Parental Knowledge and Attitude of Adolescent Sexuality Education in Rural and Urban Communities of Ekiti State, Nigeria

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Summary

BACKGROUND

Parents play a key role in shaping the attitudes and behaviour of adolescents, thereby reducing risky sexual behaviour and promoting healthy sexual development. This study assessed and compared parental knowledge and attitude towards adolescent sexuality education (ASE) in rural and urban communities of Ekiti State, Nigeria.

MATERIALS AND METHODS

A comparative cross-sectional study of 800 parents (or guardians) of adolescents in selected rural and urban communities, recruited through a multi-stage sampling technique. An interviewer-administered semi-structured questionnaire was used to collect data. Data were analysed using SPSS version 20.

RESULT

A significantly higher proportion of parents from the urban communities had a good knowledge of ASE (72.5% versus 66.0%, p-value 0.046). However, knowledge of safe sex and dating was low in both communities. About three-quarters of the respondents had a positive attitude towards ASE with no statistically significant difference in both rural and urban communities (p-value: 0.363).

CONCLUSION

Parental knowledge of ASE is high in Ekiti State, and it is higher in the urban compared to the rural communities. Attitude towards ASE is high in both communities but not significantly different. However, the knowledge of the various components of ASE varies significantly amongst the communities. While it is recommended that government should create a supportive environment to assist parents in their roles as sexuality educators, parents should see sexuality education as their responsibility and also start the discussion early.

Keywords: *Adolescent Sexuality Education, Parental Knowledge and Attitude*

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Introduction

Sexuality is a central aspect of being human and encompasses sex, gender identities, gender roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. It is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships [1]. Sexuality education is the provision of information about bodily development, sex, sexuality, and relationships, along with skills-building to help young people communicate about and make informed decisions regarding sex and their sexual health [2]. It should include information about puberty and reproduction, abstinence, contraception and condoms, relationships, sexual violence prevention, body image, gender identity and sexual orientation [2]. It is sometimes called sex education or sex and relationship education.

According to the World Health Organization (WHO), adolescents refer to people between the ages of 10 and 19 years and it is a period of transition from childhood to adulthood [3]. It is a period in which an individual undergoes enormous physical and psychological changes. Physical growth and development are accompanied by sexual maturation, often leading to intimate relationships [3]. Adolescence is a period of life that has been associated with intense sexual interest as a result, access to sexual, and reproductive health information and services have become increasingly important. Adolescents are influenced by a variety of factors (including social factors) which puts them at risk for many sexual and reproductive health issues. Adolescents have a higher prevalence of most reproductive health problems due to lack of information and poor access to health services [4].

Although, most schools now have sexuality education as part of their curriculum, educating adolescents on sexuality should also be the responsibility of parents. It has been noticed that some parents not only discourage discussions of sex and related topics, thereby withholding vital information, but they also impart messages of danger, fear and shame [5]. While parents withhold information, the media and the marketplace spew sexual misinformation, which has made the need for timely and accurate sexuality education indispensable in today's contemporary society [6].

Over the past few years, adolescent sexual and reproductive health (SRH) has increasingly received special attention in many African countries mainly due to the human immunodeficiency virus/ acquired immune deficiency syndrome (HIV/AIDS) pandemic that has swept across the continent with devastating impact, particularly among young people (10-24 years old) [7]. Sexuality education is seen by many experts as a vital public health strategy that will reduce unwanted pregnancies, and sexually transmitted infections (STIs), including HIV and their social consequences [8].

Adolescent sexuality is not a much-researched topic in Nigeria as in most sub-Saharan countries due to our restrictive socio-cultural values and norms [9], but the HIV pandemic has given a sense of urgency to the topic of sexuality education mostly in school settings [12]. Parents who ought to be the primary educators shy away from their role in the area of sexuality education, leaving it to schools [10]. School-based sexuality education caters only for in-school adolescents. Moreover, out-of-school adolescents who are generally less informed about sexual and reproductive health participate more in risky sexual activity than those in school; this further buttresses the need for parents to provide sexuality education at home as this will envelop all adolescents [8].

The family as a focus of health research, despite evidence from previous studies, have been relatively neglected (in health strategies) as an area of research. Coupled with these, sex education provided by

parents across geographical areas varies considerably even within similar regions [11]. Sex education knowledge among parents in Nigeria varies across religious, cultural and geographical settings. Differences in the way of life, educational attainment, income and media exposure among parents in rural and urban communities make this comparison imperative. Furthermore, diverse access to health facilities and heterogeneous sexual behaviour among adolescents in rural and urban communities also is an indication for comparison. To proffer evidence-based solutions, community-based research among parents cannot be overemphasized [12]. This study aimed to assess and compare parental knowledge and attitude towards adolescent sexuality education (ASE) in rural and urban communities of Ekiti State, Nigeria. It will also highlight areas of need for resources to support parents and guardians as sexuality educators of their adolescents [13, 14]. Documentation of the findings of this study will help identify areas of further research with the ultimate aim of improving adolescent health.

Materials and Methods

This was a cross-sectional descriptive study of parents or guardians of adolescents in rural and urban communities of Ekiti state, south-western Nigeria. The sample size was determined using the formula for comparing two proportions:

$$n = \frac{(Z_{1-\alpha/2} + Z_{1-\beta})^2 [P_1(1-P_1) + P_2(1-P_2)]}{(P_1-P_2)^2}$$

Using a multistage sampling technique and after adjusting for a non-response rate of 10%, a total of 800 parents were sampled in both the rural and urban communities and included in the study. A semi-structured interviewer-administered questionnaire was used, which was adapted from the NDHS 2013 questionnaire [15], HIV-KQ-18 [16], WHO Questionnaire on adolescent sexuality education (illustrative Questionnaire for interview) [17] and literature reviews. The modified questionnaire used in this study was reviewed and approved by a group of experts including public health physicians (and adolescent reproductive health specialists). The questionnaire was pretested (in a similar but different location) to correct for any ambiguity. It was also translated to the Yoruba language (which is the local language) by a linguistic expert in the Yoruba language so as not to lose the meanings of some words. Four research assistants who were Senior Community health extension workers (SCHEW) were recruited and trained for two days in the appropriate use of the questionnaire and maintenance of ethical standards.

The collected data were analysed using SPSS version 20. The socio-demographic characteristics of the parents, their knowledge and attitude were analysed and summarized as means (standard deviation). Differences between rural and urban communities were analysed using the chi-square test, with the level of significance set at a p-value of <0.05.

Ethical approval for this study was gotten from the Ethical Committee of the Federal Teaching Hospital (FETHI) Ido-Ekiti. Permission to conduct the study was also obtained from relevant Local Government Authorities (LGA) and community leaders. Written informed consent was obtained from all the respondents before the interview. Respondents were informed of their right to decline or withdraw from the study at any time without any adverse consequences. All authors in this study have complied with the ethics of the World Medical Association Declaration of Helsinki in regards to research on human subjects.

Results

The majority of the respondents in this study were between the ages of 40-49 years. The mean age of the rural respondents was 43.3±6.5 years while the mean age of urban

respondents was 42.4±4.6 years with a p-value of 0.023. A total of 430 (53.8%) of the respondents were females. A high proportion of the respondents were Yoruba by tribe, with a higher proportion of the rural respondents 331 (82.8%) being Yoruba compared to the urban respondents 263 (65.8%), p-value <0.001. Most of the respondents interviewed were married (rural, 87.5%; urban, 81.0%). Christianity was the dominant religion (rural, 76.2%; urban, 86.0%), with a significant difference in the rural and urban respondents.

There is a significant difference in the level of education between the two communities with a p-value of <0.001; almost two-thirds of the respondents in the urban communities had tertiary education (250; 62.5%) and almost half of the rural respondents had a secondary school education 181 (45.2%) with only a few of the respondents from both communities having no formal education (rural, 3.0%; urban, 1.8%). The majority of the respondents were civil servants (rural, 29.8%; urban, 53.8%). Out of the 101 (12.6%) respondents that were farmers, 96 (95.0%) resides in the rural communities while 5 (5.0%) were resident in the urban communities (p-value <0.001).

More than half of the respondents in both the rural and urban communities had good knowledge of HIV/AIDS, STIs and Contraceptives. However, the knowledge is significantly higher amongst urban respondents than rural respondents (p-value **<0.001**) for HIV/AIDS, STIs and Contraceptives. Only about a third of respondents in both communities had good knowledge of safe sex and dating/relationship. There is no significant difference amongst rural and urban respondents in terms of knowledge of dating/relationship (p-value: 0.204), puberty/sexuality (p-value: 0.831), sexual violence (p-value: 0.819) and abortion (p-value: 0.229).

About three-quarters of the urban respondents had a good knowledge of ASE in comparison to two-thirds of rural respondents (urban, 72.5%; rural, 66.0%). The knowledge of ASE is significantly higher amongst urban respondents than rural respondents (p-value: 0.046). About three-quarters of the respondents had a positive attitude towards ASE in both rural 298 (74.5%) and urban 309 (77.2%) communities. And there is no statistical difference in attitude toward ASE in both rural and urban communities with a p-value of 0.363.

Discussions

The knowledge of ASE amongst parents in this study is high; with 69.2% of parents in this study having a good knowledge of ASE. In the urban communities, about three-quarters (72.5%) of the respondents had a good knowledge of ASE which is significantly higher than two-thirds (66.0%) that was obtained in the rural area with a p-value of 0.046. This is not surprising given the fact that there was a significant difference in the educational attainment of rural and urban respondents; with urban respondents being more educated and exposed to internet facilities. Some studies have reported a similar level of sexual health knowledge among parents from different parts of the world. According to Liu W and Edwards CP in China, parental knowledge of sexuality viz-a-viz knowledge of reproduction and HIV/AIDS is 64.8% and 66.4% respectively [11]. In Africa, studies by Njoroge in Kenya reported that knowledge of sexuality education among Kenyan parents was high [18] while Yadeta *et al* in Ethiopia reported that 64.2% of parents demonstrated a good knowledge of reproductive health issues [19]

Studies from Nigeria showed similar findings, according to Aniebue in Enugu 66.9% of parents had adequate knowledge of sex education [20] while Asekun-Olarinmoye *et al* in Osogbos, reported that 73.3% of the parents understood sex education to mean providing basic information about sex [5]. Furthermore, a study conducted among secondary school students by Akande *et* al in

Kwara state (Nigeria) on the level of sexuality education awareness was reported to be 72.3% [21].

Findings in this study showed that though the overall knowledge of ASE was high, the knowledge of its components is diverse. While knowledge of HIV/AIDS, STIs, puberty and sexual violence is high (i.e. more than 50%) amongst the respondents, knowledge of safe sex, dating and relationship are low (i.e. less than 50%). This may be because parents in our preservative culture would prefer an abstinence-only message [5]. An increase in the awareness campaign on HIV/AIDS as a result of the HIV pandemic in Sub-Saharan Africa in the last decade may have contributed to the high knowledge of HIV/AIDS. Also, the knowledge of HIV/AIDS, STIs, Contraceptives, abstinence and safe sex are significantly higher amongst the urban respondents than the rural respondents. The knowledge of the various components of sexuality is important, for example, the knowledge of HIV/AIDS risk was found to be a protective factor against sexual debut among female adolescents [22].

This study further revealed that there was no significant difference between rural and urban areas in terms of knowledge of dating/relationship, puberty/sexuality, sexual violence and abortion/consequences. Similarly, in Ethiopia, Yadeta *et al* mentioned that STDs and family planning are the commonest components of RH issues known to parents in their study [19]. Although knowledge alone does not translate to adolescent sexuality education, thorough knowledge is necessary for the parental practice of ASE. According to Jin et al, parents reported having difficulty providing sexuality education due to a lack of knowledge. Therefore diverse resources should be provided to improve parents' knowledge [23].

Parental attitude is vital for the effectiveness and sustenance of most adolescent reproductive health programs. In this study, concerning parental attitude to ASE, most of the parents in both rural and urban communities had a positive attitude towards ASE (75.9%) with no significant difference between the rural and urban communities (p-value 0.363). About 14.0% of the respondents did not support ASE, the commonest reasons cited by the rural and urban respondents for not supporting ASE is that "it is only meant for adults" and that it "makes adolescent promiscuous." This is in contrast to what was reported in a study in India where the attitude of urban and rural parents of adolescent girls was divergent; with 80.0% of urban respondents agreeing that it is important to impart sex education to children whereas about 90.0% of rural respondent do not agree that it is important to impart sex education to children [23].

Studies carried out in other parts of Africa by Njoroge in Kenya, Yadeta *et al* in Ethiopia and Asekun-Olarinmoye *et al* in Osogbo, Nigeria found that most parents had a positive attitude towards ASE [5, 18, 19]. According to Asekun-Olarinmoye *et al*, 88.3% of the parents reported a positive attitude towards sexuality education, and the most prominent reason (55.3%) given for non-support of sexuality education was "the fear that it may lead the adolescents to want to experiment with sex"[5].

Though most parents in this study reported a positive attitude towards ASE, this is not peculiar to home-based ASE as even some studies on school-based ASE record a high positive parental attitude too. In terms of school-based ASE, Asekun-Olarinmoye *et al* reported that most parents support the inclusion of ASE into the school curriculum. Eko *et al* reported that 60% of parents strongly agreed that sex education should be made a compulsory subject in school [25], while Adetunji in Lagos, and found no significant difference in the attitude of parents towards the inclusion of sexuality education in the school curriculum based on gender and educational qualifications [26]. In Ghana Nyarko *et al* found that 42% of the

respondents have a favourable attitude towards the teaching of sexuality education among lower primary school students [27]. However, caution in the interpretation of these results is necessary as most studies on adolescent sexuality are complicated in interpretation and some are inconclusive.

Study Limitation

1. This study focused on the parents of adolescents only, a follow-up study which should be expanded to include adolescent teachers and important persons in their lives will help give a clearer picture.

2. This study was observational and can only present what was reported by analysis of the data. To go further an experimental study which can link the outcomes to indices will be appreciated.

Conclusion

This study concluded that parental knowledge of ASE is significantly higher in the urban communities of Ekiti state than the rural communities. However, the knowledge of its components varies and as such, parents must be educated holistically so that they can serve as ASE educators at home. Although a majority of the parents in both communities had a positive attitude toward ASE, parents with a negative need to be re-oriented and properly guided on the effect of their attitude on their performance of ASE.

Recommendation

Based on the findings from this study, we make the following recommendations:

Government

The Local, State and Federal government should support parents through capacity-building and the creation of an enabling environment that support parents in their roles as primary sexuality educators to their children/adolescents. This is an area requiring accelerated action as parents who are educated and earn more tend to practice more ASE.

Families

Parents are to be encouraged to start a discussion on sexuality early (preferably at pre-school age) as this will lead to a build-up of both their confidence and that of the adolescent. Timely and continuous age-appropriate ASE is important for the success of this education.

Parents should be encouraged to accept ASE as their responsibility, and both parents should encourage each other to educate their adolescents irrespective of sex and age rather than leaving it for the mothers only.

Authors' Contributions

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Availability of data

Data for the study is kept securely by the author. Additional information will be made available by the author upon request.

Competing interest

The authors have no competing interests to declare.

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Table 1:
Socio-Demographic Characteristics of Parents in Rural and Urban Communities

Variables	Location				
	Rural (%) (n = 400)	**Urban (%) (n = 400)**	**Total (%) N = 800**	χ^2	**p - value**
Age groups (in years)					
30 – 39	125 (31.3)	113 (28.2)	238 (29.8)	7.515	**0.023**
40 – 49	229 (57.2)	260 (65.0)	489 (61.1)		
≥50	46 (11.5)	27 (6.8)	73 (9.1)		
Sex					
Male	179 (44.8)	191 (47.8)	370 (46.2)	0.724	0.395
Female	221 (55.2)	209 (52.2)	430 (53.8)		
Ethnicity					
Yoruba	331 (82.8)	263 (65.8)	594 (74.3)	30.754	**<0.001**
Igbo	28 (7.0)	60 (15.0)	88 (11.0)		
Hausa	10 (2.5)	15 (3.7)	25 (3.1)		
Others	31 (7.7)	62 (15.5)	93 (11.6)		
Religion					
Christianity	305 (76.2)	344 (86.0)	649 (81.1)	12.833	**0.002**
Islam	92 (23.0)	53 (13.2)	145 (18.1)		
Traditional	3 (0.8)	3 (0.8)	6 (0.8)		
Marital Status					
Single	12 (3.0)	7 (1.8)	19 (2.4)	11.734	**0.008**
Married	350 (87.5)	324 (81.0)	674 (84.2)		
Divorced/ Separated	15 (3.7)	32 (8.0)	47 (5.9)		
Widowed	23 (5.8)	37 (9.2)	60 (7.5)		
Family Type					
Monogamous	292 (73.0)	335 (83.8)	627 (78.4)	13.637	**<0.001**
Polygamous	108 (27.0)	65 (16.2)	173 (21.6)		
Level of Education					
No formal education	12 (3.0)	7 (1.7)	19 (2.4)	133.724	**<0.001**
Primary education	117 (29.3)	44 (11.0)	161 (20.1)		
Secondary education	181 (45.2)	99 (24.8)	280 (35.0)		
Tertiary education	90 (22.5)	250 (62.5)	340 (42.5)		
Occupation					
Civil servant	119 (29.8)	215 (53.8)	334 (41.8)	112.226	**<0.001**
Trading	76 (19.0)	74 (18.5)	150 (18.8)		
Artisan/ Technician	67 (16.7)	69 (17.3)	136 (17.0)		
Farming	96 (24.0)	5 (1.2)	101 (12.6)		
Housewife/ Student	32 (8.0)	33 (8.2)	65 (8.1)		
Others	10 (2.5)	4 (1.0)	14 (1.7)		

SD – Standard deviation.

Table 2:
Parental Knowledge of the Components of ASE in Rural and Urban Communities

Variables	Location				
	Rural (%) (n = 400)	**Urban (%) (n = 400)**	**Total (%) N = 800**	χ^2	**p – value**
HIV/AIDS					
Good	204(51.0)	260(65.0)	464(58.0)	16.092	**<0.001**
Poor	196(49.0)	140(35.0)	336(42.0)		
STIs					
Good	247(61.8)	303(75.8)	550(68.8)	18.246	**<0.001**
Poor	153(38.2)	97(24.2)	250(31.2)		
Contraceptive					
Good	183(45.8)	286(71.5)	469(58.6)	54.672	**<0.001**
Poor	217(54.2)	114(28.5)	331(41.4)		
Safe sex					
Good	126(31.5)	164(41.0)	290(36.2)	7.811	**0.005**
Poor	274(68.5)	236(59.0)	510(63.8)		
Dating and relationship					
Good	117(29.2)	101(25.2)	218(27.2)	1.614	0.204
Poor	283(70.8)	299(74.8)	582(72.8)		
Puberty and Sexuality					
Good	218(54.5)	221(55.2)	439(54.9)	0.045	0.831
Poor	182(45.5)	179(44.8)	361(45.1)		
Sexual violence					
Good	277(69.2)	274(68.5)	551(68.9)	0.052	0.819
Poor	123(30.8)	126(31.5)	249(31.1)		
Abortion/consequences					
Good	196(49.0)	213(53.2)	409(51.1)	1.446	0.229
Poor	204(51.0)	187(46.8)	391(48.9)		

Table 3:
Parental Attitude towards ASE in Rural and Urban Communities

Variable	Location				
	Rural (%) n=400	**Urban (%) n=400**	**Total (%) N=800**	χ^2	**P – value**
Attitude					
Positive	298 (74.5)	309 (77.2)	607 (75.9)	0.826	0.363
Negative	102 (25.5)	91 (22.8)	193 (24.1)		

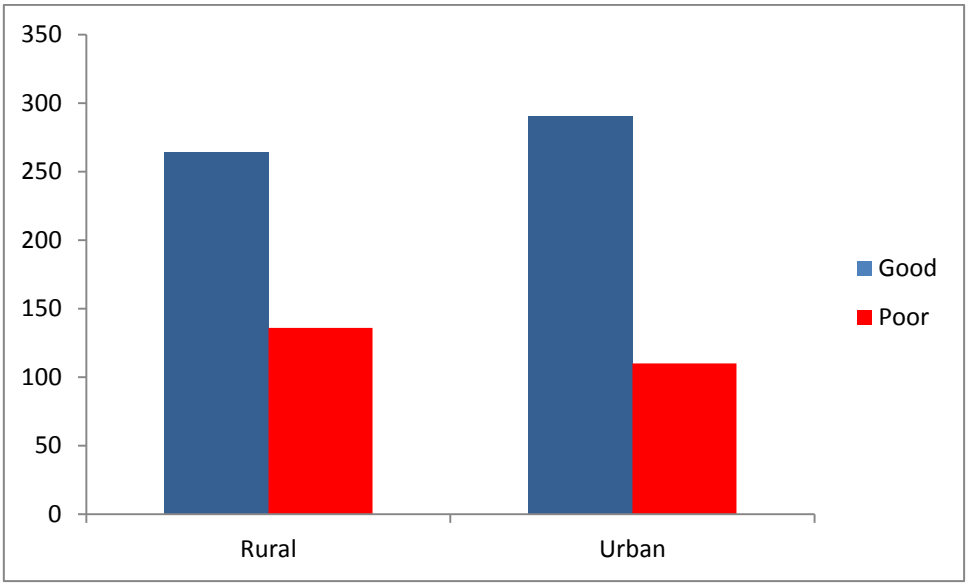

Figure 1:
Overall Knowledge of ASE among parents in rural and urban communities