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Quality of Family Planning Services in HIV/AIDS Care and Treatment Clinics in Tanzania

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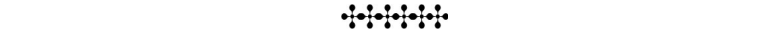

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Quality of family planning services in HIV/AIDS care and treatment clinics in Tanzania

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Abbreviation

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
CTC	care and treatment center
DMO	District Medical Officer
FP	family planning
HIV	human immunodeficiency virus
HIV^+	human immunodeficiency virus-positive people
IUCD	intrauterine contraceptive device
MMRC	Muhimbili Medical Research Center
MOHSW	Ministry of Health and Social Welfare
NIMR	National Institute for Medical Research
RCH	reproductive and child health
RMO	Regional Medical Officer
PMTCT	prevention of mother-to-child transmission
WHO	World Health Organization

1.0 Background

People living with HIV, similar to those with other chronic conditions, have health needs that extend beyond those directly associated with their HIV infection. Mounting evidence shows that many people with HIV have an unmet need for family planning (FP) and as a result experience unintended pregnancies. For example, 53% and 62% of pregnancies among HIV-positive women were unintended in recent studies in Uganda and South Africa, respectively, and up to 35% of female clients on antiretroviral therapy (ART) in Nigeria had unmet contraceptive needs (McCarraher, Vance, Gwarzo, Taylor & Chabikuli, 2011; Birungi et al., 2008). Moreover, people with HIV who use contraceptives are more likely to rely on male condoms for pregnancy prevention. However, with typical use, 15 pregnancies per 100 women occur over the first year among those whose partners use male condoms for pregnancy prevention (Tamene & Fantahun, 2007). In addition, some people with HIV want more children, but need information about how to increase the likelihood of safe conception and reduce the chances of mother-to-child transmission of HIV when they do get pregnant. For example, studies in Ethiopia and South Africa showed that 45% and 26% of HIV-positive women desired more children, respectively (Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs & World Health Organization, 2011; Myer, Morroni & Cooper, 2006).

Providing FP services in HIV care and treatment clinics (CTCs) offers an opportunity to increase access to contraception among women and couples living with HIV. In the past decade, international organizations have endorsed the integration of FP and HIV services as a strategy to address unmet contraceptive need among women living with HIV and as one prong of prevention of mother-to-child transmission (PMTCT) initiatives. A small but growing body of evidence suggests that integrated services can lead to improvements in access to and quality of care, program efficiency, provider knowledge and skills, reductions in stigma, and an increase in contraceptive use. However, the potential public health benefits of integrated services remain largely undocumented. Integrated service models are challenging to implement and few evaluations of scalable, replicable programs have been conducted. Integration efforts often face unclear and unenforced guidelines and policies, a lack of leadership, and inadequately trained supervisors and providers who often have heavy workloads with few incentives. In addition, service integration is challenged by monitoring systems that have yet to be integrated, weak referral systems, inadequate infrastructure, commodity stock-outs and poor procurement systems, and vertical financing structures.

In Tanzania, 6% of the population aged 15-49 years is living with HIV/AIDS. HIV prevalence is higher among women than men (7% and 5%, respectively) (TACAIDS, ZAC, NBS, OCGS & Macro International Inc., 2008). Furthermore, only 29% of all women of reproductive age (15-49 years) use an FP method. (NBS & ICF MACRO, 2011) Tanzania has set an aggressive target of 80% of HIV-positive women using FP by 2013 (MOHSW, 2008). However, FP services are mostly offered only in reproductive and child health clinics, a situation that minimizes access to FP services among people living with HIV/AIDS. Integrating FP services into HIV/AIDS care and treatment services provides an opportunity to increase access to contraception among clients with HIV who do not want to become pregnant, or to maximize chances of a safe and healthy pregnancy and birth for those who wish to have a child.

As of 2008, the Tanzania Ministry of Health and Social Welfare (MOHSW) decided to coordinate the integration of FP and HIV/AIDS services. An operational research study conducted by FHI 360 in 2008 to develop and test a facilitated referral model to integrate FP services in CTCs in both Iringa and Morogoro regions showed that use of non-barrier methods rose from 17% to 39% among sexually active women after the integration intervention, and total contraceptive use, including condoms, increased from 78% to 93% (FHI 360, 2010). As a result of this study, the MOHSW decided to scale up efforts for a modified model of FP/CTC integration to include direct provision of short-acting methods (pills, condoms, and injectables) and implants at the CTCs with referral for an intrauterine contraceptive device (IUCD) and permanent FP methods.

Currently there are two forms of integration at the health facilities that are providing FP/HIV services. The facilitated referral model in Iringa comprises the following services offered at the CTC: screen clients for risk of unintended pregnancies, educate clients on the available FP methods or counsel on safer pregnancy, record referrals to an FP clinic, and accompany clients to an FP clinic. The FP clinic provides all available methods (short-acting and long-acting/permanent methods) to clients intending to use contraception. The expanded facilitated referral model in Morogoro provides all the services included in the facilitated referral model in addition to providing short-acting methods (pills, injectables, and condoms).

The health providers at these selected CTC facilities received training on the provision of integrated services. For the facilitated referral model, CTC providers were trained on screening, counseling/education, and recording and referring clients who want FP services.

They were also trained to counsel those who want to conceive and those who are already pregnant. Although most of the CTC facilities where FP integration has been scaled up provide FP services on-site, in some instances, facilities bring a provider from an FP clinic to the CTC to provide the services. For example, at Kilosa District Hospital, space is made available for an FP provider to come to the CTC to provide FP services.

1.1 Quality of Care

The World Health Organization (WHO) has defined quality health systems in six areas as shown in figure 1. These areas were assessed according to the degree of adherence to national standards for provision of FP services as stipulated in the National Family Planning Procedure Manual 2011 (WHO, 2006) which states that:

- counseling for FP follows informed choice principles;
- provision of FP must be followed according to the WHO medical eligibility criteria;
- there must be adherence to infection prevention procedures;
- clients' rights should be upheld and fulfilled, including right to information, access to services, choice, safety, privacy and confidentiality, dignity and comfort, continuity of services, and opinion; and
- clinics should be organized to ensure a safe and efficient environment for provision of FP services, including client flow; maintenance of FP commodities, equipment and records; provider technical competence; and the physical setting.

Figure 1: WHO quality of care definition.

Effective, delivering health care that is adherent to an evidence base an results in improved health outcomes for individuals and communities, based on need;

Efficient, delivering health care in a manner which maximizes resource use and avoids waste;

Accessible, delivering health care that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need;

Acceptable/patient-centered, delivering health care which takes into account the preferences and aspirations of individual service users and the cultures of their communities;

Equitable, delivering health care which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status;

Safe, delivering health care which minimizes risks and harm to service users.

Source:
World Health Organization (WHO). *Quality of Care, A Process for Making Strategic Choices in Health Systems.* Geneva, Switzerland: WHO; 2006:9-10.

2.0 Rationale

This study sought to have a better understanding of the quality of FP services as provided in the two integration models and further inform national efforts to scale up the facilitated model throughout other regions in Tanzania, while ensuring that quality of FP services is not compromised as a result. It builds upon information already gathered by FHI 360 as part of an evaluation of the program and adds key information on quality. Knowledge generated from this study also contributes to the global evidence and quality of FP services in integrated settings.

3.0 Study Goal and Objectives

The study examined the quality of FP services delivered in CTC clinics using the facilitated referral model and the expanded facilitated referral model in terms of quality of care as defined by WHO and along the national FP guidelines. The study objectives were to:

1. assess the quality of FP services delivered in HIV/AIDS FP/CTC integration facilities; and
2. assess the degree to which FP services offered in CTCs meet established national guidelines on FP service delivery.

4.0 Methods

The study employed a non-experimental, descriptive and cross-sectional design. It was conducted in eight health facilities where there are CTCs providing FP services to their clients. The study included four health facilities in Iringa, all of which were implementing the facilitated referral model, and four facilities in Morogoro, which were implementing the expanded facilitated referral model. Both public and private health facilities were involved in the study.

The study included a target client population of HIV-positive clients between the ages of 18 and 49 years, regardless of ART status, who were attending CTCs in public facilities in Morogoro and Iringa regions. We excluded clients with a CD4 count less than 100 or those who meet the WHO Stage IV criteria for HIV disease because these patients were likely to be too sick to participate.

Baseline and post-intervention data for approximately 648 clients who were exposed to the facilitated referral model were available from FHI 360. In addition, data from 108 provider and nine health manager interviews were available. We used the post-intervention data from the FHI 360 study to partially address the WHO quality dimensions.

Table 1 shows the number of study subjects for which secondary data were available from baseline and post-intervention studies.

Table 1: Total Number of Completed Interviews

	Baseline	Post-Intervention
CTC clients	323	299
CTC providers	63	45
CTC supervisors	n/a	9
FP providers	41	21
FP supervisors	n/a	8

In order to assess the WHO quality of care dimensions adequately, we needed to supplement the data described above with primary data from a representative sample of clients, providers, and CTC facility in-charges. Sample size estimation was based upon the following variables: client load, percentage of the facility sample to the full sample for each of the models, sex ratio at the facility centers, and clinic operating days as illustrated in the sample size table in the protocol. Then the required sample size was divided equally among the two models and the health facilities so as to have an equal representation (table 2).

4.1 Data Collection

The data were collected through structured interviews with clients exiting the CTCs after getting a service and with health service providers at the clinics and CTC in-charges. The structured interviews with the clients were to assess the client's knowledge on a number of things, such as: the use of contraceptives, unmet need for FP, dual method use and its importance, side effects of method used, and what to do if side effects are experienced. The interviewers also asked about client satisfaction with their chosen FP method (if a current FP user), inter-personal communication with the provider, if the provider correctly screened for medical eligibility, provider counselling on fertility preference versus method availability and appropriateness, client demographic/profile including wealth index, preferences on where to get the FP services and why, stigma associated with an HIV-positive individual accessing FP,

client preference for chosen method, settings of facility care, geographical proximity, client waiting time, timely delivery of services, and if counselled on dual protection.

Table 2: Sample Size Estimations

Health Center	Client Sample Size	Provider Sample Size	Client Load	Percent of Facility Sample Compared to Full Sample	Sex Ration (F:M)	Clinic Operating Days*	Visit Days†
Morogoro — Expanded Facilitated Referral Model							
Sabasaba Health Centre	25	2	714	15%	3:1	4	1
Morogoro Regional Hospital	25	2	2499	53%	2:1	4	1
Kilosa District Hospital	25	2	1018	22%	2:1	4	1
Mtibwa Health Center	25	2	473	10%	2:1	4	1
Model subtotal	100	8	4,704	100%			
Iringa — Facilitated Referral Model							
Iringa Regional Hospital	25	2	2914	29%	2:1	5	1
Mafinga District Hospital	25	2	2205	22%	2:1	4	1
Lugoda Hospital	25	2	3066	30%	2:1	5	1
Ilula Lutheran Hospital	25	2	1903	19%	2:1	4	1
Model Subtotal	100	8	10,088	100%			
Study total	200	16	14,792				

Notes: * Number of days on a weekly basis that a clinic is open for service.
† Number of times study team visited.

Structured interviews with the CTC providers were on: extent to which providers follow steps for FP provision in accordance with the national guidelines, if counselling on dual protection is being followed, what entails FP service provision, average time a provider spends with a client, method availability, provider job satisfaction, client's fertility preference versus method counselled by provider, provider screens correctly for medical eligibility, interpersonal communication with clients, and equipment availability at the clinic.

Structured interviews with the CTC in-charges captured whether the process of informed choice is being followed, provider's satisfaction, and equipment availability at the clinic.

Observation was done on the providers' service provision with reference to the required standards of the MOHSW under the Tanzania FP procedure manual. This included: extent to which providers follow steps for FP provision in accordance with the national guidelines, maintenance and conditions of facilities and FP methods (e.g. storage of FP commodities, hygiene standards at facilities, privacy considerations for FP counselling area), and correct screening for medical eligibility and interpersonal communication.

A document review was done for service statistics at the CTCs for a period of six months prior to the study team's visit at the clinic.

4.2 Field Procedures

Prior to data collection, the research assistants participated in a two day training workshop to familiarize the team on the study objectives and questionnaires as well as the underlying research ethics. The research assistants (i.e., interviewers) travelled to each health facility. For eligibility purposes, clients were between 18 and 49 years, HIV-positive, attending CTCs, with a CD4 count greater than 100 and not clinically ill at the time of the visit and consenting to participate in the study.

The research assistants carried with them a copy of the letter documenting ethical approval to conduct the study and a copy of an introduction letter from the NIMR-Muhimbili Medical Research Center (MMRC) director addressed to the Regional Medical Officer/District Medical Officer/Facility in-charge about the study team's presence and details of the study.

The coordinator reviewed all forms on-site to ensure completeness on a daily basis. All correctly filled out questionnaires were compiled for later data analysis.

4.3 Ethics

All effort was made to protect participant confidentiality. Each study participant was assigned a unique identifier; thus, the study questionnaires contained no names or other identifying information linking the data to individual participants. Completed forms from the field were kept in a dedicated area in the offices of NIMR-MMRC for the duration of data entry, cleaning, and analyses. The results have been presented in aggregates. No social risk events were anticipated and clinical adverse events were not relevant to this study. This was an anonymous survey with minimal risk. The protocol was submitted for review and approval to the local institutional review board, the National Health Research Ethics Board at the NIMR.

Written, informed consent was obtained from all participants. The CTC clients, providers, and in-charges were informed that they did not have to participate, could terminate their participation at any time, and could refuse to answer any item on the questionnaire without affecting the receipt or quality of services provided at the CTC.

4.4 Data Management Plan

The data from the prior FHI 360 databases were available in STATA and were combined with the additional data collected in this study. Data were double entered by two independent data entry clerks using EpiData v3.1. The two databases were compared and discrepancies were queried and rectified. The final data file was exported to STATA v10 using STATA TRANSFER v8 for cleaning and analysis. Both secondary and primary data were saved in a password-protected database, and only the personnel involved in the study have had access to the questionnaires and electronic data.

5.0 Results

5.1 Demographic Characteristics

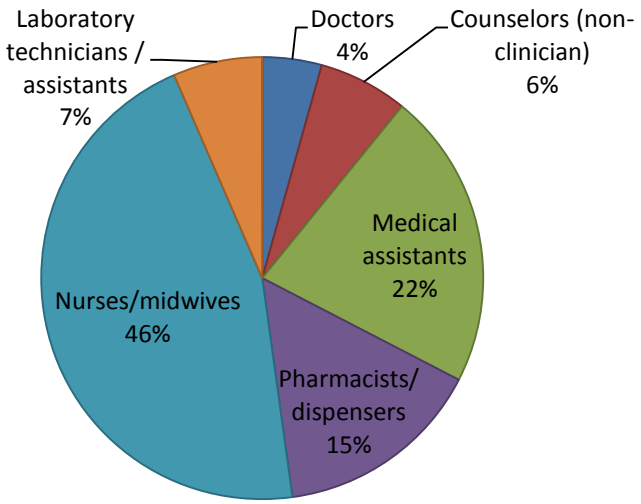
A total of 93 respondents were interviewed. Of these, there were 10 males (11%) and 83 females (89%). Among the respondents, the majority were married (45%), with 28% single and 26% widows. Most of the respondents were aged 40-49 (32%) and with a primary level education (72%). Only 3 (3%) of the respondents had attended university or college and 11 (12%) had not attained any education at all (table 3).

Table 3: Demographic Characteristics of Respondents

Variable	N (%)
Sex (mean, sd) (1.892, 0.311)	
Male	10 (10.75)
Female	83 (89.25)
Marital status	
Single	26 (27.96)
Married	42 (45.16)
Widow	24 (25.81)
Age of the respondent	
19-25	11 (11.83)
26-32	26 (27.96)
33-39	27 (29.03)
40-49	29 (31.18)
Education level	
none	11 (11.83)
primary	67 (72.04)
secondary	12 (12.90)
university/college	3 (3.23)

At the CTCs that were visited in the expanded facilitated model, there were a variety of health providers. Of these, 4% were doctors, 6% counselors (non-clinicians), 7% laboratory technicians, 15% pharmacists, 22% medical assistants and 46% nurses/midwives (figure 2).

Figure 2: Cadres of the health providers.



5.2 WHO Dimensions of Quality of Care

5.2.1 Effective

As seen in table 4, the criteria, **maintaining a positive provider/client interpersonal relationship** was not met**.** Although more than 90% of the clients were welcomed, greeted and made to feel comfortable, over 50% of all responses were not sure of confidentiality, more than 60% were not asked whether they had come with their partner or close relative and whether they would like that person to be in the counseling room during the session, and around 55% were not asked the purpose of their visit or questioned if they may have any additional special needs. The next criteria, **provider exploring client's situation and reproductive goals and needs,** was also not met. Even though 76% of all provider respondents asked their clients about their reproductive goals, more than 62% did not ask if their client had any other reproductive health concerns/problems. Around 59% did not ask their client whether they knew/had heard about FP methods and 60% had not asked their client which FP method they are interested in and what they may know about that method. Additionally, around 55% out of 38 responses said they didn't provide information on the side effects of the method of choice.

The next criteria, **provider exploring client's situation and reproductive goals and needs,**

was also not met. Even though 76% of all client respondents were asked about their reproductive goals, more than 62% were not asked by the provider if they had any other reproductive health concerns/problems. Around 59% were not asked whether they knew/had heard about FP methods and 60% had not been asked which FP method they are interested in and what they may know about that method. Additionally, around 55% out of 38 responses said they didn't provide information on the side effects of the method of choice.

Table 4: Extent to which Service Provision Adheres to FP Procedure Manual

Variable	Yes		No	
	N	%	N	%
Maintains a positive provider/client interpersonal relationship				
Welcome, greet and make client comfortable	88	95%	5	5%
Determine purpose of the visit and explore if the client may have any additional special needs	41	44%	52	56%
Ask whether the client has come with the partner or close relative and whether she would like that person to be in the counseling room during session	33	35%	60	65%
Assure confidentiality of all the information discussed	44	47%	49	53%
Provider explores client's situation and reproductive goals and needs				
Ask client about her/his reproductive goals	71	76%	22	24%
Ask the client whether she has any other reproductive health concerns or problems	35	38%	58	62%
Ask the client what she/he knows or has heard about FP methods	37	40%	56	60%
Ask client which FP method s/he is interested and what she knows about this method	38	41%	55	59%
Provider talks about the following:				
Consistent and correct use of condoms can be very effective for contraception	77	95%	4	5%
Condoms are the only contraceptive method that also protects against STIs	36	92%	3	8%
Using condoms AND another FP method offers more protection from pregnancy than condoms alone	38	86%	6	14%
Any contraceptive method can be used if an individual and his or her partner are uninfected and mutually monogamous	17	59%	12	41%
There are types of sexual intimacy that can be satisfying yet do not spread STIs/HIV/AIDS	12	46%	14	54%
Delaying or avoiding sexual activity (abstinence) can be a good choice for some adolescents or unmarried adults	10	40%	15	60%
Provider gives information on the side effects of the method of choice	17	45%	21	55%

About 60% of the 92 respondents hadn't used a pregnancy prevention method other than a condom in the past three months. Among those who used a condom in the past three months, 67% had used a condom once, 14% had used a condom twice, 4% had used a condom three times, 6% had used a condom four times, and 9% had used a condom five times. Based on the combination of methods, 39% of the respondents had used a condom and another pregnancy prevention method in the past three months; injection and pills were the most used

method combination with condoms at 69% and 28% respectively. Among the respondents, 71% had talked to a health provider about FP with the methods most mentioned being condoms (68%), pills (65%), and injectables (60%).

A total of three respondents (4%) were given a referral for a FP method at the CTC. Of these, none were given a referral letter and only one mentioned having been escorted to the reproductive and child health clinic. When asked whether the health provider asked the client if they know how to protect against unwanted pregnancies, 69% responded affirmatively. Sixty-five respondents were counseled on dual protection, 74% of all respondents (table 5).

Table 5: FP Referrals and Counseling at the CTCs

	Yes		No	
	N	%	N	%
First day at clinic	13	14%	80	86%
Service received:				
A referral for a method today	3	4%	81	96%
Provider gave you a referral letter	0	0%	3	100%
Provider escorted you to the FP clinic	1	33%	2	67%
Provider asked you whether you know how to protect against unwanted pregnancies	56	69%	25	31%
Provider counseled you on dual protection	65	74%	23	26%

In the expanded facilitated referral model, the number of clients that were given a referral for FP was generally low. The number of HIV-positive clients counseled on FP was high throughout the health facilities with large variations among the numbers recorded for the six months (between March and August). Most of the health providers stated that maintaining the equipment was a mandate that was under the management of the health facility. So in cases of a breakdown, they reported the need for repairs to the health facility's management.

5.2.2 Efficient

FP supplies among four clinics in the expanded facilitated model were relatively stable. A TV/VCR, male condoms, penis model, and disposable needles and syringes were reportedly in supply, as well as FP flip charts and gloves. All four health facilities reported a stock out of female condoms and the female model for demonstration of condom use at the CTCs on the day of the study visit (figure 3).

Supply inventory was done at all the four health CTCs in Morogoro for a period of six months. In all four CTCs, female condoms and female model for demonstration were reportedly not available (figure 4).

Figure 3: Supply in stock on the day of the visit among four CTC sites that are providing expanded facilitated referral model in Morogoro Region.

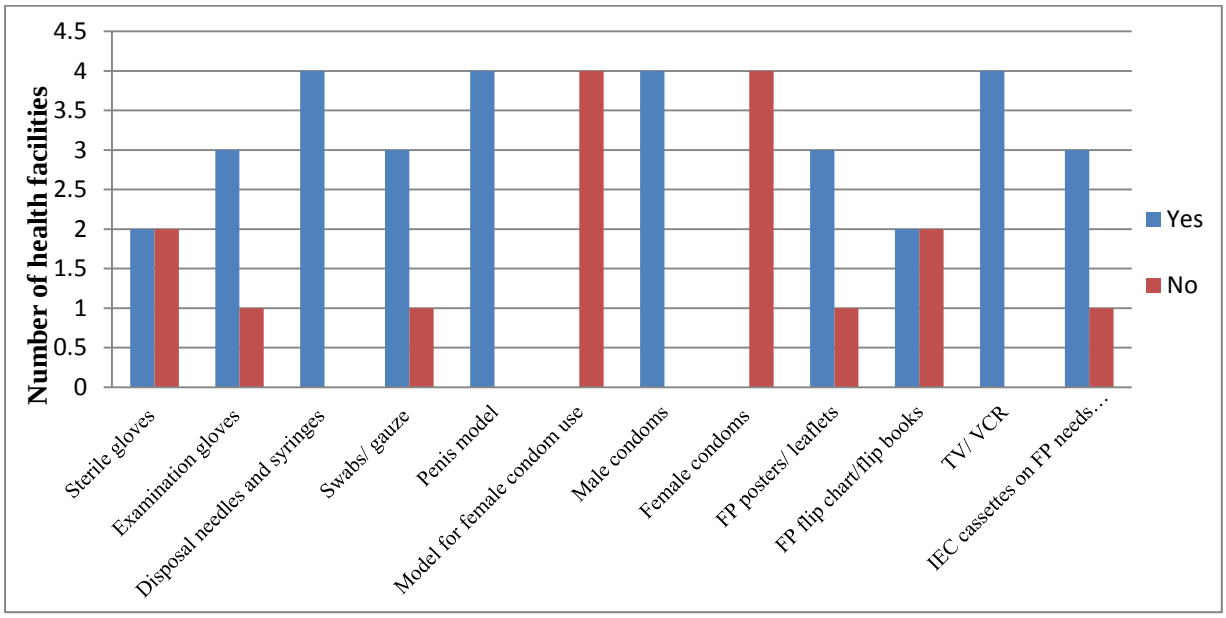


Figure 4: Supply stock outs at any time in the past six months (March to August), including the day of the visit among four sites providing expanded facilitated referral model.

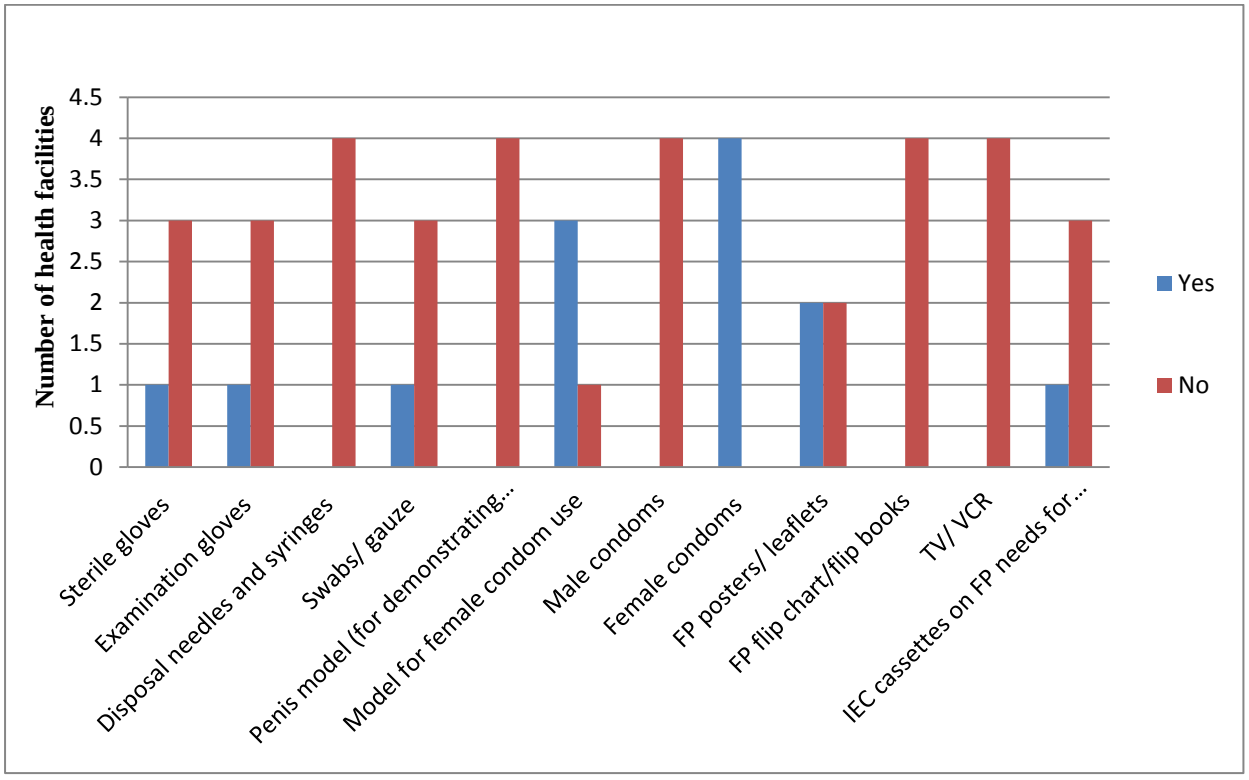
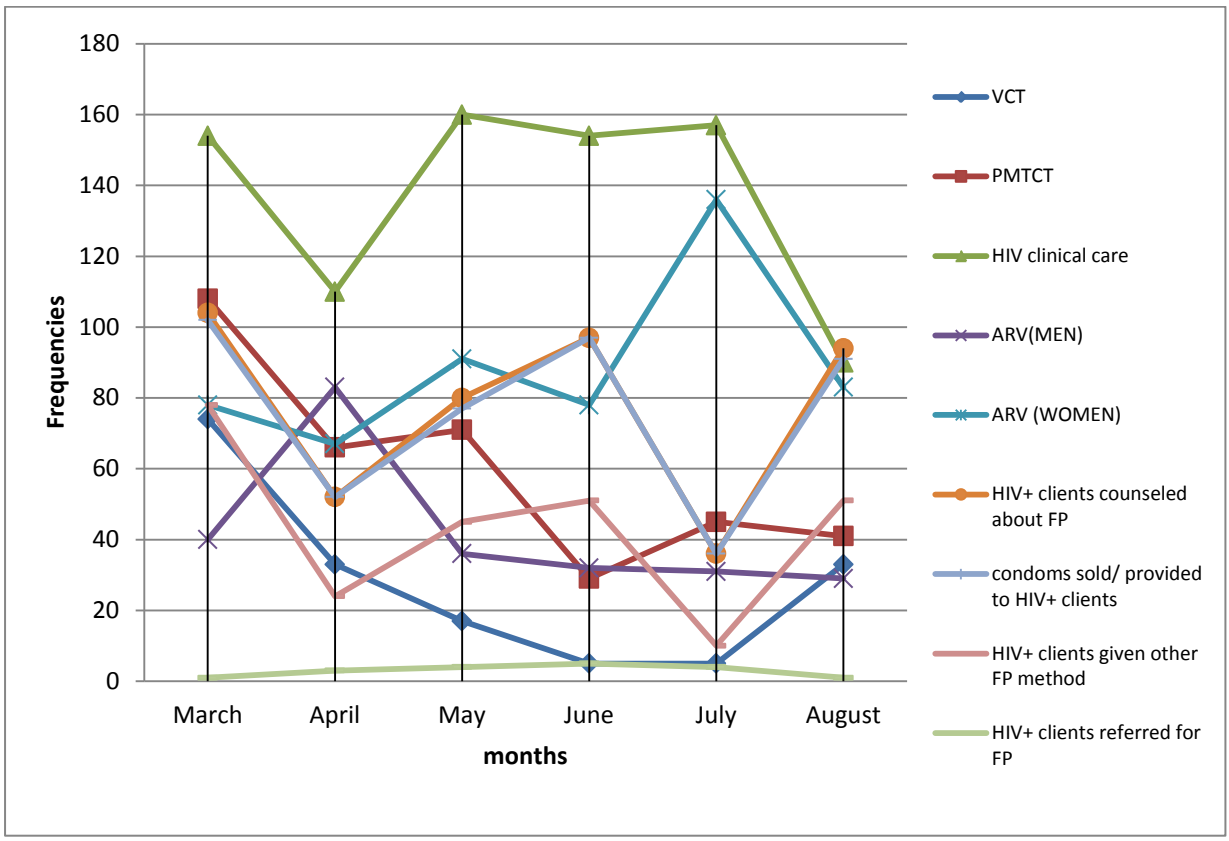


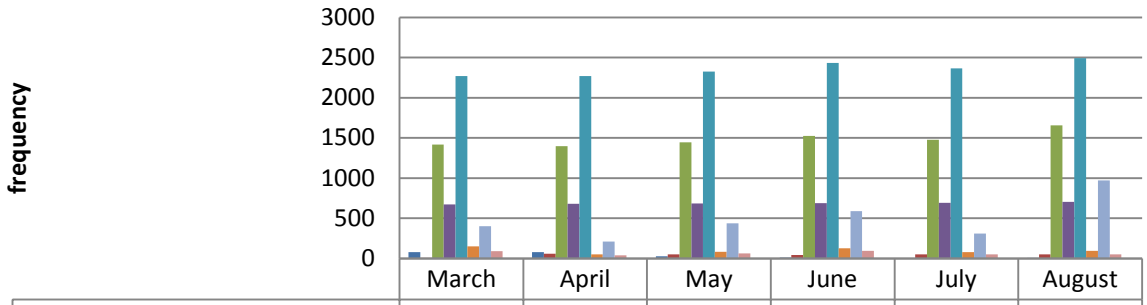
Figure 5: Trends of registered new service statistics for 6 months prior to the day of the visit among four sites providing expanded facilitated referral model.



The trend of service statistics for new clients in the Morogoro health facilities spanned six months, March through August (figure 5). HIV clinical care was the most popular service registered at all four CTCs over this period. HIV-positive clients counseled about FP were highest in March and lowest in July. Condoms sold/provided to HIV-positive clients were highest in March and lowest in July. The number of HIV-positive clients given other FP methods over this period was highest in the month of March and lowest in July. The least common service trend was for FP referrals.

The study also reviewed service provision statistics for follow-up clients at the CTCs in Morogoro (figure 6). Women seeking ARVs registered the most number of clients over the period. The total number of condoms sold/provided to HIV-positive clients was highest in August and lowest in April.

Figure 6: Service provision follow-up for clients at the CTCs in Morogoro for a period of six months.



	March	April	May	June	July	August
VCT	80	80	28	10	2	6
PMTCT	8	57	51	42	49	51
# enrolled in HIV clinical care	1418	1396	1445	1523	1475	1657
ARV(MEN)	672	680	685	688	694	703
ARV (WOMEN)	2269	2268	2324	2434	2366	2491
HIV+ clients counseled about FP	149	51	83	128	77	93
condoms sold/ provided to HIV+ clients	403	209	436	589	308	971
HIV+ clients given other FP method	90	37	62	96	52	52
HIV+ clients referred for FP	1	1	0	0	0	1

5.2.3 Accessible

Of the total respondents, 80% responded that this was not their first day at the CTCs in all the facilities that were visited. When asked what service they had received, 62% of the respondents were presenting for follow-up on ARV drugs, 34% were VCT clients, and 25% received FP services only. Three (4%) clients were referred for FP services and this was for IUD.

Table 6: Number of Visits and Services Received at CTCs.

	Yes		No	
	N	%	N	%
First day at clinic	13	14%	80	86%
Service received:				
VCT	32	34%	61	66%
PMTCT	6	6%	87	94%
Adherence counseling	4	4%	89	96%
ARV follow-up	58	62%	35	38%
Routine follow-up (not ARV)	10	11%	83	89%
Treatment of opportunistic infections	5	5%	88	95%
Starting of ARVs	7	8%	86	92%
Family planning	23	25%	70	75%

Table 7 shows the responses of the clients on the waiting time to see a health provider. Overall total of respondents was 93 clients and over 50% responded that they had to wait for

more than one hour to meet a health provider at CTCs. When asked to comment on the waiting time, 41% said that they were comfortable with it while 37% said that the waiting time for service provision was so long.

Table 7: Wait Time for Clients at Health Facilities for Service Provision

	N	%
How long did you wait between the time you arrived at this facility and when you were attended to by the health worker?		
Saw provider immediately	20	22%
Waited for a few minutes	19	20%
1-2 hours	27	29%
More than 2 hours	27	29%
Comment on the time you waited for before being seen by the service provider		
Normal queue at the clinic	14	19%
Service provision should start early at the clinics	2	3%
Long waiting for services	27	37%
Am satisfied with the waiting time	30	41%

5.2.4 Acceptable/Patient Centered

A total of 38 (41%) of respondents received an FP method. The most provided methods were injections (37%), pills (26%), and condoms (16%). Also, 8% and 5% of the respondents received IUD and implants, respectively. When asked who selected the FP method for the respondents, 58% had made a self-choice, 24% selected based on consultation with a provider, and 18% selected with the help of a relative. Overall, 92% of the respondents that received a FP method were satisfied with the method of choice.

Table 8: FP Service Provision by Method

	Yes		No	
	N	%	N	%
Given a FP method by a provider	38	41%	55	59%
Method received:				
Condom	6	16%	32	84%
Pill	10	26%	28	74%
Injectables	14	37%	34	63%
IUD	3	8%	35	92%
Implants	2	5%	36	95%
Vasectomy	0	0%	38	100%
Female sterilization	0	0%	38	100%
Tubal ligation	0	0%	38	100%
Lactational amenorrhea method (LAM)	0	0%	38	100%
Calendar	1	3%	37	97%
Standard days method	0	0%	38	100%

There were 27 respondents who needed clarification from a health provider were (42%); and of these, 77% were able to ask for clarification from a health provider. Over 50% of the respondents agreed that the provider had asked them whether they needed more clarification; and of these, 16 (71%) received the clarification that they needed. All the respondents were satisfied with the provider's explanations.

A total of 89 (96%) of the respondents said that the health providers at the CTCs were friendly. About 82% of the respondents agreed that they would recommend a friend to come for services at the CTCs. Only 41% of the respondents were given a pamphlet to read at home; most mentioned that the content in the pamphlets involved how to prevent HIV infection.

Table 9: Clarification Need among Respondents

	Yes		No	
	N	%	N	%
Needed clarification	35	38%	58	62%
Asked for clarification	27	77%	8	23%
Reason for not asking for clarification:				
More education should be given the next week	1	20%	NA	NA
Limited time	1	20%	NA	NA
Afraid of asking	3	60%	NA	NA

Note: NA = not applicable.

5.2.4 Equitable

Of the total respondents, 66 reported that they had been counseled about dual protection as opposed to the 27 who did not receive this information (table 10). The p-value for dual protection and sex of the respondents is 0.419, meaning this is statistically significant. A total of 63 respondents reported that the providers at the CTCs talked to them about FP that day: and of these, 57 were females and six were males. Twenty-five respondents said that they had not discussed FP with the providers and five did not respond. Overall, statistically, the p-value for this relationship between providers giving advice about FP and sex of the respondents is 0.093, which means that this is significant.

Table 10: Provider Advice to Clients about FP Methods

	Male: N (%)		Female: N (%)		P value
	Yes	No	Yes	No	
Were you counseled on dual protection?	6 (60%)	4 (40%)	60 (72%)	23 (28%)	0.419
Did your provider talk to you about FP today?*	6 (60%)	2 (20%)	57 (69%)	23 (28%)	0.093
What FP methods did the provider talk about?					
Condoms	4 (67%)	2 (33%)	41 (72%)	16 (28)	0.786
Pills	3 (50%)	3 (50%)	41 (72%)	16 (28)	0.266
Injectables	2 (33%)	4 (67%)	39 (68%)	18 (32)	0.086
IUD	3 (50%)	3 (50%	28 (49%)	29 (51)	0.967
Implant	1 (17%)	5 (83%)	16 (28%)	41 (72)	0.549
Male sterilization	0 (0%)	6 (100%)	5 (9%)	52 (91)	0.450
Female sterilization	0 (0%)	6 (100%)	5 (9%)	52 (91)	0.450
Natural FP (periodic abstinence)	0 (0%)	6 (100%)	0 (0%)	57 (100)	
LAM	0 (0%)	6 (100%)	8 (100%)	49 (86)	0.326
Standard days method	0 (0%)	6 (100%)	9 (16%)	48 (84)	0.293

Note: * Two men and three women did not respond to this question.

5.2.6 Safe

Of the total respondents, those who were asked where they needed further clarification during service provision were reported to be 53% (49 respondents) and those that received more explanations were 61% (table 11). About 87% of all respondents were satisfied with the explanations that they received from the service providers. During consultation, only 10% of the respondents were afraid that other clients would overhear their consultation with the provider, and 4% were afraid other clients would see the consultation. About 88% of the respondents were confident that the information that they shared with the doctor would be kept confidential. About 82% of the total respondents during this study indicated that they would encourage a friend or relative to come to this facility for FP/HIV care and treatment services. Overall, 96% (89 respondents) of the respondents were happy with the client-provider relations at the care and treatment centers.

Table 11: Respondents' Response during Consultation with the Provider

	Yes		No		Not Sure	
	N	%	N	%	N	%
Provider asked whether you wanted more clarification	49	53%	44	47%	0	0%
Gave you more explanations after this	57	61%	33	35%	3	3%
Explanations satisfied you	80	87%	12	13%	0	0%
Do you think that during the consultation:						
others could hear what you were talking about?	9	10%	71	76%	13	14%
others could see what you and the doctor were doing?	4	4%	84	90%	5	5%
information you shared with the provider about yourself today will be kept private and confidential?	82	88%	8	9%	3	3%
provider was friendly?	89	96%	4	4%	0	0%

Figue 7 shows that, among the four health facilities that were visited in Morogoro, most equipment was available. None of the health facilities had a lamp that can be moved for pelvic examination. We also looked at whether equipment was in a good working condition. Most equipment was working very well, except for the thermometer (figure 8).

Figure 7: Equipment availability among four sites providing the expanded facilitated referral model.

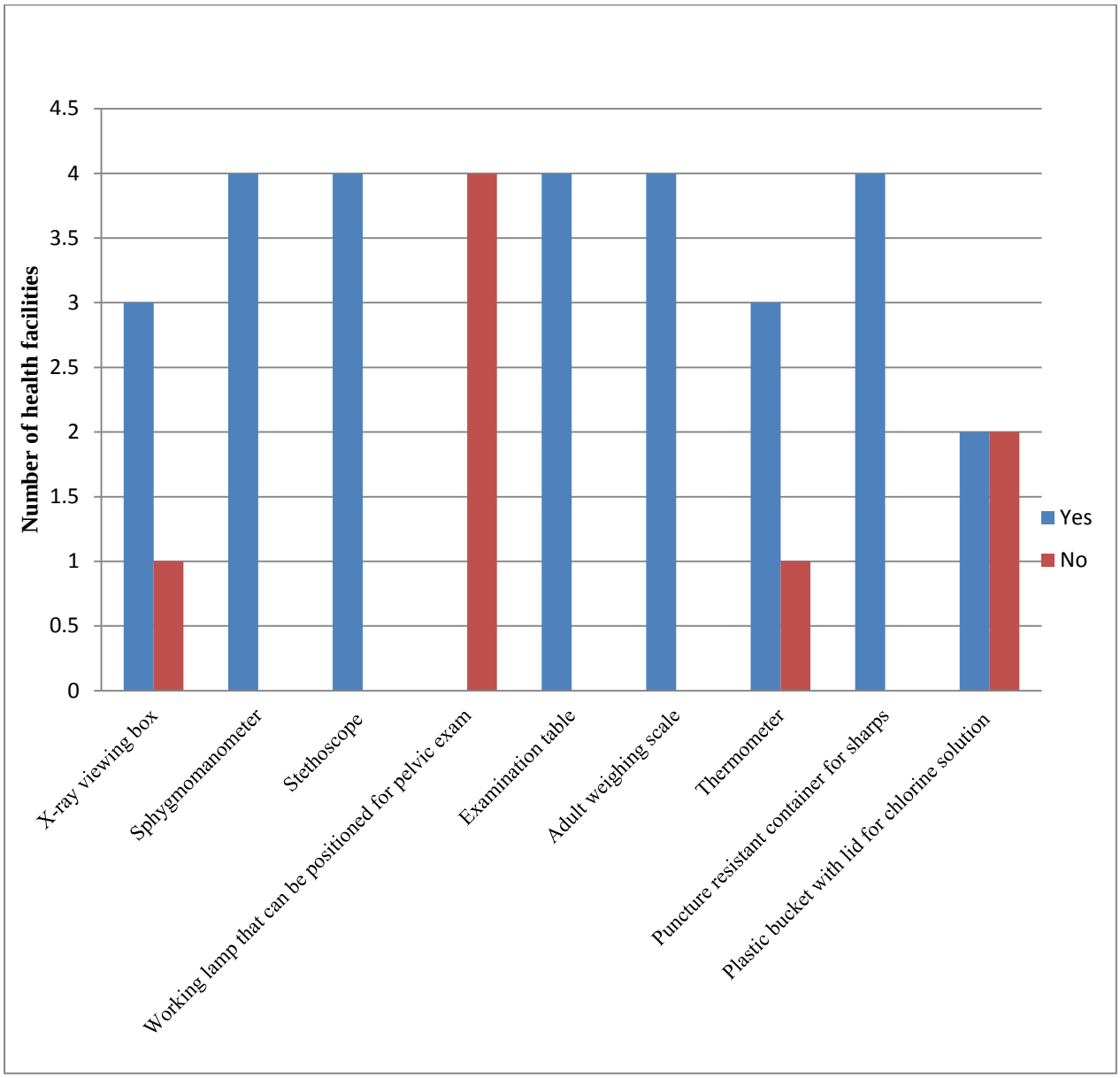
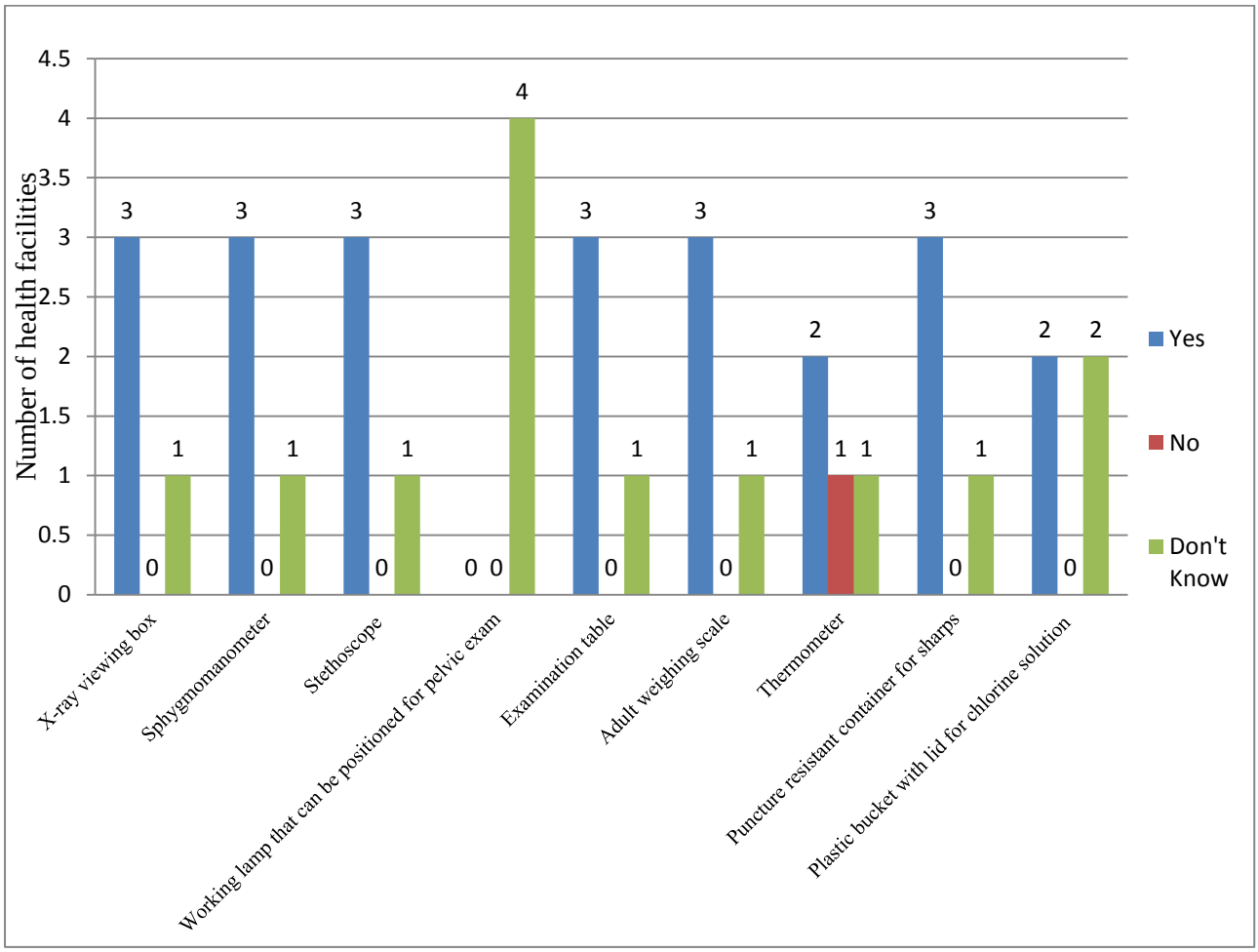


Figure 8: Equipment operability on the day of the visit among four sites providing the expanded facilitated referral model.



6.0 Discussion

The provision as well as the quality of FP services is crucial to saving the lives of newborns and mothers. Providing FP services at CTCs helps to bring services nearer to people; in this case, HIV-positive clients. This study assessed the quality of FP services in HIV/AIDS CTCs in Tanzania. It was carried out in two regions of mainland Tanzania (Morogoro and Iringa) covering eight health facilities. The main emaphasis was put on the expanded facilitated referral model, which is intended to screen clients for risk of unintended pregnancies, educate clients on available FP methods, counsel on safer pregnancy, provide short-acting methods, provide and record referrals to an FP clinic, and accompany clients to an FP clinic. This study would then provide more evidence for the MOHSW to continue with the integration model of HIV/AIDS services at the CTCs throughout the rest of the country.

When looking at the dimensions of quality of care, we considered the defination as categorized by the WHO in six areas:

Effective: Within the health facilities, there was a significant shortage of health providers as compared to the number of clients. As a result, providers do not have enough time to go through all the procedures spelt out for service provision. This lack of personnel and refresher training may make it difficult to follow all the laid out procedures for these providers and also listen to each client's needs. Indeed, the crisis in adequate human resources for health and limited on-the-job training constitute a burden for many health-care workers in other health-care sectors, as it has been described earlier in other studies (Dieleman et al., 2007).

Efficient: Resource allocation is problematic within health facilities. The supplies of materials in these facilities is usually less than that which is required to cater to the client load at the time and restocking takes time since most of the supplies are based on a quarterly basis. With the little that is at these CTCs, they are able to serve all their clients though sometimes they may have to strain beyond the level that they can afford.

Accessible: In general, the components needed to make delivery of health care accessible ─ time, geographical location, provider skills and resources ─ are inappropriate. Most of the clients at the health facilities need to travel long distances in order to access health care services at the CTCs. The waiting time to see a provider is too long with clients having to wait on average an hour to see a provider. Most health providers lack adequate skills and do not have access to on-the-job training for service provision, which hampers the service provision.

Acceptable/patient centered: The study shows that the services that are provided at these health facilities take into consideration the preferences and aspirations of individual service users and the cultures of their communities. The clients responded that they received the service that they wanted. Also, clarification was given to the clients who sought more information about the services that were provided at the CTCs. Overall, clients were not able to ask individual questions in case they need to since most of the questions are answered during the open health classes that are held on a weekly basis, where a provider explains FP/HIV services to clients. It is during this period that clients are given an opportunity to ask for clarification if needed.

Equitable: The largest gap in equitable service provision is shown in the area of gender. The provision of integrated FP/HIV/AIDS services at the CTCs takes into the consideration of gender basis of the clients. Overall, more females access health services at health facilities as compared to their male counterparts. This is mainly because men are not willing to seek health care in fear of stigma from the community. This leads to lack of information on service provision among males. More effort is needed to encourage men come for health lessons at the health centers.

Safe: The study found that most of the health facilities have reliable equipment at the CTCs. This helps make the work of service providers simpler and reduces inefficiencies. In addition to reliability, other equipment issues include timely supply of needed equipment and risk of infections through contamination, although these aspects were beyond the scope of the study.

7.0 Conclusion

There is a general need for more human resources of different cadres at the CTCs. Although some providers are following the procedure manual for service provision, there is still a need to carry out continous training and dessimination of knowledge to the providers. There is a need for equipment and supplies at the CTCs since there were noticeble deficiencies at most health facilities.

Policy implications: Our study indicates that the government should put more effort into sensitizing the providers to recognize the importance of offering integrated services at the CTCs, and this should go hand in hand with finding the best ways to train health providers, as well as assuring adequate supplies and equipment.

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