

Teachers' Attitude is Not an Impediment to Adolescent Sexuality Education in Enugu, Nigeria

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ABSTRACT

Studies have shown that adolescents in Nigeria have poor knowledge of reproductive health issues and that there was a need to provide them with correct broad-based information on reproductive health as part of a nationally-approved school curriculum^{1,2,3}. However, the non-application of the curriculum on sexuality education in many secondary schools in Nigeria has been blamed on a negative attitude of teachers⁴.

This study was undertaken to determine the attitude of secondary school teachers in Enugu, South-eastern Nigeria, to adolescent sexuality education and to determine whether this depends on their socio-demographic characteristics

A cross-sectional study of the attitude of teachers to adolescent sexuality education was done.

A total of 249 teachers were studied. Their mean age was 38.7 years \pm 8.08 SD. Two hundred and ten teachers (84%) were females. Two hundred and twenty-four teachers (90%) were married and 168 (67.5%) were of Roman Catholic faith. The awareness of reproductive health activities was high. There was a high proportion of respondents who approved of sexuality education for adolescents (77.5%) and an equally high proportion who believed that it was important (89%). One hundred and ninety-eight (79%) of the respondents were willing to teach sexuality education. The attitude to sexuality education was independent of religion, sex or marital status ($p > 0.05$).

It was concluded that secondary school teachers in Enugu urban were willing to offer sexuality education to adolescents under their care irrespective of their religion, sex or marital status. It is, therefore, recommended that teachers in Enugu be given the necessary special training in the teaching of sexuality education now and that sexuality education be officially incorporated into the school curriculum in Enugu, preferably as part of moral studies. (*Afr J Reprod Health* 2006; 10[1]:81-90).

RÉSUMÉ

L'attitude des enseignants ne constitue pas un obstacle à l'éducation sexuelle destinée aux adolescents à Enugu, Nigéria Les études ont montré que les adolescents au Nigéria n'ont qu'une faible connaissance des questions concernant la santé de reproduction et qu'il y a la nécessité de leur fournir une information correcte de tendance très large sur la santé de reproduction comme faisant partie d'un programme scolaire approuvé dans le pays entier^{1,2,3}. Pourtant, l'attitude négative des enseignants est considérée comme étant responsable de la non-application du programme sur l'éducation sexuelle dans plusieurs écoles secondaires au Nigéria⁴.

Cette étude avait pour objectif de déterminer l'attitude des enseignants au niveau de l'école secondaire à Enugu, au Sud-Est du Nigéria et de déterminer si celle-ci dépend de leurs caractéristiques démographiques.

Une étude transversale portant sur l'attitude des enseignants envers l'éducation sexuelle pour adolescents a été menée.

Au total, 249 enseignants ont été enquêtés. Leur âge moyen était 38,7 ans \pm 8,08 SD. Deux cent dix enseignants (84%) étaient des femmes. Deux cent vingt-quatre (90%) étaient mariés et 168(67,5%) étaient de profession catholique. Le niveau de connaissance des activités de la santé reproductive était élevé. Il y avait une grande proportion de répondants qui approuvaient l'éducation sexuelle pour adolescents (77,5%). Il y avait également la même proportion qui croyaient qu'elle était importante. Cent quatre vingt-dix-huit (79%) des répondants voulaient bien enseigner l'éducation sexuelle. L'attitude envers l'éducation sexuelle était indépendante de la religion, du genre ou de la situation de famille ($P < 0,5$).

Nous avons conclu que les enseignants au niveau secondaire dans la ville d'Enugu voulaient bien enseigner l'éducation sexuelle aux adolescents dont il a la responsabilité, quelque soit leur religion, leur sexe et leur état civil. Nous proposons donc que les enseignants à Enugu soient formés de manière spéciale en ce qui concerne l'enseignement de l'éducation sexuelle maintenant et que l'éducation de la sexualité soit officiellement incorporée dans le programme scolaire à Enugu, de préférence comme faisant partie des études morales. (*Rev Afr Santé Reprod* 2006; 10[1]:81-90)

KEY WORDS: *Attitude, sexuality education, adolescents, teachers*

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Introduction

The evolution of the current concept of reproductive health involved a paradigm shift to the life cycle approach in which reproductive health concerns were not limited to women of reproductive age but were extended to include life-time concerns for both men and women from birth to old age.⁵ Embodied in this approach was a rights-based concept which implies a shift of emphasis from population policies and fertility control to the promotion of the reproductive health of individuals as a right.⁶ This recognises sexual and reproductive health as ends in themselves. This new approach has enabled the attention now being paid to reproductive health problems of all age groups including adolescents.

Adolescents are known to be vulnerable to peculiar reproductive health problems such as early initiation of sexual activity, teenage unplanned pregnancy, unsafe abortion, sexual violence and abuse, early marriage, harmful traditional practices including pubertal initiation rites.⁷

Studies on adolescent reproductive health problems in Nigeria recommend that the introduction of sexuality education is paramount in efforts to rid adolescents of ignorance on sexuality/reproductive health issues and suggest the use of in-school programmes involving primary, secondary and tertiary levels of education^{1,4,8,9}

Sexuality education refers to a planned process of education that fosters the acquisition of factual information, formation of positive attitudes, beliefs and values as well as the development of skills to cope with the biological, psychological, socio-cultural and spiritual aspects of human sexuality¹⁰.

Based on the Nigeria National Reproductive Health Policy, the major role of secondary school teachers in reproductive health as a professional group is their role in adolescent reproductive health. This role is specifically defined by the position of secondary schools as one of the major avenues for imparting sexuality education to in-

school adolescent. It is thought that imparting sexuality education to in-school adolescents should have an extended effect to positively affect out-of-school adolescents who often look up to in-school adolescents as role models.⁹

The vital place of in-school sexuality education has recently been highlighted in a study in Botswana.¹¹ The study showed that adolescents perceived that teachers, peers and parents had the greatest influence on their reproductive health attitudes and that schools had the most potential for providing reproductive health information. This is because schools reach a broader section of youths both directly and indirectly by educating peers. It is perhaps with a similar understanding that training of teachers on reproductive health issues was adopted as a strategic plan for adolescent reproductive health in Nigeria⁴.

In Enugu state, South-eastern Nigeria, the national curriculum on sexuality education has not been officially incorporated into the secondary school curriculum.

This study set out, therefore, to determine the attitude of secondary school teachers in Enugu urban to sexuality education and thereby determine whether their attitude constitutes an impediment to the introduction of comprehensive sexuality education for in-school adolescents in this part of Nigeria.

Methods

The study area is a cosmopolitan city and the administrative capital of Enugu state in South-eastern Nigeria. The city has an estimated population of 464,511 according to the 1991 national population census. There were 28 public secondary schools spread across the city.

The study population included secondary school teachers in public secondary schools. There were 1,916 teachers in public secondary schools in Enugu at the time of the study.

This was a cross-sectional study of the attitude of secondary school teachers to adolescent sexuality education. The study was

carried out between September and November 2004.

The minimum sample size for the study N was calculated based on Yaro Yamane's formula for sample size determination for estimating proportion in a finite population¹².

$$n_f = \frac{no}{1 + \frac{no}{N}}$$

where n_f=minimum sample size

N=finite population, and no= $\frac{Z^2 \cdot (1-p)}{d^2}$

Where Z is the confidence interval, P is prevalence from a previous study and d is level of confidence. Assuming a prevalence of 20% for one outcome measure of interest based on a previous study in Enugu urban¹³ and 5% level of confidence and confidence interval of 1.96, the minimum sample size was 218.

The sampling technique was multi-stage sampling. The first stage involved a simple random sampling to select 20 secondary schools using a table of random numbers with the list of all the public secondary schools in the city as a sampling frame. The second stage involved a simple random sampling to select 13 teachers from the nominal roll of the teachers in each selected school using a table of random numbers. These teachers were then administered with the questionnaires. The nominal roll of each school was the sampling frame for each school.

For the focus group discussions, a random selection of 6 schools was done using a table of random numbers. The discussants were selected randomly using a table of random numbers. The nominal roll of each school was the sampling frame.

The method of data collection was by self administered semi-structured questionnaires and focus group discussions (FGDs). The questionnaires had three sections dealing with biographic data, knowledge of reproductive health issues and attitude to sexuality education/ reproductive health.

Focus group discussion was held for 6 schools selected randomly. Each school had 2 groups with each group made up of 5 teachers of the same sex. Altogether twelve FDG sessions were held and each lasted for a minimum of 45 minutes. The discussions dwelt on eliciting details of knowledge, beliefs and attitudes to sexuality education for adolescents. Questions and responses were recorded on audio-cassette tapes for subsequent analysis.

Permission to collect the data was obtained from the Enugu State Education Commission. Further institutional oral permission from school principals and consent of respondents were obtained prior to the administration of questionnaires and focus group discussions. Two trained assistants helped in the data collection.

The questionnaires were pre-tested in 50 teachers working in a private secondary school in Enugu, who did not form part of the study population.

Data analysis was done using descriptive and inferential statistics based on the PEPPS statistical package. Tests of independence were done with the Chi-square at 5% level of confidence. The results of focus group discussions were analyzed manually for content.

Results

Two hundred and forty-nine questionnaires were completed and analysed out of 260 questionnaires distributed giving a response rate of 95.8%. Data from focus group discussions were collected from sixty teachers in six secondary schools.

All the respondents were ethnic Igbo. *Table 1* shows the socio-demographic characteristics of respondents. The ages of the respondents ranged from 20-55 years. Seventy nine percent were aged 30-49 years. The mean age was 38.7 ±8.08 years. The modal age was 40 years. All the respondents were Christians with Roman Catholics constituting the majority (67.5%). Eighty-four percent of the respondents were females. One hundred and ninety-four females and 30 males (90% of all

Table 1. Socio-demographic characteristics of respondents (n=249)

Socio-demographic characteristic	number	(%)
Age (years)		
20-29	33	(13.3)
30-39	96	(38.6)
40-49	102	(41)
50-59	18	(7.2)
Sex		
Male	39	(15.7)
Female	210	(84.3)
Religion		
Christianity		
*Catholic	168	(67.5)
*Pentecostal	39	(15.7)
*Anglican	32	(12.9)
*Methodist	6	(2.4)
*Others	4	(1.6)
Educational attainment		
NCE	25	(10.0)
HND	16	(6.4)
Bachelor's degree	169	(67.8)
Masters degree	39	(15.7)
Marital status		
Married	224	(90.0)
Single	25	(10.0)
Length of service		
<5 years	57	(22.9)
5-10 years	84	(33.7)
>10 years	108	(43.4)

respondents) were married whereas 16 female and 9 male respondents were single.

One hundred and sixty-five married female respondents and 4 single female respondents had had children. The mean number of children for the married female respondents was 1.2 while the modal number of children for the same group was 4. Eighty-three percent of the respondents had at least a bachelor's degree. Over 77 percent had been in service for over 5 years.

Table 2 shows the distribution of respondents based on correct interpretation of aspects of reproductive health. Over 90 percent of respondents correctly identified the interpretation of sexuality education, family planning, and safe motherhood. Reproductive health rights were the least known with only 42 percent of respondents correctly interpreting it.

Focus group discussion on knowledge of reproductive health issues also showed a high level

Table 2: Distribution of correct knowledge of components of reproductive health among respondents (n=249)

Component of Reproductive Health	Interpretation			
	Correct	(%)	Incorrect	(%)
Family planning	240	(96.4)	9	(3.6)
Safe motherhood	238	(95.6)	11	(4.6)
Sexuality education	231	(92.8)	18	(7.2)
Harmful traditional practices	216	(86.7)	33	(13.3)
Sexually transmitted disease	216	(86.7)	33	(13.3)
Infertility	200	(83.7)	49	(16.3)
Unsafe abortion	112	(45.0)	137	(55.0)
Reproductive/sexual rights	90	(36%)	159	(64%)

of knowledge. Most of the discussants correctly named the reproductive health problems of adolescents. None of the discussants was aware that sexuality education had been approved at national level as part of the secondary school curriculum.

Table 3 shows the distribution of sources of reproductive health information among respondents. Information from mass media (radio and television) and public workshops were the most frequent sources of reproductive health information. Churches provided such information to only 10 percent of respondents.

Focus group discussants revealed identical sources of reproductive health information. They expressed surprise that they did not get such information from doctors and nurses. They stated that the only issues commonly discussed by doctors and nurses were family planning and contraception and that these were discussed at family planning clinics. Discussants stated that no health worker had ever talked about sexual rights. Males got little or no information from hospitals. The following perception was expressed by one of the discussants:

"Doctors do not tell us about all these other things that you have mentioned here. They only tell us about family planning or they send you

to go and do HIV test. In short this reproductive health is a recent thing that we hear on television or radio where there is no room for private explanations"

Discussants were specifically asked what their source of knowledge on sexuality education was. Most of them mentioned workshops by non-governmental organisations. A few discussants mentioned family fellowships in Christian churches. On the sources of information on adolescent reproductive health problems, discussants stated that individual experiences from their children or those of their neighbours, friends and relations far more frequently than the media. One male discussant remarked:

Everyday you here that this person's daughter or that person's daughter is pregnant, or that person's son has impregnated someone, or that that this neighbour's daughter committed abortion, or even that this chap has died from HIV. You don't need television or radio to hear all these"

Table 4 shows the distribution of the attitude of respondents to adolescent sexuality education. More than 87.5 percent of the respondents approved of adolescent sexuality education with as much as 79.5 percent enthusiastic about it.

Table 3: Showing the distribution of sources of reproductive health information among respondents (n=249)

Source of information	number	(%)
Television	200	(80.3)
Public lectures/Workshops	147	(59.8)
Radio	100	(40.2)
Hospitals/Health centres	96	(38.6)
Friends/relations	80	(32.1)
Posters	72	(28.3)
Newspapers/Journals	48	(19.3)
Churches	25	(10.0)

Table 4: Distribution of attitude of respondents to adolescent sexuality education (n=249)

Attitude	Number	(%)
Approve	193	(77.5)
Enthusiastic	155	(62.2)
Merely Supportive	38	(15.3)
Disapprove		
Indifferent	28	(11.2)
Inhibited by religious faith	18	(7.2)
Inhibited by cultural upbringing	10	(4.0)

Table 5 shows the distribution of the rating of the importance of sexuality education by respondents. More than 75 percent of the respondents thought that it was very important while only 2.4 percent thought that it was not important.

Table 6 shows the distribution of respondents based on the willingness to teach sexuality education subject if officially introduced. Sixty-three percent were very willing while 8.0 percent were actively opposed to it.

A majority of focus group discussants also approved of sexuality education. On how this should be given, discussants were split over the age at which adolescents should be given sexuality education. Some preferred adolescents 13 years and above excluding those 10-13 years who they thought might not be able to manage the

information well. A majority however felt that all secondary school adolescents irrespective of age should be given sexuality education as they felt that the capacity to handle information did not depend on age alone.

Differences over what aspects of reproductive health should be taught were noticed with regard to contraceptives. Most female discussants stated that adolescents should not be exposed to contraceptives for fear of encouraging liberal sexual activities. However most discussants of both sexes thought that the emphasis of adolescent sexuality education should be sexual rights and the dangers associated with premarital sex including unplanned pregnancy, unsafe abortion and sexually transmitted diseases especially HIV/AIDS. Most discussants favoured the promotion of abstinence rather than contraceptives so as to avoid these problems.

Table 5: Distribution of rating of the importance of adolescent sexuality education by respondents (n=249)

Rating	Number	(%)
Very important	189	(75.9)
Important	45	(14.5)
Barely important	9	(3.6)
Not important	6	(2.4)
Useless	0	(0.0)

Table 6: Distribution of respondents based on willingness to teach sexuality education if officially introduced (n=249)

	Number	(%)
Very willing	158	(63.5)
Just willing	40	(16.1)
Not willing	28	(11.2)
Actively opposed	20	(8.0)
No response	3	(1.2)

Regarding what most influences their attitude to adolescent sexuality education, most discussants mentioned practical reproductive health experiences and their professional training as teachers. Surprisingly discussants felt their personal beliefs were based on their experiences in life more than religious injunctions.

On incorporating sexuality education into the school curriculum in the state, the majority of discussants felt that it was right. Those who supported this were of the opinion that moral issues in sexuality education would be sufficiently addressed by giving special training to selected teachers and by including it as part of religious instruction.

Table 7 shows the relationship between socio-demographic characteristics and attitude to sexuality education. It shows that attitude to sexuality education was independent of religion, sex or marital status, but dependent on age.

Discussion

The proportion of teachers, who were aware of the different components of reproductive

health, including sexuality education, was high. This is similar to findings in previous studies in Africa^{10, 11, 13-15}. The high proportion of well-educated persons among teachers may explain this high level of awareness. It may also be explained by the high proportion of women and married persons both groups of which are involved in child bearing, active sex life and consequently exposure to reproductive health activities. Nevertheless the high level of awareness of what sexuality education meant ensured that their opinions on their attitude to it would not be based on ignorance.

The high degree of approval for sexuality education by respondents contrasts with the opinion of the strategic framework and plan for the National Reproductive Health policy which suggested that the reason why the curriculum on sexuality education was not being implemented nationwide was because of a negative attitude of teachers². However, it agrees with the high approval for reproductive health practices found in previous studies^{10,13}.

Table 7: Relationship between socio-demographic characteristics and attitude to sexuality education

Characteristic	support sexuality education	p= value
Age		
20-29(n=33)(%)	24(72.7)	0.000*
30-39(n=96)(%)	64(66.7)	
40-49(n=102)(%)	59(57.8)	
50-59(n=18)(%)	9(50.0)	
Total (n=249)(%)	156(62.7)	
Sex		
Male(n=39)(%)	27(69.2)	0.688
Female(n=210)(%)	152(72.4)	
Total(n=249)(%)	179(71.9)	
Marital Status		
Married(n=224)(%)	157(70.1)	0.843
Single(n=25)(%)	18(72.0)	
Total(n=249)(%)	175(70.3)	
Christian Denomination		
Catholic(n=168)(%)	120(71.4)	0.336
Non-catholic(n=81)(%)	53(65.4)	
Total(n=249)(%)	173(69.5)	

Statistically significant

The overwhelming support for sexuality education is again reflected in the high proportion of teachers who were willing to teach sexuality education if it was officially introduced and the high proportion who thought that sexuality education was very important.

The reason for this support is suggested by the views of focus group discussants. Majority supported the use of sexuality education to encourage abstinence so as to prevent problems such as unplanned pregnancy, unsafe abortion and sexually transmitted diseases. Most were opposed to providing information on contraceptives to adolescents. The large proportion of respondents and discussants that were Roman Catholics might explain the aversion to contraceptives.¹⁸ However, whereas abstinence may be ideal, it would be unrealistic not to provide information on contraception for adolescents who cannot, by all means, abstain.^{4,7,16,19-26} Besides, to withhold

information on contraception might amount to an infringement on the sexual/reproductive rights of adolescents.⁷

The low proportion of teachers who understood reproductive health rights despite the high awareness of reproductive health is surprising given that the current concept of reproductive health is rights-based²⁶. This finding may be attributable to a possible neglect of emphasis on reproductive health rights during public health campaigns in the mass media.

In another vein, it is noteworthy that there was an apparent dissociation between the sources of reproductive health information and what influenced the attitude of respondents. Whereas the mass media is the dominant source of information, practical experience influenced attitude most. This may have an implication for reproductive health activists in this area. While utilizing the media, reproductive health campaigns

may also need to focus more at those points where reproductive health activities take place such as antenatal clinics, family planning clinics, STD clinics or during treatment for unsafe abortion. This would mean a closer co-operation between such activists and clinics that provide reproductive health services.

The fact that attitude to sexuality education for adolescents was independent of sex, marital status and religion, but dependent on age, is equally surprising. This is because these attributes were expected to influence practical reproductive health experiences which discussants stated as the most important factor influencing their attitude. However age is an attribute that also influences experience with religion and marital status. Therefore the influence of age may be attributable, at least, in part, to these features.

In conclusion, secondary school teachers in Enugu urban are willing to offer sexuality education to adolescents under their care irrespective of their socio-demographic characteristics. The finding is an encouraging development for the efforts to improve adolescent reproductive health by using targeted information to effect behavioral change.

On the basis of the findings in this study, therefore, it is recommended that secondary school teachers in Enugu Urban be given the necessary special training to give sexuality education to adolescents under their care now. Subsequent involvement of the other parts of the state may follow. These, of course, mean that government should have officially incorporated sexuality education into the secondary school curriculum in the state. The result of this study can be a stimulus to other states where adolescent sexuality education is hindered by the feeling that secondary school teachers have a negative attitude to it.

REFERENCES

1. Nwokocha A, Nwakoby BAN. Knowledge of Human Immunodeficiency Virus (HIV) among

- Secondary School Students in Enugu. *J Adolescent Rep Health* 2002;32:32-40.
2. Agboghroma OC, Emuveyan EE. Reproductive Health Problems in Nigeria: The Role of Adolescent Sexuality and Traditional/ Cultural Practices. *Nig Q J Hosp Med*, 1998; 8(1): 27-33.
3. Action Health Incorporated. Reproductive Health and Rights of in-school Adolescents in Mainland Local Government Area Lagos State, Nigeria 2003:85
4. Federal Ministry of Health, Abuja. National Reproductive Health Policy Strategic Framework and Plan, 2002-2006. Abuja, 2002:2-52.
5. Otolorin EO. Reproductive Health in Nigeria: An overview. *Dokita*, 1997:1-5.
6. Esiet AO, Whitaker C. Coming to terms with Politics and gender: The evolution of an Adolescent Reproductive Health Program in Nigeria. Action Health Incorporated, 1996: 147-167.
7. Berkely D, Ross D. Strategies for Improving the Sexual Health of Young People. *Culture Health and Sexuality*, 2003; 5(1): 71-86.
8. Gichangi PP. Reproductive Health Awareness among Adolescents. *East Afr Med J*, 2003:337.
9. Seth M. Training School Teachers to Pass on Life Skills to Adolescents. In: Bott S, Jejeebhoy SS, Puri C. Towards Adulthood: Exploring the Sexual and Reproductive Health of Adolescents in South Asia. WHO, 2000: 190-192.
10. National Educational and Research Development Council. National Sexuality Education Curriculum for Upper Primary, Secondary and Tertiary institutions in Nigeria, 2001; iii-viii.
11. Smith J. Knowledge and Attitude Regarding Reproductive Health among Adolescents in Southern Botswana. *East Afr Med J* 2003; 3(3): 48.
12. Uzoagulu A.E. Practical guide to writing research projects in tertiary institutions. Enugu; John Jacobs Classic Publishers LTD, 1998:66.
13. Onwuzurike BK, Uzochukwu BSC. Knowledge, attitude and Practice of Family planning Amongst Women in a high density, low-income Urban area of Enugu, Nigeria. *Afr J Rep Health* 2001; 5(2): 83-89.
14. Kantiok C, Olafimihan O, Shittu SO, Onwuhafua PI. Knowledge, Attitude and Practice of Family planning among Community Health officers in

- Kaduna State, Nigeria. *Trop J Obstet Gynaecol*; **19**(suppl 2): 2002.
15. Olatinwo AWO, Anate M, Balogun OR, Aliro MO. Intrauterine contraceptive device: Socio-demographic characteristics of acceptors, acceptability and effectiveness in a Teaching Hospital in Nigeria. *Nig J Med* 2001; **10**(1): 14.
 16. Anochie I, Ikpeme E. The knowledge, attitude and use of contraceptives among secondary school girls in Port Harcourt. *Nig J Med* 2003; **12**(4): 217.
 17. Olaniyan OB, Agboghoroma OP, Ladipo O. knowledge and practice of Cervical screening among female health workers in Abuja metropolis, Nigeria. *Trop J Obstet Gynaecol* 2000; **17**(1):18-20.
 18. Marx P. Sex Education and the Church. The Life Magazine, Bigard Memorial Seminary Enugu; **1**(1): 26-31.
 19. Kibret M. Reproductive health knowledge, attitude and practice among high school students in Bahir Dar, Ethiopia. *Afr J Rep Health* 2003; **7**(2): 39-45.
 20. Senanakaye KP, Ladjali M, Adolescent Health: changing needs. *Int J Obstet Gynaecol* 1994; **46**:137-143.
 21. Conrad LAE, Blythe MJ. Sexual Function, Sexual abuse and Sexually transmitted diseases in Adolescence. *Best Prac and Res Clin Obstet Gynaecol* 2003; **17**(1): 103-116.
 22. Dickson-Tetteh K. Editorial: Adolescent Reproductive Health in Africa: A problem or priority? *Afr J Rep Health* 2002:1 (incomplete reference).
 23. Lema VM. Reproductive behaviour and profiles of adolescent post abortion patients in Blantyre, Malawi. *East Afr Med J* 2003, **80**(7): 339.
 24. Satia M, Muhenza D. Adolescent Knowledge Attitude and Behaviour Regarding Reproductive Health and HIV/AIDS in Tanzania. *Culture, Health and Sexuality* 2001, **3**(4): 43-56.
 25. Kwameyaki D. A Review of Adolescent Fertility and Reproductive Health in Four Sub-Saharan African Countries. *Fert Steril* 2002; **3**(1):48-78.
 26. Omigbodun AO. Reproductive Health at the turn of the millennium: A glance back. *Trop J Obstet Gynaecol* 2001; **18**(1): 2-7.
 27. Stones W, Matthews R. Pathway to Evidence-based Reproductive Health Care in developing countries. *Int J Obstet Gynaecol* 2003; **110**:500-507.