INVESTIGATING USER-FRIENDLINESS OF THE SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG YOUTH IN BOTSWANA

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Abstract. The objectives of this study were to investigate the extent of user-friendliness of sexual reproductive health services offered in Botswana. A cross-sectional study was conducted among 110 youth. A self-administered questionnaire was used to assess the friendliness of the health providers, health facility and program design using a 5-point Likert scale. The mean age of the participants was 22.1 (SD = 3.5) years. A third (33%) of participants perceived the referral system as not being youth-friendly and/or not adequate. The majority of participants (84.2%) agreed or strongly agreed that the health providers greeted youth receiving sexual and reproductive health services in a polite manner with 89.2% either agreeing or strongly agreeing that health providers told youth to return if they had concerns and 91.9% encouraging them to ask questions. More than a quarter (26%) indicated the health providers had no respect for youth; 27% of the response variables were rated lowest among the variables used to assess the friendliness of the health facility. Almost two-thirds (64%) of respondents indicated the waiting time was excessive. Fifty percent felt the sex and reproductive health services had inadequate publicity. Health provider attitudes had the greatest impact on youth perceptions (Odd ratio = 11.81; $p < 0.05$). Although the sexual and reproductive health service in Botswana is doing well, there are still some few weaknesses that need to be addressed, particularly working hours, and publicity of the sexual reproductive health services and information.

Keywords: sexual and reproductive health services, user-friendliness, Botswana

INTRODUCTION

Promoting sexual and reproductive health (SRH) and the rights of young people remain serious public health challenges. People under age 25 years represent nearly half the world's population, giving them a powerful role in the world's health and future (Advocates for Youth, 2005). The period between 10 and 29 years is a transition period from childhood to adulthood. It is a phase in which young people are vulnerable to health risks, particularly related to sex and reproduction. A study lamented the lives of youth aged 15 and 24 years seems to be overshadowed by reproductive health issues, unintended pregnancies, HIV and other sexually

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transmitted infections (STIs) (Advocates for Youth, 2005). Worldwide, about 6,000 youth aged 15 to 24 years become infected with HIV each day. A study by Advocates for Youth found young people have more than 100 million STIs each year and young women experience high rates of unintended pregnancies; for example, 40% of pregnancies are unintended in Latin America and the Caribbean, and in sub-Saharan Africa the percentages vary from 11 to 77% (Advocates for Youth, 2005).

Young people face many challenges when they seek reproductive health services. These include policy constraints, operational barriers, lack of information and a feeling of discomfort or embarrassment by youth (Senderowitz, 1999). Researchers have found young people encounter health providers who are judgmental, rude and denied them services, especially at government-owned maternal and child health/family planning facilities (Erulkar *et al*, 2005). One study found British adolescents did not seek help even when they had serious health concerns, especially when they had sexual health concerns (Booth *et al*, 2004). Adolescents seek help from pharmacies without divulging the condition they are suffering from (Kibombo *et al*, 2008). In one study, youth in Uganda and Nigeria were not treated the same as their older counterparts when seeking reproductive health care from health providers (Erulkar *et al*, 2005). The same study found that 12% of Zimbabwean adolescents felt the youth-friendly clinic was too far (Erulkar *et al*, 2005). In a study from Uganda, the cost of services was a barrier to obtaining contraceptives (African Youth Alliance/ Pathfinder, 2003). Another study from Zimbabwe reported the same result: the reason why Zimbabwean adolescents did not use reproductive health services was the services were too expensive (Erulkar *et al*, 2005). The same study found 44% of adolescents were not using sexual reproductive health services because they did not know where to obtain such services (Kibombo *et al*, 2008). The United Nations Population Fund (UNFPA) Country Program focuses on Adolescent Sexual Reproductive Health and one of the focus areas was to increase access to youth-friendly reproductive health services (Lawson, 2001).

In Botswana both the Ministry of Health (MOH) and the Ministry of Local Government are responsible for providing health care at different levels of the health system. The country has a six-tiered health care delivery system: mobile stops, health posts, clinics, primary hospitals, district hospitals and referral hospitals (Mogobe *et al*, 2007; CSO, 2007). The MOH runs the primary, district, and referral hospitals, sets national polices and is responsible for health personnel training, while the Ministry of Local Government manages the clinics, health posts, and mobile stops (Mogobe *et al*, 2007). The hospitals are open 24 hours a day and the clinics are open from 7:30 AM to 4:30 PM (with someone on call to attend to emergencies) (Mogobe *et al*, 2007). Health services are virtually free at the public facilities, requiring only a nominal charge of 5 Botswana Pula (USD 0.70 at the exchange rate of 1 USD=7.2 Pula). It is worth noting the maternal child health and family planning services are exempted from the nominal fee.

Non-Government Organizations (NGOs), the Botswana Family Welfare Association (BOFWA) and the Young Women's Christian Association (YWCA) have been providing information and services obout sexual reproductive health to young people in Botswana. BOFWA was founded

in 1988 through a sponsored workshop by the World Bank; the organization obtains technical assistance from the International Planned Parenthood Federation (IPPF). The goal of the BOFWA program is to promote SRH to improve the quality of life of the general population, especially among youth, through the establishment of a wide range of user-friendly services. It should empower youth with sexual and reproductive health information and services, population education, and life/survival skills for informed decision making and responsible living. BOFWA runs programs targeting young people. Services provided include: family planning, voluntary counseling and testing (VCT), antenatal care, and diagnosis and treatment of sexually transmitted infections (IPPF, 2010).

Over a third of the population of Botswana is infected with HIV/AIDS. In Botswana, adolescents and youth are at risk of substance abuse, delinquent behavior, depression-suicide, sexual abuse and sexual risk taking behavior, resulting in unplanned pregnancies and acquiring STIs including HIV (Mogobe *et al, 2007*). The need for SRH services for young people is crucial since the entrance of western culture has lead to abolition of initiation schools in Botswana (*bogwera* and *bojale*), which were involved in a rite of passage from childhood to adulthood, where guidance about adulthood was imparted, including responsible sexual behavior. The services need to be comprehensive youth-friendly services that are attractive to young people, meet their needs comfortably, responsibly, and succeed in retaining those young clients for continuity of care (CSO, 2007). Another study from Botswana concurred that youth often cited health provider's attitudes and lack of adolescent SRH skills as being partially responsible for their low patronage of existing health facilities (MOH, 2005). Therefore, drawing on recognized aspects of youth-friendly services this study investigated the relative friendliness of various aspects of services at BOFWA clinics in Gaborone and Kanye to complement the program evaluation report by African Youth Alliance-Botswana. Although BOFWA clinics have taken the initiative in providing youth-friendly services there is little research done to assess the friendliness of such services. The study aimed to investigate the user-friendliness of SRH services offered at BOFWA facilities through a youth survey.

MATERIALS AND METHODS

Study setting

Botswana is an upper-middle-income country in sub-Saharan Africa. It is a landlocked country in southern Africa bordered on the west by Namibia, with South Africa to the south and southeast, Zimbabwe to the northeast, and Zambia and Angola to the north. About 60% of the population is urban. Setswana is the national language and English the official language. BOFWA has 5 stand alone public operating youth friendly clinics, 3 in the southern region of Botswana and 2 in the northern region of Botswana. Two sites were randomly selected for the study. Gaborone and Kanye were used for the study. Gaborone is the capital city of Botswana. The city is in the southeastern corner of Botswana, 15 km from the South African border. The city has government health facilities ranging from referral hospitals to clinics, a private health facility and one BOFWA center that offer youth-friendly services. Kanye is located in southern Botswana. It is a suburban village, which

is in the administrative and commercial center of the Ngwaketse District. Kanye has a mission hospital that operates at a district level, clinics and a BOFWA center that solely serves adolescents and youth. Kanye/Moshupa District is the catchment area for Kanye Health facilities, including Kanye Youth-Friendly Clinic.

Study design and study population

A cross-sectional quantitative study was conducted. The population of youth was obtained from the Central Statistics Office, 2005 Population Projection for Botswana 2001-2031. Botswana is divided into districts and sub-districts, Gaborone and Kanye/Moshupa are districts that that represent youth who utilize the Kanye Youth-Friendly Clinic. The projected youth population for the Gaborone District for 2008 was 106,824 and for the Kanye/Moshupa District was 42,928. The study population included all youth in Gaborone and Kanye/Moshupa districts (Senderowitz *et al*, 2003). The target populations are youths who utilized the services of the two youth-friendly clinics for a one year period: 5,200 in Gaborone Youth-friendly Clinic and 4,990 in Kanye Youth-friendly Clinic. Young people aged 15 to 29 years old were the target age participating in the survey.

Sample size

Minimum sample size for the study was calculated using the Epi-Info software program. For Gaborone, we considered the proportion factor as 20%, with the worst acceptable result as 12.6% and a 95% confidence level, giving a sample size of 112. For Kanye/Moshupa, we used 8.6% as the proportion factor, with the worst acceptable result as 3.5% and a 95% confidence level giving a sample size of 116.

Sampling procedure

The researcher sampled youth who had utilized the SRH services twice or more to obtain information about the services. This convenient sampling method was used to recruit participants for the study.

Exclusion and inclusion criteria

Persons aged < 15 years or > 29 years were excluded from the study. Young people aged 15-29 years who had visited the facilities more than once were included in the study.

Ethical considerations

Ethical clearance for the study was obtained from the Medunsa Campus Research and Ethics Committee of the University of Limpopo (Medunsa Campus) in South Africa (MREC/PH/140/2008:PG). Permission to conduct the study was granted by the Health Research Development Committee, Ministry of Health Botswana. Permission to conduct the study and recruit participants was also obtained from clinic headquarters in Gaborone, Botswana. Informed written consent was obtained from all participants prior to inclusion in the study. Confidentiality of participants was maintained at all times. To maintain confidentiality no identifiers were used in the questionnaires. Participation was voluntary and participants were informed they could withdraw from the study at any stage.

Data collection tools and procedures

A self-administered questionnaire was used to collect data. The questionnaire was self-developed based on the characteristics of Youth Friendly Services adopted from Senderowitz *et al* (2003) and a Mystery Client Interview Guide, which was used to assess the friendliness of SRH services and facilities in Botswana (Senderowitz *et al*, 2003; African Youth Alliance-Botswana, 2005). The first section obtained demographic information about

the participants. Health provider characteristics, including impression of staff, respect for young people, privacy honored, adequate time, provider interaction, and availability of peer counselors were asked about in the second section. The health facility characteristics, including space for counseling, convenient hours, convenient location, adequate space, sufficient privacy and comfortable surroundings were asked about. The characteristics of the program, youth involvement in their design, ability to give feedback, the ability to be seen without an appointment, the rapidity of being seen, lack of overcrowding, affordability, publicity, accessibility to men, the range of services available and the availability of referrals were asked about. A 5 point Likert scale ranging from strongly disagree to strongly agree, was used to assess subject reactions.

The questionnaire was translated into the local Setswana language and pretested using 20 patients at another health facility not included in the study to identify gaps and modify the questionnaire appropriately. The questionnaire was then pilot tested and modified to ensure it answered the research questions.

Data analysis

Data were entered into a Microsoft Excel spreadsheet and exported into SPSS version 13.0 (SPSS, Chicago, IL) for analysis. For closed ended questions a 5 point Likert scale was used rating the subjects' agreement or disagreement with the statement; responses ranged from strongly agree to strongly disagree. Each response was translated into a numerical value. Strongly agree was coded as 2 and strongly disagree was coded as -2. The scale was revised for negatively worded questions. Each section's responses were averaged to obtain the general picture for the characteristics being measured. For each response means and standard deviations were calculated. Scoring the user-friendliness of each aspect of the services was based on a 5 point Likert scale in which fewer points were assigned for less user-friendliness and more points were assigned for greater user-friendliness.

The results were summarized using descriptive statistics as mean (SD) for continuous variables and percent for categorical variables. Chi-square tests for associations and binary logistic regression were used to evaluate associations and predictive power of selected variables. In order to compute this analysis, the responses were arranged dichotomously (strongly agree and agree) as youth-friendly and (uncertain, disagree and strongly disagree) as not youth-friendly. A p-value < 0.05 was considered significant.

RESULTS

A total of 110 participants participated in the study at two sites in Botswana. The mean age of the participants was 22.08 (SD = 3.48) years. More females (59%) utilized the service than males. Table 1 shows a summary of the socio-demographic characteristics. Over half of participants (55%) had attained a secondary education, 97% were single and 76% were unemployed.

Perceptions of SRH services

Participants were asked how they perceived the sexual and reproductive health services provided at the facilities. Table 2 summarizes the perceptions toward SRH services. Ninety-one point eight percent agreed or strongly agreed the SRH services were meant for them; 92.7% indicated the services offered were important for healthy individual development. Ninety-six point four percent of

Table 1
Socio-demographic characteristics of participants.

Variable	*n*	Percentage
Age (years)		
15-19	26	24
20-24	55	50
25-29	29	26
Average age (SD)	22.08 (3.48)	
Sex		
Male	44	41
Female	63	59
Marital status		
Single	107	97
Married	3	3
Education		
None	1	1
Primary	5	5
Secondary	59	55
Tertiary	42	39
Employment		
Unemployed	83	76
Employed	26	24

participants agreed or strongly agreed they would recommend this facility to their friends. Overall, the participants had a positive perception toward SRH services (mean score of 1.29). The response variables of issuing contraceptives and condoms and recommending the facility to friends were rated highest, while the response variable referral to other health facilities for SRH services were rated lower (mean = 0.80). The responses were also analyzed dichotomously as youth-friendly (strongly agree and agree) and not youth-friendly (uncertain, disagree and strongly disagree). Most of the participants rated the services as youth-friendly. Thirty-three percent of participants perceived the referral system as not youth-friendly and/or not adequate (Table 2).

Health providers' attitudes

Participants were asked to rate health provider's attitudes. Table 3 shows the participants' ratings for health providers' attitudes. Eighty-four point two percent of participants agreed or strongly agreed health providers greeted youth receiving sexual and reproductive health services in a polite manner. Eighty-nine point two percent of participants said health providers told youth to return if they had concerns and 91.9% said providers encouraged youth to ask questions. Of the characteristics assessed, judgmental attitudes and friendliness of the health providers were rated lower than the rest, with mean scores of 0.96 and 0.95, respectively. Health provider's attitudes were also judged to be dichotomous (youth friendly and not youth friendly). Ninety-two percent said health providers encouraged youth to ask questions but 26% indicated health providers had no respect for youth.

Health facility characteristics

Table 4 summarizes participants ratings of the health facility characteristics. Seventy-seven point seven percent stated the auditory privacy was adequate for counseling at this clinic. Eighty-two point two percent agreed or strongly agreed the visual privacy was adequate for examinations at this clinic. Twenty-seven percent of the responses rated the friendliness of the health facility as low. Operation hours received the lowest rating.

Program design characteristics

The participants ratings of the program design characteristics are shown in Table 5. Sixty-four percent of respondents stated the waiting time was excessive. Fifty percent stated the publicity of sex and reproductive health services was enough. The participants rated the friendliness of the program as low.

Table 2
Perceptions of youth about SRH services offered.

Statements	Rating %				Descriptive				Youth friendly %	
	SD	D	U	A	SA	*N*	Mean	SD	YF	Not YF
I feel that SRH services are meant for me.	2.7	2.7	2.7	31.0	60.9	110	1.45	0.89	92	8
Services offered are important for healthy individual development.	1.8	1.9	3.6	31.8	60.9	110	1.48	0.81	93	7
I would recommend this facility to any of my friends.	1.8	0.0	1.9	35.8	60.5	109	1.53	0.71	96	4
SRH information meets my needs.	0.0	4.5	13.6	39.1	42.7	110	1.20	0.84	82	18
Counseling services meet my needs.	0.0	5.5	9.1	45.4	40.0	110	1.20	0.82	85	15
Issuing of contraceptives meets my needs.	1.8	3.7	3.7	21.1	69.7	109	1.53	0.88	91	9
Treatment of SRH problems met my needs.	0.0	3.7	6.4	38.5	51.4	109	1.38	0.77	90	10
Referral to other services met my needs.	2.8	11.0	19.3	37.6	29.3	109	0.80	1.07	67	33
I will visit the clinic more than once.	1.8	3.7	16.5	45.0	33.0	109	1.04	0.90	78	22
Aggregate of perceptions							1.29	0.49	77	23

SD, strongly disagree; D, disagree; U, uncertain; A, agree; SA, strongly agree; YF, youth-friendly; Not YF, not youth-friendly; SD, standard deviation

We found the perceptions of the services provided by the facilities were significantly associated with how they rated the health facility characteristics, health provider attitudes and program design characteristics (Table 6). The health provider attitude was the most significant predictor of youth perceptions (Odds ratio = 11.81; $p < 0.05$) (Table 7).

DISCUSSION

The study investigated the extent of the user-friendliness of SRH services offered at two sites in Botswana. There is a growing recognition worldwide that "youth friendly" SRH services are needed. The services must be able to attract young people and influence behavioral change in the community. SRH services for youth need periodical evaluations to ensure they continue to be relevant and achieve intended goals.

In the present study, the overall perceptions of youth about the services were positive, but there were certain variables rated low by youth. These were inadequate referral services and work hours. Regardless of how well designed the SRH programs are marketing

Table 3
Participants' rating of health provider attitudes.

Statements	Rating %				Descriptive				Youth friendly %	
	SD	D	U	A	SA	*N*	Mean	SD	YF	Not YF
Health providers greet youth seeking sexual and reproductive health services in a polite manner.	0.9	7.3	7.3	28.5	56	110	1.32	0.96	85	15
Health providers respect youth.	4.5	9.1	12.7	25.7	48	110	1.04	1.18	74	26
Health providers assure confidentiality of youth.	2.7	6.4	16.4	29.5	45	110	1.08	1.06	75	25
Health providers allocate enough time for youth interaction.	0.8	11	14.8	32.4	41	108	1.01	1.05	73	27
Health providers are friendly.	6.4	9.1	11.4	29.1	44	110	0.95	1.23	73	27
Health providers are not judgmental.	5.1	7.3	15.5	29.1	43	110	0.96	1.17	72	28
Health providers are willing to listen.	1.8	6.4	10.7	29.1	52	110	1.23	1.00	81	19
Health providers tell youth to return if they have concerns.	0.9	4.6	5.3	31.2	58	109	1.40	0.86	89	11
Health providers give relevant info to youth needs.	2.7	3.4	6.3	43.6	44	110	1.22	0.92	87	13
We are encouraged to ask questions.	1.8	0.9	5.4	30.9	61	110	1.48	0.80	92	8
Aggregate							1.17	0.64	68	32

SD, strongly disagree; D, Disagree; U, uncertain; A, Agree; SA, strongly agree; YF, youth-friendly; Not YF, not youth-friendly; SD, standard deviation

is critical. Researchers have found most adolescents did use reproductive health services because they did not know where to get them (Erulkar *et al,* 2005). There were substantial differences in the rating of friendliness. Participants perceived SRH services positively; they felt SRH services are of paramount importance for their development of healthy individuals. In Botswana, as outlined in the Policy Guidelines and Service Standards: Sexual and Reproductive Health (2005), all persons of reproductive age, regardless of age or marital status, should have the fundamental right to determine for themselves how many children to have and when to have them (MOH, 2005). This is practical in Botswana as evidenced by the majority of participants in this study responding positively about the supply of contraceptives, including condoms. Another study found youth felt welcome to use all SRH services, with the exception of family planning services (CSO, 2005). In some countries, there are restrictions by law regarding access to specific commodities, thus limiting youth's access to such services. In some African countries

Table 4
Participants' ratings of health facility characteristics.

Statements	Rating %				Descriptive				Youth friendly %	
	SD	D	U	A	SA	*N*	Mean	SD	YF	Not YF
There is separate space for different services offered at this clinic.	2.6	5.5	16.5	40.4	35	109	0.99	1.00	75	25
Operating hours are suitable.	11	16	20.9	35.1	17	110	0.31	1.25	52	48
It is easy to get to this clinic.	1.8	3.6	5.4	48.2	41	110	1.23	0.85	89	11
Auditory privacy is adequate for counseling at this clinic.	4.5	3.3	14.5	32.7	45	110	1.09	1.07	77	23
Visual privacy is adequate for examinations at this clinic.	3.7	6.5	9.6	35.2	45	108	1.12	1.07	81	19
Special times are set aside for our special concerns at this clinic.	3.6	5.5	34.9	30	26	110	0.70	1.04	56	44
The surroundings are comfortable at this clinic.	1.9	7.4	7.8	50.9	32	108	1.05	0.93	83	17
The setting of this clinic is youth appealing.	3.2	8.2	17.3	37.3	34	110	0.89	1.08	71	29
Aggregate							0.92	0.59	47	53

SD, strongly disagree; D, Disagree; U, uncertain; A, Agree; SA, strongly agree; YF, youth-friendly; Not YF, not youth-friendly; SD, standard deviation

health providers impose age restrictions on providing family planning methods, including condoms, even though such restrictions are medically unjustifiable (Erulkar *et al,* 2005).

At times it is not possible to provide services that meet the needs of youth. In such situations referral systems need to be functional, where youth are referred, they need to be treated in a friendly manner. Participant ratings indicate the referral system was negatively perceived by the majority of the participants, denoting a lack of friendliness regarding that particular service. Poor referral systems can affect the friendliness of services offered to youth in a youth-friendly clinic. The findings from this study suggest the referral system of the youth-friendly clinics is poor.

There is need for staff who work sensitively with youth, creating youth-friendly services. A study from Zimbabwe reported youth services were made friendlier by training nurses and creating youth corners where youth could obtain information from peers concerning reproductive health issues (Erulkar *et al,* 2005). We found the health provider's attitude was the most significant predictor of friendliness of services. A health provider's attitude can influence'a youth's access to services that allow them to safely make informed decisions concerning their reproductive health (CSO, 2007).

Some students listed health provider's unfriendliness and judgmental attitudes as barriers to accessing services.

Table 5
Rating of program design characteristics.

Statements	Rating %				Descriptive				Youth friendly %	
	SD	D	U	A	SA	*N*	Mean	SD	YF	Not YF
Publicity of sex and reproductive health services is adequate.	6.5	15	28.2	34.3	16	108	0.38	1.12	50	50
Youth are directly involved in determining delivery of sexual and reproductive health services.	4.5	7.6	20.9	40	27	110	0.78	1.07	67	33
We always get feedback from input we made.	2.7	15	21.8	40.5	20	110	0.59	1.06	60	40
Supply of commodities (condoms, hormonal contraceptives) is sufficient.	3.6	15	21.8	34.5	25.1	110	0.64	1.12	60	40
Fees are affordable.	6.5	4.6	16.6	46.3	26	108	0.81	1.08	72	28
Drop in clients are welcome.	5.6	5.6	24.1	29.7	35	108	0.83	1.14	65	35
Waiting time is not excessive.	18	23	23.1	25	10.9	108	-0.11	1.28	36	64
A wide range of services are available at this clinic.	6.4	6.4	16.1	43.1	28	109	0.79	1.11	71	29
There is no overcrowding at this clinic.	6.4	16	19.3	29.3	29	109	0.60	1.24	59	41
Our partners are welcomed.	3.2	3.7	14.7	28.4	50	109	1.17	1.05	78	22
Aggregate							0.58	0.44	20	80

SD, strongly disagree; D, disagree; U, uncertain; A, agree; SA, strongly agree; YF, youth-friendly; Not YF, not youth-friendly; SD, standard deviation

Other studies have found health providers negative attitudes towards youth seeking sexual reproductive health services have a negative impact on access (Senderowitz, 1999; CSO, 2005). One study found young people came across health providers who were judgmental, rude or denied services, more often at government-owned maternal and child health/family planning facilities (Erulkar *et al*, 2005). One study found health providers shouted at youth or criticized them for being sexually active when they sought sexual reproductive health care (African Youth Alliance/ Pathfinder, 2003). This was evident in this study where 27% of respondents stated health providers were not friendly to youth seeking SRH services. One study found health care providers were biased against adolescent sexual activity or found it difficult to relate to adolescents in a respectful way (CSO, 2007).

Privacy and convenient hours and locations are crucial for youth recruitment and retention, especially for first time users, those who are marginalized and those not sexual active. The researcher found the health facilities were not user-friendly. Clinic hours and special times for different services were listed as barriers by youth. These results are similar to other studies. We found the locations were accessible but the hours (07:30-15:30) were not convenient. Clinic hours coincided with work

Table 6
Association between youth perceptions of SRH services offered and facility, health provider and program design characteristics.

Youth perceptions of youth friendliness	Number	Percentage	*p*-value
Health facility characteristics	52	47	<0.001
Health provider characteristics	75	68	<0.001
Program design characteristics	22	20	<0.001

Table 7
Logistic regression for youth perceptions regarding SRH services offered and facility, health provider and program design characteristics.

Variables	B	*p*-value	Odds ratio	95% CI of odds ratio
Health provider attitude	2.469	<0.001	11.813	3.306; 42.202
Health facility characteristics	0.988	0.201	2.685	0.590; 12.212
Program design characteristics	1.120	0.207	3.066	0.539; 17.455
Constant	-0.530	0.156	0.588	

and school hours. Young people have reported they would prefer afternoon and evening hours (African Youth Alliance/ Pathfinder, 2003). Non-convenient hours are a barrier to access to SRH services (CSO, 2007).

Involving youth in program design empowers youth increasing uptake of SRH services. Response variables regarding friendliness of program design characteristics were mostly low. Lack of adequate publicity of SRH services is still a barrier to access of services. The AYA-Botswana evaluation report on Youth-Friendly Services in Botswana indicated a need for publicity of youth-friendly services and availability of outreach and peer providers or counselors (African Youth Alliance-Botswana, 2005). It is not surprising for Botswana; AYA/Pathfinder found a lack of information regarding availability of services (African Youth Alliance/Pathfinder, 2003). Community-based activities to inform the general population could improved publicity of SRH services. It is crucial that young people know about the existence of youth-friendly SRH services and be assured that they will be served courteously and confidentially, otherwise services would be underutilized despite their existence. Publicity is critical for use of services. Cost can be a considerable barrier to utilization of SRH services. Studies have found that fees for services are also a barrier to access to SRH (Mmari and Magnani, 2003; Biddlecom *et al*, 2007).

Methodological limitations of the study should be noted, non-probability sampling method was used to select participants. There could be selection bias. Participants picked to answer the questionnaire were those who often utilized the services; therefore, there may have been response bias. The intended sample

size was not reached, the response rate by participants was low. Enrolling participants, particularly at Gaborone Clinic, was difficult since there were many studies going on in the city that targeted youth who were overwhelmed by participating in studies. Time-constraint was another limiting factor. The results should only be interpreted for the study population.

In conclusion, although the results indicate youth had a positive opinion of services offered at Youth-Friendly Clinics there were problems. Operating hours and special times for different services were barriers perceived by youth. There was a lack of publicity of services. It is recommended the health facilities need to assess services periodically to ensure standards of youth friendly services are met. Publicity also needs to be strengthened.

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