mitigate FGM-related complications. Related to aforementioned, it is unclear the quality of FGM-related interventions for prevention or care services for women with FGM-induced complications across the health facilities. Therefore, this study sought to determine the quality of existing FGM related services offered across health facilities in West Pokot county in Kenya.

Material And Methods

Study design

We adopted a mixed quantitative study approach to determine the quality of interventions relevant to prevention and response to women and girls with FGM seeking care in health facilities within West Pokot county. To achieve the aforementioned, we conducted: (1) client-provider interactions observations to obtain data on the content and quality of FGM-related services; (2) client-exit interviews to determine the content and quality of services to the client during the consultation with HCWs; and (3) service data abstractions to review health facility records on services sought/offered (Table 1).

Table 1
Summary of data collection approaches with their corresponding sample size

S/N	Data gathering activity	Study Population	Sample size	Study location
1	Observations of client-provider interactions	Health care providers and women with FGM seeking reproductive health services	61	County level health facilities
2	Client-exit interviews	Women with FGM seeking reproductive health services	360	County level health facilities
3	Service data abstraction	Health facility administrators, health care providers	10	County level health facilities

Study sites

The study involved participants and respondents working and seeking services in health facilities across West Pokot county. The facilities included those across primary to tertiary referral levels. The county of West Pokot county is located in Rift Valley neighbouring the Republic of Uganda. The county covers an area of 9,169.39 KM². The county is resident to the Pokot people and other dominant Kalenjin communities with an estimated population of about 621,241 people as of 2019 [25]. The County had 127 health facilities categorized into; 87 Public, 3 non-governmental, 20 faith-based and 16 private operated facilities, respectively [26]. The health provider to population ratio was documented at: 67 nurses, 5 doctors and 23 clinical officers per 100,000 people [26]. As of 2014, the prevalence of FGM was at a high of 94% [5], mainly type III (infibulation), performed by traditional cutters. There is no documented evidence of health care providers being involved in cutting girls (medicalisation) in the county. The practice of FGM is performed on young girls (12 to 14 years old) as a rite of passage in preparation for adulthood, for associated respect and cultural conformity. The practice of FGM is executed annually (usually during December holidays) on all girls of appropriate age group with celebrations marked as an important community activity. There are reported cases of cross-border FGM activities because the members of Pokot community share a porous border with their counterparts in Uganda. Health wise, most women deliver at home assisted by traditional birth attendants, with about 25.8 percent of births delivered at a health facility [5]. Additionally, the traditional birth attendants have been reported to perform FGM on women during child birth to those who may have escaped the cut as girls. The county has high maternal and infant mortality rates. Programmatically, West Pokot has been a target county for the UNFPA-UNICEF Joint Programme on accelerated abandonment of FGM.

Study participants and respondents

The study participants and respondents included HCWs namely doctors, nurses/midwives and clinical officers who worked in service delivery points (antenatal, postnatal, family planning, delivery and new born services, accident and emergency departments) that encountered and/or dealt with women/girls with FGM-related complications in public and private health facilities across all levels of the health system. The HCWs provided information on content, quality of services as well as data on women with FGM who sought health services. The girls (14-17 years) and women (18 years and above) who had sought services were also recruited. The women/girls with FGM provided information on the content and quality of care service offered by the health facilities.

Sampling and sample size

A multistage sampling strategy was used to sample respondents and health facilities for quantitative data. We clustered the facilities into different categories (tertiary, secondary, primary and private/faith-based) using a list of health facilities obtained from the county health office. We sampled all county referral and sub-county hospitals in West Pokot. Respondents were recruited for the exit interviews and client-provider interactions observations while seeking services from the sampled health facilities. Eligible girls (14-17 years) and women (18 years and older) with FGM were identified, recruited and consent obtained to participate in the interviews as well as the client-provider interaction observations. Those who participated in the exit interviews and client provider interactions were purposively sampled after they met the inclusion criteria. The facilities (n=61) where client-provider interactions were observed were distributed across the four sub counties in West Pokot namely; Pokot Central, Pokot South, Pokot West and Pokot North. As regards data abstraction, ten (n=10) facilities were sampled.

Study instruments

The study instruments included client-provider interactions, client exit interviews and facility data abstraction checklist and questionnaire. These tools were adopted and modified from a handbook on "Assessing Integration Methodology"- a handbook for measuring and assessing the integration of family planning and other reproductive health Services [27]. The client-provider interaction was documented using a check list to capture a two-way process between provider and client on identification, management, and prevention of FGM.

The client exit interview questionnaire comprised of socio-demographic data, information on personal experience with FGM and health for example, whether the client had undergone FGM including; at what age, reasons why the client visited the health facility, as well as whether the health provider discussed with her about FGM-related complications. Furthermore, the questionnaire contained components on follow-up care and referrals, satisfaction with services, costs as well as accessibility of the health services. The questionnaire was translated into Kiswahili and local West Pokot languages.

The health facility data abstraction checklist contained the following components: facility identification, information on service statistics such as; number of pregnant women attending ANC, number of pregnant women with FGM attending ANC. Additional questions included: number of women/girls with FGM-related complications, number of women/girls undergone FGM who received counselling as well as the number of women/girls with FGM who received antibiotics and painkillers among others. The tools were pretested and validated during research assistant trainings and feedback incorporated to refine them accordingly.

Recruitment and interview procedures

The recruitment was preceded with an exploratory visit to the county prior to the formal commencement of the study. A letter describing the study objectives and research authorisation permit from the national government was submitted to the county commissioner and the county government during the visit. Thereafter, a letter authorising our formal research including involvement of the health facilities, health workers, and clients was granted by the Director of Health Services and West Pokot County commissioner. We obtained written or verbal informed consent from all participants and respondents. Participants were assured the information provided was to be treated with confidentiality. Except for the exit interviews which were conducted in local dialect, all other interviews were conducted in English by trained locally recruited research assistants.

Data analysis

Data were coded and entered into Epi-data 3.1 on password-protected computers by trained data clerks and exported to STATA version 14.2 for data quality assurance and cleaning. The cleaned data were then analysed using STATA version 14.2 as explained in wider report on health systems response on prevention and management of FGM in West Pokot (24). The variables were descriptively analysed into frequencies and proportions and presented mainly in tables.

Ethical considerations

Ethical approval for this study was granted by the Population Council's Institutional Review Board (Ref: 830; dated: October 16, 2017) and AMREF Health Africa Ethics and Scientific Review Committee (Ref: AMREF-ESRC P463/2018; dated: July 3, 2018). In addition, permission to carry out the study was granted by National Commission for Science, Technology and Innovation (Ref: NACOSTI/P/18/79790/24356; dated: August 18, 2018), the West Pokot County Commissioner and the County Director of Health Services. Study participants aged 18 years and older granted informed consent, while assent was obtained for participants younger than 18 years and consenting granted by parent/guardian or husband or male partner. Participants were informed and taken through the study protocol including measures to ensure confidentiality of the information shared and their rights to withdraw from the study at any time.

Results

Characteristics of health facilities utilised for client-provider interaction observations

A total of 61 client-provider interaction observations were conducted across various health facilities (Table 2). The facilities were located and distributed in four sub-counties of West Pokot namely: Pokot central (39.3%), Pokot south (24.6%), Pokot West (21.3%) and Pokot North (14.8%). Most (92%) of the observations were conducted in the primary level health facilities—dispensaries and health centres.

Table 2
Distribution and category of health facilities utilised for client-provider interaction observations.

Characteristics	Frequency (n)	Percent (%)
Sub-County		
Pokot West	(13)	21.3
Pokot Central	(24)	39.3
Pokot North	(9)	14.8
Pokot South	(15)	24.6
Total	(61)	100
Level of Facility		
Primary (health centre and dispensary)	(56)	91.80
Secondary (sub-county hospital and mission led facilities)	(4)	6.56
Tertiary (county referral hospital)	(1)	1.64
Total	(61)	100

Identification of FGM and its related complications during client-provider interactions

The HCWs who participated in client-provider interactions attempted to identify FGM status from their clients (Table 3). Only 15% of HCWs in primary (9.3%), secondary (45.5%) and none in tertiary health facilities enquired about FGM status of their clients. Further, only in 7% primary and 18.2% secondary-level facilities were clients asked about the severity of FGM. Similarly, in less than 10% of primary and 30% secondary-level facilities, the clients were asked about possible effects of FGM and how the practice could have undermined their physical and mental health. However, none of the HCWs at the tertiary facility asked about FGM status, its severity and the possible effects as well as physical and mental complications of the practice.

Table 3

Efforts to identify FGM and related complications by health workers during client-provider interactions

	Level of Facility							
	Primary		Secondary		Tertiary		Total	
	N=43		N=11		N=7		N=61	
	n	%	n	%	n	%	n	%
Asked client on cut FGM status								
No	38	88.4	6	54.5	7	100	51	83.6
Yes	4	9.3	5	45.5	0	0	9	14.8
Missing	1	2.3	0	0	0	0	1	1.6
Asked about the severity of cut								
No	40	93	9	81.8	7	100	56	91.8
Yes	3	7	2	18.2	0	0	5	8.2
Asked about possible effects of FGM								
No	39	90.7	8	72.7	7	100	54	88.5
Yes	4	9.3	3	27.3	0	0	7	11.5
Explain how FGM might have undermined health physically and mentally								
No	41	95.3	8	72.7	7	100	56	91.8
Yes	2	4.7	3	27.3	0	0	5	8.2

The FGM-prevention initiatives available across health facilities in West Pokot

A number of FGM prevention interventions implemented across the health facilities were identified during client-provider interaction (Table 4). In few primary (14%), secondary (45.5%) and tertiary (14.3%) facilities, the HCWs educated or advised clients on available approaches for prevention of FGM. Of the facilities, in about 30% the HCWs sensitised the clients on availability of: linkage with authority for reporting potential risk of FGM (32.8%), follow up mechanism (26.2%), existence of linkage with local community civil groups and gatekeepers to help in case of FGM (42.6%), and possible outreaches in the community for prevention of FGM (31.1%). However, the provision of IEC materials to help with reinforcement of FGM prevention was very minimal (4.9%) across the facilities.

Table 4
Availability of FGM-prevention interventions across health facilities in West Pokot

Interventions for FGM preventions	Level of Facility							
	Primary (N=43)		Secondary (N=11)		Tertiary (N=7)		Total (N=61)	
	n	%	n	%	n	%	n	%
Educated and advised on prevention of FGM								
No	37	86	6	54.5	5	71.4	48	78.7
Yes	6	14	5	45.5	1	14.3	12	19.7
Missing	0	0	0	0	1	14.3	1	1.6
Advised on availability of linkage to authorities for reporting potential risk of FGM								
No	30	69.8	7	63.6	3	42.9	40	65.6
Yes	13	30.2	4	36.4	3	42.9	20	32.8
Missing	0	0	0	0	1	14.3	1	1.6
Existence of mechanism for follow-up								
No	31	72.1	10	90.9	2	28.6	43	70.5
Yes	11	25.6	1	9.1	4	57.1	16	26.2
Missing	1	2.3	0	0	1	14.3	2	3.3
Provision of IEC related materials to help with reinforcement of FGM prevention								
No	43	100	8	72.7	6	85.7	57	93.4
Yes	0	0	3	27.3	0	0	3	4.9
Missing	0	0	0	0	1	14.3	1	1.6
Advise on existence of link with community civil groups and gatekeepers to help in case of FGM								
No	26	60.5	4	36.4	3	42.9	33	54.1
Yes	16	37.2	7	63.6	3	42.9	26	42.6
Missing	1	2.3	0	0	1	14.3	2	3.3
Possible outreaches in community to help with prevention of FGM								
No	31	72.1	6	54.5	3	42.9	40	65.6
Yes	11	25.6	5	45.5	3	42.9	19	31.1
Missing	1	2.3	0	0	1	14.3	2	3.3

Availability of adequate resources for FGM prevention and management response across health facilities

Health service infrastructure and human resources for FGM prevention and management response were identified during client-provider interactions (Table 5). The majority (88.5%) of health facilities had adequate space with privacy for consultation, and the necessary equipment for consultation (78.7%). However, there was limited human resources and capacity for FGM response. For example, only 42.6% of facilities had HCWs with adequate knowledge of FGM, and 14.8% of facilities had different HCWs with specialisation (such as counsellors, psychologists, and medical personnel) for addressing FGM cases. Additionally, 63.9% of HCWs were able to explain the referral pathway for FGM cases, while 49.2% described the association of health system and legal authorities in addressing FGM.

Table 5
Availability of adequate resources for FGM-prevention and management response
across health facilities

Level of facility									
		Primary		Secondary		Tertiary		Total	
		N=43		N=11		N=7		N=61	
		n	%	N	%	n	%	n	%
Infrastructure									
Avails private area for consultations									
No		5	11.6	2	18.2	0	0	7	11.5
Yes		38	88.4	9	81.8	7	100	54	88.5
Service provider with adequate knowledge of FGM									
No		27	62.8	2	18.2	4	57.1	33	54.1
Yes		14	32.6	9	81.8	3	42.9	26	42.6
Missing		2	4.7	0	0	0	0	2	3.3
Availability of different service providers to help with FGM cases									
No		39	90.7	10	90.9	1	14.3	50	82
Yes		2	4.7	1	9.1	6	85.7	9	14.8
Missing		2	4.7	0	0	0	0	2	3.3
Explains the existence of referral pathway for FGM cases to higher level of care									
No		17	39.5	4	36.4	0	0	21	34.4
Yes		25	58.1	7	63.6	7	100	39	63.9
Missing		1	2.3	0	0	0	0	1	1.6
Describes the existence of association of health facility with legal authorities									
No		24	55.8	5	45.5	1	14.3	30	49.2
Yes		18	41.9	6	54.5	6	85.7	30	49.2
Missing		1	2.3	0	0	0	0	1	1.6
Avails the necessary equipment needed for consultation									
No		9	20.9	3	27.3	0	0	12	19.7
Yes		34	79.1	7	63.6	7	100	48	78.7

Level of facility								
Missing	0	0	1	9.1	0	0	1	1.6

Characteristics of respondents recruited in the client-exit interviews

A total of 360 exit interviews were conducted with clients and their demographic characteristics summarised in Table 6. Thirty-nine percent were aged 15-19 years, while 38 percent were between 20 and 30 years. About half (53%) were in a monogamous marriage, with 52 percent reported having 1-3 children. Of the respondents, a third (33%) had never attended formal schooling while 48 percent had attained primary level education. Only a quarter (26%) reported having no income at all, 17 percent earned less than 3,000 Kenyan Shillings (~30 US dollars), 16 percent between 3,000 – 5,000 Kenyan Shillings, 13 percent between 10,000 – 20,000 Kenyan Shillings, while 7 percent earned more than 20,000 Kenyan Shillings. Most (76%) of those interviewed reported to have undergone FGM at the age of 11-15 years, with the procedure mainly (95%) performed by traditional circumcisers.

Table 6
Demographic characteristics of respondents recruited for client exit interviews

Characteristics	Facility Level							
	Primary		Secondary		Tertiary		Total	
	N=220		N=98		N=42		N=360	
	n	%	N	%	n	%	n	%
Age								
<15 years	3	1.4	1	1	0	0	4	1.1
15-19 years	95	43.2	33	33.7	12	28.6	140	38.9
20-24 years	37	16.8	21	21.4	10	23.8	68	18.9
25-30 years	35	15.9	18	18.4	13	31	66	18.3
30 years or older	50	22.7	25	25.5	7	16.7	82	22.8
Marital status								
Married/monogamous	100	45.5	61	62.2	31	73.8	192	53.3
Married/polygamous	83	37.7	29	29.6	9	21.4	121	33.6
Single, never married	30	13.6	5	5.1	2	4.8	37	10.3
Divorced/separated/widowed	2	0.9	0	0	0	0	2	0.6
Missing	5	2.3	3	3.1	0	0	8	2.2
Number of living children								
None	30	13.6	8	8.2	3	7.1	41	11.4
1-3 children	108	49.1	50	51	29	69	187	51.9
4-7 children	52	23.6	23	23.5	6	14.3	81	22.5
7 or more children	26	11.8	11	11.2	3	7.1	40	11.1
Missing	4	1.8	6	6.1	1	2.4	11	3.1
Education level								
Did not attend formal school	73	33.2	35	35.7	11	26.2	119	33.1
Primary	109	49.5	48	49	14	33.3	171	47.5
Secondary	33	15	8	8.2	12	28.6	53	14.7
Tertiary	3	1.4	6	6.1	5	11.9	14	3.9
Missing	2	0.9	1	1	0	0	3	0.8

Characteristics	Facility Level							
	Primary		Secondary		Tertiary		Total	
	N=220		N=98		N=42		N=360	
	n	%	N	%	n	%	n	%
Monthly income (Kenyan Shillings)								
None	31	28.4	9	17	10	35.7	50	26.3
<3000	25	22.9	5	9.4	2	7.1	32	16.8
3000 to <5000	20	18.3	9	17	1	3.6	30	15.8
5000 to <10000	22	20.2	13	24.5	5	17.9	40	21.1
10000 to <20000	8	7.3	9	17	7	25	24	12.6
20000 or more	3	2.8	8	15.1	3	10.7	14	7.4
Total	109	100	53	100	28	100	190	100
Missing/Don't Know	111	50.5	45	45.9	14	33.3	170	47.2
Age of undergoing FGM								
8-10 years	9	4	8	9	3	7	20	5.6
11-15 years	169	77	75	77	30	71	274	76.1
16-19 years	38	17	15	15	8	19	61	16.9
20 years and above	4	2	0	0	1	2	5	1.4

Content and quality of consultation during reproductive health services visit by respondents

The content and quality of consultation during seeking of reproductive health services by respondents was obtained through the client-exit interviews (Table 7). Most (90.8%) of the HCWs explained to the respondents the problems they were managing, provided treatment instructions (89.2%), follow up care information (76.7%), appointments for follow up visits (98.2%) and minimal referrals (3.3%) in regard to reproductive health services. However, only in 16% of facilities were respondents explained to about the negative consequences of FGM and the need to stop practicing FGM (15.3%) by the HCWs.

Table 7
Content and quality of information shared during reproductive health services consultations with respondents

Communication	Facility Level							
	Primary		Secondary		Tertiary		Total	
	N=220		N=98		N=42		N=360	
	(n)	%	(n)	%	(n)	%	(n)	%
Did the provider explain to you what he/she is managing and why?								
No	(16)	7.3	(11)	11.2	(5)	11.9	32	8.9
Yes	(204)	92.7	(86)	87.8	(37)	88.1	327	90.8
Missing	(0)	0	(1)	1	(0)	0	1	0.3
Did the provider explain the treatment instructions?								
No	23	10.5	10	10.2	5	11.9	38	10.6
Yes	196	89.1	88	89.8	37	88.1	321	89.2
Missing	1	0.5	0	0	0	0	1	0.3
Did the provider explain to you the negative consequences of FGM?								
No	180	81.8	83	85	39	93	302	84
Yes	40	18.2	15	15	3	7.1	58	16
Did the provider discuss with you the need to stop practicing FGM?								
No	181	82.3	84	85.7	39	92.9	304	84.4
Yes	38	17.3	14	14.3	3	7.1	55	15.3
Missing	1	0.5	0	0	0	0	1	0.3
During your visit today, were you given any information on follow-up care?								
No	62	28	14	14.3	8	19	84	23.3
Yes	158	72	84	85.7	34	81	276	76.7
During your visit today, were you given an appointment for a follow-up visit?								
No	2	1.3	1	1.2	2	5.7	5	1.8
Yes	157	99	84	98.8	33	94.3	274	98.2
During your visit today, were you referred for any services?								
No	205	93.2	96	98	37	88.1	338	93.9

Communication	Facility Level							
	Primary		Secondary		Tertiary		Total	
	N=220		N=98		N=42		N=360	
	(n)	%	(n)	%	(n)	%	(n)	%
Yes	8	3.6	1	1	3	7.1	12	3.3
Missing	7	3.2	1	1	2	4.8	10	2.8

Data on women/girls who received reproductive health services across health facilities

Data from services statistics were conducted in ten health facilities including: one tertiary, two secondary, five primary and two private facilities. The data showed existence of records on reproductive health services offered across facilities in West Pokot (Table 8). Data on number of women/girls who sought ante-natal, post-natal care and family planning services were captured. However, data on the number of women/girls with FGM and/or related complications were lacking. There were no data on women/girls who sought or received FGM-related services and treatment such as counselling, de-infibulation, clitoral reconstruction, antibiotics for infection, pain killers, and surgical interventions for keloids, cysts, or scarring specific to FGM.

Table 8
Data on respondents who sought reproductive health services across health facilities

	Last 12 months	Last 6 months	Last 1 month	Facilities with missing data
Number of clients seen at service delivery points	39548	31693	4555	5
Number of women/girls who attended ante-natal care				
1st trimester	2663	1297	118	2
2nd trimester	10981	5312	961	1
Number of women/girls with FGM who attended ante-natal care				
1st Trimester	-	-	-	10
2nd Trimester	-	-	-	10
3rd Trimester	-	-	-	10
Number of women/girls who attended post-natal care				
after first week of delivery	2334	1277	219	5
after six weeks of delivery	26	11	2	6
Number of women/girls with FGM who attended post-natal care				
after first week of delivery	-	-	-	10
after six weeks of delivery	-	3	-	9
Number of women/girls who attended family planning (FP)	4406	2539	410	2
Number of women/girls with FGM who attended FP	-	-	-	10
Number of women/girls with FGM who attended youth friendly services	-	-	-	10
Number of women with type I FGM attending service delivery points (SDPs)	-	-	-	10
Number of women with type II FGM attending SDPs	-	-	-	10
Number of women with type III FGM attending SDPs	-	-	-	10
Number of women/girls with:				
Immediate FGM complications	-	-	-	10
Obstetric FGM complications	-	-	-	10

	Last 12 months	Last 6 months	Last 1 month	Facilities with missing data
Gynaecological FGM complications	-	-	-	10
Sexual FGM complications	-	-	-	10
Psychological FGM complications	-	-	-	10
Number of women/girls who have undergone				
FGM related counselling	-	-	-	10
FGM related de-infibulation	-	-	-	10
FGM related clitoral reconstruction	-	-	-	10
Number of women/girls with FGM received				
Antibiotics for infection	-	-	-	10
Pain killers	-	-	-	10
Surgical Interventions for (keloids, cyst, scarring)	-	-	-	10
Referrals	-	-	-	10

Discussion

A summary of findings from this study shows: a large proportion of young women with low educational attainment and income had experienced FGM and early marriage; few health care workers identified FGM and its related complications during consultation with women and girls at service delivery points; minimal FGM-related prevention interventions were implemented but IEC materials to reinforce these preventive strategies were lacking; adequate infrastructure for supporting reproductive health care services albeit limited human resources and capacity in response to FGM prevention and management existed; few health facilities and health workers explained the negative consequences of FGM and the need to stop the practice; available data on clients who sought ANC, PNC and FP services but information on number of women with FGM or those with FGM complications who sought services was lacking.

Our finding of large proportion of young women with low educational attainment and income who had experienced FGM and early marriage is noted. This is supported by evidence that 76% of women who reported to have been cut, underwent the procedure at 11-15 years with a third (39%) having been married off aged 15-19 years. This is an indication that FGM in West Pokot is performed as a rite of passage perpetuating early and child marriage. This depicts a critical nexus between FGM and early marriage [28,29] - practices with far reaching socio-economic impacts on women and girls, family and community. The practice of FGM in West Pokot is further linked with negative impacts on girl-child education with analyses showing only 48% of the women attained primary education coinciding with drop outs linked

with age of FGM and the attendant early marriage. FGM is associated with impediment to schooling or school drop-outs with the resultant meagre financial earnings or resources of less than USD 30 per month for most (58.9%) of the women studied. The economic and cost burden of FGM cannot be overlooked, although the WHO has developed a cost calculator and demonstrated the amount of money saved through management and prevention of direct health impacts of FGM [18], the price tag for indirect impacts such as loss of education, school dropout, lost job opportunities and poverty need to be quantified as well [30]. Indeed, the narrative of savings that could be accrued from FGM interventions should act as good incentive for policy makers to address FGM. Interestingly, support for formal education of girls has been touted as a more effective approach to FGM abandonment as schooling starves off the risk of cutting the girls and is a more girl-centered approach [31, 32]. Moreover, a combined and pairing approach to FGM abandonment interventions with awareness creation and the legal approach can improve their effectiveness [33–35]. As regards the health sector, it is worthy mentioning that most of the interviews were conducted in primary level facilities (health centres and dispensaries) demonstrating the importance of promotive and preventive interventions that can cost effectively be implemented through nurses, midwives, clinical officers, community health workers and volunteers at community level through integration and universal health care package.

There was adequate infrastructure and human resources for responding to priority reproductive health care needs and services across health facilities in West Pokot. This is supported by evidence that health facilities and health care workers were providing and supporting the implementation of antenatal and postnatal care and well as family planning services across the facilities. These programs have been prioritised as the country and through donor funding invested financially in requisite commodity purchases, stocking, development of policies and guidelines for their implementation, capacity building and support strategy for health workers for successful implementation and programming as well as monitoring and evaluation to track progress [36–42]. This enabling policy environment is important for program implementation, capacity building for service providers, monitoring and evaluation and service delivery at service point and feed backing for decision making.

The financing, availability of policies and support tools as well as capacity building initiatives in response to FGM was lacking. Indeed, there was inadequate human resources in terms of requisite specialties to deal with myriad FGM-related complications as well as capacity deficits to respond to FGM prevention and management. The services relevant in response to FGM prevention and care services were characterised by few HCWs who identified FGM and its related complications during consultation with women and girls; few FGM-related prevention interventions that were implemented, lack of IEC materials to reinforce the FGM preventive messages; and few health facilities and workers who offered explanation on the negative consequences of FGM and the need to stop the practice. These findings are consistent with evidence that FGM has not been receiving the required attention in the health sector because of competing priorities in Kenya and elsewhere [43–45]. However, recently in line with the global agenda direction, Kenya health sector specific FGM-related interventions have gained traction at policy level with a policy statement banning medicalization issued by the minister [20, 21], a training manual for health care providers developed [22], a training package for capacity building of in-service health workers as well

as for trainees in medical and allied health training colleges are underway courtesy of facilitated funding from WHO, FCDO and UNFPA [23]. It is hoped that the enabling legal-policy environment, availability of tools to support training and capacity building will catalyze health sector-led practical solutions in response to FGM prevention and management. This will be complemented with the ongoing agenda for integration of FGM interventions into existing reproductive health services in the service points that interface with clients with FGM to leverage on their success and available resources.

We show that there is available data on clients who sought antenatal, postnatal and family planning services but information on number of women with FGM or those with FGM complications who sought services from health facilities was lacking. The absence of documentation is attributed to lack of FGM-related data capture tools at the service delivery points as well absence of FGM indicators in the health management information system (HMIS). Anchoring of FGM indicators in the HMIS will prompt the development of FGM data collection tools for use in the service delivery points. This process has already commenced with FGM indicators having been developed, while the training tools are underway through the support of WHO. This will trigger the training of the health care providers on FGM, data acquisition, dissemination and use of the tools. The development of the FGM data capture tools should leverage on similar tools such as the post-rape care (PRC) form used in gender-based violence case management. This may be facilitated through deliberate integration of FGM into existing health programs as well as monitoring and evaluation pathways.

The findings should be interpreted bearing in mind some limitations namely; the study was conducted in only one county of West Pokot where type III FGM is predominant limiting generalizability to the whole country; this is a facility based data that is biased towards to those who sought health services and may not be generalizable to all women in West Pokot; the study data are from a cross-sectional study with limitation that, it precludes our ability to make causal inferences. However, our approach was premised on multiple data methods that adds to the confidence in the results.

In conclusion, the health systems in FGM high prevalent settings are actively interfacing with women with FGM, despite that the clients' primary reason for health seeking not FGM. Despite the high number of women with FGM, identification of the problem, prevention and response to FGM complications as well as documentation of FGM cases and related complications in the service delivery points are suboptimal. This underscores the need for health system strengthening in response to FGM that should consider development of training kits for HCWs, training of HCWs, anchoring of FGM indicators in the HMIS, documentation, and development of IEC material to support FGM response at service delivery points, and overall integration of FGM into ongoing health programs.

Abbreviations

ANC Antenatal Care

FCDO Foreign, Commonwealth & Development Office

FGM	Female Genital Mutilation
FP	Family Planning
HCWs	Health care providers
HMIS	Health Management Information System
PNC	Post Natal Care
UNFPA	United Nations Population Fund
WHO	World Health Organisation
UN	United Nation

Declarations

Ethics approval and consent to participate

This study sought ethical approval from Population Council and Amref Ethics and Scientific Review Committee and all participants provided an informed consent before taking part in the study. All methods were performed in accordance with the relevant ethical guidelines and regulations.

Consent for publication

Not Applicable

Availability of data and material

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

Study conceptualization and proposal writing (S.K; J.M; J.G); Research field work (S.K; C.O), Analysis and interpretation of data (S.K; C.O; J.M; J.G), Paper writing and approval (S.K; C.O; J.M; J.G).

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