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Availability of and Access to Health and HIV/ AIDS Prevention Services for Youths in Rural Secondary Schools in South Africa

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ABSTRACT The study assessed the accessibility and availability of health and HIV prevention services for rural secondary learners in Malelane Sub-district of South Africa. A cross-sectional descriptive survey design was adopted. Self-report questionnaires were used to collect data from a total of 242 randomly selected learners aged 15 to 22 years yielding 69.1 percent response rate. On the question of access to health facilities, 93.7 percent and 85.5 percent reported accessing the clinic and the hospital respectively. Whilst almost 3 in 4 respondents reported receiving HIV information, only a quarter took part in the HIV/AIDS awareness programme. Though most (98.3%) of the respondents in the study reported being aware of the availability of free condoms, 57.1 percent indicated that they were too scared or afraid to access condoms. The study also established significant differences between gender and participation in promotion of condom use (p=0.03) and awareness of family planning services (p=0.02). Though the findings indicated that health and HIV/AIDS prevention services were available and accessible in terms of physical location of health facilities, utilization of such services was a challenge. To promote and enhance effective utilization of such services, there is the need for the creation of a permissive and conducive youth-friendly climate around health facilities through appropriate HIV/AIDS health education and promotion.

INTRODUCTION

Despite the global commitment and effort to fight the Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV/ AIDS), youths are still being ravaged by the pandemic. During the period of transition from childhood to adulthood, young people experience a variety of sexual, hormonal, emotional, cognitive and social changes thus predisposing them to a number of health risks (Imaledo et al. 2012). Resulting from such risks are juvenile pregnancies, unsafe abortions, sexually transmitted infections (STIs), including HIV (Sales et al. 2006; Olukoya and Ferguson 2002).

According to UNAIDS (2010, cited in Gatta and Thupayagale -Tshweneagae 2012), almost 12 million young people in the 15-24 age group are living with HIV/AIDS; and more than 7000 young people become infected with HIV every day. For instance, the highest reported rates of STIs worldwide are found among people between aged 15- 24 years; up to 60 percent of the new infections and half of all people living with HIV globally are in the same age group. It was also reported that between 2005 and 2012, the number of AIDS-related deaths among adolescents increased by 50 percent, while the overall number of AIDS-related deaths fell by 30 percent (UNAIDS 2012; Agwu and Fairlie 2013). Currently, the world holds the largest generation of young people in history, with 1.8 billion adolescents and youth account up to one quarter of the world's population; hence, gratifying adolescents' right to health, education and proper job will tremendously contribute to economic growth and positive change across the globe (UNAIDS 2013a; World Conference on Youth 2014).

Issues of sex and STIs in many communities are still associated with stigmatization, embarrassment and denial for both health workers and patients (Dickson-Tetteh and Ladha 2002; Department of Health (DoH) 2006). Sexuality and associated health risks, are also a major taboo in many societies particularly when it comes to adolescents. Most often, the rights and needs of young people may be acknowledged in theory, but in practice they are still faced with vari-

ous barriers when it comes to access and availability of health services (Lawoyin and Kanthula 2010 cited in Tugli 2012; Sakai et al. 2014). Dehne and Riedner (2005), and Akinbami et al. (2003) argue that unmet health needs are sometimes due to scarcity of services available for young people especially services related to the prevention and treatment of STIs. In view of this, Bilal et al. (2015) propose that providing accurate sexual and reproductive health information on safe sex and enhancing family-student discussion could be a good approach to address adolescents' sexual and reproductive health needs.

Young people in Sub-Saharan African countries are disproportionately infected and affected by HIV/AIDS (UNAIDS 2011 in Ahonsi et al. 2014). According to UNAIDS (2011), condom use among young people remains low, with only a low increase rate reported from 2002 to 2012 in Sub-Saharan Africa. Meanwhile, in South Africa, a survey carried out by Human Science Research Council (HSRC) in 2012 revealed that an estimated 6.4 million people are living with HIV/AIDS, also the proportion of people living with HIV in the country increased from 10.6 percent in 2008 to 12.3 percent in 2012. Whereas, most adolescents are sexually debuting before the age of 15 years with tenth (10.7%) of respondents aged 15–24 years reported having had sex for the first time before the age of 15 years. Significant differences were found by sex and race, with higher percentages of males (16.7%) and black Africans (11.1%) reporting that they had had sex in comparison with their counterparts. In terms of a condom utilisation among the youths across the provinces, the findings showed North West (40.8%), the Free State (40.7%), KwaZulu-Natal (39.6%), Mpumalanga (39.4%) and Limpopo (39.3%).

Youth population that is not adequately serviced by the health care system poses a huge public health dilemma. In their studies, Gatta and Thupayagale-Tshweneagae (2012) and Johnson et al. (2015) point out that whilst young people lack service awareness, they also have limited access to information and services, which also limit the effective use of family planning services. Alluding to this claim, UNAIDS (2013b) in its report, posits that access to high quality of HIV prevention, treatment and care for young people is often lower in comparison to older adults. The general expectation is to widen the scope of health services, improve quality and control the spread of the pandemic. To this end, WHO (2012) places high premium on availability, accessibility, contact and effectiveness in its framework for measuring of service coverage dimension of universal health coverage. Against this background, this study investigated the availability of and access to health and HIV/AIDS prevention services for youths in rural secondary schools in Mpumalanga province, South Africa.

MATERIAL AND METHODS

Study Design

In this paper a quantitative descriptive approach using a cross-sectional survey design was adopted to investigate the availability and accessibility of health and HIV/AIDS prevention services for youths in the study setting. This approach allowed the assessment of the phenomena in question as they existed among the subjects at that point in time (Vanderstoep and Johnston 2009)

Study Setting

The study was conducted in the East Nkomazi Circuit in the former Malelane District, Mpumalanga. This is a typically underdeveloped rural area which lacks road and service infrastructure and facilities for the communities. Besides being riddled with problems of poverty and unemployment among its population, it has the potential of economic growth and development because of it has been traversed by the Maputo Corridor which leads to Mozambique in the East.

Population and Sample

The study targeted 2230 learners aged 15-22 years from 10 High Schools in the Nkomazi East Circuit with a total population of 2,230 High school learners (15–22 year). A two-stage simple random selection process was employed to first select two schools out of the 10 schools and 350 respondents from the two selected schools in the circuit. Epi-Info Version 3.3 was used to determine the sample size using a 95 percent confidence level. Eligibility for inclusion in the study was based on being a Grade 10

learner and given the consent by parents/guardians to participate. Arrangement was made with the school authorities to administer the survey instrument to identified learners in convenient places and time without disrupting school activities.

Instrument

A self-reported questionnaire was developed in English and required approximately 40 minutes to complete. Caution was taken to ensure that it was user-friendly and understandable to all respondents. The instrument comprised closed and open-ended questions with "yes" or "no" and "agree" or "disagree" response option to assess and solicit demographic characteristic of the learners, accessibility and availability of health and HIV/AIDS prevention services including means and methods of access.To ensure validity of the instrument, a wide range of literature was also consulted on the variables of interests. Also, a pilot study was carried out on selected learners for a school outside the study area in order to identify emerging gaps and to assess the process flow. During this exercise, 5 Grade 10 learners from a neutral school were given the questionnaires to answer. Their comments and inputs were used to further improve on the quality of the questionnaire and to make easy to understand.

Data Collection

The research team visited the two randomly selected schools and collected data using a structured self-reported questionnaire. Dates for data collection were pre-arranged with the school authorities. Within each participating school, a special class was organized where the respondents were briefed before the administration of the instrument. Clarity was also given to the satisfaction of the respondents, and anonymity of their responses was further ensured. Completed questionnaires were dropped in a box provided. The administration of the questionnaires lasted approximately 40 minutes.

Data Analysis

The open-ended questions were coded and entered into Microsoft Excel programme and were subsequently imported to Epi-Info version 3.3.2. Frequencies and percentages of responses to the questions were computed and represented using frequency distribution tables. Responses to the open-ended questions were also briefly analysed; and the chi-square (χ^2)test of association was used to establish some of the relationships between gender and accessibility to health services. The level of significance was set at $p<0.05$.

Ethical Procedure

Prior to commencing the study, an ethical clearance (Project number NSPH/ST/2006/25) was received from the Medunsa Research and Ethics Committee of the University of Limpopo. This was followed by permission from the Mpumalanga Department of Education, Nelspruit. Final access to the participating schools was negotiated with the school authorities. Written informed consent was obtained from participants and from parents/guardians of respondents below the permissible consent age. Whilst ensuring that participation in the study was voluntary, respondents were also guaranteed anonymity and confidentiality.

RESULTS

The results of the study are reported under the following sub headings.

Demographic Characteristics

Two hundred and forty-two learners aged between 15 and 22 years participated in the study giving 69.1 percent response rate. This figure comprised 150(62.0%) normal school aged learners (15-18 years) and 92(38.0%) above school aged learners ($\geq$19 years). Whilst there was equal (n=121; 50%) number of females and males, an overwhelming the majority (n=209; 86.4%) of the respondents were Swazi speaking. In addition, 176(72.7%) indicated that they were Christians and about three-quarters (n=186; 76.9%) were living with mother and/or father.

Accessibility

Two hundred and nine (93.7%) and 178 (85.5%) of the respondents reported that they were able to access the clinic and hospital respectively as shown in Table 1. In the same vein, whilst most respondents reported that they walk

from home to clinic (n=220; 91.7%) and from home to hospital (n=222; 93.3%), 223(95.3%) take taxicab from school to the hospital.

Table 1: The accessibility of health and HIV prevention services and means of access

Accessibility to health facilities		*N*	*%*
Clinic	Yes	209	93.7
	No	14	6.3
Hospital	Yes	178	80.5
	No	43	19.5
Main means of access	*N*	*%*	
Home to clinic	Walking	220	91.7
	Taxi	19	7.9
	Bus	1	0.4
Home to hospital	Walking	12	5.0
	Taxi	222	93.3
	Bus	2	0.8
	Others	2	0.8
School to clinic	Walking	197	82.1
	Taxi	41	17.1
	Bus	1	0.4
	Others	1	0.4
School to hospital	Walking	7	3.0
	Taxi	223	95.3
	Bus	2	0.9
	Others	2	0.9

As depicted in Table 2, 93(44.1%) and 87(41.2%) reported taking less than 20 minutes and between 30-60 minutes respectively to reach the clinic from their school. In respect of the time taken from school to reach the hospital, nearly half (48.9%) of the respondents reported taking under 20 minutes. In terms of distance to access health services, only one in five (20.2%) of the respondents estimated that the clinic was within 1 kilometre radius from their schools whilst most (n=114; 69.5%) estimated that their schools are over 5 kilometres away from the hospital. On one hand, nearly three-quarters (73.9 %) of the respondents reported that they had received HIV information from the local clinic; but on the other hand, majority (n=179; 75.5%) of them reported that they did not take part in HIV/AIDS awareness programme (Table 2).

Table 3 gives a summary of health and HIV/AIDS services available to the respondents. An overwhelming number (n=235; 98.3%) of the respondents reported that they aware that there were free condoms available at the health facilities, 192(81.7%) reported that the promotion of condom use was available and 188(79.7 %) indicated condoms were available at more than two places. In other service areas, 151(65.4%) reported the availability of Family Planning Services, safe sex promotion (n=206; 90%), Voluntary Counselling and Testing (VCT) services (n=120; 54.5%) and STI services (n=148; 64.1%). How-

Table 2: Access to health facilities in terms of time and distance

Location of health facilities from respondents and services received		*N*	*%*
Time from School to Clinic	< 20 minutes	93	44.1
	Between 20 and 30 minutes	27	12.8
	Between 30 and 60 minutes	87	41.2
	Between 60 and 120 minutes	3	1.4
	> 120 minutes	1	0.5
Time from School to Hospital	< 20 minutes	91	48.9
	Between 20 and 30 minutes	16	8.6
	Between 30 and 60 minutes	54	29.0
	Between 60 and 120 minutes	19	10.2
	> 120 minutes	6	3.2
Distance Between School and Clinic	< 1 km	36	20.2
	Between 2 and 3 km	106	59.6
	Between 3 and 5 km	15	8.4
	> 5 km	21	11.8
Distance Between School and Hospital	< 1 km	8	4.9
	Between 2 and 3 km	8	4.9
	Between 3 and 5 km	34	20.7
	> 5 km	114	69.5
HIV Information Received from Local Clinic	Yes	176	73.9
	No	53	22.3
	Not sure	6	2.5
	Don't know	3	1.3
HIV/AIDS Awareness Programme and Participation	Yes	41	17.3
	No	179	75.5
	Not sure	5	2.1
	Don't know	12	5.1

Table 3: Assessment of health and HIV/AIDS prevention services

Assessment of the availability of the following services at your health facilities		*N*	*%*
Free Condoms	Available	235	98.3
	Not available	2	0.8
	Don't know	2	0.8
Promotion of Condom Use	Available	192	81.7
	Not available	12	5.1
	Don't know	31	13.2
Number of Places where Condoms are Available	One place	16	6.8
	Two places	32	13.6
	More than two places	188	79.7
Family Planning Services	Available	151	65.4
	Not available	31	13.4
	Don't know	49	21.2
Safe Sex Promotion	Available	206	90.0
	Not available	12	5.2
	Don't know	11	4.8
VCT Services	Available	120	54.5
	Not available	22	10.0
	Don't know	78	35.5
STI Services	Available	148	64.1
	Not available	24	10.4
	Don't know	59	25.5

ever, in case of STI services almost 1 in 4 respondents (25.5%) reported that they did not know that such services were available.

Barriers Expressed in Open-ended Responses of the Respondents

Table 4 summarised the responses to some of the open-ended questions posed to respondents pertaining to barriers experienced in accessing HIV/AIDS prevention services. In their response to the question: *"What makes it difficult for the youth to get condoms?"*, 112(57.1%) indicated that they were *"scared/afraid"*, and this was followed by *"feeling shy"* (n=41; 20.9%); to the question: *"What makes it difficult for the youth to go for VCT?"*, 114 (71.3%) indicated that they were *"scared/afraid"*, and the re-

Table 4: Emerging points from open-ended questions

Open-ended questions	*Main emerging responses*	*N*	*%*
1. What Makes It Difficult for the Youth to Get Condoms?	Scared/afraid	112	57.1
	Feel shy	41	20.9
	Too young	24	12.2
	Condoms not available	1	0.5
	Not interested	15	7.7
	Don 't understand	1	0.5
	Lack of confidentiality	1	0.5
	Lack of trust	1	0.5
2. What Makes It Difficult for the Youth To Go For VCT?	Scared/afraid	114	71.3
	Feel shy	16	10.0
	Too young	7	4.4
	Not interested	7	4.4
	Don 't understand	8	5.0
	Lack of confidentiality	6	3.8
	Lack of trust	2	1.3
3. What Makes It Difficult for the Youth to Go for STI Screening /Treatment?	Scared/afraid	115	69.3
	Feel shy	32	19.3
	Too young	6	3.6
	Not interested	5	3.0
	Don 't understand	1	0.6
	Lack of confidentiality	5	3.0
	Lack of trust	2	1.2

sponse to the question: "*What makes it difficult for the youth to go for STI screening /treatment?",* 115(69.3%) also indicated that they were *"scared/afraid"*(Table 4).

Some of the reported statements in response to the open ended questions posed in Table 4 are:

Question 1

- *"the youth are afraid to go to the clinic"*
- *"they are ashamed of the nurses or parents because they are going to see them"*
- *"they know that condoms are not for the youth. They make it for the marriage people"*

Question 2

- *"they are scared to know their status"*
- *"I am afraid, may be is HIV"*

Question 3

- *"they feel shy that the doctors will tell them they have STI"*
- *"they say treatment does not help anything but it make the thing worse"*
- *"elders around my community have negative attitude towards a child getting treatment, they say what have you been doing"*

Relationships between Gender and Responses to Health and HIV/AIDS Prevention Services

Pearson's Chi-square (χ^2) test was used to establish if there was any relationship between gender and some variables pertaining to health and HIV/AIDS prevention services. The results presented in Table 5 indicated significant relationships ($p<0.05$) between gender and four variables that is, *access to hospital* (p=0.04), *ever received HIV/AIDS information* (p=0.04), *ever taken part in promotion of condom use* (p=0.03) and *ever taken part in promotion of condom use* (p=0.03). There were no significant differences in terms of male and females in accessing the clinic and receiving treatment for STI (p=0.19 and p=0.32 respectively).

DISCUSSION

The respondents in this study were youths aged 15 to 22 years old; and because of the high propensity to sexual risk behaviours and proneness to HIV infections (Gatta and Thupayagale-Tshweneagae 2012; Tsegay et al. 2013; UNAIDS 2013b), they became the focus of this research. The World Conference on Youth (2014) points out that young people constitute 39 percent of all new HIV infections and more than 2 million aged between 10 and 19 years are living with HIV. According to Dehne and Riedner (2005) young people are the future generation and thus, determine the future health status of any nation or country. Against this background, youths' health needs and services should be a priority not only in terms of behavioural change but also in terms of bringing HIV/AIDS prevention services to their door steps.

Accessibility is one of the key elements in widening the scope of health service delivery in any health system. According to WHO (2012), accessibility is the percentage of the target pop-

Table 5: Relationships between gender and access to health and HIV/AIDS prevention services

Variable		*Gender*		χ^2	*p-value*
		Male	*Female*		
Access to clinic	Yes	89.3	83.3	1.71	0.19
	No	10.7	16.5		
Access to hospital	Yes	79.3	67.8	4.15	0.04
	No	20.7	32.2		
Have you ever received HIV/ AIDS information?	Yes	66.9	78.5	4.06	0.04
	No	78.5	21.5		
Received treatment of STI	Yes	14.0	9.9	0.97	0.32
	No	86.0	90.1		
Ever taken part in promotion of condom use	Yes	85.1	73.6	4.90	0.03
	No	14.9	26.4		
Family Planning Services	Yes	55.4	69.4	5.10	0.02
	No	44.6	30.6		

ulation who can reach and use the services. In this study, 93.7 percent and 85.5 percent of respondents reported that they could access clinic and hospital respectively, unlike Uganda where most people do not have easy access to a hospital or a Health Centre-IV facility (Ugandan Ministry of Health 2007). In addition, though 91.7 percent and 93.3 percent claimed the clinic and hospital were walking distances away from their homes respectively, over two out of three (69.5%) indicated that the hospital was over 5 kilometers away from their school. On one hand, this is quite a welcomed news to have such a high proportion of respondents accessing health facilities, but on the other hand distance, time and physical access or geographical terrain are important factors that also affect efficient health service delivery (WHO 2008). However, physical location of health facilities alone does not necessarily guarantee their usage by youths. To this end, WHO (2008) alludes that comprehensive measurement of access requires a systematic assessment of physical environment as well as socio-economic and psychological access and services.

The study also investigated the availability of health and HIV/AIDS prevention services for learners in a rural secondary school. According to WHO (2008), availability refers to elements of service delivery that include equipment, medication, treatment, health care staff etc. Ideally, facilities where HIV/AIDS services are offered should be prime locations for a number of services such as, VCT, diagnosis, treatment, prevention of STIs, promotion of condom use, youth-friendly services and awareness programmes (Ugandan Ministry of Health 2007). In this study, contrary to the notion that young people lack service awareness (Gatta and Thupayagale-Tshweneagae 2012), knowledge and awareness about services rendered in their local clinics and hospitals is generally high. Almost 3 in 4(73.9%) reported receiving HIV information; but pathetically, 75.5 percent did not partake in HIV/AIDS awareness programme (see Table 2). Low level of participation seemingly suggests that youths in this setting failed to positively respond to HIV information services. Consistent with this finding, Bilal et al. (2015) reported in their study that only 1 out of 5 (20%) of students had used sexual reproductive health services for adolescents in Mekelle town, North Ethiopia in the past year.

STIs are a known risk factor for contracting HIV; of particular importance for the prevention of the spread of HIV is the use of condoms during sex as well as the promotion of condom use. According to UNAIDS (2013b), access to high quality of HIV prevention, treatment and care for young people is often lower in comparison to older adults. Most (98.3% versus 79.7%) of the respondents in the study reported being aware of the availability of free condoms and also at more than two places in their communities. Despite this finding, condom utilisation among the youths in South Africa is generally low. Similarly, in the 2007 survey among sexually active youths in Uganda, only about half were reported to have used a condom the last time they had sex (Ugandan Ministry of Health 2007). A study in Madagascar opined that whether youth will use condoms appears to depend largely on condoms' perceived effectiveness for family planning, access to a nearby condom source, parental support for condom use, and patterns of risky sexual behaviour (Meekers et al. 2003). Alluding to this, Ramathuba et al. (2015) also point out that communication barrier as a result of certain stereotyped behaviours can undermine health-setting behaviour.

As regards other services, the respondents reported the availability of safe sex promotion (90%), VCT (54.5%) and STI services (64.1%). Though it is gratifying to note that essential critical and crucial HIV prevention services are available, utilization of these services were not without challenges. Most of the respondents cited *"being scared or afraid"* to access condoms, or go for VCT or go for STI screening or treatment. On the contrary, Tsegay et al. (2013) found in their study that 22.7 percent of their respondents were unwilling to utilize VCT services due to *"didn't feel at risk"* and *"trusting themselves and their partners"* (18.3%). This study also found a significant difference between males and females with respect to participation in promotion of condom use (85.1% vs. 73.6%, p=0.03). This implies that more males than females get involved in preventive programmes. Coming to awareness of family planning service, there was a significant difference in gender as more females than males tend to be more aware of issues pertaining to family planning (69.4% vs. 55.4%, p=0.02) (see Table 5).

CONCLUSION

This study revealed that, there is availability of health and HIV prevention services as well as condoms for rural school learners in Malelane Sub-District of Mpumalanga Province. However, their accessibility by learners is impeded by various factors such as fear of what the health care workers rendering these services will say and also the community negative attitude towards young people getting such services. School-based health service centres can go a long way in reducing some of the challenges facing learners in accessing and utilisation of reproductive health services.

RECOMMENDATIONS

Youths' health needs are multi-dimensional; hence, servicing their needs, therefore, requires not only access and availability of health services but a permissive and conducive youth-friendly climate. Promotion and effective service utilization must include tailor-made information for youth, protection of their confidentiality, destigmatization of sex related issues and morbidity-free and knowledge about HIV and servicing youth centres and schools with HIV/AIDS preventive mobile clinics.

LIMITATION OF THE STUDY

The study involved two randomly selected secondary schools in only one Circuit in Malelane Educational District, and as such, generalization of the result may not be possible.

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