GLOBAL JOURNAL OF MEDICAL SCIENCES VOL. 3, NO. 1 & 2, 2004: 5 - 8
COPYRIGHT(C) BACHUDO SCIENCE CO. LTD. PRINTED IN NIGERIA. ISSN 1596 - 2911

KNOWLEDGE OF REPRODUCTIVE HEALTH ISSUES AMONG SECONDARY SCHOOL ADOLESCENTS IN CALABAR - NIGERIA.

A. E. OYO-ITA , Q. N. KALU , N. E. MKPANAM, B. M. IKPEME and S. J. ETUK

(Received 11 November, 2003; Revision accepted 6 August, 2004).

ABSTRACT

The knowledge of reproductive health issues amongst secondary school adolescents in Calabar was studied. The aim was to assess and improve the knowledge content of these adolescents about reproductive health issues. Ten secondary schools in Calabar were selected by simple random sampling. One hundred and eight students from the selected schools had a two-day workshop on reproductive health matters. Before the training more than 90% of the 108 participants were knowledgeable about when boys and girls reach puberty. Similarly 99 (91.7%) knew that a girl could become pregnant once she starts menstruating. However, knowledge on contraceptive methods was low (41.7%). There were also misconceptions on the frequency of coitus that could result in pregnancy and prevention of sexually transmitted infections. Following the two-day workshop, the number of participants knowledgeable about contraceptive methods increased to 100 (92.6%), and those who knew that one coital exposure could result in pregnancy increased from 34(32.4%) to 56 (51.9%). Overall mean knowledge score also increased from 54.4% to 74.0% and the difference was statistically significant ($P < 0.01$). Continuous health education is indispensable if the knowledge of adolescents on reproductive health matters is to improve.

KEYWORDS: knowledge, reproductive health issues, secondary school adolescents

INTRODUCTION

Meeting young people's needs for reproductive health information is vital to their future. This is because of the observed relationship between an individual's knowledge and his/her subsequent behaviour (WHO/UNESCO, 1992). Worldwide adolescent sexual activity appears to be on the increase (Anochie and Ikpeme, 2001). In Nigeria, secondary school students have been observed said to be sexually active at an increasingly earlier age. Age at first intercourse is reported to be 16 years for girls and a little earlier for boys (Fawole et al, 1999). This is influenced by peers (PRB, 2000), television movies, poverty and inquisitiveness. This increase in sexuality among youths predisposes them to early unwanted pregnancy, unsafe abortions and sexually transmitted infections including HIV/AIDS (Fawole et al, 1999). Complications from teenage pregnancy and childbirth, as well as unsafe abortions are the major causes of death in women aged 15 to 19 years in the less developed countries of the world (PRB, 2000).

The fertility rate for women aged 15 to 19 years old is 150 births per 1000 women (PRB, 2000). In a country with a rapidly growing population, such as Nigeria, the population explosion will have a negative impact on the already limited resources for national development and this will in turn impede any improvements in the quality of life of the people. In Nigeria, adolescents have limited access to reproductive health services because family planning services are primarily designed to meet the needs of the married. Unmarried teenagers often find service providers hostile, because of the existing strong cultural and religious restriction on premarital sex (PRB, 2000). Most youths are reluctant to disclose their sexual activities to parents or service providers. They, rather, seek information from peers who themselves are usually poorly informed. In addition, most parents and teachers are professionally ill-equipped or afraid to educate the young people on sexual matters (Blaney, 1993).

To get the youths properly informed on reproductive health matters, an NGO (the Medical Women's Association, Calabar branch) initiated a training programme. The training and its impact on the participants is reported in this paper.

MATERIALS AND METHODS

The training was held in Calabar, the capital of Cross River State located in the South Eastern part of Nigeria. Calabar has a projected population of 2,739,702 from the 1991 National Population Census. It has an urban and semi-urban setting and the inhabitants are mostly civil servants, traders and farmers. There are 46 secondary schools in Calabar. Ten of the schools were selected by simple randomisation to participate in the programme. Consent was obtained from the principals of the participating schools after explaining the aims of the programme to them. Each participating school was requested to send 15 students for a two-day workshop on adolescent reproductive health. The teachers were to select the students based on two criteria namely: personal interest in joining an Adolescent Health Club in the school, and attainment of 14 years of age. These students were to be trained as Peer Health Educators. There were 4 workshop sessions, each lasting 2 days. The first 2 sessions had 2 schools in attendance while

OYO-ITA A. E., Department of Community Health, University of Calabar Teaching Hospital, Calabar, Nigeria.
KALU Q. N., Department of Anaesthesia, University of Calabar Teaching Hospital, Calabar, Nigeria.
N. E. MKPANAM, Department of Community Health, University of Calabar Teaching Hospital, Calabar, Nigeria.
B. M. IKPEME, Department of Community Health, University of Calabar Teaching Hospital, Calabar, Nigeria.
S. J. ETUK, Dept. of Obsterics and Gynaecology, University of Calabar Teaching Hospital, Calabar, Nigeria.

the last 2 sessions had 3 schools in attendance. The workshop sessions included didactic and participatory lectures, role plays on communication, discussions, questions and answers. The lectures were given by medical experts on the different areas of interest. The knowledge of the participants was assessed by a pre-test comprising a self-administered, semi-structured questionnaire which was administered to the participants before the workshop. A post-test was conducted using the same instrument as in the pre-test to assess the impact of the workshop on the knowledge of the participants. Aspects of reproductive health assessed included knowledge about the male and female reproductive system, teenage pregnancy, sexuality, contraceptive methods and Sexually Transmitted Infections/Acquired Immune deficiency Syndrome.
Statistical analysis was done with the aid of *EPI info 2000* statistical software and differences were significant at p less than 0.05.

RESULTS

One hundred and sixty - six participants attended the workshop. The additional 16 participants were from the selected schools bringing more than the 15 requested for. One hundred and eight of these did both the pre- and post tests; 58 either did not complete the questionnaire or completed only the pre-test or the post-test alone. These were excluded from the analysis.

In the pre-test, 104(96.3%) of the participants knew the age at menarche of girls and 100 (92.6%) knew the age at which boys have wet dreams. The knowledge of the age at menarche was similar among male and female participants, but that of onset of wet dreams was higher among males than females(Table 1). The meaning of ovulation was known by 34(31.5%) during the pre-test; at post-test the knowledge increased to 65(60.2%) (Table 2). The number of participants knowledgeable about the physiology of menstruation also improved from 38 (35.2%) to 50(46.3%) but the difference was not statistically significant (p >0.05) (Table 2).

Pre-test results showed that 99(91.7%) participants knew that a girl could become pregnant once she starts menstruating, but only 34 (35.2%) knew that one coital exposure could lead to pregnancy (Table 1). A majority (64.8%), therefore, believed that more than a single sexual exposure was needed for pregnancy to occur. The number that became knowledgeable, however,

Table 1: Comparison Of Knowledge Between Male And Female Respondents

Variables	Male (n =53)	Female (n = 55)	Total (%) (n=108)	x^2	p value
Knowledge about menarche	51	53	104(96.3)	0.00	0.87 (fishers exact)
Knowledge of when boys begin to have wet dreams	52	48	100 (92.6)	4.62	0.03 (fishers exact)
Meaning of ovulation	14	20	34 (31.5)	1.24	0.26
Knowledge of physiology of menstruation	18	20	38 (35.2)	0.07	0.79
Knowledge of when girls are likely to become pregnant	47	52	99 (91.7)	1.22	0.22 (fishers exact)
Knowledge of frequency of sex likely to result in pregnancy	20	14	34 (32.4)	1.89	0.16
Knowledge of obstructed labour as a common complication of teenage pregnancy	26	21	47 (43.5)	1.30	0.25
Knowledge that HIV carriers are not recognisable	36	29	65 (60.2)	2.60	0.10

Table 2: Comparison Of Knowledge Between Pre And Post-Tests

Variables	Pre-test (n = 108)		Post-test (n = 108)		x^2	p value
	No	%	No	%		
Meaning of ovulation	34	31.5	65	60.2	17.92	0.00
Physiology of menstruation	38	35.2	50	46.3	2.76	0.09
When girls are likely to become pregnant	99	91.7	100	92.6	0.06	0.80
Frequency of sex before pregnancy	34	32.4	56	51.9	9.22	0.02
Knowledge of obstructed labour as a common complication of teenage pregnancy	47	43.5	65	60.2	6.01	0.01
Knowledge of at least one contraceptive method	45	41.7	100	92.6	63.47	0.00
Best way to avoid pregnancy	75	69.4	94	87	9.82	0.00
Meaning of sexuality	43	39.8	81	75	27.34	0.00
Knowledge that irrational use of antibiotics does not prevent STIs	58	53.7	75	69.4	5.65	0.01

increased to 56(51.9%) following the educational intervention. Similarly, the proportion that knew that obstructed labour was a common complication of teenage pregnancy also increased from 43.5%(47) to 60.2%(65) (p=0.01) at post-test. There was a highly statistically significant difference between the number of participants who knew at least one contraceptive method at the pre-test 45 (41.7%) and at post-test 100 (92.6%) (p<0.01). The most common method known by the participants was the condom.

Sixty-five (60.2%) of the participants knew that HIV carriers cannot be recognised by their appearance (Table 1). Fifty eight (53.7%) of the participants were of the opinion that sexually transmitted infections could be prevented by taking a dose of an antibiotic immediately after sexual intercourse (Table 2). The mean score for pre and post tests were 54.4% and 74.0% respectively. The difference was statistically significant (t = 8.79, df 214, p< 0.01).

DISCUSSION

The knowledge of male and female anatomy and physiology is a means of empowering adolescents to make informed decisions on reproductive health issues. From this study, it was observed that many young people before the training were knowledgeable about the onset of puberty, but their understanding of its physiology was poor (Table 1). This poor knowledge of the participants about their reproductive physiology may explain their poor knowledge on pregnancy-related issues. Though 99 (91.7%) of the participants knew that a girl could become pregnant when she begins to menstruate, 74 (64.8%) before the training did not know that one episode of sexual intercourse could result in pregnancy. However, after the training this number dropped to 52 (48.1%). It is important for adolescents to know that it is possible to get pregnant at every act of sexual intercourse. This is because they may not be involved in regular sex and may assume that they are safe. They, therefore, use their irregular sexual activity as a reason for non use of contraceptives (Fawole et al, 1999) which may explain why contraceptive use is low among adolescents (Okpani and Okpani, 2000). Not surprisingly, they constitute a significant proportion of abortion seekers in Nigeria (Adewole et al, 2002). There is, therefore, a need to instruct youths on their physiology to enable them understand how their body functions.

Knowledge about contraceptive methods increased from 41.7% before the training to 92.6% after the training. The commonest contraceptive method known to the participants was the condom. This is easily accessible and user-dependent which may be the reason why young people are more conversant with it. Similarly, the oral contraceptive pill was reported as the most common contraceptive method among abortion seekers, a majority of which were students (Adewole et al, 2002). Intervention or educational programmes for adolescents should therefore, promote methods that are user-dependent and friendly as these may be more acceptable to them. Their skills and attitudes towards these methods need to be studied in other to address any misconceptions that they may have concerning these methods.

Poor knowledge of prevention of sexually transmitted infections is still prevalent among adolescents. Use of unconventional methods such as "careful selection" of sexual partners, taking of lemon drinks, ingesting concentrated solution of table salt have been reported (Fawole et al, 1999). From this study some of the participants (53.7%) before the training believed that taking a few capsules of an antibiotic soon after sexual intercourse prevents sexually transmitted infections. This increased to 69.4% after the training (Table 2).

A two-day intervention workshop resulted in an increase in the knowledge of the participants from 54.4% to 74% which was highly statistically significant. This indicates that knowledge could be imparted in a short-term training. However, for them to appreciate the physiology of the female reproductive system and its relationship with pregnancy, a few days workshop may not be adequate.

CONCLUSION

Secondary school adolescents in Calabar have a fair knowledge of their reproductive health. This knowledge could be improved upon through short-term educational intervention and the incorporation of appropriate sexuality education into secondary schools' curriculum. Such interventions should stress the physiology of the male and female reproductive systems, pregnancy and its prevention; it should also incorporate the control of sexually transmitted infections and HIV/AIDS. Effort should be made to address misconceptions like pregnancy occurring only from frequent and repeated sexual exposures and the dangers of irrational use of antibiotics to prevent sexually transmitted infections.

REFERENCES

Adewole, I. F., Adeniran, B. A., Iwere, N., Oladokun, A., Gbedegesin, A., Babarinsa, I. A., 2002. Contraceptive usage among abortion seekers in Nigeria. West African Journal of Medicine; 21(2): 112-114

Anochie, I. C and Ikpeme, E. E, 2001. Prevalence of sexual activity and outcome among female secondary school students in Port Harcourt, Nigeria. African Journal of Reproductive Health; 5(2): 63-67

Blaney, C. L., 1993. Sex education leads to safer sex. Network 14 (2): p5

Fawole, I. O, Asuzu, M. C, Oduntan, S. O. and Brieger,

W. R., 1999. A school-based AIDS education programme for secondary school students in Nigeria: a review of effectiveness. *Health Education Research*; 14(5): 675-683.

Okpani, A. O. U., Okpani, J. U., 2000. Sexual activity and contraceptive use among female adolescents – a report from Port Harcourt, Nigeria. African Journal of Reproductive Health; 4(1) 40-47

Population Reference Bureau, 2000. Meeting Young Women's Reproductive and Sexual Health needs. Washington DC: PRB: 1 -4

WHO/UNESCO, 1992. School health education to prevent AIDS and sexually transmitted diseases. WHO AIDS SERIES 10.