# Effect of Training Programme on Secondary Schools Teachers' Knowledge And Attitude Towards Reproductive Health Education In Rural schools Ile-Ife, Nigeria

Caleb.A.Adegbenro<sup>1</sup>, J.D.Adeniyi<sup>2</sup> and O.Oladepo<sup>2</sup>.

### ABSTRACT

This study assessed the effect of training programme on teachers' knowledge of and attitude towards reproductive health education /sexuality education [RHE/SE] in five randomly selected rural schools in Ife-North local government area [IFLGA], Southwest, Nigeria. All the 84 teachers in the selected schools in the LGA were recruited for the study. They [84 teachers] were all given training in RHE/SE for one month. Their knowledge and attitude towards RHE/SE were assessed pre-and post-training programme. The results show a significant increase in percentage of those who had good knowledge in general areas of RHE/SE at post-training assessment compared with pre-training assessment[from 14.3% to 53.6%,p=0.0001]. Also, pre-post attitudinal disposition assessments show that there was an increase in percentage of those who were favourably disposed to the teaching of RHE/SE in Nigeria Schools at post-training assessment [from 17.9% to 45.2%, p=0.0011]. The study suggests that RHE/SE should be included and made compulsory in all training programme for all teachers in Nigeria. (Afr J Reprod Health 2006; 10[3]:98-105)

#### RÉSUMÉ

Effet du programme de formation sur la connaissance et l'attitude des enseignants au niveau secondaire envers l'éducation de la santé de reproduction dans les écoles rurales, à Ile-Ife, Nigéria. Cette étude a évalué l'effet de la formation des enseignants au secondaire sur la connaissance et l'attitude envers l'éducation de la santé de reproduction/éducation sexuelle (ESR/ES) dans 5 écoles rurales situées dans l'administration locale d'Île-Ife, au sudouest du Nigéria, qui ont été selectionnées au hasard. Tous les 84 enseignants dans les écoles selectionnées dans l'administration locale ont été recrutés pour l'étude. Tous (les 84 enseignants) ont fait le stage sur ESR/ES pour un mois. Leur connaissance et leur attitude par rapport à l'ESR/ES ont été évaluées avant et après le stage. Les résultats ont montré une hausse importante dans le pourcentage de ceux qui avaient une bonne connaissance dans les domaines généraux de l'ESR/ES après le stage par rapport à l'évaluation d'avant stage (53,6% vs 14,3%, p = 0,0001). De plus, les évaluations de la disposition d'attitude avant et après le stage montrent qu'il y a eu une augmentation dans le pourcentage de ceux qui étaient favorables à l'enseignement de l'ESR/ES dans les écoles nigérianes pendant l'évaluation d'après stage (45,2% vs 17,9%, p = 0,0011). L'étude suggère qu'il faut inclure l'ERS/ES et les rendre obligatoire dans tous les programmes de formation pour tous les enseignants au Nigéria. (Rev Afr Santé Reprod 2006; 10[3]:98-105)

KEY WORDS: Teachers, Training Programme, Knowledge, Attitude, Reproductive Health Education

<sup>1</sup>Department of Community Health, College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.. <sup>2</sup>Department of Health Promotion and Education, College of Medicine, University of Ibadan, Ibadan, Oyo State, Nigeria.

Correspondence: Caleb .A. Adegbenro, Department of Community Health, College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. E-mail: calebade2002@yahoo.com

## Introduction

Adolescents in Nigeria as in other countries of the world are facing with many reproductive health problems nowadays. Some of these problems are high rate of risky-sexual activities, unwanted (unintended) pregnancy, abortion, STIs/HIV/AIDS and school drop-out. 1-23. Some factors which were implicated as being responsible for these reproductive health problems are, erosion of traditional moral values nowadays, negative peer group influence, love of money, women's economic dependence on men, desire to be loved, effect of western cultures such as pornographic materials/films that present sexual intercourse as being glamorous and finally poor knowledge of reproductive health education/sexuality education (RHE/SE)<sup>13,14,17,18,24-28</sup>.

To address these problems, constant suggestions and recommendations have been made by previous researchers for the introduction of compulsory reproductive health education/sexuality education (RHE/SE) at all levels of the educational institutions throughout Nigeria<sup>2,3,5,8,44,45</sup>. The reasons for this are of two folds. Firstly, provision of adequate RHE/SE to adolescents has been long employed to address the problems associated with reproductive health behaviours among them in some parts of the world<sup>3,11,29,32,46</sup>. Secondly, the schools have been found to be the important sites where young people can acquire knowledge and skills that equip them for responsible lifestyles now and in the future<sup>33-37</sup>.

Presently, the Nigerian government has set the necessary machinery in motion for the introduction of RHE/SE in all educational establishments in the country. Efforts taken thus far in this regard is the inauguration of National Guidelines Task Force (NGTF)44 which is being charged with the responsibility of development of a guideline for comprehensive sexuality education for adolescents and young adults<sup>38</sup>. To implement this programme, the teachers are the school personnel that can be saddled with the responsibility of formally executing it in the

classroom system<sup>35,43</sup>. But surprisingly, the teachers themselves have been found to be uncomfortable when discussing openly issues relating to human reproductive health<sup>39,40,45</sup>.

Therefore, the objectives of this paper were to:

- Access the teachers' level of knowledge of RHE/SE before and after the training programme.
- Assess their attitudinal disposition towards use of effective contraceptives among secondary school students before and after the training programme.
- Access their attitudinal disposition towards the introduction of RHE/SE into the curriculum of secondary schools in Nigeria before and after the training programme.
- 4. Equip them with adequate knowledge of RHE/SE to enable them function effectively as trainers (Service providers) in the proposed school-based adolescent RHE coming up shortly in their respective schools.

### Materials and Methods

The study was carried out among the teachers in the five selected rural secondary schools in Ife-North Local Government Area (LGA) in Osun State, Nigeria. The headquarters of this rural LGA is at Ipetumodu. It has an adjoining boundary with Ife-Central LGA in the Ancient city of Ile-Ife (the cradle of the Yorubas) which is located in the southwestern part of Nigeria.

The sampling technique was done in different stages. The first stage was the selection of the study site [Ife- North LGA] which was purposively selected. In the next stage, five schools were randomly chosen from the existing 10 public secondary schools in the selected LGA. And finally, all the 84 teachers that were available at the time of the study in all the five schools were recruited as sample size for the study. The subjects [teachers] were not matched with any control group. The reason for this is that the focus of the study was to access their level of preparedness

towards RHE programme and as well as equipping them with adequate knowledge of RHE/SE for the intended roles which they will play in the proposed RHE/SE programme in their respective school. However, this could be one of the limitations of the study.

Data collection was done in two phases. The first phase was before the training[base-line data] of the teachers in the area of adolescent reproductive health, while the second phase was after the training[post-training data]. The training which was carried out for a period of one month took place in the month of November, 2002.

The curriculum for the training was developed after due consultation with expert in adolescent reproductive health and standard books on training manual and facilitators' guide on adolescent reproductive health<sup>41,42</sup>.

The developed curriculum includes the following:

- description and functions of human reproductive organs,
- ii concept of adolescent and puberty
- iii teenage pregnancy: associated problems and prevention
- iv abortion, its associated problems and prevention
- v STIs/HIV/AIDS causes and prevention
- vi Contraceptives for the adolescents
- vii Communication skills [self assertive/esteem skills].
- viii Goal setting and life skills

The training was handled by trained research assistants (RA) which included reproductive health workers and family planning providers. Before the commencement of the study, permission was obtained form the state ministry of education, the local inspector of education (LIE) of the LGA and from the respective school authorities. Informed consent was also obtained from the participating teachers.

Materials used for data collection were focus group discussion (FGD) and self-administered questionnaire. The questionnaire was designed using the information obtained from FGD coupled with the information received from other researchers working on adolescent reproductive health and review of published literature. The questionnaires were administered in two phases (i.e. pre-and post-training phases). Information collected included: demographic data, knowledge of concept of adolescent and human reproductive organs, knowledge of STIs and HIV/AIDS, knowledge of contraceptives and attitude towards contraceptive use by adolescents and attitude towards the teaching of RHE/SE in Nigerian schools.

Data from the survey were coded and entered into a computer using the SPSS software. Chi-square test was used to establish whether there is a statistical significant difference between pre and post training evaluation results at p < 0.05.

### Results

### Socio-demographic characteristics

Details of the personal data of the 84 teachers involved in the study are shown in Table I From the table, majority (77.4%) of them were male and slightly above the average were 40 years and above (51.2%), their mean age was 37.8 years (SD = 7.6). As regards their religion, most (77.4%) were Christians. Fifty-nine were either first degree or higher National diploma (HND) holders representing 70.2% of the respondents. In case of marital status, most (72.6%) of them were married.

## Knowledge of Adolescence, RHE/SE and STIs/HIV/AIDS

Table 2 shows the trend of the results when comparing the results of pre-training assessment with that of post-training with respect to their knowledge in certain areas of reproductive health matters. In case of knowledge of adolescence at pre-training assessment, 34.5% had correct knowledge, while at the post training, it was

Table 1: Demographic characteristics of the Respondants [n=84]

Sex	No	%
Male	65	77.4
Female	19	22.6
Age (in years)		
20-29	15	17.9
30-39	26	31.0
40+	43	51.2
Mean (x) Age = 37.8 years Std Deviation	(SD) = 7.6	
Religion		
Christianity	65	77.4
Islam	12	14.3
Others	7	8.3
Qualification		
NCE/OND	21	25.0
B.ED/B.A/BSc/HND	59	70.2
M.ED/M.A/M.Sc	4	4.8
Marital Status		
Single	14	16.7
Married	61	72.6
Widowed/Divorced/Separated	8	9.5
Others	1	1.2

Table 2: Knowledge of Concept of Adolescence and Adolescent Reproductive Health Matters (n = 84)

Variables	Pre	Post	
	N (%)	N (%)	P-Value
Knowledge of adolescence		· · · · ·	
Correct Answer (good knowledge)	29(34.5)	58(69.0)	0.0012
Incorrect Answer (poor knowledge)	55(65.5)	26(31.0)	
Knowledge of Puberty			
Correct Answer (good knowledge)	31(36.9)	61(72.6)	0.0011
Incorrect Answer (poor knowledge)	53(63.1)	23(27.4)	
Knowledge of menarche	, ,	· /	
Correct Answer (good knowledge)	27(32.1)	38(45.2)	0.08
Incorrect Answer (poor knowledge)	<i>57</i> (67.9)	46(54.8)	
Knowledge of human reproductive organs			
Correct Answer (good knowledge)	36(42.9)	51(60.7)	0.02
Incorrect Answer (poor knowledge)	48(57.1)	33(39.3)	
General Knowledge of RHE/SE		· · · · · · · · · · · · · · · · · · ·	
Good Knowledge	12(14.3)	45(53.6)	0.0001
Fair Knowledge	10(11.9)	17(20.2)	
Poor Knowledge	6(73.8)	22(26.2)	
Knowledge of STIs and HIV/AIDS			
Good Knowledge	48(57.1)	61(72.6)	0.109
Fair Knowledge	15(17.9)	10(11.9)	
Poor Knowledge	21(25.0)	13(15.5)	

African Journal of Reproductive Health Vol. 10 No.3 December, 2006

significantly increased to 69.0% (p = 0.001). With respect to knowledge of puberty, a significant increase in percentage of those who had correct knowledge was observed at post-training when compared with pre-training assessment (from 36.9% to 72.6% p = 0.0001). Although respondents' correct knowledge of menarche shows a slight increase at post training assessment (from 32.1% to 45.2%), but it was not significant (p = 0.08). As regards correct knowledge of human reproductive organs, there was a significant increase in the percentage obtained at post-training assessment over what was obtained at pretraining assessment (from 42.9% 60.7%, p = 0.02). From the assessment of their general knowledge of RHE/SE, the percentage of those who had good knowledge of it shows a significant increase at post training assessment in comparison with

that of pre-training assessment (from 14.3% to 53.6%, p = 0.0001). And finally with respect to their knowledge of STIs and HIV/AIDS, although there was an increase in percentage of those who had a good knowledge at post training over that of pre-training, assessment (from 57.1% to 72.6%, p = 0.109)., but it was not significant.

## Knowledge of Contraceptives devices and Attitude Towards Contraceptive Use among Secondary Schools Students

The results obtained here are presented in Table 3. As regards their knowledge of effective contraceptive methods (e.g. condoms, pills, IUD, etc), an increase in the percentage was obtained at post-training assessment compared with pre-

Table 3: Knowledge of Contraceptives and Attitude towards contraceptive use among secondary school students (n = 84)

Variables	PreN (%)	Post N (%)	P-Value
Contraceptive knowledge effective methods			
(eg. Condom, pills, IUCD, injectables)	35(41.7)	65(77.4)	
Ineffective methods (eg. Use of local rings, withdrawal)	49(58.3)	19(22.6)	0.0021
Do you supports the use of effective contraceptive by the adolescents?			
Yes	21(25.0)	58(69.0)	0.0012
No	63(75.0)	26(31.0)	
Contraceptive methods recommended for			
students			
Condom	46(54.8)	68(81.0)	0.0014
Others (eg. IUD, pills/tablets, injectables)	38(45.2)	16(19.0)	

Table 4: Attitude towards the teaching of RHE/SE in Nigerian secondary schools (n=84)

Variables	Pre N (%)	Post N (%)	P-Value
Do you support the teaching of			
RHE/SE in schools?			
Yes	15(17.9)	38(45.2)	0.0011
No	69(82.1)	46(54.8)	

training assessment (from 41.7% to 77.4%). But in case of ineffective methods of contraceptive (e.g. use of local rings, withdrawal etc), a decrease in the percentage of knowledge of it was observed at post-training assessment (from 22.6% to 58.3%).

With respect to the teachers' support of use of effective contraceptives by the secondary school students, a significant increase in percentage of those who supported its use was obtained at post-training assessment in comparison with that of pre-training assessment (from 25.0% to 69.0%, p = 0.0012). As regards the recommended contraceptive methods for the students, condom tops the list in both pre- and post- training assessments [54.8% and 81.0% respectively, p = 0.0014

## Attitude Towards the Teaching of RHE/ SE in Nigerian Secondary Schools

Table 4 shows the attitudinal disposition of the teachers towards the teaching of RHE/SE in Nigerian secondary school. At pre-training assessment, the percentage of those who were favourably disposed to it was low (17.9%), while at post-training it was significantly increased to 45.2% (p=0.0011).

### Discussion and Conclusion

Based on the results in our study, a general trend of an increase in the percentage of those who had the correct knowledge in all area of reproductive health education [sexuality education] was obtained after post-training assessment, when compared with pre-training assessments. Two facts emerge from these differential results between pre and post training assessments. Firstly, it is a pointer to the fact that teachers [especially in rural areas] were still illequipped to handle the proposed RHE/SE which is yet to be introduced into Nigeria schools as found in the previous studies39,40,45,47. Secondly, it underscores the fact that teachers still need sound training in all aspects of RHE/SE before

they can effectively handle the subject-matter. As regards the use of effective contra-ceptive methods by the students, the same trend of increase in percentage of those who support its use was obtained at post-training assessment and with respect to recommended contracep-tive methods for the students, condom use was the most favoured method in both pre- and post-training assessments [54.8% and 81.0% respectively].

Finally their low level of attitudinal disposition at pre-training assessment [17.9%] towards the teaching of RHE/SE in Nigeria schools is at variance with the previous studies 43,45. The reason that can be advanced for this is that the previous studies were carried out in urban areas whereas our study was done in the rural area. The conclusion from our study is that Nigeria teachers [especially in the rural areas]need to undergo a thorough training in all areas of RHE/SE including promotion of condom use among adolescents. This will equip them in handling the subject-matter effectively in their respective schools.

Therefore, in view of our findings, it is hereby recommended that more effort should be put at 'educating' the teachers to raise their acceptance attitude to teaching them this type of sex education higher than the 45% achieved in this study. In other to achieve this, RHE/SE should be included and made compulsory in the training programme for all teachers in Nigeria. And those already on the job should always undergo periodic seminars and refresher courses on this subject-matter

## Acknowledgment

We thank the following for their invaluable contributions towards this study; the teachers that participated in study as well as their respective principals, local school authority in charge of the LGA [the study location], the family planning health workers from Urban Comprehensive Health Center, Eleyele, Ile-Ife, Osun State, Nigeria and reproductive health experts [research

African Journal of Reproductive Health Vol. 10 No.3 December, 2006

assistants] from the College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

### REFERENCES

- Oronsaye, AU and Odiase, GI. Altitude towards abortion and contraception among Nigerian secondary school girls. *Int.. J. Gynaecol Obstet* 1983; 21 (5): 423-426
- Nichols D, Ladipo, OA, Paxman, JM, and Otolorin, EO. Sexual behaviour, contraceptive practice and reproductive health among Nigerian adolescents. Stud Fam Plan 1986; 17(2): 100-106.
- Odujinrin, OMT. Sexual activity, contraceptive practice and abortion among adolescents in Lagos, Nigeria Int. J. Gynaecol Obstet 1991, 34:361-366
- Adekunle, AO and Ladipo, OA. Reproductive tract infections in Nigeria: challenges for a fragile health intrasture. In Germain, KK, Piot P and Wasser helt, A (Eds). Reproductive tract infections: global impact and priorties for women's reproductive Plenum press, New York, 1992; 297-315
- Jinadu, MK and Odesanmi, WO. Adolescent sexual behaviour and condom use in lle-lfe, Nigeria. J. Clin Nur Research 1993; 2(1): 111-118.
- Population Reference Bureau (PRB) and centre for population options (CPO). The world's youth: A special focus on reproductive health - Wall Chart Washington DC 1994.
- Brabin, L, Kemp, J, Obunge, OK, lkimalo, J Dolimore, N, Odu, NN, Hart, CA and Briggs, ND. Reproductive wact infections and abortions among adolescent girls in rural Nigeria. *Lancet*, 1995; 345 (8945): 300-304.
- Okonofua, FE factors associated with adolescent pregnancy in rural Nigeria. J. of Youth and Adol 1995; 24(4): 419-437
- Kenya Demographic and Health surveys (KDHS) (1998)
- Makinwa-Adebusoye, P. Adolescents: reproductive behaviour in Nigeria. A chart-book, UNFPA/ CEDA 1996.
- Network Programmes for adolescents: sex education helps prepare young adults Fam Health Inter. 2000; 20(3): 13-14

- 12. Noble, J, Cover, J and Yanagishta, M. The world's youth. Poster, Washington DC. Pop. Ref. Bureau Inc. 1996.
- Eggleston, E, Jackson, J and Hardeck, Sexual attitudes and behaviour among young adolescents in Jamaica. Int. Fam. Plan Perspect 1999; 25(2): 78-84&91
- Fawole, IO, Asuzu, MC and Oduntan, SO. Survey of knowledge, attitudes and sexual practices relating to HIV infection/AIDS among Nigeria secondary school students. Afri J Reprod. Health 1999; 3(2): 15-24
- 15. Singh, S, and Darroch, JE. Trends in sexual activity among adolescent American women, 1982-1995. Fam Plan Perspect 1999 Sept-Oct; 31(5): 212-219
- 16. Upadhyay, UD and Robey, B. Why family planning matters. *Pop. Reports*, Series J, No 49, 1999
- Anochie, IC and Ikpeme, EE prevalence of sexual activity and outcSome among female secondary school students in Port Harcourt, Nigeria. Afri J Reprod. Health 2001; 5(2): 63-67
- 18. Nzioka, C. Dealing with the risks of unwanted pregnancy and sexually transmitted infections among adolescents: some experiences from Kenya. *Afri J. Reprod. Health* 2001: 5(3): 132-149
- Otoide, VO, Oronsaye, F and Okonofua FE why Nigerian adolescents seek abortion rather than contraception: Evidence from focus-group discussions. Inter. Fam Plan Perspect 2001; 27(2): 77-81
- Population Reference Bureau (PRB). Adolescent women in sub-saharan Africa: A chart Book on Marriage and childbearing; Washington, DC 1992
- 21. Ariko, C. Teenage births hike population. *New vision*, Oct 14, 2002: (1) p
- Sunmola, AM, Dipeolu, M, Babalola, S and Out, AD. Reproductive, sexual and contraceptive behaviour of adolescents in Niger state, Nigeria. Afri. J. Reprod. Health 2002; 6 (3): 89-92
- 24. Briggs, LA. Adolescent pregnancy in the Port Harcourt Local Government Area of Rivers state. Implications for health education. *Un Publlished Ph.D* Thesis of the University of Ibadan, Ibadan, Nigeria 1995.
- Dada, JO, Olaseha, IO and Ajuwon, AJ. Sexual behaviours and knowledge of AIDs among female trade apprentices in a Yoruba town in South-

- Western Nigeira. Inte. Quart. Community Health Educ. 1998; 17(3)
- Oladepo, O. risk behaviour of Nigerian adolescent girls, implication for educational intervention. Women's Behaviour Issue, 1994; 1 (2).
- 27. Kin, YM, Kols, A, Nyakauru, R et. al. promoting sexual responsibility among young people in Zimbabwe. Inter Fam Plan Perspect. 2001; 27(1): 11-19.
- 28. Kiragu, K. Joshi, K. and Salem R. Youths and HIV/AIDS, Can we avoid catastrophe? Pop Reports, series I, No 12, 2001.
- 29. Eddman, MW and Pittman, KJ. Adolescent pregnancy: Black and White. J. Community Health, 1986: 11(63)
- 30. Grant, LM and Demetrious, E. Adolescent sexuality. Pediatric Clinic, North America 1988. vol 35 page 1271.
- 31. Georgina, M. Young peer survey in Kenya youths. Plan Parent, Challenges, 1995 No 4 IPPF
- 32. loucH, et. al. effects of a community-based sex education and reproductive health service program on contraceptive use of unmarried youths in Shanghai. J. Adol Health, 2004; 34(5): 433-440
- 33. Ekeh. HE. Intervening in social behavioural dimensions of tropical diseases control among secondary schools children: An extra-curricular approach. An unpublished Ph.D thesis of the University of Ibadan, Ibadan, Nigeria, 1987.
- 34. Gilchrist, LD. The role of schools in communitybased approaches to prevention of AIDS and intravenous drug use National Institute of Drug use National Institute of Drug Abuse Research Monographs, 1993, 150-166
- 35. Action Health Incorporated (AHI). Meeting the sexual and reproductive health needs of young people in Nigeria. A guide for action. Publish It! Limited, Lagos, Nigeria, 1999
- 36. Ajuwon, AJ, Oladepo, O, Sati, B and Otoide P. Improving the knowledge of primary school teachers to screen for visual acuity in Ibadan. Inter. Quarterly Community Health Educ. 1997: 16 (3): 219-227.

- 37. Fabiyi, AK. Introduction to Health Education. First Edition, published by Obafemi Awolowo University Press Limited, lle-lfe, Nigeria, 2001.
- 38) Action Health Incorporated (AHI) professional sexuality training holds at AHI; Growing up. A Newsletter for teenagers, Lagos, Nigeria, 1996: 3 (1)
- 39. Oladepo, O and Akintayo, T. secondary school teachers' view points on sex education. I. Royal Society Health, 1991; 1111(6): 216-220
- 40. Barker, G. adolescent fertility in sub-saharan Africa: Strategies for a new generation. Published by International center on Adolescent fertility (ICAF), The center for population options, Washington DC 2005 USA, 1992.
- 41. Training Manual and facilitators' Guide: Adolescent sexuality and reproductive health, counseling skills, funded by JHU/PCS, USA 1999.
- 42. Adolescent Health and Development. National Training Manual being developed through joint effort of FMOH/UNFPA/WHO (draft), Nigeria, 2001.
- 43. Orji, EO and Esimai, OA. Introduction of sex education into Nigerian schools: The parents', teachers' and students' perspective J. Obstet Gyneacol, March, 2003: 23(2): 185-8
- 44. National Guideline Task force (NGTF). Guideline for comprehensive sexuality education in Nigeria, school age to young adulthood, Lagos. Action Health Incorporated, 1996.
- 45. Ogwu, TN. Perception of students and teachers on teaching of sexuality education on Zaria educational zone. Nigerian School Health Journal, 2001; 13(2): 123-132
- Network.Sex education leads to safer sex. Fam. Health Inter, USA; Oct 1993; 14 (2)
- Akinbode, O. Adolescent reproductive health rights Health Column. The Guardian Newspaper, Tuesday, August 17, 2004.
- Gardner, R, Blackburn, RO and Upadhayay UD. Closing the condom gap. Pop. Reports, Series H. Number 9.