Original Article
Field of Study

Social Factors Predisposing Nigerian Adolescents in Enugu to STI

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ABSTRACT [ENGLISH/ANGLAIS]

The risky sexual practices which result in high rate of sexually transmitted infections (STIs) among adolescents are linked to socio-economic and socio-cultural factors. Therefore, to assess the risk of STIs, it is vital to study the effect of social influence on the adolescents' sexual behavior so that an intervention strategy which would address areas of deficiency could be planned. To study the social influence on adolescents' sexual behaviour for risk assessment of STIs, a total of 909 students were selected (from six public secondary schools) by multistage random sampling for the study. All the participating students were presented with a pre-testedquestionnaire which was self- administered. This was after signing the Consent forms by their parents. Respondents who were in co-educational schools, who generally belonged to the lower socio-economic class and those who imbibed alcohol and illicit drugs were more sexually active. In addition, those that have low self-esteem, orphans, those who did not recognize the importance of religion and those who took lightly, their parents' opinion as well as those who succumbed easily to peer pressure also were sexually active. This was more than those, who had high self- esteem, who discussed well with their parents, and who took their religion seriously. These factors hinge on inadequate core value system in conflict with the norm, giving rise to low self-esteem in these immature minds.

Keywords: STIs, adolescents, social factors, self-esteem, behavior

RÉSUMÉ [FRANÇAIS/FRENCH]

Les pratiques sexuelles à risque qui conduisent à taux élevé d'infections sexuellement transmissibles (IST) chez les adolescents sont liés à des facteurs socio-économiques et socio-culturels. Par conséquent, pour évaluer le risque d'ITS, il est essentiel d'étudier l'effet de l'influence sociale sur le comportement des adolescents sexuelle de sorte qu'une stratégie d'intervention qui porterait sur les zones de carence pourrait être envisagée. Pour étudier l'influence sociale sur le comportement sexuel des adolescents pour l'évaluation des risques des IST, un total de 909 étudiants ont été sélectionnés (à partir de six écoles secondaires publiques) par échantillonnage à plusieurs degrés au hasard pour l'étude. Tous les élèves participants ont été présentés avec un pré-testedquestionnaire qui était auto-administré. Ce fut après avoir signé les formulaires de consentement de leurs parents. Les répondants qui se trouvaient dans les écoles mixtes, qui ont généralement appartenu à la basse classe socio-économique et ceux qui imbibée d'alcool et de drogues illicites sont plus actives sexuellement. En outre, ceux qui ont un faible estime de soi, les orphelins, ceux qui ne reconnaissent pas l'importance de la religion et ceux qui ont pris à la légère, l'opinion de leurs parents ainsi que ceux qui ont succombé à la pression des pairs facilement aussi étaient sexuellement actifs. C'était plus que ceux qui avaient une haute estime de soi, qui a discuté bien avec leurs parents, et qui ont pris leur religion au sérieux. Ces facteurs dépendra de la valeur de base du système inadéquat en conflit avec la norme, ce qui donne lieu à une faible estime de soi chez ces esprits immatures.

Mots-clés: IST, les adolescents, les facteurs sociaux, l'estime de soi, le comportement

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INTRODUCTION

The high rate of sexually transmitted infections (STIs) due to risky sexual practices among adolescents remains a concern [1, 2]. This risk is attributed to inextricable link between behavioral and socio-economic factors, such as poverty and early marriages, transactional sex practices, absence of nurturing, supportive parents, socio-cultural beliefs of male superiority and drug abuse [3-9]. An adolescent's sexual activity is usually modified by societal norms, expectations and parental influence (balanced restrictions and permissiveness) [3, 4]. However, parental influence on adolescent behaviour gets progressively eroded by peer influence [3, 4]. It is believed that some protective factors reported to be effective against risk behaviour like illicit sexual activity that tend to result in STIs tend to provide value and result in stability of character. These include parental consistency and firmness in discipline, appropriate parent - adolescent communication, regular attendance at a place of worship, strong social support, positive and possibly bilateral peer influence and high self-esteem [4, 6, 9-13].

The high rate of STI among adolescents is disturbing as it is often associated with risky sexual practices [1] and linked with behavioural and socio-economic factors [3-5].

An adolescent's sexual behaviour is usually modified by societal norms, expectations and parental influence. Peer influence progressively erodes parental influence [3, 4]. Parental consistency and firmness in discipline, appropriate parent/adolescent communication, regular attendance at a place of worship, strong and social support, high self-esteem and positive peer influence help in building stability of character in adolescents.

This study is to evaluate the social influences on the adolescents' sexual behaviour, It may be vital in assessing the risk of STIs among adolescents and in the planning of an appropriate health education and other intervention strategies which would address areas of deficiency that predispose adolescents to STIs.

MATERIALS AND METHODS

In February 2003, a prospective study was carried out in the different Local Government Areas (L.G.A s) within Enugu metropolis, Enugu State, South-Eastern Nigeria. Six public secondary/High schools were randomly selected after approval was granted by the Chairman of Post Primary School Management Board (PPSMB). The selected schools were 2 mixed, 2 female-only, and 2 male-only schools.

A total of 950 questionnaires were distributed but 909 were completed and returned, giving a response rate of 95.7%. All the participating students obtained consent from their parents after which they were encouraged to complete a pre-tested questionnaire administered by the Researchers in the classrooms. The Questionnaire sought information on socio-demographic characteristics, sexual behaviour, as well as other related risk behaviours, perceived to have positive and negative social influence with regard to sexual behavior, self-esteem, self-perception and ability to be peer educators. Sharing of ideas, while filling the questionnaires, was discouraged and individual questions were handled when necessary. Identity of the subjects in the forms was excluded to encourage confidentiality and honesty.

Data were collated and subjected to statistical analysis using EPI-INFO version-7 software. Chi square test was used to test the significance where appropriate. A p-value of 0.05 or less was considered statistically significant.

RESULTS

A total of 909 adolescents in 6 secondary schools in Enugu metropolis were assessed. There were almost equal number of males and female respondents with ages ranging from 9 to 23 years and a mean age of 15.3±1.7 years. The respondents were mainly Christians and Grail message and Eckanckar make up the others (Table 1).

The social class of the students' parents/guardians by Oyedeji's criterion showed that most students while only 14.3%belonged to the upper social class (table 1). Majority of the parents of the respondents were married.

Table 2 shows that 34.3% of the respondents were sexually active with a greater proportion, being males and females ($p<0.05$). A good percentage of the sexually active respondents 70.8%had used condoms though inconsistently (Table 2).

The majority of respondents who were in the mixed schools and those who belonged to the lower social class were more likely to have had sexual intercourse as shown in Table 3 than those in schools of single sex and those in the upper social class.

Approximately 33.4% respondents took alcohol out of which 47.1% were sexually active. Very few respondents, 3.7%, with male predominance ($p<0.05$) took illicit drugs and the illicit drug most commonly used was marijuana. Sexual activity was reported by 55.9% of the respondents who indulged in illicit drug use.

Considering respondents' opinion on religion, a large majority 71.6 %indicated that religion was very essential but yet 20.3%of them were sexually experienced. Among the 11.6% respondents who considered religion unnecessary practice 86.7% of them were sexually active. This showed that religion alone was not enough deterant but its absence is a significant fuel.

Certain patterns emerged on the findings concerning social influence on the respondents: (Table 4). The parents position has become appropriate.

Table 1: This table shows distribution of religion and social class of respondents

Parameters	Males n=451	Females n=458	Total n=909	χ^2(p value)
Religion				3.2,
Christianity	446 (98.9)	449 (98.0)	895 (98.5)	p>0.05
Islam	(0.4)	8(1.7)	10 (1.1)	
Others	3 (0.7)	1(0.2)	4 (0.4)	
Social class				0.7,
Upper	67 (14.9)	66 (13.6)	133 (14.6)	p>0.05
Middle	170 (37.7)	186 (41.7)	356 (39.2)	
Lower	214 (47.5)	206 (44.7)	420 (46.2)	

Table 2: This table shows characteristics of sexual behaviour among the respondents

Characteristics	Males n=451	Females n=458	Total n=909	χ^2 (p value)
Ever had sexual intercourse	177 (39.2)	135 (29.5)	312 (34.3)	6.1, p< 0.05
Ever use of condom				16.6 , p<0.05
Yes	138 (30.6)	83 (18.1)	221(24.3)	
No	297 (65.9)	341 (74.5)	638 (70.2)	
No response	16(3.5)	34 (7.4)	50 (5.5)	

Table 3: This table shows distribution of social factors among respondents who were sexually active

Parameters	No of Respondents	No of Sexually Active Respondents	Percentage of Sexually Active Respondents (%)
Types of School			
All female	302	71	23.5
All male	305	95	31.1
Mixed	302	146	48.3
Social class			
Upper	133	37	27.8
Middle	356	119	33.4
Lower	420	156	37.1
Religious opinion			
Unnecessary practice	105	91	86.7
Don't care	153	89	58.2
Very essential	651	132	20.3
Takes alcohol			
Yes	384	181	47.1
No	494	124	25.1
Takes illicit drugs			
Yes	34	19	55.9
No	871	285	32.7
Total No of respondents	909	312	34.3

Table 4: This table shows distribution of social and parental influence on respondents who were sexually active

Parameters	No of respondents	No of sexually active respondents	Percentage of sexually active respondents (%)
Consideration of parents' opinion			
Not important	171	114	66.7
Important	717	195	27.2
Persons' opinion sought on sexual issues			
Peers	221	119	53.8
No one	165	73	44.2
Brother/sister	158	58	36.7
Parents	428	115	26.9
Total No of respondents	909	312	34.3

Table 5: This table shows distribution of sexually active respondents according to response to self-esteem

Parameters	No of Sexually Active Respondents (% by parameters)	No of Respondents by Parameters	χ^2, p
Happy with appearance			1.3,
Yes	195 (25.0)	780	p>0.05
No	42 (57.5)	73	
Don' know	40 (71.4)	56	
Can resist peer pressure			
Yes	120 (23.6)	509	3.1,
No	78 (49.4)	158	p>0.05
Don't know	79 (32.6)	242	
Persons with whom condom use	2.0, p>0.05		
can be discussed			
Parents	49 (28.2)	174	
Peers	118 (47.6)	248	
Partner	78 (38.6)	202	
Can be peer educators			
Yes	151 (23.4)	646	1.5,
No	86 (44.6)	193	p>0.05
Don't know	40 (57.1)	70	

with a slight female predominance, making them more available for health education. able 5 shows that sexual activity was higher among the respondents who did not have any opinion about themselves (71.4%), who could not resist peer-pressure (49.4%) and among those who discussed condom use with peers (47.6%). The result also shows that among the respondents who could be peer educators, very few (23.4%) were sexually active.

DISCUSSION

This study highlights the point that sexual behaviour in adolescents is largely shaped by sociocultural norms and peer influence that send conflicting messages about sexuality and expectations. It revealed that most of the respondents were Christians with married parents. This is because Christianity is the major religion of the people of South Eastern Nigeria (the Igbos), a people that have a high socio-cultural value placed on the marriage institution. Majority of the respondents belonged to the lower social class as the respondents were in State public schools. (Perhaps because wealthy families rather sent their children to private schools, and this study was conducted in public schools.)

The fact that 34.3% of the respondents were sexually active is in keeping with the high rate of sexual experience reported by previous studies in Nigeria(FMOH 2003, National Guidelines Task Force 1996, Ajuwon 2001). Yet only few respondents (with males predominating) had ever used condom compared to a higher percentage that were sexually active. This is similar to other reports from Nigeria(Bello, Egah,Okwori et al 1997) Kenya(Nzioka

2001,NCPD 1999 and some other parts of the world.(AAP 1999,Schaalma, Kok Peters 1993) . However the NARHS (FMOH, NARHS 2003) and a USA (Biddlecom 2004) study reported increasing use of condoms and in Senegal and Ghana (Public Reference Bureau 2001) low sexual experience has been reported in studies

This study demonstrated some social factors associated with the sexual activity of the adolescents in Enugu. These include: lower social class, mixed schools and having poor parental supervision . This supports Darrow and Pauli's earlier report that 'Individuals within the lowest levels of educational, economical and social attainment are high-risk groups since they are least likely to adhere to preventive and promotive health practices'(Darrow and Pauli 1984) . The students that have no parental supervision and have physical, sexual or emotional abuse seek for affection through usually unprotected sexual contact. Other plausible reasons include the fact that students in the mixed schools are usually placed over a long period of time in the same environment, where they interact with the opposite sex and so may indulge in sexual risk behaviour if not counteracted by adequate reproductive health education and information.

Also this study showed sexual experience among a large number of respondents who felt religion was unnecessary practice or didn't care about it. Similar report by Holder *et*

al (Holder, Durant, Harris et al 2000) agreeing with Jessor (Jessor 1991) confirmed that religion was inversely proportional to voluntary sexual activity. The study also supports the theory of co-variation between risk behaviours as there was a larger proportion of sexually experienced respondents who took alcohol and illicit drugs compared to a smaller proportion of the sexually experienced who did not. The study by Zabin *et al (Zabin, Hardy and Smith 1986)* also agreed with this study reporting that sexually active teenagers rated higher in substance abuse than virgins. Alcohol and illicit drugs intake reduce inhibition, dull the senses and result in inability to resist sexual pressures predisposing to risk-taking behaviours such as unprotected sexual intercourse and sexual abuse (Darrow and Pauli 1984, Jessor 1991, Pauli et al 1995) This highlights the fact that sexual risk behaviour should not be looked at in isolation from other risk taking activities in adolescents (Jessor 1991) since a number of these other factors influence it making it difficult for adolescents to embrace the gold standard of abstinence from premarital sexual activity.

The traditional taboo associated with a show of interest or discussion of sexual and reproductive health issues often leads to socio-cultural stigma and the lack of transparency in discussing with adolescents. This fact was exposed in the finding that condom use was discussed mainly with peers than with parents. Among the several reasons given for condom use, prevention of pregnancy ranked highest, only followed by prevention of STIs. This portrays the need for awareness programs to enhance the understanding and need for protective measures with special emphasis on adolescent females who are usually more vulnerable and in a more disadvantageous position as far as pregnancy is concerned. This is for those who choose to get involved with coitus despite the primary message of abstinence knowing that adolescents rarely plan to get involved in sexual activity (Nwokocha 2006) . It is however encouraging to observe that parental opinion and discussion became a runner-up to that of the peers demonstrating that parents are beginning to assume their rightful position in primary education. This is in contrast to the finding of Okonkwo *et al (Okonkwo and Ilika 2003)* , Amazigo (Amazigo, Silva, Kaufman and Obikeze 1997) and Aniebue (Aniebue, 2002) who had earlier published parental opinion and discussion to be very low in ranking. Some parents do not accept sex education for their children/adolescents for fear that the children/adolescents may want to experiment; that it was a sin to teach children about sexuality and also that sex education was meant for adults (Okonkwo and Ilika 2003, Aniebue 2002) . However, the advantage of parent-adolescent communication (PAC) was brought out in this study where a large proportion of those who discussed sexual issues with their parents and considered their parents' opinion important were mostly not sexually experienced. Some earlier studies (Jessor 1991, Aniebue 2002, Donovan 1990) agreed with this report that adolescents who rarely communicated with their parents on sex-related matters were more unlikely to have premarital sex. Health education programmes therefore may compliment the parental information and turn out to be a major means of providing accurate information for young people.

The respondents in this study sought peers' opinion next to parents' opinion and a large proportion of those who did so were involved in sexual activity, thus demonstrating the risk involved in seeking peers' opinion alone. Peer Health Education (PHE) has been found to be an effective means of information sharing but this should only be encouraged when the information to be shared is accurate and truthful. This, again, is why sex education in schools should be encouraged.

Most of the respondents found communication on sexual issues difficult with siblings as well. This is still due to the conservative nature of this society concerning discussion of matters related to Reproductive and Sexual Health. However, fewer respondents who discussed with their siblings were sexually experienced compared to those who discussed with their peers or those who did not discuss with anyone.

Self-esteem has been found to influence the behaviour of an individual (Medinus and Johnson 1976, Schaalma, Kok, Poelman and REINDERS) . The degree of awareness of one's own body image is related to self-esteem with resultant variability as adolescents' biological and physiological changes occur (Medinus and Johnson 1976, Schaalma, Kok, Polman and Reinders) . The result of this study showed that, although a great proportion of the respondents were comfortable with their physical appearance, yet only a small proportion could resist peer pressure. This indicated low self-perception and low self-esteem. Earlier studies have reported that an adolescent with a high self-esteem is able to adjust better to stressful situations, negotiate better for the practice of safer sex, endure, succeed and also educate others(Schaalma Kok, and Peters 1993, Nzioka 2001, Schaalma, Kok, Poelman and Reinders 1994 and Shrier, Ancheta et al 2001) A large number of respondents were

willing to be peer educators. This is encouraging and it confirms a report by UNAIDS (UNAIDS 1999) which stated that young people are a powerful tool that could be used to change the lives of their peers and the wider community.

Certain characteristics of self-esteem influenced the adolescents' behaviour: Respondents who had no opinion about themselves, who could not resist peer pressure, who mostly discussed condom use with peers and who did not know if they could be peer educators, were more likely to be sexually experienced; so also are those who are involved with taking alcohol and illicit drugs.

CONCLUSION

It is concluded that ideally, adolescents should abstain from premarital sex for many reasons. Studies have shown that this is far from the case, with many adolescents being voluntarily sexually active. The many complications from this abound, particularly Sexually Transmitted Diseases (STIs), a known major health problem of adolescents, which was studied in this article. The fact that some manage to abstain suggest there must be some avoidable factors that influence this practice. This has been found to include lack of quality parental supervision, lack of religious commitment, low social class, and unsupervised peer influence, consumption of alcohol and illicit drugs and low Self-esteem. Health education programmes (especially in schools), and the training of Peer Health Educators (PHE) are strategies for providing adequate information for young people. Adolescents' behavior generally is influenced by intrinsic core values and environmental factors. The core value lead up to self-esteem and the environmental factors which are mainly directed by parental influence are affected by peer pressure. The parental influence tends to exert more significance on the behavior since it has effect on both sides. Sexual behavior and hence activity which tend to determine STI is highly influenced by parental influence affected by peer pressure. Therefore inadequate parental influence in the presence of peer pressure contributes significantly to the prevalence of STI among adolescents which in this case 34.3%,

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CONFLICT OF INTEREST

Nil