



*Original Research Article*

# Adequacy of adolescent healthcare services available for adolescent girls in a Southern Nigerian environment

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**Background:**Health-seeking behaviour of a population depends to a great extent on the availability, accessibility and affordability of services of healthcare providers/facilities in nearby localities. Adolescents are usually uncomfortable discussing private health issues such as sexuality and contraceptives. This study was aimed at assessing the adequacy of service provision among adolescents in southern Nigerian environment.

**Methods:** This was a comparative study among adolescent secondary school girls in rural and urban areas. A multi-stage sampling technique was used to select the study sample and was administered with questionnaire. Adolescent health services delivery centre serving the respective population was surveyed, using checklists and mystery client approach to determine the adequacy of provision of adolescent services.

**Results:** Among the rural respondents, 12.5% have had an unpleasant experience at a health centre while 13.3% of urban respondents have had a similar experience, the reasons being: improper attention, lack of privacy and being yelled at. Observed difference was not statistically significant ( $X^2=0.000$ ,  $p= 0.987$ ).

**Conclusion:**There was no statistically significant observed rural-urban difference in terms of unpleasant experiences at a health centre; implying a similar experience albeit among a few respondents. The main problems here were the issues of confidentiality and office atmosphere.

**Key words:** adequacy, adolescent services, provision, health seeking behaviour

## INTRODUCTION

The health-seeking behaviour of a population depends to a great extent on the availability, accessibility and affordability of services of healthcare providers/facilities in nearby localities (Ahmed, SM 2001). Adolescents often want to discuss topics, such as physical fitness, stress, nutrition, Sexually Transmitted Infections, HIV/AIDS, alcohol, good eating behaviours, and contraception with their counsellors (Ackard and Neumark-Sztainer, 2001; Joffe et al., 1988 ; Rideout, 2000) in their study revealed that adolescents hesitate to request personal health information from their physicians (Adinma and Adinma, 2008 ; Grinstein-Weiss et al., 2005) and found that they will prefer to turn to friends first, then family, and formal help will be their last resort (Grinstein-Weiss et al., 2005 and Unrau and Grinnell Jr, 2005).

Adolescents also struggle with lack of knowledge about reproductive health and healthy sexual relationships (Andrew et al., 2003; Banister and Schreiber, 2001; Borzekowski and Rickert 2001). In general, they are uncomfortable discussing private health issues such as sexual and contraceptives. Adults as well as younger adolescents are embarrassed, afraid, or uncomfortable discussing certain health issues (e.g., menstruation, pregnancy) (Turker, 1989).

Whereas girls prefer familiar persons (in non-threatening situations) particularly mothers for menstrual education, mothers are usually unable to meet their needs probably because of inhibition to discuss the subject in most cases. This was the observation in the different studies, respectively, (Turker, 1989 ; Whisnant et al., 1975). Their

parents, even if knowledgeable, may lack the skills to discuss these issues with children, probably because it was never discussed with them in their time.

The use of health services is related to availability, quality and cost of services as well as the social structures, health beliefs, gender discrimination, status of women and personal characteristics of the users (Bhatia and Cleland, 2001). Included among the many barriers why young people in particular are reluctant to seek health service for their sexual and reproductive health needs are restrictive laws and policies according to (Tylee et al., 2007). The World Health Organization states other barriers to be the judgmental attitude of health workers and a lack of training in understanding of adolescent reproductive needs (WHO, 2002). There is fear among adolescents of humiliation or having to respond to unpleasant questions and procedures. Furthermore, Rice states that there is lack of respect, privacy and confidentiality within the health care system (Bhatia and Cleland 2001).

Lack of reproductive health information and services place these young people at risk of pregnancy, abortion, sexually transmitted infections (STI), and HIV/AIDS. In all communities, girls are more vulnerable to reproductive health problems than boys for both biological and social reasons, as well as for cultural and patriarchal factors, and they often have poor access to information and services about their reproductive health (Meekers and Wekwete, 1997). Although youth in Nigeria generally face health challenges, the adolescent girls face serious challenges, ranging from early exposure to intercourse and pregnancy, with severe consequences of abortion and death, and poor physical and psychological development (Meekers and Wekwete, 1997)

Within the school institution, accessing supportive resources has historically been structured into the school curriculum. As a result, youth studied 'guidance' as a subject, under a guidance teacher who was an educator and a counsellor. In this instance, the teacher became a formal helper (Lavin et al., 1992)

Financial constraints and low education levels have implications for the uptake of health services and how to correctly understand and implement health education messages Atuyambe et al (2008).

This study aimed to determine the adequacy of healthcare services available for adolescent girls in the southern part of Nigeria.

## METHODOLOGY

The study was conducted in Akwa Ibom State, located in the coastal south-Southern part of Nigeria. Along with English, the main languages spoken here are Ibibio, Annang, and Oron while prominent towns are Ikot Ekpene, Oron, Eket and Abak.

Christianity is the predominant religion with a mix of traditional religion which influences the code of conduct and behaviour of the people. For instance, no female sees

the seasonal "Ekpo masquerade" unduly without repercussions. Hence, the implication of restrictive movement for females at certain times in certain localities.

The study subjects were in-school adolescent girls who had attained menarche. Adolescent girls from secondary schools in the selected rural and urban local government areas of Akwa Ibom State took part in this study (Ekong et al., 2015).

This was a comparative study design among adolescent secondary school girls in rural and urban areas. Sample size for the study was determined using the formula for comparative studies (Feinstein, 2002).

$$N = 2 \cdot [z_{crit} \sqrt{2\bar{p}(1 - \bar{p})} + z_{pwr} \sqrt{p_1(1 - p_1) + p_2(1 - p_2)}]^2 / D^2$$

A minimum sample size of 546 was calculated. To allow for 10% (i.e. 55) invalid, incomplete and non-responses, the total sample was 546+55= 601 for the four locations giving an average of 150 students per location.

This study used both quantitative and qualitative research methods. It consisted of a baseline survey to determine the adequacy of services for these adolescents in selected local government areas of Akwa Ibom state. The sampling frame consisted of adolescent girls attending the 237 co-educational and girls' school from the list of rural and urban secondary schools in Akwa Ibom State (Ekong et al., 2015)

A multi-stage sampling technique was used to select the study sample (Ekong et al., 2015). The first stage involved the stratification of local government areas into rural and urban (seven out of the thirty one local government areas in Akwa Ibom State are classified as urban, the other twenty four are rural) (Okon, 2008). Two local government areas were selected from each stratum using the simple random sampling technique, by use of table of random numbers. In the second stage, among the thirty eight secondary schools (co-educational and girls') that were listed in the four local government areas, one school each was selected per local government area (total of 4) using the simple random sampling technique, by use of table of random numbers, after stratification had been done. In the third stage, each school was stratified into lower (31) and upper (42) senior secondary classes to represent junior and senior adolescents. Selection of the classes was by stratification and then simple random sampling, using the table of random numbers, within each strata. The fourth stage involved selection of eligible students (2,867) that met the inclusion criteria (in-school girls aged between 10-19 years who had attained menarche) distributed over the selected streams of each class by the simple random sampling technique by use of table of random numbers. In the use of table of random numbers, every list was itemized. Six hundred and one adolescent girls were selected (Ekong et al., 2015)

A questionnaire was designed in line with the objective.

Pre-test was carried out in a rural girls' school and an urban girls' school after the study sites had been selected. At each site, Junior Secondary class 3 (10) and Senior Secondary class 1 (10) female adolescents were involved at this stage. The outcome led to the re-phrasing of certain terms in the questionnaire. (Ekong et al., 2015).

Data collection was carried out at the school site during school hours, during the break period, with informed consent from the respective school principals. Pre-tested self-administered questionnaires, following an anonymous respondent approach were shared to the selected students (who had gathered at the assembly hall) without the presence of teachers and male students. Three female assistants were trained to assist with the conduct of the survey, confidentiality, procedures for responding to students' questions and focus group discussions Ekong et al., (2015).

The closest health centre, hospital or adolescent health services delivery centre serving the respective population was surveyed, using checklists, to determine the adequacy of provision of adolescent services. The mystery client approach was used to study client-provider interaction in terms of the reception, and services to adolescents in the health centres/youth friendly centres. Four (4) Senior Secondary class 2 adolescent girls, one (1) from each study site, were sent to these facilities, with written guidance notes, to request for information about menstrual and other associated problems. They were trained for one hour and prepared for their role to minimize any disappointment from their visit experiences. They returned immediately after their visits (which lasted for an average of two hours) to be interviewed by the researcher.

Quantitative data generated from the survey was entered into the Statistical Package for Social Sciences (SPSS) software, Version 17 for Windows, and analyzed. Percentages were calculated to draw out differences in variables between urban and rural adolescent girls (where they did not add up to 100%, the responses were mutually exclusive, and where they did not add up to the required percentage, there were no responses). Cross tabulation and Chi-square tests were used to determine any association between selected variables. Odds ratio and Chi square were used to compare possible differences between urban and rural variables and significance was at the 95% confidence level. Tables were used to highlight the results obtained Ekong et al.,(2015).

Qualitative data gathered through the interview following the mystery-client approach were transcribed verbatim from the audio record and analyzed manually. The checklist was also analyzed manually. The results of the mystery client interview were scored using a graduated scale of 1-4: poor, fair, good, and very good on four parameters of reception, confidentiality, effective communication and client satisfaction. However, the checklist was scored using a cumulative scale from 1-7 (according to the number of items observed) on office atmosphere, staff outlook, confidentiality, effective communication, and community resources.

Ethical clearance was received from Ethical Committee of the University of Uyo Teaching Hospital, while approval was obtained from the Ministry of Education and the respective school authorities. Informed consent was obtained from parents/guardians of participating students for minors; and from students that had attained the age of 18. Audio records were made with due verbal consent from the participants. Anonymity and confidentiality of the respondents were maintained in all phases of the study. Due to the sensitive nature of the study, female assistants were used at all times in administering the quantitative and qualitative surveys Ekong et al., (2015).

Informed consent was sought from participants with respect to voluntary participation and freedom to discontinue the interview/discussion at any stage.

There were no risks to the participants in the study. Out-of-school adolescent girls may have different perceptions and practices about menstruation; hence the study findings may only be generalizable for in-school adolescents in similar socio-demographic contexts.

## RESULTS

Table 1 displays the socio-demographic variables of adolescent girls in the urban and rural areas. It shows that the urban girls were younger (mean age 14.9 years) than their rural counterparts (mean age 15 years), though the observed difference in the mean ages was not statistically significant ( $t = 1.2$ ;  $p=0.232$ ). In both groups majority of respondents were aged between 10-15 years. They were almost equally shared between SS1 and SS2 classes, and the majority was of the Christian faith.

Table 2 displays some determinants of health-seeking behaviour (health centre experience) among rural and urban adolescent girls. Among the rural respondents, 12.5% have had an unpleasant experience at a health centre while 13.3% of urban respondents have had a similar experience, the reasons being: improper attention (2.8% urban as against 0.7% rural respondents); lack of privacy (0.7% urban as against 0.4% rural respondents); being yelled at (only experienced by urban respondents-3.8%); lack of drugs (1.1% rural as against 0.7% urban respondents), and delay (also experienced only by urban respondents-0.3%). As a result, 78.7% and 62.3% of respondents in the urban and rural areas respectively would desire to visit a health centre at any time, and 9.8% urban as against 14.3% rural respondents would not; observed difference was statistically significant ( $X^2=18.282$ ,  $p= 0.000$ ). Of those that would not desire to visit, a higher proportion (3.8% urban as against 2.2% rural respondents) stated the use of home remedies as their preferred alternative.

Among the urban respondents, 4.2% claimed they had a youth-friendly centre whereas 1.1% of rural girls claimed they did; the observed difference was statistically significant.

Table 3 displays the weighted score for adequacy of

**Table 1.** respondents' socio-demographic profile

VARIABLE	URBAN	RURAL\
	(N=286)n(%)	(N=273)n(%)
Respondents' age		
Range	13- 19 years	12 - 19 years
Mean	14.9 ±1.1 years	15.0±1.56 years
		t= 1.2; p= 0.232
12-15 years	214(74.8)	177(64.8)
16-19 years	71(25.2)	96(35.2)
Class SS1	143(50)	136(49.8)
Class SS2	143(50)	137(50.2)
Religion		
Christianity	284(99.7)	267(97.8)
Islam	1(0.3)	1(0.4)
Traditional	1(0.4)	4(1.5)

**Table 2:** Some determinants of health-seeking behaviour for menstrual problems and associated factors; health centre experience

VARIABLE	FREQUENCY		X <sup>2</sup> ,df,p
	RURAL(N=273) n(%)	URBAN(N=286) n(%)	
Unpleasant experience at any health centre	34(12.5)	38(13.3)	0.000, 1, 0.987
*Type of unpleasant experience			8.790, 5, 0.118
Improper attention	2(0.7)	8(2.8)	
No privacy	1(0.4)	2(0.7)	
Yelled at		11(3.8)	
No drugs	3(1.1)	2(0.7)	
Delay		1(0.3)	
Desire to visit health centre at any time			18.282, 2, 0.000
Yes	170(62.3)	225(78.7)	
No	39(14.3)	28(9.8)	
Maybe	64(23.4)	33(11.5)	
*Reason for not desiring to visit			3.681, 4, 0.451
Lack of finance		2(0.7)	
No permission	1(0.4)	1(0.3)	
Dislike hospital	1(0.4)		
Home treatment	6(2.2)	11(3.8)	
Previous bad experience		1(0.3)	
Any youth health care centre around?			11.270, 2, 0.004
Yes	3(1.1)	12(4.2)	
No	161(59)	195(68.2)	
Don't know	109(39.9)	79(27.6)	
If yes, will usage be preferred?			
Yes	0	6(2.1)	

\*Appropriate responses only

adolescent health services provision using checklist which was modified from the *Adolescent Health Group*, 2003.

For the office atmosphere and confidentiality issues, the facilities in the urban areas scored about double that of the rural areas. However, both areas had good scores with respect to attitude of healthcare personnel and effectiveness of communication. Availability of community resources was better in the urban areas.

Table 4 displays the weighted score for adequacy of adolescent health services provision using the mystery client interview. The rural areas had poor scores with

respect to confidentiality issues, effective communication and rendering of satisfactory services. Reception for both areas was fair, but the urban areas had better scores for confidentiality issues, communication and rendering of satisfactory services.

## DISCUSSION

There was no statistically significant observed rural-urban difference in terms of unpleasant experiences at a health

**Table 3.** checklist for adequacy of adolescent health services provision

PARAMETER	URBAN	RURAL
Office atmosphere	3 of 4	1.5 of 4
Staff outlook	3.5 of 4	4 of 4
Confidentiality	3.5 of 5	1.5 of 5
<b>Effective communication</b>	<b>5.5 of 7</b>	<b>5 of 7</b>
Community Resources	1.5 of 2	1 of 2
<b>TOTAL</b>	<b>17 OF 22</b>	<b>13 OF 22</b>

(Weighted score)

**Table 4.** weighted score for adequacy of adolescent health services provision using mystery client interview

PARAMETRE	URBAN	RURAL
Reception	2.5 of 4	2 of 4
Confidentiality	3.5 of 4	1 Of 4
Communication	3.5 of 4	1.5 of 4
Satisfaction	3 of 4	1.5 of 4
<b>TOTAL</b>	<b>13 of 16</b>	<b>6 of 16</b>

(Weighted score)

centre; implying a similar experience albeit among a few respondents. A high proportion of respondents desired to visit a health centre at anytime for personal problems, but those with no such desire stated mostly the preference for home remedies as their excuse, as in an Indian study where two fifths of the respondents preferred home remedy (Sharma et al., 2008) others were 'dislike for hospitals' (Chan et al., 2009), lack of finance and 'no permission'. As alluded to in some studies, Client-perceived quality of services and confidence in the health provider affect the health service utilization (Mondal, 1997). Also whether medicine is provided by the health care facility or has to be bought from the private pharmacies has an effect (Aga Khan University, 2003). The communication factor also creates a barrier and it can also affect the choice of a specific health provider or otherwise (Van Der Riet and Knoetze, 2004). Other barriers are the judgmental attitude of health workers and a lack of training WHO (2002).

When asked about the presence of Youth Friendly Centres in their settlements, 4.2% urban respondents alluded to it; however, 1.1% of rural respondents claimed it was present in their own settlement. The ignorance of the rural respondents (though very few) about such services is glaring here, because the only functional youth friendly centre in Akwa Ibom is situated at the University campus, in the state capital.

With a weighted score of 17 out of 22, provision of adolescent health services in the urban areas was rated better than that of the rural areas with a score of 13 out of 22. The mystery client interview findings was supplemental to the checklist survey findings above and it also showed an appreciable rating in favour of the provision of adolescent services in the urban areas as compared to almost half the score in the rural areas. The main problems here were the

issues of confidentiality and office atmosphere. The variables used in this study could be facilitative or act as barriers to health-seeking as alluded to in a study carried out in South Africa (Van Der Riet and Knoetze, 2004). For example, a high level of trust or an emphasis on confidentiality will facilitate the ease with which youth seek help from a specific source, but a lack of trust or confidentiality would hinder the help seeking process. "potentially then, all barriers, if 'reversed', should be able to act as facilitators in the process of help seeking. This, however, is not always the case, especially when it involves the absence or presence of specific resources" Van Der Riet and Knoetze (2004).

## Conclusion

Adolescent Health Services Provision to the respondents was generally poor; obviously the girls were ignorant about the existence of such services. Healthcare providers need to be given appropriate capacity building with regards to the provision of adolescent healthcare services in this part of Nigeria. Environmental support for early health care seeking, such as clinic accessibility, acceptability, and confidentiality remains a major strategy in promoting adolescent health in Nigeria. A limitation of the study was the duration of training the girls in preparation for the mystery client interview. A repeated training and/or a longer one could have improved outcomes.

## Recommendation

Setting up an Adolescent Friendly Health Service in school or college premises all over the country (using the Public

Private Partnership and Non-Governmental Organizations) for easy accessibility should be considered and it should be made an integral part of the health system. Adolescents may be involved in the planning and provision of health services by involving local youth groups and clubs

### Conflict of interest

The author declares that there is no conflict of interest in this research.

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