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ASSESSMENT OF KNOWLEDGE, ATTITUDE, AND PRACTICES ON SEXUALITY EDUCATION AMONG YOUTH IN PAKISTAN

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ABSTRACT

This study aimed to explore sexual and reproductive health knowledge, attitudes, and practices among young people in Islamabad. The objectives of the research were to determine the sexual and reproductive health-related knowledge score of youth, the resources they commonly used for knowledge, and their attitude and perceptions towards abstinence-only and comprehensive sexuality education. The research used quantitative data, collected through a self-structured questionnaire comprising closed-ended questions. The study is based on responses collected from young people of Islamabad city. Both convenience and snowball sampling techniques were used for data collection. Collected data was analyzed by applying descriptive statistics along with one-way ANOVA and linear regression through Statistical Package of Social Sciences (SPSS) version 26.0. The findings indicated a poor overall knowledge score among the youth, which was not affected by demographic variables. The most commonly consulted source of information for sexuality education was mass media, with formal education being the least consulted. A majority of the youth supported abstinence-only education at the secondary school level, with comprehensive sexuality education being preferred at the college level. The study highlights the need for effective sexuality education for Islamabad youth.

Keywords: Sexuality education, Knowledge, Attitude, Practices, Islamabad, Abstinence-only, comprehensive sexuality education

INTRODUCTION

Sexuality education includes teachings about various aspects of sexuality including intellectual, psychological, social, physical, and interpersonal components, from childhood to adulthood **[1]**. It aims to enhance knowledge and responsibility for one's own and other's sexual health. Two types of sex education are Comprehensive Sexual Education (CSE), also known as Abstinence plus Sexuality Education and the other one is abstinence-only education **[2]**. CSE encompasses nearly all aspects of sex education, including healthy and safe sexual practices, whereas abstinence-only education focuses solely on avoiding sex until marriage **[2]**. Studies indicate that CSE has an edge

over Abstinence-only in terms of effectiveness.

Sources of sex education can be parents, friends, teachers, mass media, and schools. Sexual education is necessary for individuals to develop knowledge and skills to make healthy sexual choices, healthy relationships, and good self-worth **[3]**. Studies show that it can decrease the prevalence of sexually transmitted diseases, including HIV **[4]**. Lack of sex education can lead to negative consequences such as unhealthy sexual practices, an increase in the prevalence of sexually transmitted diseases, and a rise in premarital rapes **[5, 6]**.

NGOs such as Aahung and Rutgers are successfully implementing sex education in Pakistan, but cultural stigma and low literacy rates make it difficult to regulate sex education among Pakistani people **[7]**. In Pakistan, sexual education is considered a taboo, and low literacy rates and lack of education contribute to fire fears associated with the promotion of sex education **[8]**. CSE is not included in the curriculum and youth move towards exploitative sources of information when they are unable to consult with their parents or teachers about sex education **[9]**. There are many misconceptions and resistance towards sex education, but comprehensive sex education is necessary to promote healthy sexual practices.

Literature has shown that Islamabad has a literacy rate of 86%, the highest among all the regions in Pakistan **[10]**. However, in previous research, the city was found to be at stage two of community readiness for sex education, with a vague awareness **[10]**.

This research was therefore done to assess the current knowledge and attitudes of youth towards sex education to improve interventions for promoting sexual education in Pakistan. It seeks to answer several questions including the assessment of knowledge among youth related to sexual and reproductive health, assessment of the relationship of demographics with level of knowledge, identification of sources most commonly used for knowledge (Practice of youth towards obtaining knowledge), and to find if any relationship exists between the level of knowledge and source used for obtaining knowledge. It also explores the preferred level of sexuality education (Attitude), both for abstinence-only education and comprehensive sexuality education, among youth at different education levels, including primary school, secondary school, college or university.

The research used several facts for the purpose including that withdrawal and natural methods of contraception are still widely used, however, they are less effective than barrier and surgical methods, moreover, condoms cannot prevent pregnancy in all cases. HIV can be transmitted through sexual contact and needle sharing, but AIDS cannot be spread through casual contact. Masturbation has no negative effects on sexual health, but it can lead to guilt and psychosexual consequences in the absence of proper sexual education.

METHODOLOGY

This was quantitative research done with the help of a self-structured questionnaire. The population targeted in this study were young people aged 18 to 28 years residing in Islamabad. The data collection method was primarily based on primary data collection through a 14-item questionnaire. The questionnaire was divided into four sections: demographics, assessment of knowledge, assessment of resources used for knowledge, and assessment of attitude and perception about sexuality education. The questionnaire was distributed to respondents through WhatsApp, Facebook, and Instagram. All of the questions were closed-ended, with most being multiple-choice questions. Convenience and snowball sampling techniques were used to ensure the questionnaire reached the target population, with diversity maintained as the questionnaire was sent to people of various age groups from various institutions and residential areas (rural or urban).

The research was conducted in two parts, the first of which involved an assessment of knowledge and practice while the second part assessed attitude and perception towards sexuality education. The first part was further divided to assess knowledge and resources consulted by youth for obtaining knowledge. The researcher assessed knowledge about contraception, HIV/AIDS, and masturbation. Additionally, the researcher assessed the resources used for knowledge, including parents or guardians, friends, curriculum/formal education, mass media such as internet sources, social media, or healthcare professionals. The relationship between levels of knowledge and sources used for obtaining knowledge was also assessed. The impact of demographic characters on knowledge was also considered, with knowledge being the main dependent variable and all the demographic characters being independent variables.

In the second part of the research, the researcher assessed the favor for sexual education and the favorable attitude towards the type of sex education to be taught at particular levels of education. The types of sexual education included abstinence-only and comprehensive sexual education, while the levels of education included primary level, secondary level, college or university.

The researchers used the Student Package of Statistical Sciences SPSS version 26 to derive meaningful results from the data collected through the questionnaires. Descriptive statistics were performed to calculate the knowledge score for each question, the cumulative knowledge score, and the frequency of the most common resources used for knowledge. An independent t-test was conducted to examine the impact of gender and age on knowledge scores. Regression analysis was performed to analyze the impact of demographics on the knowledge score. One-way ANOVA was used to determine if there was any difference in knowledge scores based on the resources consulted by the youth.

RESULTS

Demographics A total of 111 responses were collected with the following demographic profile

Table 1 Demographics of respondents

Gender	
Male	53
Female	58
Marital Status	
Married	10
Unmarried	98
Divorced	3
Age	
18-20	25
21-25	70
26-30	16
Level of Education	
University	92
College	18
Secondary School	1

Assessment of knowledge

Reproductive Health-Related Knowledge Among Youth

The researcher applied descriptive statistics to examine the frequency distribution of knowledge scores across various questions related to sexual and reproductive health among youth. The findings indicated an overall poor level of knowledge among the youth. The cumulative Knowledge score of 88 percent of the population was 3 out of 5 questions. However, the overall results indicated a poor knowledge score. The first two questions were about contraception, the next two were about HIV/AIDS and the last question was related to masturbation. From the results and graphs, it could be seen that youth had poor knowledge about contraception but had some knowledge about HIV/AIDS and masturbation. The mean knowledge score was 1.1982 with a standard deviation of 1.877 (1.1982 ± 1.877).

Impact of Demographics on Knowledge Score.

The potential impact of demographic factors on knowledge scores was evaluated through regression. Age, gender, marital status, level of education, and residency were considered independent variables, while knowledge score was the dependent variable. The analysis demonstrated some correlation between gender and knowledge. To investigate this relationship further, the researcher conducted an independent t-test.

Impact of Age and Gender on Knowledge Scores.

The mean knowledge score for females was slightly higher than for males (1.6207 ± 0.23697 vs. 0.7358 ± 0.25578, $p = 0.842$), but this difference was not statistically significant. Similarly, there was no significant difference between the knowledge scores of the 15-20 age group and the 20-25 age group ($p = 0.420$).

Resources Used for Knowledge (Practice)

The researcher utilized simple descriptive statistics to determine the relative frequencies of various resources used by youth to obtain knowledge about sexual and reproductive health. The analysis revealed that mass media was the most frequently consulted resource, with 51.4% of the youth population utilizing it. Healthcare professionals were consulted by 17.1% of the population, while friends were consulted by 13.5%. In contrast, the formal curriculum or education was the least utilized source, consulted by only 9.9% of the population (Table 2).

Table 2: ***Frequencies of incorrect, no answer, and correct answers*****.**

Questions	Incorrect answer	No answer	Correct answer
Pregnancy can be effectively prevented by withdrawal method of contraception	52	39	20
Using condoms can avoid pregnancy in all cases	41	33	37
HIV can be transmitted by eating or drinking with a person infected by HIV.	33	18	60
Can HIV be transmitted by sharing needles or syringes with HIV infected person	100	8	3
Does masturbation damage one's health	65	26	20

Table 3: Frequency distribution table for resources used for knowledge

Resources used for knowledge	Frequency	Percentage (%)
Curriculum / formal education	11	9.9
Friends	15	13.5
Health care professionals	19	17.1
Mass Media (internet sources, social media and others)	57	51.4
Parents / Guardian	9	8.1
Total	111	100

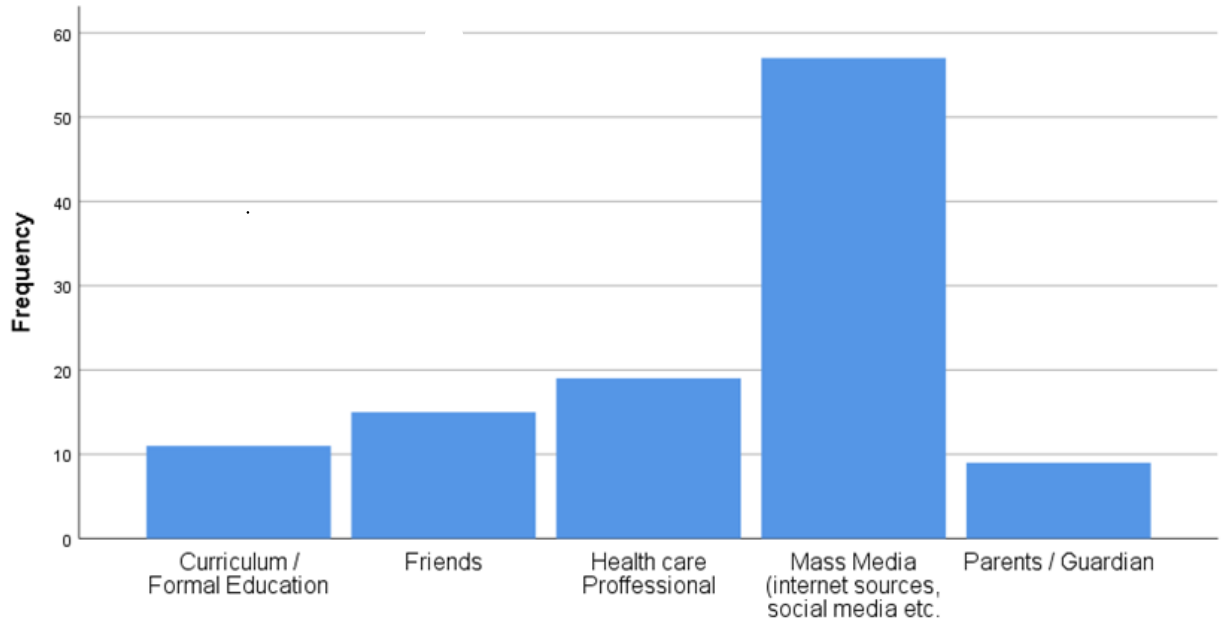

Figure 1: Frequencies of sources used for knowledge.

STATISTICAL ANALYSIS

There was no significant correlation between sources of information used by youth to acquire knowledge and their knowledge scores ($p<0.05$).

Preference of Study Level for Initiation of Sexuality Education

The majority of respondents (53.2%) believe sex education should be started at secondary school, followed by college (25.2%) and primary school (18%). There were two widely held beliefs regarding sex education that emphasize abstaining: 41.4% in secondary school, 36% in college, 13.5% in elementary school, and 9% in university.

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Table 4 Frequency distribution table showing the preferred level of education for initiating sexuality education.

Level of Education	Frequency	Percent
College	28	25.2
Primary School	20	18.0
Secondary School	59	53.2
University	4	3.6
Total	111	100.0

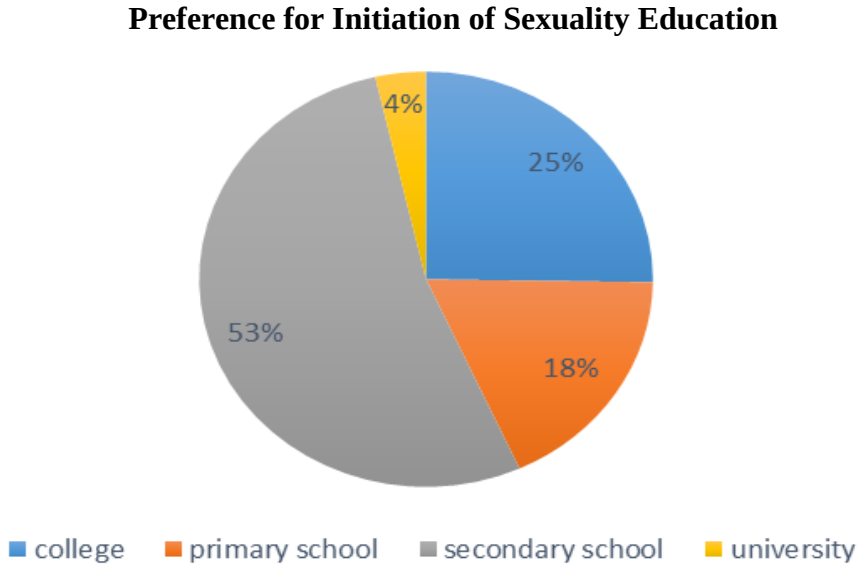

Figure 2. Pie chart showing preferred level for initiating sex education

Table 5 Frequency distribution table showing the preferred level of education for initiating abstinence-only sexuality education.

Level of Education	Frequency	Percent
College	40	36.0
Primary School	15	13.5
Secondary School	46	41.4
University	10	9.0
Total	111	100.0

Preference for Initiation of Abstinence-Only Sexuality Education

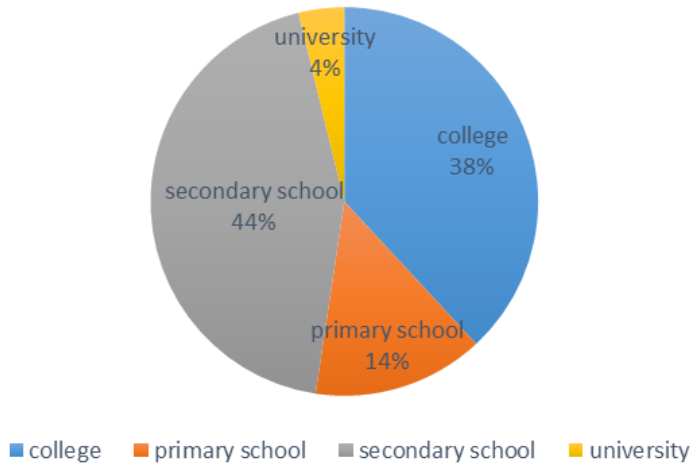

Figure 3 Preferred level for initiating abstinence-only sexuality education

Table 6. Frequency distribution table showing the preferred level of education for initiating comprehensive sexuality education.

Level of Education	Frequency	Percent
College	49	44.1
Primary School	5	4.5
Secondary School	28	25.2
University	29	26.1
Total	111	100.0

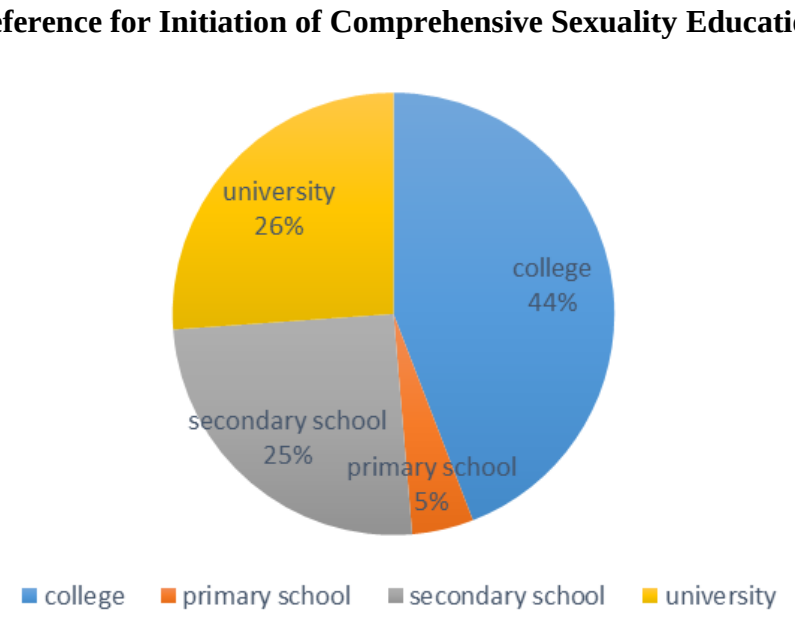

Figure 4. Pie chart showing preferred level for initiating comprehensive sexuality education

DISCUSSIONS

This research aimed to explore sexual and reproductive health knowledge, attitudes, and practices among young people in Islamabad. The findings indicated a poor overall knowledge score among the youth similar to the findings of a study conducted in Lahore **[11]**. The poor knowledge of youth particularly about sexual and reproductive health depicts that Pakistan is lagging in achieving the Sustainable development goal (SDG number 3). According to the seventh target of SDG 3, sexual and reproductive health-related services should be integrated into national strategies to combat unhindered population growth which the nation is currently suffering **[12].** However, this research indicates a significant lack of knowledge related to contraception among youth.

No significant correlation was found between demographics (age, marital status, level of education, and residency) and knowledge scores, indicating that adolescents and young adults have similar levels of knowledge. These results were similar to the findings of a study from Kenya **[13]**. Both married and unmarried individuals, as well as those with varying levels of overall knowledge score among youth, were poor, suggesting a lack of measures taken for sex education **[14]**.

The overall knowledge score was poor along with no significant difference among students of primary levels from those of university students or graduates. This indicates the deficiencies in our curriculum. Also, urban areas have access to healthcare along with modern and efficient technologies available. Statistically insignificant difference between the knowledge of urban and rural individuals also indicates the lack of adaptability in the

environment for sex education. This, however, needs further validation with newer research.

This study identified that mass media was the most consulted source for obtaining sexual health-related knowledge. The researcher combined both social media and the internet in the term mass media and informed these to participants. However, the data analysis revealed insignificant differences between knowledge score and sources used for knowledge which indicates that some efforts are needed to provide resources that could sufficiently educate youth on sexual and reproductive health. Mass media, parents, or friends are not providing sufficient information to youth which is indicated by poor knowledge scores. Again, the curriculum also does not contain sufficient matters on sex education as there is no difference in knowledge scores of those individuals who consult formal education from those who ask their friends or parents. Efforts are needed to incorporate CSE in the curriculum **[15]**. This insignificant relationship further shows that mass media fails to provide adequate information related to sexual and reproductive health.

The research found that youth are willing to gain sexual and reproductive health-related knowledge. The results show that youth favors sex education to be started at the school level. There were two popular opinions regarding the initiation of abstinence-only sex education. The majority of the sample population favors abstinence-only sexual education to be started at the secondary school level followed by favors to college level. The sample population thought that comprehensive sex education should be started in college.

The findings of this study highlight the critical need to integrate comprehensive sex education into the curriculum and to provide accessible and reliable sources of sexual and reproductive health information. These measures have the potential to improve young people's knowledge, attitudes, and practices regarding sexual and reproductive health, as well as contribute to the achievement of the SDG target of combating unhindered population growth.

LIMITATIONS OF THE STUDY

This study was more of a time point study, cross sectional surveys conducted over months could generate better results. Moreover, the limited sample size does not allow us to extrapolate the results to the general population of the city.

IMPLICATIONS / RECOMMENDATIONS OF THE STUDY

This research has provided enough data to show that sexuality education is lacking in Pakistan. It has various impacts on youth. Good knowledge about sexual and reproductive health can help youth make better decisions throughout their lives. Larger studies are required to explore the root causes of lack of knowledge and possible measures that could eradicate them. Our study found that a lack of awareness in both urban and rural environments with statistically insignificant differences indicates that the general environment is not adapted to sex education. This, however, needs validation from further research. Moreover, no difference in knowledge of individuals from different levels of education indicates that the

education system lacks an emphasis on sex education. However, this finding also needs further validation.

CONCLUSIONS

Sexuality education in Pakistan is considered a taboo and knowledge related to sexual and reproductive health is often withheld from youth. Comprehensive Sexuality Education (CSE) is not incorporated in the curriculum despite sustained development goals. Access to healthcare facilities in rural areas is limited, which affects the physical health of patients when they have any sexual or reproductive health-related issues. The lack of knowledge among youth, along with the lack of sufficient resources to be consulted, leads to ill practices and an increasing burden of premarital rapes, sexual violence, and masturbation reported in Pakistan over the years. Previous studies have assessed knowledge among stakeholders and attitudes toward sex education. However, this research aimed to assess the knowledge of youth related to sexual and reproductive health and to find if any demographic parameters or resources consulted may have an impact to improve knowledge. No significant difference was found among any variation in demographic characteristics and knowledge, including the level of education. Mass media, including social media and the internet, was the most consulted source of information related to reproductive health, and formal education or curriculum was the least consulted. There was no significant difference in knowledge of individuals consulting different sources of information. Most of the study population favored that sexuality education should start at secondary school levels where abstinence only should start from secondary school and comprehensive sexuality education should start from college. This study suggests the urgent need to include sexuality education into the curriculum and provide reliable and useful sources of knowledge to youth to help them develop good sexual health-related practices. Taking measures to improve the Knowledge, Attitude, and Practices of youth towards sexual and reproductive health can foster national progress towards the achievement of sustainable development goals.

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