

Biology Students' Perception of Sexuality Education in Secondary Schools

Martha Ijok Adibe Njoku¹, Appollus Ebenezer Josiah²

¹Department of Biology, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Nigeria

²Department of Paediatrics, Braithwaite Memorial Specialist Hospital, Port Harcourt, Nigeria

Abstract: *The study of biology has a vital role to play in the understanding of sexuality education in schools. Despite its importance in shaping the opinion of youths and adolescents, sexuality education has not received commensurate attention in our homes and schools. Thus, the study was aimed at identifying the perspectives of the adolescent students in the senior secondary schools about sexuality education and issues that affect their perspectives. It also sought to identify in the opinion of the adolescent senior secondary students, where it is best to have sexuality education. It was aimed at establishing the mean perception of secondary school biology students towards sexuality education and the influence of gender on their perception. Stratified random sampling was used in selecting the schools while purposive and proportional sampling were used in selecting a total number of 165 respondents. A well-structured questionnaire was administered on the respondents using their classroom teachers. Data collected were analyzed using sample means, standard deviation, percentages and Analysis of variance tests (ANOVA). Most of the students, agreed with most of the issues raised about their perception towards sexuality education. Although a slightly higher number of females had sexuality education than the males, the difference was not statistically significant ($p < 0.05$). Most of the students; 43.6% believed that school, rather than home and other places, was the best place to imbibe sexuality education. A few recommendations were suggested.*

Keywords: Biology, Students, Sexuality Education, Perception

1. Introduction

Biology is the science that deals with the study of variety of living organisms (plants and animals) including human beings. Medical advancements have shown the application of the knowledge of biology in our everyday living. The study of dreaded communicable diseases, their causative agents, mode of transmission, cure as well as the action of drugs in such cure are ways of Biological enlightenment that strives at minimizing human suffering. The study of Biology has a vital role to play in understanding sexuality education [1].

Biology has long been considered a key factor in explaining adolescents' sexual behaviour. Several researchers have described the role of biological 'unfoldment', including physical forces such as pubertal development and hormones, in adolescents' sexual behaviour, suggesting that the timing of sexual activity may be as much a biological issue as a social or behavioural one [2]. Biology students are assumed to have the needed information for this research on sexuality education.

Sexuality education seem not to receive commensurate attention in our homes and schools, despite the fact that issues concerning sex and sexuality and their consequences stare us all in the face on a daily basis in the form of; products advertisements, music videos, jingles, bill boards single parenthood, abortions increased family instability, divorces and so on. The excessive use of sex and sexuality by the mass media for publicity has resulted in the lack of understanding about the mystery of sex and sexuality by teenagers. This has caused young people to face issues of morality and encounter differing points of view on the subject. This may have led to more cases of sexual harassment, sexual abuse, incest and rape. To worsen the situation parents are not ready to tell these young ones about their sexuality. [3], observed that in most African homes,

parents are not fully equipped to answer questions on sexual matters usefully, thus, even those who try to end up passing faulty information to their children. The whole subject thus becomes surrounded by secrecy and the children now become too embarrassed to discuss these matters with their parents. Parents are in the appropriate position to provide information about sexuality to their children.

Meanwhile, Akande & Akande [4] assumed that sexuality education takes place on a daily basis in homes, schools, faith-based institutions and through the media. But after carrying out a research into the perception of sexuality education by rural secondary school students, it was found out that 70% of the respondents said they had never discussed issues of sex and sexuality with their parents, meaning that the information they have may have come from sources outside the home.

The goal of sexuality education is to reach young people before they become sexually active, whether this is through choice, necessity (e.g. in exchange for money, food or shelter), coercion or exploitation. For many developing countries, this discussion will require attention to other aspects of vulnerability, particularly disability and socio-economic factors.

Furthermore, some students, now or in the future will become sexually involved with persons of their own gender. These are sensitive and challenging issues for those with responsibility for designing and delivering sexuality education, and the needs of those most vulnerable must be taken into particular consideration [5]. Nigeria is not isolated from current trends and happenings in other parts of the world. Nigeria being a full member of the global village through the media especially social media, experiences the full impact of globalization which is the influence of foreign

popular cultures, acceptance and the adoption of such cultures as norm by people of other cultures.

Nigerian youths now have access to information which was hitherto unavailable to their parents when they were youths, some of the information are regarded as unwholesome in our culture. Youths access this information through the web/internet without supervision or sanctions. With the hue and cry about the menace of dangerous and incurable sexually transmitted diseases in recent times, the role of the school as an important institution of society vested with the all-important role of training and preparing the youths to be useful members of the society cannot be overemphasized. More so, there is the need to provide the necessary guidance through wholesome educational programmes aimed at ensuring the survival of its future generation of leaders and society. Preventing avoidable deaths from illegal abortions by pregnant teenagers and dangerous sexually transmitted diseases in Nigeria can be achieved to a large extent through a properly planned programme of sexuality education.

Sexuality education or sex and relationships education is the process of acquiring information and forming attitudes and beliefs about sex, sexual identity, relationships and intimacy. It also increases the knowledge of the functional and structural, behavioural aspect of human reproduction [6]. It implies that sexuality education will not just focus on the structure and function of human reproductive system, but also examine the behavioural components of the individual in relation to it. According to Agbo[7] it is also seen as the provision of accurate factual and developmentally appropriate information and training on human sexuality topics. It recognizes and respects individual and other community norms, cultural beliefs and language regarding healthy sexuality.

Furthermore, sexuality education is also about developing young people's (adolescents) communication skills so that they make informed choices about their behaviour and feel confident and competent about acting on their choices. According to Briggs [8] sexuality education, which remains an issue in some quarters in Nigeria appears to be one of the appropriate measures to curb teenage pregnancies as well as sexually transmitted disease. The controversy surrounding sex and sexuality education makes it imperative to find out student's perception of the concept.

Perception is the ability to see, hear or understand things [9]. Peter & Donald [10] defined perception as a process by which organism interpret and their sensation to produce a meaningful experience of the world around them. Perception is the way one notices things especially with senses like the ear, eye, nose and tongue or the ability to understand the true nature of something. Enebechi [11] explained that perception is a process by which one becomes aware or internalizes a situation, or an existing factor. In the context of the present study, perception is the process of becoming aware, analyze or view a situation with clear understanding of events in respect to sexuality education and its related concepts among the adolescents.

Students in the senior secondary schools are mainly adolescents who are very active and inquisitive. At this stage

they are under hormonal influences and tend to explore for themselves, ask questions and can be easily influenced into getting involved in sexual activity, either by their naïve choices or exploited by an adult. The desire to gain knowledge about themselves and take control of their "new self" and the belief in peers (rather than parents) to provide explanations is engendered by the parents' unwillingness or ignorance to discuss and correctly give this all-important sexuality education at home. From the point of view that outside the parents and home environment, the teacher and the school provides the next best opportunity to offer these adolescents with information on sex and sexuality to enable them make bettered informed decisions and cope better with life. Briggs [8] reported that, among adolescents who were provided with adequate information on sex, sexuality and other aspects of reproductive health, it was observed that early pregnancy and its complications could be prevented and controlled.

Furthermore, sexuality education helps to remove the misconception of adolescents about sex and sexuality. For instance, some adolescents say that when sexuality education is taught in the school, they will become wayward, but on the contrary it will create in them the awareness of the implication of going into sexual acts, how to prevent themselves from sexually transmitted diseases, the need for family planning, suitability of and the implication of each family planning method chosen.

The teaching of sexuality education is aimed at helping adolescents acquire knowledge of sexual and personal relationship in a way that promotes responsibility [8]. Sexuality education in school helps in correcting the unwholesome attitude developed at home by adolescents, especially those who are unknowledgeable or shy away from discussing specific sexuality related issues with their parents. The children become suspicious, curious and tend to rely on peers for information and for need of knowledge. Adolescents' ignorance in sexuality education and illiteracy may lead to misconception which is carried over to the future. The schools therefore stand the better chance of correcting these attitudes developed at home.

The study of sexuality education in school is often shaped by cultural and religious perceptions, some students regard discussion on sex and sexuality as a taboo. According to Godwin [12] some communities regard discussion about sexual matters, as committing heresy. Some religious groups play a vital role in shaping the perception of students about sexuality education, therefore making them to seek information about sexuality in a wrong way, such as peers, media or by observing adults. Therefore, the need to find out the perception of secondary school students concerning sexuality education.

Omale, [13] in the research on "Perception of Students on the Study of Sex Education in Secondary School Social Studies", found out that students have positive perception and attitude towards sexuality education. More so, the students agreed that the best person to discuss issues bothering on sex and sexuality is their teacher in school. In addition, Oliko [14] stated that female adolescents are more knowledgeable on issues concerning sex and sexuality than

the male adolescents. Oliko, [14] therefore claimed that this gender influence is usually associated with the nature of training given to female adolescents in respect to reproductive health education by their mothers. All the disparities expressed in various researches concerning students' perspective of sexuality education by adolescents in secondary school led to the current search for same issue in Andoni Local Government Area of Rivers State, Nigeria. To achieve this, two research questions and one null hypothesis guided the study;

1.2. Research Questions

- 1) What is the mean perception of secondary school biology students towards sexuality education?
- 2) What is the mean perception of biology students towards sexuality education with respect to gender?
- 3) Which is the best place to receive sexuality education?

1.3. Hypothesis

Null Hypothesis 1:(H₀₁) There is no significant difference between the perception of male and female biology students towards sexuality education.

2. Methodology

2.1. Design

The study employed a survey design that explored the perception of sexuality education among secondary school biology students in Andoni Local Government Area, of Rivers State, Nigeria.

2.2. Population of the Study

The population of the study consisted of all the four hundred and sixty (460) SS II biology students in the ten public senior secondary schools located across the four clans in Andoni Local Government Area.

2.3. Sampling Technique

The study used stratified random sampling in selecting one school from each of the clans, while purposive and proportional sampling were used in selecting the respondents for the study. The use of random sampling was to ensure that every member of the population has an equal chance of being included in the sample.

2.4. Sample

A total of 165 students from the 460 S.S. II biology students in the Local Government Area were selected using proportional stratified sampling. The choice of S.S. II students was based on the fact that it is the most stable senior secondary class. SS I students are just being introduced to biology, and SS III students are preparing for their terminal exams (SSCE).

2.5. Instrument for Data Collection

A Well-structured questionnaire titled Students' Perception of Sex Education Questionnaire (SPSEQ) which was designed by the researchers was used in collecting data for the study. The instrument was divided into three parts. Part A sought information on the school and gender of the respondents while part B consists of items on sex education using a 4 point Likert scale of strongly agree (SA), Agree (A), Disagree (B), and Strongly Disagree (SD) with scoring value of 4, 3, 2, and 1 respectively for positive items while 1, 2, 3 and 4 was used for negative statements. The research instrument was validated by 3 experts; one from Test and Measurement another Biology Education and the third person from Human Kinetics/Health and Safety Education Department, all of Ignatius Ajuru University of Education, Port Harcourt before its administration. Cronbach's Alpha was used to obtain a reliability coefficient of 0.89 from the pilot test which involved 30 students that possessed similar characteristics with the population of interest.

2.6. Method of Data Collection

The researchers employed the assistance of four biology teachers for SS II, who randomly administered 165 questionnaire to the respondents and all the questionnaire were duly completed and returned.

2.7. Method of Data Analysis

The data collected based on research question 1 and 2 were analyzed with the use of sample mean and standard deviation. Any item with a mean value of 2.5 and above was regarded as positive perception which is considered acceptable while those items with a mean value below 2.5 were considered to be negative and not accepted. For research question 3, percentage was used in analyzing the items used in answering the research question. Finally the only Null hypothesis was tested using ANOVA.

3. Results

3.1 Research Question 1

What is the mean perception of secondary school biology students towards sexuality education?

Table 1: Mean and Standard Deviation showing the perception of secondary school biology students towards sexuality education

S/N	ITEMS	N	Mean	Std. Devtn.	Decision
1.	Sexuality education brings about conflict in issues of sex and sexuality	165	1.04	0.20	Disagreed
2.	Young boys and girls should not have sex until they get married	165	2.58	1.18	Agreed
3.	Sexuality education provides good framework on issues concerning sex and sexuality	165	3.72	0.47	Agreed
4.	Sexuality education provides opportunity for	165	2.95	1.10	Agreed

	safe sex for young boys and girls				
5.	Sexuality education is good and encouraging	165	2.49	1.14	Agreed
6.	Sexuality education aims at reducing the risk of potentially negative outcome from sexual behavior	165	3.24	0.80	Agreed
7.	Sexuality education is the study of the characteristics of being a male and female	165	3.36	0.91	Agreed
8.	Knowledge of sexuality education protects against abuse	165	2.23	1.22	Disagreed
9.	Knowledge of sexuality education protect against unintended pregnancy	165	3.34	0.60	Agreed
10.	Sexuality education is the process of inquiring information and forming attitude and beliefs about sex	165	3.58	0.66	Agreed
11.	Sexuality education should be taught in schools	165	3.47	0.80	Agreed
12.	Sexuality education is against my religion	165	1.76	0.98	Disagreed

Source: Researchers' Field Work

The result presented in Table 1 revealed the perception of biology students towards sexuality education. The respondents tend to agree with most of the issues raised about their perception towards sexuality education as evidenced by the mean score above the 2.5 which is the decision point. This reveals positive perception towards sex education, except item 1, 8 and 12 with a mean score of 1.02, 2.23 and 1.76 respectively where the respondents disagreed. This is an indication that sexuality education is not considered by biology students to bring about conflict in issues of sex and sexuality, knowledge of sexuality education does not protect against abuse and that sexuality education is not against their religion.

Research Question 2: What is the mean perception of biology students towards sexuality education with respect to gender?

Table 2: Mean and Standard Deviation showing the mean perception of male and female students towards sexuality education

S.No	ITEMS	Gender	N	X	SD
1.	Sexuality education brings about conflict in issues of sex and sexuality	M	97	1.01	0.10
		F	68	1.08	0.28
2.	Young boys and girls should not have sex until they get married	M	97	2.59	1.13
		F	68	2.57	1.26
3.	Sexuality education provides good framework on issues concerning sex and sexuality	M	97	3.70	0.48
		F	68	3.75	0.46
4.	Sexuality education provides opportunity for safe sex for young boys and girls	M	97	2.90	1.10
		F	68	3.01	1.11
5.	Sexuality education is good and encouraging	M	97	2.51	1.07
		F	68	2.45	1.23

6.	Sexuality education aims at reducing the risk of potentially negative outcome from sexual behavior	M	97	3.39	0.58
		F	68	3.04	1.01
7.	Sexuality education is the study of the characteristics of being a male and female	M	97	3.39	1.03
		F	68	3.33	0.70
8.	Knowledge of sexuality education protects against abuse	M	97	2.40	1.24
		F	68	1.98	1.15
9.	Knowledge of sexuality education protect against unintended Pregnancy	M	97	3.45	0.50
		F	68	3.19	0.69
10.	Sexuality education is the process of acquiring information and forming attitude and beliefs about sex	M	97	3.55	0.69
		F	68	3.63	0.62
11.	Sexuality education should be taught in schools	M	97	3.58	0.83
		F	68	3.30	0.73
12.	Sexuality education is against my religion	M	97	1.47	0.83
		F	68	2.17	1.03

Source: Researchers' Field Work

Table 2 shows the responses of the perception of male and female biology students towards sexuality education. Furthermore the result indicates slight disparities in the items on perception of male and female, except for item 5 where the female students rather showed disagreement with a mean value of 2.45, as against the male students' agreement with a mean value of 2.51.

Research Question 3: Which is the best place to receive sexuality education?

Table 3: Responses of the students on the best place to receive sexuality education

Learning Place	Number of respondents	Percentage (%)
Home	49	29.70
School	72	43.64
Social gatherings (friends)	8	4.85
Hospital	11	6.67
Church	19	11.52
Undecided	6	3.64
Total	165	100

Source: Researchers' Field Work

Students' response in table 2 indicated that 29.70% considered the home as the best place to receive sexuality education while 43.64% were in favour of the school. 4.85% considered social gatherings (friends) as the best place to receive sexuality education, 6.67% think that the best place is the hospital while 11.52% were of the view that such education should come from the church. However, 3.64% of the respondents were undecided about the best place to receive sexuality education.

Null Hypothesis 1: There is no significant difference between the perception of male and female students towards sexuality education.

Table 4: Analysis of variance (ANOVA) showing the perception of male and female biology students towards sexuality Education

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.444	1	2.444	.169	.681
Within Groups	2352.259	164	14.431		
Total	2354.703	165			

Table 4 shows that there is no significant difference between the perception of male and female students towards sexuality education. ($F_{1, 164} = 0.17, p > 0.05$). The null hypothesis (1) was not rejected.

3. Discussion

The study generated and analyzed data on the perception of secondary school biology students towards sexuality education in Andoni Local Government Area of Rivers State.

Based on the responses of the students, the results were discussed according to the research questions.

- 1) What is the mean perception of secondary school students towards sexuality education?
- 2) What is the mean perception of male and female student towards sexuality education?
- 3) Which is the best place to receive sexuality education?

The findings in table 1 revealed that the perception of sexuality education by senior secondary school biology students in Andoni Local Government Area was positive as evidenced by the respondents agreeing to nine of the items out of twelve. This finding was in line with the assertion of Omale (2013) that students have positive perception and attitude towards sexuality education.

The result in table 2 shows that male and female perception towards sexuality education slightly differ, which would have tallied with the assertion of Oliko (2009) who stated that female adolescents are more knowledgeable on issues concerning sex and sexuality than the male adolescents. Conversely, after testing the only hypothesis using ANOVA as shown in table 4 there was no significant difference between the perception of male and female students.

A closer look at table 3 reveals that most of the respondents (43.64%) indicated that the school is the best place to receive sexuality education. This is in line with Omale (2013) who found out that according to the students, the best person to discuss issues bothering on sex and sexuality is their teacher in school.

4. Implication of the Study

Adolescent display sexual behaviour and developmental characteristics that place them at risk for HIV/AIDS, other sexually transmitted disease (STD), unwanted pregnancy. Because young people experiment sexually and because of the consequences of indiscriminate sexual activities on the youth, there is need to mount sexuality education programmes that are geared towards enlightenment and appropriate education about sex and sexuality in order to curb the menace of unwanted pregnancy and STDs. More

so, biology teachers should be monitored to ensure that topics that has to do with sexuality education are adequately taught.

5. Conclusion

Adolescents are faced with the challenges of understanding and becoming comfortable with the physical changes of puberty. Moreover, secondary school biology students (adolescents) agreed to the fact that sexuality education in schools will be very effective, if adolescents are provided with accurate information about their sexuality in order to form good attitude and belief towards sex. Sexuality education is needful and necessary for young ones in order to enlighten them on their reproductive systems, sexually transmitted diseases and so on. Durojaiye (2005) observed that in most African homes, parents are not fully equipped to answer questions on sexual matters usefully, even when those who try to, they pass faulty information to their children. Therefore the school should be better equipped for this service, teachers should be given adequate training on how to handle sex and sexuality education in schools.

6. Recommendations

- Sexuality education should be part of the secondary school biology curriculum for adolescents to have easy access to help them to take informed decisions on sexuality matters.
- Adequate information should be given to adolescents in order to form good attitude and belief towards sexuality.
- There should be training and re- training of specialized skillful personnel (Biology teachers) for the teaching of sexuality education in Nigeria.
- Sexuality education should be taught in clear unambiguous terms.

References

- [1] M. O. Salami, "Sex Education and Teenage Pregnancy in the Niger Delta: Implications for Secondary School Biology Curriculum in Nigeria," *World Journal of Education*, V (3), pp. 73-76, 2015.
- [2] B. A. Kotchick, A. Shaffer, K. S. Miller, R. Forehand, "Adolescent Sexual Risk Behaviour: A Multi-System Perspective," *Clinical Psychology Review*, 21, pp 493-519, 2001.
- [3] Durojaiye, *Guidelines for comprehensive sexuality education*. Codat publications. Ibadan, 2005.
- [4] A. A. Akande & T. M. Akande, Knowledge and perception of sexuality education among students of rural secondary school in Kwara state Nigeria. *Nigerian Medical Practitioner*. LII (3), pp. 55 – 59, 2007.
- [5] UNESCO, "International Technical Guidance on Sexuality Education: An Evidence-informed approach for schools, teachers and health educators," Paris, UNESCO, 2009, [Online]. Available: <http://unesdoc.unesco.org/images/0018/001832/183281e.pdf>. [Accessed: Feb. 16, 2017].
- [6] C. N. Obionu, *Primary Health care for developing countries*. Enugu: Delta publication Ltd, 2006.
- [7] P. O. Agbo, *Safe Motherhood and family for developing countries*. Lagos Heinemann, 2003.

- [8] L. A. Briggs, "Adolescent pregnancy in Port Harcourt, Nigeria: Implication for sex education." Nigeria School Health Journal, Eastern Zone 1: pp. 96 – 105, 2002.
- [9] A. O. Nwagugu, Menopausal perception and coping strategies among women of menopause age in Igbo-Etiti. LGA. Unpublished project report, UNN 2011.
- [10] L. Peter, &A. N. Donald, Human Information Process. An introduction to psychology. New York: University Press, 2003.
- [11] J. C. Enebechi, Teachers' perception of occupational hazard of teaching profession in Udi Education zone. Unpublished project report, UNN, 2007.
- [12] A. J. Godwin, "A study of adolescent sexuality in Nigeria." West African journal of education. XVIII (18), pp. 445-453, 2001.
- [13] A. Omale, "A Survey of the Perception of Students on the Study of Sex Education in Secondary School Social Studies in Dekina Local Government Area of Kogi State." International Journal of Education Learning and development. III (1), pp 67 – 74, 2013.
- [14] P. M. Oliko, Overview of family planning and exclusive breastfeeding: A paper presented at the conference of Nigerian National Association of Nurses and midwives. (NNANM) Lagos, 2009.