

Attitudes of Healthcare Providers towards Providing Contraceptives for Unmarried Adolescents in Ibadan, Nigeria

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Abstract

Objective: This study sought to assess the attitude of Healthcare Providers towards providing contraceptives for unmarried adolescents in four Local Government Areas in Ibadan, Nigeria.

Materials and methods: A cross-sectional descriptive study was conducted among 490 Healthcare Providers in 24 randomly selected healthcare facilities using self-administered, pre-tested questionnaires.

Results: More than half (57.5%) of the respondents perceived the provision of contraceptives for unmarried adolescents as promoting sexual promiscuity. The attitude of 42.7% of them was informed by the Nigerian culture which does not support premarital sex. About half (51.7%), reported that unmarried adolescents should be asked to abstain from sex rather than providing them with contraceptives. Over a third (44.2%) reported that providers should not provide services for both married and unmarried adolescents.

Conclusion: Many healthcare providers have unfavourable attitudes towards the provision of contraceptives for unmarried adolescents. There is a need for further training of Healthcare Providers to address this situation.

Keywords: Adolescents; Attitudes; Contraceptives; Healthcare Provider

Introduction

High levels of premarital sexual activity without the use of contraceptives have been recorded among Nigerian adolescents (1–3). Although many of these adolescents are aware of contraceptive methods, studies (4–8) have reported that they still do not use these methods. Consequently, there is a high incidence of unwanted pregnancies, unsafe abortions, HIV and other STIs among them (9–13). Factors reported to be generally associated with the non-use of contraceptives among adolescents includes fear of stigma, shame and embarrassment (14); inadequate

information about contraceptives, unplanned sexual activities, inability to negotiate with partners and the attitude of providers. For instance, some adolescents have reported that they refused to go to public clinics because of the attitudes of the healthcare providers (15–16).

In many African settings, studies have investigated the attitude of healthcare providers towards providing contraceptives for unmarried adolescents and reports reveals that many providers have negative attitudes. For instance, a Ugandan study reported that most of the providers had negative attitudes towards the provision of contraceptives for young people and were not prepared or were hesitant to give young people contraceptives. As such, they imposed non-evidence based age restrictions and

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consent requirements (17). In a South African study conducted among nurses, it was reported that the nurses generally stigmatized adolescent sex and felt very uncomfortable giving contraception to adolescent girls; they often tried to influence the adolescents who came for contraception not to have sex. Parental permission was also sought from adolescents before contraceptive services were provided even though legally, parental permission is not needed for minors to be given contraception in South Africa (18). Similarly, another study conducted among nurse-midwives' providing sexual and reproductive healthcare in Kenya and Zambia on their attitudes reported that majority approved of contraceptive use by sexually active girls and were prepared to counsel boys on condom use. However, most of the nurse-midwives in both countries reported that their first option would be to recommend unmarried adolescent boys and girls to abstain from sex when they ask for contraceptives rather than offer them contraceptives. Notably, those who had received continuing education on adolescent sexuality and reproduction showed a tendency towards more youth friendly attitudes (19). Another study reported similar ambivalent attitude among providers in Zambia; nearly all the nurses interviewed said they provided youths with contraceptive methods but mainly those aged between 18 and 24 years (15). A Ghanaian study reported that providers enforced a variety of restrictions known to impede access to services. Restrictions include age and parity. A number of these providers believed that the injectable contraceptives cause permanent infertility (20). A study conducted in Nigeria on the attitudes and practices of health professionals towards adolescent contraception revealed that half of the respondents were favourably disposed to adolescent contraception (21). A major reason reported to be responsible for the resistance of service providers to provide contraceptive services to adolescents is the belief that it promotes sexual promiscuity (22–23) and that by restricting access to services, they were protecting both the client and the society.

Instilling moral values especially at an early age, showing good examples in the family and promoting spiritual growth can enhance the development and practice of healthy behaviours such as sexual abstinence among unmarried adolescents. This will further help them delay sex until a time in the future when they are ready for the physical, emotional, and financial responsibilities. Nevertheless, there are still

some adolescents who will engage in sexual activities. For this group, access to contraception will be helpful to prevent medical, social and psychological problems as well as their consequences, for instance, sexually transmitted infections, unplanned pregnancies, unsafe abortions, school drop-out, loss of life etc. All stakeholders including health care providers have a role to play in ensuring that adolescents have access to essential reproductive and sexual health information and services they require. Therefore, it is of utmost importance to study the attitude of health care providers who have the responsibility of assisting adolescents meet their unique sexual and reproductive health needs.

Although a good number of studies (4–8) have been conducted in Nigeria involving adolescents' knowledge, attitudes and practice of contraception, not many have explored healthcare providers' perspectives towards providing contraceptive services for adolescents. Thus, this study was undertaken to assess the attitude of healthcare providers towards provision of contraceptives for unmarried adolescents.

Materials and methods

Procedure

This cross-sectional descriptive study was conducted in Ibadan, Nigeria. Ibadan is the capital city of Oyo state located in the south-west region of Nigeria. The study was carried out from June 2009 to July 2010 in 24 randomly selected healthcare facilities (four secondary and twenty primary healthcare facilities) in four Local Government Areas (LGAs) in Ibadan namely, Ibadan South-West, Ibadan North, Ibadan, Ibadan North-East and Ibadan North-West LGAs. The sample size was statistically determined using the proportion of health professionals favourably disposed to adolescent contraception as reported by a similar study (21). While giving consideration for a ten percent rate in non-response for questions, the final sample size calculated was a minimum of 422 cases. The study population comprised of medical doctors, registered nurse-midwives, pharmacists, community health officers (CHOs), community health extension workers (CHEWs) and social workers working in the family planning clinics and obstetrics and gynaecological units. The semi-structured questionnaire was developed from a review of relevant literatures with the aim of exploring attitudes of healthcare providers towards providing contraceptives for unmarried adolescents.

Prior to obtaining an overview of the actual situation in which the study was conducted, content validation of the questionnaire was done by experts in the field of Adolescent Reproductive Health. The developed questionnaire was pretested among 20 healthcare providers in a different study site after which necessary corrections were made before administration. Test-retest reliability was done to ensure internal consistency of the instrument.

Measures

Information was collected on the type of provider, age, sex, religion and marital status. They were also asked if they have ever received Continuing Education (CE) on Adolescent Sexual and Reproductive Health (ASRH).

The attitude of the healthcare providers towards providing contraceptive services for adolescents was assessed using a 5 point Likert scale (strongly agree, agree, undecided, disagree and strongly disagree). There were six statements altogether; three were negatively worded while the other three were positively worded.

The negatively worded questions were: (1) Providing contraceptives for unmarried adolescents promotes sexual promiscuity (2) Unmarried adolescents should not be provided with contraceptives because the Nigerian culture does not support premarital sex and (3) It is better to tell sexually active unmarried adolescents to abstain from sex when they ask for contraceptives rather than give them contraceptives when they request for it. The positively worded questions were: (4) Healthcare providers should provide contraceptive services for both married and unmarried clients in the healthcare facilities (5) Adolescents should be given contraceptive counselling before they become sexually active and (6) Unmarried adolescents do not require parental consent before contraceptives are provided

Data management

Data analysis was done using SPSS version 15. For each of the negatively worded statement (1, 2 and 3), 4 marks was awarded for choosing the option strongly disagree, 3 for disagree, 2 for agree and 1 for strongly agree. For each positively worded statement (4, 5, and 6), 4 marks was awarded for choosing the option strongly agree, 3 for agree, 2 for disagree and 1 for strongly disagree. No mark was awarded for choosing the option undecided for any of the statements. The maximum score for the six statements was 24 marks. Respondents that scored

50% and above of the maximum score (≥ 12 marks), were classified as having a positive attitude while those that scored less than 50% were classified as having a negative attitude (< 12 marks). Chi-square test was used to test associations between categorical variables. In addition to categorizing the attitudinal scores of the healthcare providers into positive and negative attitudes, the mean attitudinal scores were also computed and compared using the independent sample t-test for two groups and ANOVA (analysis of variance) test for more than two groups.

Ethical considerations

Four trained research assistants administered the semi-structured questionnaires to the respondents after ethical approval was obtained from the Ethical Review Committee of the Oyo State Ministry of Health. Also written permission was obtained from the medical directors/chief consultants in the Oyo State owned secondary health facilities and the Medical Officer of Health in the primary health care facilities. Informed consent was also obtained from each participant after adequate explanations of the study objectives were made. They were assured that participation was voluntary and if they decide not to participate they will not be victimized.

Results

Characteristics of providers

A total of 490 respondents were included in the study. Majority of them were nurse-midwives (66.9%) followed by community health officers/community health extension workers (CHOs/CHEWs) (20.8%). Others were physicians (8.8%), pharmacists (2.4%) and social workers (1.0%). The ages of the respondents ranged between 18 to 60 years. The mean age of the respondents was 38.0 ± 9.5 years. Most were females (88.8%) and Christians (81.0%). Also, a large proportion (79.0%) was married. Most of them (63.3%) had received Continuing Education (CE) on Adolescent Sexual and Reproductive Health (ASRH) (Table 1).

Responses to statements on attitudes towards providing contraceptives for unmarried adolescents

More than half (57.5%) of the respondents reported that providing contraceptives to unmarried adolescents promotes sexual promiscuity. Over a third of the respondents (42.7%) reported that unmarried adolescents should not be provided with contraceptives because the Nigerian culture does not

Table 1: Characteristics of providers (n = 490)

Variable	n (%)
Type of provider	
Registered nurses/midwives	328 (66.9)
CHOs/CHEWs	102 (20.8)
Physicians	43 (8.8)
Pharmacists	12 (2.4)
*Social workers	5 (1.0)
Age group (years)	
< 20	5 (1.1)
20-29(Table 1)	91 (18.6)
30-39	142 (29.0)
40-49	123 (25.0)
≥ 50	81 (16.5)
No response	48 (9.8)
Sex	
Female	435 (88.8)
Male	55 (11.2)
Religion	
Christianity	397 (81.0)
Islam	86 (17.6)
African traditional	7 (1.4)
Marital status	
Married	387 (79.0)
Single never married	85 (17.3)
Widowed	8 (1.6)
Divorced	4 (0.8)
Cohabiting	4 (0.8)
Separated	2 (0.4)
Ever received CE) on ASRH	
Yes	310 (63.3)
No	180 (36.7)

*This group also reported to provide contraceptive services

support premarital sex. About half of all the respondents (51.7%) responded that it is better to tell

sexually active unmarried adolescents to abstain from sex when they ask for contraceptives rather than give them contraceptives when they request for it.

On the other hand, more than a third (41.5%) reported that healthcare providers should provide contraceptive services for both married and unmarried clients in the healthcare facilities. Majority (70.6%) were of the opinion that adolescents should be given contraceptive counselling before they become sexually active. About a third (33.4%) reported that unmarried adolescents do not require parental consent before contraceptives are provided, 14.5% were undecided while more than half (52.1%) disagreed with this statement (Table 2).

Respondents' attitudes towards provision of contraceptives for adolescents by type of provider

Table 3 shows the attitude towards provision of contraceptives for unmarried adolescents by type of provider. Majority of the nurse-midwives (69.5%), CHOs/CHEWs (75.5%), physicians (79.1%) and pharmacists (75.0%) had positive attitudes towards providing contraceptive services for adolescents. On the contrary, most of the social workers (80.0%) had a negative attitude.

Association between selected characteristics and respondents' attitudes towards providing contraceptives for adolescents

The relationship between attitude towards providing contraceptive for adolescents and selected characteristics is presented below (Table 4). A statistically significant relationship was demonstrated

Table 2: Responses to statements on attitudes towards providing contraceptives for unmarried adolescents (n = 490)

Statements	Strongly Agree n (%)	Agree n (%)	Undecided n (%)	Disagree n (%)	Strongly Disagree n (%)
Providing contraceptives for unmarried adolescents promotes sexual promiscuity.	140(28.5)	142(29.0)	46(9.4)	117(23.9)	45(9.2)
Unmarried adolescents should not be provided with contraceptives because the Nigerian culture does not support premarital sex.	89 (18.2)	120 (24.5)	41(8.4)	150 (30.6)	90 (18.3)
It is better to tell sexually active unmarried adolescents to abstain from sex when they ask for contraceptives rather than give them contraceptives when they request for it.	144 (29.4)	109 (22.3)	53 (10.8)	108 (22.0)	76 (15.5)
Healthcare providers should provide contraceptive services for both married and unmarried clients in the healthcare facilities.	40 (8.2)	163 (33.3)	70 (14.3)	68 (13.8)	14 (30.4)
Adolescents should be given contraceptive counselling before they become sexually active.	178 (36.3)	168 (34.3)	53 (10.8)	51 (10.4)	40 (8.2)
Unmarried adolescents do not require parental consent before contraceptives are provided.	61 (12.4)	103 (21.0)	71 (14.5)	116 (23.7)	139 (28.4)

Table 3: Respondents' attitudes towards provision of contraceptives for unmarried adolescents by type of provider

Type of Provider	Positive attitude n (%)	Negative attitude n (%)	Total n (%)
Nurses/Midwives	228 (69.5)	100 (30.5)	328 (100.0)
CHOs/CHEWs	77 (75.5)	25 (24.5)	102 (100.0)
Physicians	34 (79.1)	9 (20.9)	43 (100.0)
Pharmacists	9 (75.0)	3 (25.0)	12 (100.0)
Social workers	1 (20.0)	4 (80.0)	5 (100.0)

Table 4: Association between selected characteristics and respondents' attitudes towards provision of contraceptives for unmarried adolescents

Characteristics	Attitude		Total n (%)	X ²	p-value
	Positive attitude n (%)	Negative Attitude n (%)			
Sex					
Male	42 (77.8)	12 (22.2)	54 (100.0)	1.461	1.461
Female	301 (69.8)	130 (69.8)	431 (100.0)		
Religion				8.952	0.011*
Christianity	270 (68.7)	123 (31.3)	393 (100.0)		
Islam	70 (82.4)	15 (17.6)	85 (100.0)		
African Traditional	3 (42.9)	4 (57.1)	7 (100.0)		
LGA				18.949	0.000*
Ibadan South-West	69 (89.6)	8 (10.4)	77 (100.0)		
Ibadan North	128 (64.0)	72 (36.0)	200 (100.0)		
Ibadan North-East	56 (65.9)	29 (34.1)	85 (100.0)		
Ibadan North-West	90 (73.2)	33 (26.8)	123 (100.0)		
Age				1.395	0.845
< 20 years	2 (100.0)	-	2 (100.0)		
20-29 years	64 (68.1)	30 (31.9)	94 (100.0)		
30-39 years	102 (72.3)	39 (27.7)	141(100.0)		
40-49years	87 (70.7)	36 (29.3)	123 (100.0)		
≥ 50 years	54 (69.2)	24 (30.8)	7 (100.0)		
Marital status				1.307	0.520
Single	62 (70.5)	26 (29.5)	88 (100.0)		
Married	273 (71.3)	110 (28.7)	383 (100.0)		
Others	8 (57.1)	6 (42.9)	14 (100.0)		

*Statistically significant at p< 0.05

between the religion of the respondents and their attitude (p=0.01). Similarly, there was a significant relationship between the LGA of the respondents and their attitudes (p <0.01). However, there was no statistically significant relationship between sex, age or marital status of the respondent (p >0.05).

Mean attitudinal scores of respondents by selected variables

Table 5 below shows the mean attitudinal scores of the respondents by selected variables. The mean attitudinal score of all respondents was 13.6±4.7.

Those < 20 years had a higher mean attitudinal score of 17±0.0 compared to other age groups. Islamists had the highest mean attitudinal score of 14.4±4.9. Single respondents had a higher mean attitudinal score of 14.0±4.6 as compared to their counterparts. Furthermore, those that have ever received CE on ASRH had a higher mean attitudinal score of 14.3±4.2 than those that had never. All these findings were also statistically significant (p<0.05). Only the mean attitudinal scores by age and having ever received CE on ASRH were found to be statistically significant (p<0.05).

Table 5: Mean attitudinal scores of healthcare providers by selected variables

Variables	Mean score	Standard deviation	Test statistic	p-value
Age				
< 20 years	17.0	0.0	ANOVA	0.49
20-29 years	13.7	4.8		
30-39 years	13.4	4.7		
40-49years	13.0	4.9		
≥ 50 years	14.1	4.0		
Religion				
Islam	14.4	4.9	ANOVA	0.02*
Christianity	13.4	4.6		
African Traditional	9.9	6.7		
Marital status				
Single	14.0	4.6	ANOVA	0.36
Married	13.5	4.8		
Others	12.4	4.2		
Ever received CE on ASRH				
Yes	14.3	4.2	T - test	0.000*
No	12.2	5.3		

*Statistically significant at $p < 0.05$

Discussion

Majority of the healthcare providers in this study were nurse-midwives (66.9%) and CHOs/CHEWs (20.8%). Others were physicians and pharmacists. Interestingly, social workers reported that they provide contraceptive services for adolescents. Ordinarily, they are not expected to be offering such services. This finding indicates that adolescents may be seeking contraceptive services from them. Thus this group may benefit from training on adolescent sexual and reproductive health.

Providers in this study had ambivalent attitudes towards providing contraceptives for adolescents. Over half (57.5%) were of the opinion that providing contraceptives for unmarried adolescents promotes sexual promiscuity. Similar fears have been expressed by providers in other settings (22 – 23) even though there is no scientific evidence to support the premise that providing contraceptives to the unmarried promotes promiscuity. Contrary to this belief, unmarried young people who use contraceptives practice safer-sex and decrease their chances of having unwanted/unplanned pregnancies or contracting STIs. It could be that providers held this attitude because of the moral issue which stigmatizes premarital sex.

Over a third of the respondents (42.7%) in this study reported that unmarried adolescents should not be provided with contraceptives because the Nigerian

culture does not support premarital sex. This perception is not in line with the realities of adolescent sexual activities as reflected in the high rates of STIs and unplanned pregnancies reported among this group. It could be that the providers believe that they owe the society the duty of protecting one of its values (chastity). The fact remains that irrespective of this culture, many adolescents are having sex. Providing sexually active adolescents with contraceptives will assist in safeguarding their lives and future.

It was observed in this study that some healthcare providers preferred to discourage sexually active adolescents from using contraceptives. Over half (51.7%) felt it is better telling sexually active unmarried adolescents to abstain from sex instead of giving them contraceptives when it is requested. Similar findings have been reported in other developing countries. For example, majority of the nurse-midwives in Kenya and Zambia also said their first option would be to recommend to unmarried adolescent boys and girls to abstain from sex when they ask for contraceptives rather than offer them contraceptives (19). A study conducted in South Africa (18) also reported that providers told adolescents to abstain from sex when they come for contraceptives. This might probably be the reason why adolescents do not visit public health facilities for professional contraceptive counselling and other reproductive

health services. Instead, they may prefer to visit chemists or seek advice from their peers. Unfortunately, the information received may be incomplete or inaccurate.

There is no controversy that sexual abstinence is the best method for preventing unplanned pregnancies and STIs especially among adolescents. It should be promoted as such. However, for some sexually active adolescent boys and girls, they may see abstinence from sex as being impracticable. For this group of adolescents, access to contraceptives is very important. Healthcare providers, particularly those that provide contraceptive services should provide confidential contraceptive services in a non-judgmental way.

Findings from this study suggest that healthcare providers may not perceive unmarried adolescents as a part of their target audience. Only one third (41.5%) of the respondents felt that contraceptive services should be provided for both married clients and unmarried adolescents. The possible explanation for this might be that healthcare providers believe that providing equal access for both married clients and unmarried adolescents will seem like encouraging sexual activity among unmarried adolescents.

Nevertheless, it appears that the providers in this study are somewhat concerned about the reproductive health of adolescents. Majority (70.6%) were of the opinion that adolescents should be given contraceptive counselling before they become sexually active. They however appeared to be unsure as to whether unmarried adolescent require parental consent before contraceptive provision. About a third (33.4%) reported that unmarried adolescents do not require parental consent before contraceptives are provided, 14.5% were undecided while more than half (52.1%) disagreed.

In Nigeria efforts have been made over the years in both policy and programme fronts at improving the reproductive health status of Nigerian adolescents which has been described as very poor (10, 24). The strategies suggested to improve their reproductive health include providing adolescents access to a comprehensive range of adolescent/youth friendly information, counselling and behaviour change communication in order to foster the adoption of healthy sexual behaviour and enable them take control of their health (21). However, there are no clear policy statements as to provision of contraceptive services for unmarried adolescents by health care providers.

Limitation of the study

This study was limited by the use of data which relied on provider reports. The study did not observe interactions between providers and unmarried adolescents. Thus, the relationship between attitude and behaviour could not be ascertained.

Conclusion

Findings from this study indicate that healthcare providers felt ambivalent about providing contraceptives for adolescents in Nigeria. Many felt the provision of contraceptives for unmarried adolescents promotes promiscuity and that contraceptives should not be provided because the Nigerian culture is not in support of premarital sex. Providers reported that they discouraged sexually active adolescents from using contraceptives. Nevertheless, most were concerned about the reproductive health of adolescents and were of the opinion that contraceptive counselling should be given to adolescents before they commence sexual activities.

Positive provider attitudes are a key element in enhancing contraceptive use among young people. It is important that attitudes opposing the use of contraception by sexually active adolescents be reviewed in line with the realities of adolescent sexuality. Sexual abstinence should be promoted for those willing to practice it. For those who are sexually active and want to use contraceptives, access to contraceptive services should not be denied because it is better to prevent unwanted pregnancies and STIs than to be faced with the consequences that may result.

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References

1. National Population Commission (NPC) and ORC Macro. Nigeria demographic and health survey 2003. NPC and ORC Macro, Calverton, Maryland, 2004.

2. Fatusi AO, Blum RW. Predictors of early sexual initiation among a nationally representative sample of Nigerian adolescents. *BMC Public Health* 2008; 8: 136.
3. National Population Commission (NPC) and ICF Macro. Nigeria demographic and health survey 2008. Abuja: NPC and ICF Macro, 2009.
4. Ikeme ACC, Ezegwui HU, Uzodinma, AC. Knowledge, attitude and use of emergency contraception among female undergraduates in eastern Nigeria. *J Obstet Gynaecol* 2005; 25: 491-3.
5. Orji EO, Esimai OA. Sexual behaviour and contraceptive use among secondary school students in Ilesha southwest, Nigeria. *J Obstet Gynaecol*. 2005; 25: 269-72.
6. Ozumba BC, Obi SN, Ijioma NN. Knowledge, attitude and practice of modern contraception among single women in a rural and urban community in southeast Nigeria. *J Obstet Gynaecol* 2005; 25: 292-5.
7. Biddlecom AE, Munthali A, Singh S, Woog V. Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana, Malawi and Uganda. *Afr J Reprod Health* 2007; 11: 99-110.
8. Onwurah-Chimah UC. Sexual risk behaviour and contraceptive use among secondary school students in Ojo military barracks, Lagos. Dissertation. University of Ibadan, Ibadan, Nigeria 2006.
9. UNFPA. State of the Nigerian population. Abuja: UNFPA, 2005.
10. Federal Ministry of Health [Nigeria]. National HIV/AIDS and reproductive health survey. Abuja: Federal Ministry of Health, 2006.
11. Federal Ministry of Health [Nigeria]. National HIV/AIDS and reproductive health survey. Abuja: Federal Ministry of Health, 2009.
12. Bankole A, Oye-Adeniran BA, Singh S, Adewole IF, Wulf D, Sedgh G. et al. Unwanted pregnancy and induced abortion in Nigeria: causes and consequences. New York: Guttmacher Institute, 2006.
13. Research Alliance to Combat HIV/AIDS (REACH). Social dimensions of HIV and AIDS prevention: HIV/AIDS related risks behaviours and testing and counselling in Nigeria. Ibadan: REACH, 2010.
14. Lindberg C, Lewis-Spruill C, Crownover R. Barriers to sexual and reproductive health care: urban male adolescents speak out. *Issues Compr Pediatr Nurs* 2006; 29: 73-88.
15. Mmari KN, Magnani RJ. Does making clinic-based reproductive health services more youth-friendly increase service use by adolescents? Evidence from Lusaka, Zambia. *J Adolesc Health* 2003; 33: 259-70.
16. Agampodi SB, Agampodi CT, Piyaseeli UKD. Adolescents perception of reproductive health care services in Sri Lanka. *BMC Health Serv Res* 2008; 8: 98.
17. Nalwadda G, Mirembe F, Tumwesigye NM, Byamugisha J, Faxelid E. Constraints and prospects for contraceptive service provision to young people in Uganda: providers' perspectives. *BMC Health Serv Res* 2011; 11: 220.
18. Wood K, Jewkes, R. Blood blockages and scolding nurses: barriers to adolescent contraceptive use in South Africa. *Reprod Health Matters* 2006; 14:109-18.
19. Warenus LU, Faxelid EA, Chishimba PN, Musandu JO, Ong'any AA, Nissen. Nurse-midwives' attitudes towards adolescent sexual and reproductive health needs in Kenya and Zambia. *Reprod Health Matters* 2006; 14:119-28.
20. Stanback J and Twum-Baah KA. Why do family planning providers restrict access to services? An examination in Ghana. *Int Fam Plan Perspect* 2001; 27: 37-41.
21. Adekunle AO, Arowojolu AO, Adedimeji, AA, Roberts OA. Adolescent contraception: a survey of attitudes and practices of health professionals toward adolescent contraception. *Afr J Med Med Sci* 2000; 29: 247-52.
22. Mngadi PT, Faxelid E, Zwane IT, Höjer B, Ransjo-Arvidson AB. Health providers' perceptions of adolescent sexual and reproductive health care in Swaziland. *Int Nurs Rev* 2008; 55: 148-55.
23. Matatu S, Njau W, Yumkella F. To reach the youth: creating adolescent-friendly reproductive health services in Uganda. *PRIME II Dispatch* 2001; 1: 1-11.
24. Federal Ministry of Health [Nigeria]. National policy on the health and development of adolescents and young people in Nigeria. Abuja, 2007.