*JHER Vol. 30, No. 1, September 2023, pp. 160 - 173*

# Promoting Parent-to-Child Sex Education in Nigerian Homes through Rational-Emotive Health Education Programme: A Pilot Study of Imojo Community Ofekiti State, Nigeria

**[1]Adekoya, Adebolu F.,[2]Adams, Adijat B., [3]Okueso, Samuel A., [4]Ajani, Olajide E., [5]Okparaeke, Magdalen I.,[6]Onyekwere, OgechiK., [4*]Ugwu, Ndubuisi F.,[1]Oloyede, Abiodun O., & [4]Alade Temitope T.**

[1]Department of Human Kinetics, Federal University, Oye-Ekiti, Ekiti State, Nigeria
[2]Department of Guidance and Counseling, Federal University, Oye-Ekiti, Ekiti State
[3]Dept of Human Kinetics & Health Edu, Olabisi Onabanjo University, Ago-Iwoye, Nigeria.
[4]Department of Health Education, Federal University, Oye-Ekiti, Ekiti State, Nigeria
[5]Tai-Solarin College of Education, Omu-Ijebu, Ogun State, Nigeria
[6]Department of Physical and Health Education, Federal College of Education, Eha-Amufu, Enugu State, Nigeria,

*Corresponding author: ndubuisi.ugwu@fuoye.edu.ng

**Abstract**

This study examined the effects of Rational Emotive Health Education Programme (REHEP) on irrational beliefs of about parent-to-child sex education among parents in Imojo community of Ekiti State, Nigeria. Specifically, the study determined the effects of REHEP on parents' irrational beliefs relating to teaching their children in Imojo community of Ekiti State: sex education, biological bases of human sexuality, psychosocial bases of human sexuality, reproductive and sexual rights, issues on early preparation for responsible family roles. The study adopted quasi-experiment design that followed a pre-test post-test non-control group approach. A total number of 42 parents who were resident of Imojo Community in Oye LGA of Ekiti State, Nigeria was studied. Questionnaire was the instrument used for data collection. Data were analyzed using mean, standard deviation and analysis of covariance. The pre-test results show that the parents had higher mean scores of irrational beliefs concerning teaching children: sex education ($\overline{X}$ =3.74; SD=1.14), the biological bases of human sexuality ($\overline{X}$ =3.74; SD=1.13), the psychosocial bases of human sexuality ($\overline{X}$ =3.73; SD=1.15), and sexual and reproductive rights, and these mean scores of the irrational beliefs significantly diminished after the intervention programme. There was no significant interaction effect of gender and level of education on the mean scores of irrational beliefs about sex education among the participants. Among other things, the researchers recommended a larger scale of this study will be needed for promoting sex education in Nigerian homes.

**Keywords:** Sex, Education, Irrational, Beliefs, Parents, Rational-Emotive, Health.

## Introduction

Parents have a crucial role in the sex education (SED) of their children. According to Kee-Jiar and Shih-Hui (2020), SED provides accurate information that helps the young ones not only to develop and appreciate values, attitudes and insights concerning their sexuality but also to assist them in developing relationships, interpersonal

skills, as well as the ability to exercise responsibility regarding sexual relationships. It also creates in youngsters the awareness regarding the risks of sex, sexual exploitation and abuse that will enable them to protect themselves and identify how to access available sources of support. Furthermore, SED helps young people to gain knowledge, competencies and motivation necessary for making healthy decisions regarding sex and sexuality throughout their lives. It therefore becomes very necessary that parents should be involved in SED for their children (Ganji et al, 2018). Available report however show that most parents are strongly opposed to SED and have shown great apathy in conveying sexual tips to their children (Achille et al, 2017). There are many others who, although, appreciate the benefits of SED, yet, they are uncomfortable engaging in sexual discussions with their children (Liu, Dennis, & Edwards, 2015).

There are some irrational beliefs among parents which discourage SED for children. These include that: that SED spoils a child, robs him of sense of childhood innocence and lead to early sexual experience (Esohe & Inyang, 2015). These irrational beliefs have since been disputed in previous studies which show that SED does not accelerate sexual activity but promotes safer sexual behaviours, delays sexual debuts, and prevents sexually transmitted diseases as well as teenage pregnancies (UNESCO, 2016; Kee-Jiar and Shih-Hui, 2020). Another widely held irrational belief is that it is wrong to offer SED to children with the assumption that they know nothing about sex and that SED is the sole responsibility of schools (Achille et al, 2017). Furthermore, there is also an irrational belief derived from religious or traditional principles where sex is regarded as extremely sacred and discussion on it is strongly abhorred (Ugwu et al, 2021). The foregoing irrational beliefs are responsible for dearth of SED in most conservative African homes including those in Nigeria.

The stance of an average Nigerian parent is that the children will understand SED issues as they grow up. For them, there is no reason why the young people would know about sex since it is of no use to them. According to them, it is only a morally bankrupt child that wants to know or talk about sex (Ugwu et al, 2021). Therefore, the young people would even prefer risking the consequences of premarital sex instead of discussing their sex life with their parents or other adult about (Tulloch & Kaufman, 2013). Other agents of socialization like cultural environment and the church cannot also properly guide the child on matters of sexuality. While the culture forbids the child from acquiring mere knowledge of the names of sex organs (Salami, 2015), the church, on the other hand, does not also find it comfortable presenting sex education to young people (Ogundipe & Ojo, 2015). Hence, sex has been shrouded in secrecy making it to remain an enigma for the young people. This gets them increasingly confused and affects how they understand sexuality. This tends to provoke inquisition in their minds and they are left with the only choice of seeking information from other sources mainly through peers and internet.

A child's exposure to sexual contents commences much earlier than most parents would imagine. Avoiding engaging the children in discussions bothering on their sexuality would make parents to have little or no control over

where, how and what the young ones learn about sex (Kids Health, 2019). It is worthy of note that in addition to managing their own hormonally driven sexual drives, the brains of the youngsters are flooded with sexual stimuli from all sides including provocative content in movies, and TV shows, readily available internet pornography, social media filled with flirtation and sexting (Ugwu et al, 2021). To make it worse, there is poor delivery of sex education in most Nigerian schools to properly guide them through the "sexual wilderness" (Ogbuinya & Nwimo 2015). This may create room for all sorts of risky behaviour with increasing cases of morbidities linked to sexual ignorance and poor decision making among the young ones.

Regrettably, the much that the parents can do when there is an eventuality of teenage pregnancy, STDs or other related problems are to blame, criticize, or punish the young ones. They usually absolve themselves of any blame regarding unwanted outcome because of the afore-mentioned irrational beliefs. Therefore, there is the need for intervention for remedying these irrational beliefs about sex education among the parents (IBASE). Rational Emotive Behaviour Therapy (REBT) can be of help in diminishing the IBASE.

The REBT created by Albert Ellis in 1995 is an approach that helps in identifying negative thought patterns and irrational beliefs that may result in behavioral or emotional issues with a view to replacing them with thought patterns that are more rational (Health line, 2018). REBT has various forms, namely: rational-emotive education (REE), rational emotive distress management programme (REDMP), rational emotive occupational health coaching (REOHC), rational-emotive health education programme (REHEP), among others. A number of successes have been recorded in the use of these various psychotherapeutic interventions in dealing with cognitive behavioural problems including; irrational beliefs and anxiety, stress management and irrational beliefs nd depression (Egenti et al, 2022). REBT studies have also been found to be efficacious in enhancing self-esteem, psychological wellbeing, personal value system (Abiogu et al., 2020), as well as in reducing negative self-beliefs (Ede et al, 2021) and irrational and rational beliefs (Laurito, 2021). None of these interventions has been geared towards reducing Nigerian parents' irrational beliefs in sex education of their children. This study attempted addressing this through the use of Rational Emotive Health Education Programme.

Rational Emotive Health Education Programme (REHEP) is a group-oriented health counseling programme that scholars adapted from the Rational-Emotive Education (REE) approach (Knaus et al, 1977) which is regarded as an extension of Rational Emotive Behaviour Therapy created by Ellis (1995).In the present study, the REE approach was adopted in implementing REHEP for promoting parent-to-child sex education. Within this context, the REHEP explored the belief system that hampers parent-to-child sex education and disputed such forms of irrational beliefs through series of mental health lessons.

The need for implementation of a REHEP to enhance parent-to-child sex education is further strengthened by findimg of previous studies that sex education is not only lacking but also abhorred in most Nigerian homes

(Ugwu *et al*, 2021). This is the situation in Imojo where the present study was conducted. Through observation and interaction with the natives, the present researchers noted that in Imojo, it was a taboo and unacceptable to discuss issues of sexuality and reproductive health persons (children). Young people were prevented from listening to or participating in sex-related conversations. All of these are as a result of internalized irrational ideas about sex education for children. The young ones are not properly guided on issues of sex and reproductive health. Therefore, an intervention was needed to disabuse these irrational beliefs hindering delivery of parent-to-child sex education in the area of the study. This was the crux of this study.

**Objectives of the Study**

This study examined efficacy Rational-Emotive Health Education Programme (REHEP) on irrational beliefs about parent-to-child sex education among parents in Imojo community of Ekiti State, Nigeria. Specifically, the study determined the effects of REHEP on parents' irrational beliefs relating to teaching their children:

1. sex education,
2. biological bases of human sexuality,
3. psychosocial bases of human sexuality,
4. reproductive and sexual rights,
5. issues on early preparation for responsible family roles.

**Methodology**

***Design of the Study:*** the study adopted quasi-experimental study design. It involved pretest -posttest non-equivalent comparison (control) group design. This design attempts to determine a cause-and-effect relationship.

***Area of the Study:*** Area of this study was Imojo, Oye Local Government Area of Ekiti State, Nigeria. Imojo is a typical conservative rural community with dwellers who are strongly tied to their cultures. There appeared to be a lot of cases of teenage pregnancies and children born out of wedlock by single young girls. Focus group discussions (FGD) with the natives revealed that parent-to-child sex education was deemed weird. Any discussion bothering on sex was termed *"oro buruku"* meaning "abominable conversation" which should be distant from the reach of the children. It was these observations that triggered this study.

***Population for the Study*:** The study participants consisted of all the 112 adult community dwellers in Imojo who attended Sex Education enlightenment programme organized by the present researchers. The population was made up of male and female adults.

***Sample for the Study*:** The sample for the study was made up of 42 (22 males and 20 females) out of the 112 participants who attended the Sex Education enlightenment programme. Purposive sampling technique was employed. Only participants who were married, had children and volunteered to participate were selected.

***Instrument for Data Collection*:** "Irrational Beliefs about Sex Education (IBASE) questionnaire (test) was used for data collection. The IBASE covered the five aspects of REHEP which form the bases of the five specific objectives, namely sex education, biological bases of human sexuality, psychosocial bases of human sexuality, reproductive and sexual rights, and issues on early preparation for responsible family roles. These formed the basis the items that

constituted the pre-test and post-test for the study. The questionnaire had a 5-point Likert-type scaling (1=completely disagree to 5=completely agree). Participants were required to respond to the list of irrational beliefs. The questionnaire was validated by five experts in Public Health Education. The instrument was subjected to reliability test using split- half method (Spearman Brown Coefficient), and it yielded a reliability index of 0.82.

***Method of Data Collection*:** Pre-test was first administered 42 adult dwellers who formed the sample for the study, using the IBASE test. Thereafter, the sex education enlightenment programme (intervention) was implemented. The involved teaching on the REHEP. After the intervention, the items in the IBASE were randomly rearranged and re-administered to the participants as post-test. Four trained research assistants were involved in the study.

***Method of Data Analysis*:** Frequencies and percentages were used to describe the subjects' demographic characteristics (gender and level of education). Mean and standard deviation were used in describing the irrational beliefs about sex education before and after the intervention. Mean values of 0–0.8; 0.9 – 1.79; 1.8 –2.69; 2.7–3.59; and 3.6 –4.0 imply "very rational"; "rational"; "irrational" and "very irrational" respectively. Analysis of Covariance (ANCOVA) was used to examine the interaction effects of gender and level of education on the participants' irrational beliefs about parent-to-child sex education. All the tests were 2-tailed, and the probability values less than 0.05 ($p<0.05$) were considered significant.

## Results

**Demographic Characteristics of Participants:** Data analysis shows that of the 42 respondents, 22 (52.4%) were males while 20 (47.6%) were females. A total of 14 participants (33.3%) had no formal education, 12 (28.6%) of the respondents have Primary/Ordinary level certificate, 09 (21.4%) had Ordinary National Diploma/Nigeria Certificate on Education (OND/NCE), 05 (12.0%) had Higher National Diploma (HND)/Bachelor's Degree, whereas only 02 (04.70%) had Postgraduate Degree.

**Table 1: Mean Scores of Irrational Beliefs about Teaching their Children Sex Education (N= 42)**

| S/N | Measures | $\bar{X}_1$ | $SD_1$ | $\bar{X}_2$ | $SD_2$ | $\bar{X}d$ | t | Df | P |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Sex education leads to early sex experience by children. | 3.95 | 1.20 | 2.07 | .86 | 1.79 | 7.814 | 74.584 | .000 |
| 2 | Sex education makes a child wayward. | 3.71 | 1.13 | 1.80 | .67 | 1.90 | 9.377 | 66.651 | .000 |
| 3 | Sex education robs children of their innocence. | 3.80 | 1.17 | 1.97 | .94 | 1.83 | 7.870 | 78.579 | .000 |
| 4 | School should shoulder the responsibility of children's sex education. | 3.52 | 1.34 | 1.83 | .85 | 1.90 | 6.869 | 69.305 | .000 |

*Continue in the next page*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 5 | Sex education can lead to child marriage. | 4.04 | .93 | 2.21 | 1.27 | 1.83 | 7.497 | 75.119 | .000 |
| 6 | Sex education make children vulnerable to pedophilic attack. | 3.61 | 1.05 | 2.47 | 1.32 | 1.02 | 4.359 | 78.067 | .000 |
| 7 | Sex education is not for the ears of the children. | 3.61 | 1.12 | 2.59 | 1.10 | 1.02 | 4.206 | 81.975 | .000 |
| | **Grand** | **3.74** | **1.14** | **2.13** | **1.00** | **1.61** | | | |

*$\bar{X}_1$ =Pre-test mean; $\bar{X}_2$ = Post-test mean; $SD_1$ = Standard deviation pre-test; $SD_2$= Standard deviation post-test; $\bar{X}_d$ = Mean difference; t-test value; df = Degree of freedom; P = P-value.*

Table 1 shows that rational-emotive health education programme (REHEP) had significant effect on parents' irrational beliefs about teaching children sex education. The grand mean scores of the items in the pre-test ($\bar{X}_1$=3.74) decreased in the post-test ($\bar{X}_2$ =2.14). Specifically, there is a significant difference in the pre-test and post-test scores of all the items ($p<0.05$). This show a reduction in the irrational belief measured.

**Table 2: Mean Scores of Irrational Beliefs about Teaching their Children the Biological Bases of Human Sexuality (N= 42)**

| S/N | Measures | $\bar{X}_1$ | $SD_1$ | $\bar{X}_2$ | $SD_2$ | $\bar{X}d$ | t | Df | P |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Young people are not supposed to be taught that pregnancy results from sex. | 3.40 | 1.32 | 2.20 | .92 | 1.20 | 4.881 | 72.908 | .000 |
| 2 | Young people are not supposed to be taught the reproductive system and their functions. | 3.30 | 1.00 | 2.60 | .89 | 0.7 | 3.367 | 81.051 | .001 |
| 3 | Young people should not know about sperm or ovum. | 3.24 | 1.10 | 2.31 | .87 | 0.93 | 4.292 | 77.835 | .000 |
| 4 | Young people should not be made to know the pregnancy prevention methods. | 3.67 | 1.20 | 2.10 | 1.03 | 1.57 | 6.427 | 80.133 | .000 |
| 5 | Young people should be made to believe that female genital mutilation is the way to prevent sexually transmitted diseases. | 3.60 | 1.40 | 2.00 | .96 | 1.6 | 6.180 | 72.658 | .000 |
| 6 | Young people should not to be educated about menstrual circle. | 3.43 | 1.40 | 1.83 | 1.01 | 1.6 | 5.990 | 74.603 | .000 |
| | **Grand** | **3.74** | **1.14** | **2.13** | **1.00** | **1.61** | | | |

*$\bar{X}_1$ =Pre-test mean; $\bar{X}_2$ = Post-test mean; $SD_1$ = Standard deviation pre-test; $SD_2$= Standard deviation post-test; $\bar{X}_d$ = Mean difference; t-test value; df = Degree of freedom; P= P-value.*

Table 2 shows that there is a reduction in irrational belief about educating the children on the biological bases of human sexuality after the treatment. The grand mean scores of the items in the pre-test ($\bar{X}_1$ =3.74) reduced in the post-test ($\bar{X}_2$ =2.14). Specifically, there is a significant difference in the pre-test and post-test scores of all the items ($p<0.05$).

**Table 3: Mean Scores of Irrational Beliefs about Teaching their Children Psychosocial Bases of Human Sexuality (N= 42)**

| S/N | Measures | $\bar{X}_1$ | $SD_1$ | $\bar{X}_2$ | $SD_2$ | $\bar{X}d$ | t | Df | P |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Any form of opposite sex interaction should be completely discouraged. | 3.88 | 1.15 | 1.54 | .50 | 2.33 | 12.027 | 56.129 | .000 |
| 2 | Children should not be taught about healthy heterosexual relationship. | 4.26 | .85 | 2.02 | .51 | 2.23 | 14.488 | 67.380 | .001 |
| 3 | Abstinence is the only morally correct option. | 3.88 | 1.27 | 1.83 | .85 | 2.04 | 8.661 | 71.653 | .000 |
| 4 | Young people should be made to know that everything about sex is bad and risky. | 3.38 | 1.32 | 2.40 | 1.21 | 0.97 | 3.526 | 81.352 | .001 |
| 5 | Young people should be made to believe that female genital mutilation is the way to prevent sexually transmitted diseases. | 3.26 | 1.14 | 1.95 | .79 | 1.30 | 6.075 | 72.934 | .000 |
| | **Grand** | **3.73** | **1.15** | **1.95** | **0.77** | **1.77** | | | |

*$\bar{X}_1$ =Pre-test mean; $\bar{X}_2$ = Post-test mean; $SD_1$ = Standard deviation pre-test; $SD_2$ = Standard deviation post-test; $\bar{X}_d$ = Mean difference; t-test value; df = Degree of freedom;P= P-value*

Table 3 shows that the treatment had significant effect on parents' irrational beliefs about teaching children sex education. The grand mean scores of the items in the pre-test ($\bar{X}_1$=3.73) decreased in the post-test ($\bar{X}_2$ =1.95) implying that the treatment was effective in reducing irrational behaviour about teaching children the psychosocial bases of human sexuality. More so, a significant difference is shown in the pre-test and post-test scores of each of the items (**p**<0.05).

**Table 4: Mean Scores of Irrational Beliefs about Teaching their Children Sexual and Reproductive Rights (N= 42)**

| S/N | Measures | $\bar{X}_1$ | $SD_1$ | $\bar{X}_2$ | $SD_2$ | $\bar{X}d$ | t | Df | P |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Young people should not be made to know their sexual and reproductive rights. | 3.16 | 1.30 | 2.16 | .62 | 1.00 | 4.483 | 58.683 | .000 |
| 2 | It is not right to teach children legal issues relating to sex because it always breaks the home | 3.714 | 1.40 | 1.66 | .477 | 2.04 | 8.961 | 50.373 | .001 |

*Continue in the next page*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 3 | Young people should be made to understand reporting rape incidents and other sexual harassments leads to stigmatization. | 3.76 | 1.42 | 2.02 | .68 | 1.50000 | 7.121 | 58.697 | .000 |
| 4 | Teaching children about gender equality is not right. Males are naturally superior to females. | 3.76 | 1.32 | 2.26 | .44 | 1.50 | 6.971 | 50.178 | .000 |
| | **Grand** | **3.60** | **1.36** | **2.02** | **0.55** | **1.57** | | | |

*$\bar{X}_1$ =Pre-test mean; $\bar{X}_2$ = Post-test mean; $SD_1$ = Standard deviation pre-test; $SD_2$= Standard deviation post-test; $\bar{X}_d$ = Mean difference; t-test value; df = Degree of freedom; P = P-value.*

Table 4 reveals that the grand mean scores of the items in the pre-test ($\bar{X}_1$=3.60) decreased in the post-test ($\bar{X}_2$= 1.36). It means that the treatment was effective in reducing irrational behaviour about teaching children their reproductive and sexual rights. Furthermore, a significant difference ($p<0.05$) is shown in the pre-test and post-test scores of each of the items.

**Table 5: Mean Scores of Irrational Beliefs about Teaching their Children Early Preparation for Family Roles**

| S/N | Measures | $\bar{X}_1$ | $SD_1$ | $\bar{X}_2$ | $SD_2$ | $\bar{X}d$ | t | Df | P |
|---|---|---|---|---|---|---|---|---|---|
| 1 | It is not right to teach the young people about marriage. | 3.52 | 138 | 2.14 | .35 | 1.39 | 6.267 | 46.351 | .000 |
| 2 | It is not right to teach the young people about mate selection. | 3.30 | 1.47 | 2.40 | .49 | 1.11 | 5.869 | 56.245 | .000 |
| 3 | It is not right to teach the young people about birth control and child spacing. | 3.88 | 1.27 | 1.80 | .67 | 1.50 | 6.005 | 57.324 | .000 |
| 4 | It is not right to teach the young people the various roles of family members | 3.57 | 1.30 | 2.04 | .85 | 1.52 | 6.317 | 70.541 | .000 |
| 5 | Issues of pregnancy and childbearing should not be discussed with children. | 3.47 | 1.34 | 2.19 | .77 | 1.28 | 5.363 | 65.322 | .000 |
| | **Grand** | **3.48** | **1.32** | **2.11** | **0.62** | **1.36** | | | |

*$\bar{X}_1$ =Pre-test mean; $\bar{X}_2$ = Post-test mean; $SD_1$ = Standard deviation pre-test; $SD_2$= Standard deviation post-test; $\bar{X}_d$ = Mean difference; t-test value; df = Degree of freedom; P = P-value.*

Table 5 shows that the irrational beliefs about sex education (IBASE) in all the measures reduced after the REHEP. The grand mean scores of decreased from pre-test ($\overline{X}_1$=3.48) to post-test ($\overline{X}_2$=2.11). The difference is shown to be significant ($p<0.05$) in all the 5 items.

**Table 6: Analysis of Covariance of Interactive Effect of Education Level and Gender on the Means Scores of Irrational Belief**

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|---|---|---|---|---|---|---|
| Corrected Model | 4615.119[a] | 8 | 576.890 | 3.242 | .008 | .440 |
| Intercept | 1053.105 | 1 | 1053.105 | 5.917 | .021 | .152 |
| Pretest | 481.333 | 1 | 481.333 | 2.705 | .110 | .076 |
| Gender | 141.163 | 1 | 141.163 | .793 | .380 | .023 |
| Educational | 1887.885 | 3 | 629.295 | 3.536 | .025 | .243 |
| Gender * Educational | 1145.062 | 3 | 381.687 | 2.145 | .113 | .163 |
| Error | 5873.000 | 33 | 177.970 | | | |
| Total | 144111.000 | 42 | | | | |
| Corrected Total | 10488.119 | 41 | | | | |

*a. R Squared = .440 (Adjusted R Squared = .304)*

Table 3 shows the interaction effect of education, gender and treatment on the irrational belief on sex education. The table shows that gender ($F=.793$; $p>0.05$) does not significantly affect the IBASE mean scores. It is further revealed from the table that educational level ($F=3.536$; $p<0.05$) has significant effect on the IBASE mean scores. The table further shows that the adjusted R squared is .304. This is an indication that 30.4% of the change is caused by the programme(intervention), the remaining 69.6% is due to the combined external or extraneous factors.

**Discussion**

This study revealed that the parents' general belief about sex education for children was very irrational during the pre-test. The participants strongly believed that sex education is not for the ears of the children since it can rob children of their innocence, lead them to early sex experience and may result to child marriage. These irrational beliefs have been previously documented in previous studies (Achille elat, 2017). However, this study further showed that after the treatment, the mean scores of these irrational beliefs reduced significantly. This implies the effectiveness of the programme in disabusing the irrational beliefs about sex education for children. This finding is expected since education helps to create deeper understanding of health issues. The finding is in line with the previous studies which reported that family-based sex education training improves the parents' knowledge, attitudes, and practices about sexual issues and promotes the quality of sexuality education for their children (Stone et al, 2013). Similarly, Ganji el at, (2018) fielded that sex education training for parents can empower them to be proactive in responding to the sexual issues of their children. The importance of parental training on the need for sex education for children was further

emphasized by Slum and Rural Health Initiative (2023).

This study also found that the participants had very irrational beliefs about teaching children the biological bases of human sexuality. This is expected since most parents are concerned that this is an indirect encouragement and approval of early sexual experience and promiscuity ((Liu el at, 2015). This result is in line with previous study (Onyeodi el at, 2022) which found that majority of respondents irrationally believed that biological side of sex education should be for adults only.Ugwu et al (2021) also reported that most parents consider it lewd and immoral to discuss private parts, pregnancy, menstrual circle, or general issues of reproductive system with the children. All of these are regarded as irrational. However, the present study found that these irrational behaviours were diminished after the REHEP intervention. This finding is expected. It has earlier been reported that to enable parents overcome irrational beliefs in sex education, they need sex education awareness intervention (Wilson el at, 2010; Othman el at, 2020; Ugwu et al, 2021).

The present study further found that the respondents' beliefs regarding teaching children the psychosocial bases of human sexuality were very irrational during the pretest. However, the irrational beliefs significantly reduced after the treatment implying that REHEP was effective in addressing the irrational beliefs about teaching children the psychosocial bases of human sexuality. This finding is expected, therefore, not surprising. This finding is in agreement with prior reports (James & Nwoyi, 2018; Mbere el at, 2020) which found that greater percentage of the respondents (parents) irrationally believed that any form of opposite sex relationship should be strictly discouraged and that children should not be taught about it. Most parents adopted a rather extreme method of preventing their children from going out or engaging in any form of social interaction, and all issues concerned with gender were frontally resisted (Ani, 2020; Sau & Hoi, 2020). However, an intervention programme aimed at addressing the parental irrational beliefs about adolescents' social behaviours has been recommended in various studies (James & Nwoyi, 2018; Ani, 2020; Mbere el at, 2020; Sau & Hoi, 2020). In an intervention study conducted by Ani (2020) to specifically address the parental irrational beliefs related to social lives of the adolescents, it was found that there was a significant improvement in the irrational beliefs after the intervention.

This study found that the respondents' beliefs regarding teaching children their reproductive and sexual rights were very irrational at the pretest. The participants strongly believed that young people should not be made to know their sexual and reproductive rights since this always breaks the home, and that males are naturally superior to females. However, these irrational beliefs reduced after the REHEP. This result is expected, therefore, not surprising. The irrational beliefs are reinforced by patriarchy and deep-rooted male-focused culture in Nigeria (Orisaremi, 2020). These irrational beliefs were earlier reported by Ani (2020). According to the study, the respondents believed that teaching the young ones their reproductive and sexual rights will lead to crises in families. The study further found that

the participants believed that reproductive decisions belong to the males, and that the idea of gender equality is completely unacceptable. However, after the intervention programme, Ani (2020) found that the irrational beliefs were immensely diminished. This could be why there is strong emphases in previous studies (James & Nwoyi, 2018; Ani, 2020; Mbere el at, 2020; Sau & Hoi, 2020) that African parents need capacity building in the area of sex education for their children.

This study also found that the respondents' beliefs regarding teaching children about early preparation for family roles were very irrational during the pretest. The parents were strongly opposed to teaching children issues bordering on marriage and family. This might be because parents are often worried that this might lead to early sex experience or child marriage (Esohe & Inyang, 2015; Sau & Hoi, 2020). However, the present study found that after the REHEP, the mean scores of their irrational beliefs reduced significantly, a proof that REHEP is effective in addressing the aforementioned irrational behaviours. This finding is expected. Ganji el at, (2018) had earlier observed that sex education training for parents can empower them to be proactive in responding to the sexual issues of their children. The REHEP has been previously used is addressing irrational beliefs on myriads of issues including irrational beliefs about teaching (Ugwuoke*et al*, 2017; Ani, 2020).

Furthermore, this study found no significant interaction effect of gender and the irrational beliefs of parents about sex education of their children in the pre-test and post-test group. This finding was surprising as the interaction effect was expected to be significant since females have been reported to be generally more health conscious than do males (Bärebring *et al*., 2020). Specific findings in previous studies have shown the mothers have more favourable attitude towards sex education of their children even when it involves controversial topics like contraception (Barr el at, 2014; McKay et al, 2014). In fact, they are more knowledgeable (Barr et al, 2014) and are more ready to engage in sex-related discussions with children (Wanje et al, 2017) compared to fathers.

Finally, the present study found that interaction effect of level of education and IBASE before and after the programme was significant. This was not surprising as we expected education to always drive a change in health knowledge. Attitude, and practice. However, this finding is in contrast with Ugwu et al (2021) who found that parental education is not a significant determinant of their attitude towards sex education. Although, Kee-Jiar and Shih-Hui (2020) had argued that there is inconsistency in the influence of parental level of education on their attitude towards sex education. While some studies reported that higher level of parental education is linked with better attitude towards sex education (Achille et al, 2017), inverse relationship is reported in similar studies (Barr et al, 2014; Liu el at, 2015). For instance, Chinese parents who were educated were more glued to their tradition and this hinders them from discussing sexuality with their children (Liu el at, 2015).

**Conclusion**

This study demonstrates that there were irrational beliefs about parent-to-child sex education in Imojo where the present study was conducted. It further shows

the REHEP is effective in reducing the irrational belief by empowering the participants to objectively weigh their belief system and interrogate their social contexts so as to be able to live above negative social norms that are inimical to their health and collective welfare. The findings of this study contributed, in no small measure, to an understanding of actionable way of reducing irrational beliefs about sex education among parents. The finding provides a meaningful guide that may be useful to the health ministries, counselors, public health specialist and all the policy makers on practical steps of disabusing irrational beliefs about sex education and in building self-efficacy of the participants on the subject.

**Recommendations**

This work is a community-based pilot study. Based on the findings, it was recommended that:

1. Policy makers and researchers should adopt this study as a template for designing large scale intervention for disabusing irrational beliefs relating to sex education for the children.
2. Health educators should consistently offer health talks on sex education.
3. Programs on health which encourage parent-to-child sex education should always be made available on mass media.
4. Sex education for children should be emphasized in marriage classes even before wedding.

**References**


Abdullah, N. A. F. B., Muda, S. M., Zain, N. M., Hamid, S. H. A. (2020). The role of parents in providing sexuality education to their children. *Makara J Health Res.*, *24*(3), 157−163 doi: 10.7454/ msk.v 24i3.1235.

Abiogu, G. C., Ede, M. O., Amaeze, F. E., Nnamani, O., Agah, J. J., Ogheneakoke, C. E., ... & Ede, K.R. (2020). Impact of rational emotive behavioral therapy on personal value system of studentswith visual impairment: a group randomized control study. *Medicine, 99*(45), e22333.

Achille, O., Tonato, B., Salifou, K., Hounkponou, A., & Hounkpatin, B. (2017). Parents' Perceptions and Practices asRegards Adolescents' Sex Education in the Home Environment in the City of Come, Benin in 2015. *Reprodroductive SystSex Disord*, *6*(2) 1-6.

Ani, J. I (2020). Effects of sex education programme in promoting parent-to-child engagement in sex talks. *Journal of Adolescent Social Behaviours, 1*(2), 83-97.

Ashman, M. (2016). The OECD's seven principles of learning. https:// gregashman.wordpress .com/ 2016/ 12/03/ the-oecds-seven-principles-of-learning/.

Bärebring, L., Palmqvist, M., Winkvist, A. et al. (2020). Gender differences in perceived food healthiness and food avoidance in a Swedish population-based survey: a cross sectional study. *Nutrition Journal*, 19, 140 https://doi.org/10.1186/s12937-020-00659-0

Barr, E. M., Moore, M. J., Johnson, T., Forrest, J., & Jordan, M. (2014). New evidence: data documenting parental supportfor earlier sexuality education. *Journal of School Health,84*, (1), 10-17.

Centre for Disease Control, 2014) Principles for Providing Quality Counseling. https://www.cdc.gov/mmwr/preview /mmwrhtml/rr6304a4.htm.

David K. Sex education: What role should parents play? The Guardian [Cited 2020 July 10] Available from: https://www.theguardian.com/society /2012/may/30/sex-education-parents-role

Ede, M. O., Okeke, C. I., & Chukwu, C. L. (2021). Assessing the Efficacy of Rational Emotive Behavior Intervention for Visually Impaired Upper Basic School Children with Negative Self-

belief/Personal Value System. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 1-22. DOI: 10.1007/s10942-021-00419-

Egenti, N. T., Nwosu, N., Ogheneruemu, I. R., &Ncheke, D. C. (2022). *Efficacy of Rational Emotive Behavioural Therapy on Depression Behaviour of Students Enrolled in, Psychology & Sociology of Education (CPSE). International Journal of Quantitative and Qualitative Research Methods, 10* (2). 23-35.

Ellis A. (1995). *Better, Deeper and More Enduring Brief Therapy: The Rational Emotive Behavior Therapy Approach*. 1st ed. London: Routledge.

Esohe, K. P., & Inyang, M. P. (2015). Parents Perception of the Teaching of Sexual Education in Secondary Schools inNigeria. International Journal of Innovative Science, Engineering & Technology, *2*(1), 89-99.

Ganji, J., Emamian, M. H., Maasoumi, R., Keramat, A., & Khoei, E. M. (2018). Sexual Health Education at Home: Attitude and Practice of Iranian Parents. Iranian Journal of Public Health, *47*(1), 146–147.

Healthline (2018). Rational emotive behaviour therapy. https://www.healthline.com/health/rational-emotive-behavior-therapy#effectiveness

James, I. L., & Nwoyi, O. D. (2018). Parents and sex education of their children. *Journal of Adolescent Social Behaviours, 1*(2), 34-45.

Kee-Jiar, Y., & Shih-Hui, L. (2020). A systematic review of parental attitude and preferences towards implementation of sexuality education International Journal of Evaluation and Research in Education *9*(4), 971~978. DOI: 10.11591/ijere.v9i4.20877

Kids Health (2019). Sex education for children: Why parents should talk to their kids about sex https://www.aboutkidshealth.ca/Article?contentid=718&language=English

Knaus, W. J., Ellis, A., & Greiger, R. (1977). Rational-emotive education. *Handbook of Rational-Emotive Therapy*. New York: Springer; 1977. 398–408.

Laurito, C. (2021). Rational emotive behavior therapy for deaf and blind individuals with progressive vision loss. *Theses and Dissertations*. 206. https://scholar.stjohns.edu/theses_dissertations/206

Liu, W., Dennis, J. M., & Edwards, C. P. (2015). Chinese parents' involvement in sexuality education for adolescents. *International Journal of Sexual Health*, *27*(4), 485-507.

Mbere, Z., Mensah, O. Y., & Caleb, M. (2020). Adolescent sexual behaviours: Why parents' involvements matter. *Journal of Adolescent Social Behaviours, 1*(2), 27-40.

McKay, A., Byers, E. S., Voyer, S. D., Humphreys, T. P., & Markham, C. (2014). Ontario parents' opinions and attitudestowards sexual health education in the schools. *The Canadian journal of human sexuality,23* (3), 159-166.

Moghadam S, Ganji J. The role of parents in nurturing and sexuality education for children from Islamic and scientific perspective. Journal of Nursing and Midwifery Sciences2019; 6(3): 149-155. Doi:10.4103/ JNMS.JNMS_57_18.

Ogbuinya, N. E. & Nwimo, I. O. (2015). Attitude towards receiving information on sexual relationship among female secondary students in Ebonyi State, Nigeria.*Journal of Biology, Agriculture and Healthcare, 5*(12), 112-119.

Ogundipe, S. O. & Ojo, F. Y. (2015). Adolescent sexuality education in contemporary Nigeria and its implication for pastoral counseling International *Journal of Scientific and Research Publications,* 5(8): 1-8.

Onyeodi, I. A., Ladi-Akinyemi, T. W., & Kanma-Okafor, O. J. (2022). Parental Knowledge, Attitude and Practice of Adolescent Sex Education in Yaba, Lagos, Nigeria. Journal of Community Medicine and Primary Health Care. 34 (1) 99-116.

Orisaremi, T. C. (2020). Gender and the Reproductive Rights of Gbagyi Women in North-Central Nigeria. *Open Access*

*Library Journal*, *7*(12), DOI**:** 10.4236/oalib.1106797

Othman, A., Shaheen, A., Otoum, M., Aldiqs, I. M., Dabobe, M., Langer, A., Gausman, J. (2020). Parent-child communication about sexual and reproductive health: perspectives of Gordian and Syrian parents. *Sexual and Reproductive Health Matters, 28*(1), 1758444.

Salami, M. O. (2015). Sex education and teenage pregnancy in the Niger Delta: Implications for secondary school Biology curriculum in Nigeria. *World Journal of Education, 5(3)*, 733-78.

Sau, N. T. U., & Hoi, H. T. (2020). The role of parents in providing sexuality education to their children. Makara J Health Res. 2020; 24(3): 157−163 doi: 10.7454/msk.v24i3.1235.

Slum and Rural Health Initiative (SRHI) (2023). Role of parents in sexual health education. https://srhin.org.role-of-parents-in-sexual-health-education/

Stone, N., Ingham, R., & Katie G. K. (2013). 'Where do babies come from?' Barriers to early sexuality communication between parents and young children. *Sex Educ, 13(2*): 228–240.

Tulloch, T., & Kaufman, M. (2013). Adolescent sexuality. *Pediatrics in Review*, *34*(1), 29–38. https://doi.org/10.1542/pir.34-1-29

Ugwu, N. F., Onyekwere, O. K., Anibueze, A. U., & Familoni, J. K. (2021). Strengthening Sexuality Education in Contemporary Tertiary Institutions: Gains and Hindrances. A book chapter presented in the book of reading:*Contemporary Tertiary Education in Africa: Challenges and Opportunities for Sustainable Educational Development.*

UNESCO (2016). Review of the evidence on sexuality education: Report to inform the update of the UNESCOInternational technical guidance on sexuality education. Paris, France: UNESCO Education Sector.

Walker, J. (2004). Parents and sex education—looking beyond 'the birds and the bees'. Sex education, 4 (3), 239-254.

Wanje, G., Masese, L., Avuvika, E., Baghazal, A., Omoni, G., & McClelland, R. S. (2017). Parents' and teachers' views onsexual health education and screening for sexually transmitted infections among in-school adolescent girls inKenya: A qualitative study. *Reproductive Health,* 14 (1), 1-11.

Wilson, E. K., Dalbert, B. T., Koo, H. P., & Gard, J. C. (2010). Parents' perspectives on talking to pre-teenage children about sex. *Perspective on Sexual and Reproductive Health, 42*(1), 56-63.

World Medical Association. (2013). World Medical Association Declaration of Helsinki; Ethical principles for medical research involving human subjects. *Journal of American Medical Association,* 310, 2191-2194