

Risk Factors And Underlying Conditions for Sexually Transmitted Diseases In Females Within Reproductive Age In Lagos State University Teaching Hospital, Lagos. Nigeria.

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Abstract: Sexually transmitted diseases (STDs) continue to remain a public health concern globally, especially among young females within the reproductive age (15-49). Levels of knowledge with regard to STDs have been investigated in prior research; however, these investigations have been limited primarily to older adolescents, young adults and males. Grounded in the social cognitive and subjective culture theories, this quantitative, cross-sectional study assessed STD knowledge (other than HIV/AIDS) among females within the LASUTH community, Ikeja, Lagos state.

A descriptive cross-sectional survey design with a quantitative method was adopted while the sample comprised of 356 females within LASUTH, which were selected through Multistage sampling techniques. The instrument used was a structured, validated questionnaire with a Cronbach's alpha result of 0.78. Three hundred and fifty six questionnaires were administered to examine the level of Knowledge of females within the reproductive age to the risk factors and underlying conditions of STDs, Attitudes of females towards the risk factors and underlying conditions, practice of females and perception of the females. Data were analysed and presented as descriptive statistics using SPSS version 20.0.

Results showed that, a handful of the respondents, 36.8%, were between the ages of 31 to 40, 50.8% of the respondents had secondary school, 48.6% were in a relationship, and 58.1% were Christians. 95.2% were aware of STDs, 28.7% had received information clinic/hospital, 50.8% were aware of safe sex, 91.3% knew how STDs were transmitted, and 74.4% had an understanding of how STDs were transmitted. 91.3% knew other STDs other than HIV, 27.8% knew abdominal pain as a sign and symptom of STDs, and 56.2% as the most common complication if STDs are left untreated, a handful of the respondents (23%) knew a spouse/live-in partner that had STDs, and 52% knew viruses as the possible cause of STDs. 97.5% agreed that condoms protect during sexual intercourse while a low level of respondents (25.8%) agreed that washing of genitals after sexual activity can reduce the risk of contracting of STDs. 71.6% disagreed that they cannot have any other STDs apart from HIV, 57% agreed that all STDs can be cured, 71.3% have never had an STD before, 65.4% stated that they are not susceptible to have other STDs than HIV, 74.2% make use of health services but 43% will not make use of health services if they have an STD. 41.9% respondents showed that abdominal pain was the sign and symptom when they had an STD.

In conclusion, knowledge of STDs is low among the studied respondents. There is a need to educate females within the reproductive age about STDs to increase their knowledge and awareness. Adequate medical attention should contain prevention measures for potential infections which includes refining the methods of secondary prevention by identifying persons susceptible and aim at them for interventions.

Key Words: Sexually transmitted diseases, Knowledge, Attitude, Perception, Practice, Females, Reproductive

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I. Introduction:

Sexually transmitted infections (STIs) are amid the extremely frequent sources of diseases globally with significant impact on health, public and economic effects. STIs have a profound impact on sexual and reproductive health worldwide. (WHO, 2016).

Sexually Transmitted Diseases (STDs) are predominantly by sexual contact, including oral, vaginal and/or anal sex (WHO, 2016). STDs commonly do not have symptoms but are easy to treat if tested at an early age. The most predominant STDs in females include Human Papilloma Virus (HPV), Gonorrhoea, Syphilis,

Trichomoniasis, Chlamydia and Genital Herpes. HPV infection causes 528 000 cases of cervical cancer and 266 000 cervical cancer deaths each year. (WHO, 2016). With HPV existing as the most predominant, it is also a predisposing factor for cervical cancer. In a developing country like Nigeria, STDs are becoming a trend amongst young females as a result of modernization, industrialization, westernized education which escalates the rate of sexual activity mostly within adolescents.

STIs are more common within African and Caribbean youths than the rest of the world, which may be due to the fact that sexual activity begins at an early age of 10-11 years in some African and Caribbean countries (Ikeako et al, 2014). An estimated 60% of new HIV infections in western and central Africa in 2015 occurred in Nigeria (UNAIDS, 2016). The cause of this prevalence can be directed to various factors such as unprotected sexual activities, infidelity and sexual assaults.

The level of awareness about STDs and the variety of sexual risk conducts involved in by the youth in Africa and other countries have been studied and recorded quite broadly. Majority of the materials studied for this research observed HIV/AIDS as the disease of attention. Materials evaluated the knowledge of STDs alongside other aims such as preventive measures, awareness of susceptibility embraced by adolescents and achievement of program intervention. In a group of schools in western Nigeria (Oladebo & Fayemi, 2011), the awareness of HIV/AIDS and its diverse transmission channels were valued between 61.7% - 87.8% for both sexes. Abstinence as a validated preventive method was peak at 88% between partakers aged 10-19 years. Different studies have shown high level of awareness of HIV/AIDS in adolescents as high as 92.0% (Asekun-Olarinmoye, 2011) with mass media as the peak informant.

A research carried out in western Nigeria to study urban and rural adolescents resulted peak levels of HIV/AIDS. They had little knowledge about other sexually transmitted diseases and misconceptions about diseases such as gonorrhoea, warts, and syphilis (Adedimeji, Heard, Odutolu, Omololu, & Adedimeji, 2008). These perceptions have led to unsafe sexual practices and consequently increased the chances of young adults contracting STDs and HIV (Odimegwu & Okengbo, 2008; Oladebo, Yusuf, & Arulogun, 2011).

Studies of this occurrences differs by concepts employed to describe levels of awareness and by the variety of sexual risk conducts being studied. Several frameworks have been construed in an endeavor to explain why specific variables appear to affect sexual conducts equally positive and negative, and why opposing stages of sexual conducts occur, separately.

Adolescent sexual conducts comprises a variety of relations that are a role of the normal development to adulthood, however, high risk conducts are capable of causing intensified chances of inadequate health effects varying upon exposure to infection, age, and more unfavorable conditions. Hypothetical frameworks utilized to study these conducts differ and depend upon the viewpoint of the investigator and the inconsistencies stated.

The conglomeration of these theoretical approaches into an integrated network has provided researchers the ability to analyze data from overarching variables affecting adolescent sexual behavior and social phenomena as well as a provision of a blueprint for future researchers, enabling them to further examine the effects of proximal variables in different population subgroups (Guilamo-Ramos et al., 2008).

Social learning theory is based on the premise that behavior is imitated by observation and modeling or mimicking and is influenced both cognitively and environmentally (Bandura & McDonald, 1963). Oppositely, the theory of reasoned action assumes that behavior is controlled by the intention to perform the behavior and is influenced by personal attitudes and perceived societal norms (Busse, Fishbein, Bleakley, & Hennessy, 2010). Correspondingly, subjective culture theory is a theoretical approach framed by human intragroup interactions based on beliefs, attitudes, norms, and roles within each respective group and how they relate and interact with one another (Triandis & Malpass, 1970) and is similar to self-regulation theory that defines human behavior as flexible and impressionable. Self-regulation theory assumes that humans can control urges and subdue them at will, and this can occur in line with social norms, ideals, and regulations in hopes to achieve a more favorable response or behavior (Baumeister & Vohs, 2007).

The following research questions were raised:

1. What is the level of knowledge on STDs and its consequences among females within the LASUTH community?
2. What is the level of attitude on the use of STD preventive methods within the females of LASUTH community?
3. What is the perception of females within the LASUTH community on the factors predispose females to STDs?
4. What practices do the females apply to the underlying conditions for STDs in LASUTH community?

II. Methodology:

Research Design

The research design adapted for this study was a descriptive cross-sectional design which was aimed at assessing the level of knowledge, practices, attitudes and perceptions of females within the reproductive age

(15-46 years) within the LASUTH community, GRA Ikeja, Lagos, Nigeria. This research design was adopted as it has shown the ability to gather miscellaneous data within a short period of time.

Description Of Study Area

This study was carried out in LASUTH, GRA Ikeja, Lagos state, Nigeria. Ikeja is known as the capital of Lagos state, Nigeria. Lagos state is situated in the South-Western part of Nigeria. It is bounded on the North and East by Ogun State, on the West with the Republic of Benin and in the South by the Atlantic Ocean. Ikeja is bounded in the North by Obafemi Awolowo way at Alausa through Aromire to both sides of Adeniyi Jones to end of Oba Akran and both sides of the other end of Adeniyi Jones to its tail by Ikeja industrial area, South by the other part of Bank Anthony way from the Airport junction through Unity and Toyin street to Allen/Opebi junction, East by Lagos/Ibadan expressway at Alausa. (Lagos state Government, 2011). There are various organizations like banks, state government offices, shopping centers, restaurants, schools, hospitals, churches and others. Accredited facilities in Ikeja include: 1 General Hospital, 13 Primary healthcare centers, 165 private hospitals, 41 diagnostic laboratories, 8 dental clinics and 7 eye clinics (LAWMA medical waste, 2012). LASUTH is the only general hospital in Ikeja and is a part of the accredited facilities in the area. It is located at 1-5 Oba Akinjobi Street, GRA Ikeja, Lagos state, Nigeria. It consists of various departments which include Anesthesia, Community Health and Primary Health Care, Dietetics, Dentistry, Family Medicine, Laboratory services, Hematology and Blood Transfusion, NHIS, Medical Records, Surgery, Pediatrics, Radiology, Obstetrics and Gynecology, Pharmacy, Nursing, Intensive Care Unit (LASUTH). The total population of Ikeja LGA was said as 648,720 consisting of 319,942 females (Lagos state Government, 2011).

Study Population

The population utilized for this study was selected from the LASUTH community focusing on the female population located in this locality. This included patients, visitors, doctors, nurses, and non-admin staff who were willing to take part in the research.

Inclusion Criteria

The study included all females within the reproductive age in LASUTH who were willing to participate in this study.

Exclusion Criteria

The study excluded females who were not within the reproductive age and were not present in the study area on the day the questionnaires were shared. Males were also excluded from this study.

Sample Size Determination

The technique used to determine the sample size is as follows:

$$N = Z_a^2 P (1-p)$$

Z = standard normal deviate set at 1.96, which correspond to 95% confidence level

P = Proportion of persons in the population with factors under study.

Q = proportion of persons in the population without factors under study i.e. 1-p

D= Degree of required accuracy, which is 0.05.

This Formula is used when the population size is greater than 10,000.

$$n = (1.96)^2 (0.5) (0.5) / (0.08)^2 = 0.9604 / 0.0025 = 384.16$$

$$n = 384.16$$

Therefore, sample size = 384.16 ~ 380

Therefore approximately 380 participants were selected for the study.

Sampling Technique

A multistage random sampling technique was used to select a total of 380 females from the departments within LASUTH for this study.

Stage 1: A list of all the departments in LASUTH were collated and 50% were selected.

Stage 2: A list of all the departments which were selected were gathered and 3 were selected by balloting.

Stage 3: The females (patients, doctors, nurses, and non-admin staff) within the reproductive age were selected from each department

Stage 4: Purposive sampling method was applied in selecting 380 females within the reproductive age based on informed consent and assent from the females in LASUTH

This method was used in obtaining eligible females in each department till the participants for the study were gotten.

Instrument for Data Collection

For collection of data, a semi-structured questionnaire was used during this research. The questionnaire consists of 34 questions with 4 sections. The following are the headings of each section.

Section A: Demographic characteristics; consists of age, religion, educational level, marital status, etc.)

Section B: Knowledge; information about the correspondent’s knowledge towards the risk factors and underlying conditions of STDs in females within the reproductive age.

Section C: Attitude/Perception of Females within the Reproductive Age to the Risk Factors and Underlying Conditions of STDs; Contains the details concerning the respondents attitude towards the research topic.

Section D: Practices carried out by the females in the LASUTH community concerning the risk factors and underlying conditions for STDs in females within the reproductive age

Validity and Reliability Of Instrument

Validity: Both face and content validity of the instrument was determined by the research supervisor by going through the questionnaires and removing the ambiguous ones, offer suggestions, and make necessary corrections. A pilot study was carried out in Babcock University Teaching Hospital using 38 respondents which is 10% of the sample size for this study, to see if the questions in the questionnaire are understood and if the questions can be answered while necessary corrections were made.

Reliability: A Cronbach alpha was used to evaluate the reliability of the instrument. The reliability test statistics was 0.785.

Data Collection

A Semi-structured questionnaire was self-administered to the respondents with the assistance of volunteers. Respondents were instructed not to write their names or any form of identification on the questionnaire to ensure their anonymity. A letter of consent and assent was presented to the respondents to sign before administering the survey instrument.

The purpose and contents of the questionnaire were explained to the participants adding that their identity would not be disclosed. This was done in order to gain maximum cooperation in obtaining the correct and unbiased information. Verbal consent was obtained from the study participants and those that agreed were enlightened on the guidelines for the completion of the questionnaire in each section. Completed questionnaires were collected by the researcher and the volunteers on the spot.

Data Analysis

The questionnaires distributed were duly collected. The completed questionnaires were entered into the statistical package for social Sciences (SPSS) software for analysis version . Data was analyzed producing tables, frequencies and percentages, bar charts, pie chart. SPSS was used to analyze all sections of the questionnaire.

III. Results:

Table 1: Knowledge Characteristics of correct responses.

| | | | |
|----|---|-----|------|
| 1. | I am aware of STDs | 339 | 95.2 |
| 2. | STDs means Sexually Transmitted Diseases | 264 | 72.3 |
| 3. | Where information on STDs has been received from: | | |
| | Friends | 54 | 15.2 |
| | Family | 58 | 16.3 |
| | School/College | 38 | 10.8 |
| | Media | 100 | 28.1 |
| | Clinic/Hospital | 106 | 29.8 |
| 4. | What is safe sex: | | |
| | Sex with a condom | 181 | 50.8 |
| | Sex with just one partner | 146 | 41 |
| 5. | Methods of ensuring safe sex: | | |
| | Male condoms | 159 | 44.7 |
| | Birth control pills | 79 | 22.2 |
| | Abstinence | 56 | 15.7 |
| 6. | Any other STDs other than HIV: | 325 | 91.3 |
| 7. | Do you know STDs are transmitted: | 325 | 91.3 |
| 8. | Ways STDs can be transmitted: | | |
| | Sexual intercourse | 265 | 74.4 |
| | Anal sex | 40 | 17.1 |
| | Oral sex | 21 | 5.9 |
| | Kissing | 30 | 8.4 |

Majority of the respondents (91.3%) knew other STDs than HIV, such as Gonorrhoea (43.8%), Syphilis (3.4%), Hepatitis B (2.8%), Chlamydia (4.5%), and Herpes (4.8%) while a significant percentage of 25.8% did not know what other STDs were apart from HIV.

Table 2: Respondents Attitude to the Risk Factors and Underlying Conditions of STDs within Females of Reproductive Age.

| Questions for consideration | Respondents; N=356 | |
|--|--------------------|----------------|
| | Frequency(n) | Percentage (%) |
| Condoms protect from contacting STDs during sexual intercourse | 347 | 97.5 |
| Having anal sex increases a person's risk of getting Hepatitis B. | 188 | 52.8 |
| All STDs can be cured | 153 | 43 |
| The same virus causes all STDs in women | 63 | 17.7 |
| Female condoms cannot protect a woman from getting STDs. | 69 | 19.4 |
| Adolescents who practice safe sexual behaviours with numerous sexual partners are NOT at risk of getting STDs. | 203 | 57% |
| A breastfeeding mother with STD can give her child STD through breastfeeding. | 184 | 51.7 |
| Washing your genitals after sexual activity can reduce the risk of contracting STDs. | 92 | 25.8 |
| Having oral sex with numerous partners can cause mouth herpes. | 128 | 36 |
| It is possible for you to have an STD other than HIV. | 101 | 28.4 |

Source: Field Survey, 2018

IV. Discussion Of Findings

This study revealed that majority (36.8 percent) of respondents are between 31 to 40 years of age. This is followed by the 36.2 percent of respondents between the ages of 21 to 30 years. A greater number (50.8%) of the respondents had secondary level of education followed by 32.3% of the respondent who had undergraduate as their level of education. Furthermore, 48.6% of all the respondents were in a relationship, while about 43.3% were married. Also disclosed that majority (58.1%) of the respondents were Christians while others (41.9%) were Muslims.

Fundamentally all the respondents (95.2%) are aware of Sexually Transmitted Diseases. Most of the respondents indicated that they heard about STDs from the Clinic/Hospital(28.7%), followed by 28.1% of the respondents that heard from the media, 16.3% heard about STDs from the family, 15.2% of the respondents heard from friends, and about 10.8% of the respondents heard from school. Based on the research conducted by Amu and Adegun in 2015, which stated that "Four hundred and ninety-nine (92.4%) respondents had heard about sexually transmitted diseases before, the three most important sources of information being electronic data (68.7%); teachers (68.1%); and print media (44.9%)", majority of the respondents for this study had gotten their information from the clinic/hospital, showing that healthcare centers have attributed to the high level of knowledge amongst the females in LASUTH.

The knowledge of STDs among young Nigerian adults was projected between 61.7%-87.8% as at 2015 (Adegun and Amu, 2015), gotten from schools in Western Nigeria, thus showing that there has been an increase in the awareness and knowledge of sexually transmitted diseases amongst young female Nigerians.

Essentially a high level of respondents answered that they knew other STDs apart from HIV, 91.3% also said that they knew how STDs are transmitted leaving a minute percentage of 8.7% not knowing how STDs are transmitted. The respondents majorly have an understanding on how STDs are transmitted through sexual intercourse (74.4%), anal sex (7.1%), oral sex (5.9%) and kissing at 8.4%. This shows that most respondents had a vague understanding that STDs can only be transmitted through sexual intercourse, very few had an understanding that STDs could be transmitted through anal sex, oral sex and kissing.

Popularly, most of the respondents (91.3%) knew other STDs than HIV, such as Gonorrhoea (43.8%), Syphilis (3.4%), Hepatitis B (2.8%), Chlamydia (4.5%), and Herpes (4.8%) while a significant percentage of 25.8% did not know what other STDs were apart from HIV. In respect to a study carried out by Adedimeji, Heard, Odutolu, Omololu, and Adedimeji in 2008, which I cite "They had little knowledge about other sexually transmitted diseases and misconceptions about diseases such as gonorrhea, warts, and syphilis". Majority of the respondents knew one of the most common STDs, Gonorrhoea and were unaware of the other STDs. These insights have led to unsafe sexual practices keeping in mind that a percentage of 50.8% respondents answered that safe sex was sex with a condom while 41% said that it was sex with just one partner, this will consequently increase the chances of young females contracting STDs such as Gonorrhoea, which is commonly known, is easily treated unlike the majority others of STDs.

The respondents indicated abdominal pain as a sign and symptom of STDs at a high level followed by pain during intercourse at a low level. This also indicates that most respondents did not have a sound knowledge on the other signs and symptoms of sexually transmitted diseases. Infertility was the most common complication if STDs are untreated, as given by respondents with responses that indicated a moderate level perception. This shows that most respondents have a low knowledge on one of the most common complications of untreated STDs. In justification, majority of the respondents were educated to the secondary school level, which in defense, a majority of them might not have a sound understanding of adverse effects and complications of STDs.

The respondents were asked if they knew anyone who had other STDs apart from HIV, and the results states that a majority of the respondents knew a spouse/live-in partner who has an STD (23%), followed by a sexual partner/lover (23%), then a friend (22%) with the lowest been other family member at 9%.

Also, it shows that a majority of the respondents indicated they had high knowledge on the possible causes of STDs ranging from Virus occupying a handful of the responses, followed by fungi and then bacteria at the lowest level. It also shows that a noticeable percentage of respondents at 16% did not know the possible causes of STDs. Virus having the most percentage can be channeled to the fact that most respondents know about HIV, and that it is caused by a virus, forgetting that most sexually transmitted infections are caused by bacteria and fungi.

A greater part of the respondents (97.5%) agreed that condoms protect from contacting STDs during sexual intercourse while the latter (2.5%) disagreed. This shows that most respondents were practicing safe sex. It also shows that very few respondents (19.4%) agreed that female condoms cannot protect a woman from getting STDs, the popular misconception that female condoms can protect from STDs was highly shown, and also that washing of genitals after sexual activity can reduce the risk of contracting STDs (25.8%). Based on the results from the attitude

Majority (71.6%) disagreed that it was possible for them to have an STD other than HIV, and also disagreed (64%) that having oral sex with numerous partners can cause mouth herpes. 57% of the respondents agreed that all STDs can be cured, which shows a low level of attitude towards STDs.

A low level of respondents had indicated that they have had STDs before (28.7%), where 65.4% stated that they could not get any other STD apart from HIV. Most respondents make use of health services, mostly Government hospitals at 45.85, followed by Teaching hospitals with 34.3%. But 43% of the respondents also stated that they if they contacted STDs, they would not make use of these health facilities.

64% of the respondents were sexually active while 4.6% were not sexually active. Most respondents were sexually active but most did not know the implications of having unprotected sex, what could result from the implications of having unprotected sex.

V. Conclusion

The study was done to examine the level of knowledge, attitude, perception and practices of females within the reproductive age to the risk factors and underlying conditions of STDs. Thus, the study has shown that most respondents have a myopic level of knowledge for STDs, their practices and perceptions towards the risk factors and underlying conditions of STDs in females within the reproductive age is very poor, majority of the respondents only knew the most common STDs, HIV and Gonorrhoea, and only a few knew other STDs such as Syphilis, Chlamydia and Herpes. It is suggested that there should be more awareness and less stigmatization towards victims with STDs. Also, woman should be conscious and aware of their personal hygiene and activities which may allow them to be at risk of contracting STDs.

Recommendation

Based on these research findings, the following are the recommendations which have been put together:

1. There is an alarming need for an extensive creation of awareness on the risk factors and underlying conditions of STDs in females within the reproductive age,
2. Leading organizations for Nigerian women and girls should serve as a place of solace for women who have contracted incurable STDs such as HIV/AIDS and Cervical Cancer. They should conduct programs and carry out projects that benefit and educate young females on the risk they expose themselves to by having unprotected sex,
3. The Lagos State Government should include welfare budget for STDs in females so as to better address the financial constraints causing a breach in the means of exposure.

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