INTERNSHIP REPORT

ON

"THE STUDY AMONG STD CLINIC ATTENDEES"

INDIAN COUNCIL OF MEDICAL RESEARCH (ICMR)

NATIONAL INSTITUTE OF EPIDEMOLOGY

CHENNAI 600 077

SUMMITED TO

PRESIDENCY COLLEGE (AUTONOMOUS)

DEPARTMENT OF STATISTICS

JULY 2023

MASTER OF SCIENCE

BY

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DECLARATION

I hereby attest that the Internship report titled "A Study on Sexually Transmitted Diseases" submitted for the fulfillment of the requirements to obtain a Master of Science degree in Statistics for the academic year 2023-2024 is based on my original research. This Research conducted under the guidance and supervision of Dr.V.RAMACHANDRAN., a Senior Technical Officer at the Indian Council of Medical Research-National Institute of Epidemiology, Chennai. The findings presented in this report contribute to the existing knowledge on the subject and reflect my dedication to academic excellence and the pursuit of scientific understanding.

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DATE:

V.RAMACHANDRAN

SENIOR TECHNICAL OFFICER

ICMR-NIE

BONOFIDE CERTIFICATE

This is to certify that the internship done by **P.SOUNDARYANAYAGI (REG.NO:2213212075026) at ICMR-NIE** is a bonofide record of work done from 29/05/2023 to 28/06/2023, in a partial fulfillment of the Requirement for the award of the degree of master of science in statistics presidency college (autonomous) during the academic year 2022-2024.

SIGNATURE OF EXAMINERS

EXAMINER 1:

EXAMINER 2:

SIGNATURE OF H.O.D

Dr.N.VISHWANATHAN

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1. INTRODUCTION

1.1 ICMR-NATIONAL INSTITUTE OF EPIDEMIOLOGY

The ICMR-National Institute of Epidemiology (ICMR-NIE) is a permanent premier institute of Indian Council of Medical Research (ICMR) established on July 2, 1999 by merging the Central JALMA Institute for Leprosy (CJIL Field Unit), Avadi with the Institute for Research in Medical Statistics (IRMS), Chennai.

The broad objectives of the Institute cover conducting epidemiological studies, development of human resources in epidemiology and bio-statistics, networking of the various ICMR and non-ICMR Institutes at the national level for epidemiological purposes, and consultancy. The Institute has the distinction of being the WHO Collaborating Centre for Leprosy Research and Epidemiology. The Institute carries out a variety of research activities, which include areas such as interventional studies, health systems research, evaluation of health schemes and disease control programmers, statistical methodology, epidemiological investigations and outbreak science.

The Institute hosts the ICMR School of Public Health that conducts various academic programs. ICMR-NIE is recognized by Tamil Nadu Dr. MGR Medical University for PhD in Epidemiology and by University of Madras for PhD in Biostatistics, Epidemiology and Microbiology. The Institute is recognized by the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram for the 2-year Field Epidemiology Training Program (FETP-INDIA) leading to Master of Public Health (MPH) degree. The Institute conducts other certificate-level FETPs including 2-year India Epidemic Intelligence Service (India EIS), 2-year FETP Noncommunicable disease Fellowship, and 1-year Intermediate FETP – Noncommunicable disease. The institute is recognized by Periyar University to conduct a 2-year Master degree (MSc) course in Biostatistics. The Institute also runs several online courses in health research and related fields.

1.2 VISION

"To be a catalyst for a vibrant national health system through responsive research, education and training in epidemiology and public health."

1.3 MISSION

- To effectively contribute in enhancing the quality of life of Indian citizens and influencing public health practice and policies through research, education and training.
  We will strive to accomplish our mission by:
- Working with national and international partners in health research with effective use of innovative state-of-art technologies
- Aligning our research with all key stakeholders to generate and implement evidence-based health strategies for an effective and efficient National health system
- Setting standards in public health education that would emphasize professionalism as a core competency
- Strengthening human resources for National public health services through education and training and building bridges between educational and research institutions.

Role and Mandate:

ICMR-NIE is a premier research institution in the field of epidemiology and public health in India. Its primary role is to conduct research and provide technical expertise in epidemiology, disease surveillance, and prevention. The institute's mandate includes studying the patterns, causes, and effects of diseases in populations, developing strategies for disease control, and promoting evidence-based public health policies.

Research Areas:

ICMR-NIE focuses on a wide range of research areas related to communicable and non-communicable diseases, environmental health, and health systems research. Some of the key research areas include infectious disease epidemiology, vaccine evaluation and impact assessment, cancer epidemiology, maternal and child health, health economics, and genetic epidemiology.

Disease Surveillance:

ICMR-NIE plays a crucial role in disease surveillance and outbreak investigations. The institute collaborates with various national and international agencies to monitor disease trends, detect emerging infections, and respond to public health emergencies. It also conducts population-based studies to understand disease burden and risk factors.

Training and Capacity Building:

ICMR-NIE is involved in training and capacity building activities to strengthen the research and public health workforce. It offers various short-term and long-term training programs, workshops, and seminars on epidemiology, biostatistics, research methodology, and related areas. These initiatives aim to enhance research skills and promote evidence-based public health practices.

Collaboration and Partnerships:

ICMR-NIE collaborates with national and international organizations, academic institutions, and government agencies to conduct research and implement public health programs. It works closely with the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), and other global health institutions to address global health challenges**.**

Publications and Dissemination:

ICMR-NIE actively publishes research findings in scientific journals and disseminates knowledge through conferences, workshops, and reports. Its research outputs contribute to the scientific understanding of diseases and influence public health policies and interventions**.**

Field Studies:

ICMR-NIE conducts field studies and surveys across different regions of India to collect data and investigate disease patterns and risk factors. These studies involve collecting biological samples, conducting interviews, and performing medical examinations to gather information for research purposes. Field studies play a crucial role in generating evidence for policy-making and improving public health interventions.

Notable Achievements:

ICMR-NIE has made significant contributions to epidemiological research and public health in India. It has conducted several large-scale epidemiological studies, including the India State-Level Disease Burden Initiative, which estimates disease burden and risk factors across states in India. The institute has also played a vital role in conducting research on vaccines, vector-borne diseases, cancer epidemiology, and maternal and child health.

1.4 DIVISIONS

1. Epidemiology & Biostatistics
2. Computing and Information Science
3. Health System Research
4. Laboratory
5. Online Courses
6. Non-Communicable Diseases
7. ICMR School of Public Health
8. Model Rural Health Research Unit - Kallur
9. Model Rural Health Research Unit - Raichur
10. Administration

2.SEXUALLY TRANSMITTED DISEASES

2.1 ABSTRACT

This research aimed to study the effect of premarital sex on sexually transmitted infections (STIs) and high risk behaviors among STD clinic attendees in Rajiv Gandhi government hospital Chennai. Participants' demographic and socio demographic characteristics, alcohol use, drugs, Condom use, number of Sexual partners, symptoms of STIs and age at first sex and marriage were obtained. Moreover, the diagnosis for the diseases were collected for 616 samples with 567 males and 49 females with patients concern. These findings highlight the importance of a lengthy period of premarital sex as a public health issue. Keywords Premarital sex; High-risk behaviors;HIV,Non Venereal Disease , STI(Sexually transmitted infection)/RTI(curable),STI/RTI(non curable)

What are sexually transmitted diseases (STDs)

Sexually transmitted diseases (STDs), or sexually transmitted infections (STIs), are infections that are passed from one person to another through sexual contact. They are usually spread during vaginal, oral, or anal sex. But sometimes they can spread through other sexual contact involving the penis, vagina, mouth, or anus. This is because some STDs, like herpes and HPV, are spread by skin-to-skin contact.

Some STDs can be passed from a pregnant person to the baby, either during pregnancy or when giving birth. Other ways that STDs may be spread include during breastfeeding, through blood transfusions, or by sharing needles.

There are more than 20 types of STDs, including:

- Chlamydia
- Genital herpes
- Gonorrhea
- HIV

- HPV
- Pubic lice
- Syphilis
- Trichomoniasis

Premarital sexual contact

Premarital sexual contact is sexual activity practiced by persons who are unmarried. The prevalence of pre-marital sexual contact has increased in both developed and developing countries. In some cultures, the significance of premarital sex has traditionally been related to the concept of virginity. However, unlike virginity, premarital sex can refer to more than one occasion of sexual activity or more than one sex partner. There are cultural differences as to whether and in which circumstances premarital sex is socially acceptable or tolerated. Social attitudes to premarital sex have changed over time as has the prevalence of premarital sex in various societies. Social attitudes to premarital sex can include issues such as virginity, sexual morality, extramarital unplanned pregnancy, legitimacy besides other issues. Premarital sex may take place in a number of situations. For example, it may take place as casual sex, for example, with at least one participant seeking to experience sex; it may take place between a couple living together in a long-term relationship without marriage; for a betrothed couple engaging in sexual activity before their anticipated marriage; and many other situations are possible.

2.2 OVERVIEW OF STD's AND THEIR IMPACT ON PUBLIC HEALTH

More than 30 different bacteria, viruses and parasites are known to be transmitted through sexual contact, including vaginal, anal and oral sex. Some STIs can also be transmitted from mother-to-child during pregnancy, childbirth and breastfeeding. Eight pathogens are linked to the greatest incidence of STIs. Of these, 4 are currently curable: syphilis, gonorrhoea, chlamydia and trichomoniasis. The other 4 are incurable viral infections: hepatitis B, herpes simplex virus (HSV), HIV and human papillomavirus (HPV).

In addition, emerging outbreaks of new infections that can be acquired by sexual contact such as monkeypox, *Shigella sonnei*, Neisseria meningitidis**,** Ebola and Zika, as well as re-

emergence of neglected STIs such as lymphogranuloma venereum. These herald increasing challenges in the provision of adequate services for STIs prevention and control.

2.3 INCREASE IN PMC AND ASSOCIATED RISKS

Today, due to the advances in technology and its impact on the quality of life, addressing the health and its influencing factors has become important. Also, providing health for the society is considered as one of the main issues in any country. Sexual behaviors of adolescents and youth are categorized as one of the main health priorities of a society because of the high prevalence of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), sexually transmitted infections (STIs), and unwanted pregnancies.

2.4 ANALYSIS PROBLEM

This Study aims to investigate the relationship between pre-marital sexual contact in transmission of sexually transmitted diseases (STDs) among patients who are all atendented the STD clinic at Rajiv Gandhi memorial Government general Hospital, Chennai

2.5 PREVALENCE OF STD IN PMC

The 'Sex' topic is taboo for discussion in India's traditional communities in any age group regardless of their educational status. In conservative culture, pre-marital sex (PMS) is strictly forbidden in both genders and those who are indulging are secretly engaged in these acts. However, a comprehensive understanding of PMS behavior in India is relatively scarce, as sexuality remains a sensitive issue. According to statistics, the reported rate of the students who are involved in PMS practices in different regions of India ranges from 8-15%

According to WHO, "*Sexual health is a state of physical, mental, and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence."*

In India, the prevalence of PMS practices in Tamil Nadu was 35%, in Puducherry it was 31%, in Andhra Pradesh it was 23% and in Pune, it was 16-18%. Rapid economic development, urbanization, widespread media attention, porn videos, X-rated products, drug abuse, sexually

active peers, family dysfunction are considered to be risk factors for the initiation of early sexual activity among young People. Younger people are engaging in premarital sexual behavior at an alarming rate, but they are mostly unprotected. It is high time for physicians and society to acknowledge that premarital sexual practice is a reality. When dealing with such difficulties, they must be compassionate and nonjudgmental. Separate units/desks may be established to handle adolescent sexual health inquiries. The physicians should have a counsellor in place for such budding adults. The physicians may be accompanied by an intern of similar age as an adolescent to ease them in being free and frank.

2.6 DATA DESCRIPTION

The present study involved the collection of data in the year 2013 from attendees of the STD clinic at Rajiv Gandhi Memorial Hospital in Chennai. The data collection process extended over a period of six months and specifically targeted individuals seeking treatment for sexually transmitted diseases (STDs), aiming to address their concerns and gather relevant information.

Before data collection, a pre-coded questionnaire was carefully designed, incorporating a comprehensive range of demographic characteristics relevant to the participants. This questionnaire was administered using diverse methods to ensure reliable data collection.

Following a rigorous screening process, a total of 616 data samples were successfully retained from the original dataset. The collected data underwent a post-coding procedure to facilitate analysis and identification of key factors. Notably, a considerable portion of the variables examined in this study focused on the topic of pre-marital sexual contact among the STD clinic attendees or respondents.

These meticulous data collection efforts and subsequent screening have provided a robust dataset for analysis, offering valuable insights into the demographics and factors associated with pre-marital sexual contact among individuals seeking treatment at the STD clinic during the specified time period.

Variable used:

Demographic characteristics such Age, Religion ,Occupation, Gender, Education, Marital Status, were collected from the STD clinic attendees with their concern. The other variables are as follows.

1. **Age at Marriage**: This variable represents the age at which individuals got married.

2. **Age at Sexual Debut**: This variable indicates the age at which individuals first engaged in sexual activity.

3. **Whom was Your Sexual Partner**: This variable captures information about the identity or relationship of the individuals' sexual partner.

4. **Age of the Sexual Partner:** This variable records the age of the individuals' sexual partner.

5. **Place of First Sex**: This variable identifies the location where individuals had their first sexual encounter.

6. **Type of First Sex**: This variable describes the nature or specific characteristics of individuals' initial sexual experience.

7**. Reason for First Sexual Contact**: This variable explores the motivations or factors that influenced individuals to engage in their first sexual encounter.

8. **Condom or Pill Usage during First Sex**: This variable indicates whether individuals used a condom or oral contraceptive pill during their initial sexual contact.

9. **Duration of Premarital Sexual Contact (in months):** This variable measures the length of time individuals were involved in premarital sexual activity.

10. **Number of Persons You Had Premarital Sexual Contact with:** This variable records the total number of individuals had premarital sexual contact with.

11. **Condom Usage Frequency and Reasons during Premarital Sexual Contact**: This variable assesses how often individuals used condoms during premarital sexual activity and the reasons behind their frequency of usage.

12. **Habits Frequency (Smoking, Drinking, Oral Drugs, IDU):** This variable examines the frequency of various habits, including smoking, drinking alcohol, using oral drugs, and engaging in intravenous drug use (IDU).

13. **Influencer of Habits**: This variable identifies the individuals or sources that influenced the participants' habits (e.g., friends, family, media).

14. **Attitude towards Premarital Sexual Contact:** This variable captures individuals' attitudes or beliefs regarding engaging in premarital sexual activity.

15. **Reasons for Premarital Sexual Contact (Male Perspective):** This variable explores the perceived reasons or motivations behind individuals' involvement in premarital sexual activity from a male perspective.

16. **Reasons for Premarital Sexual Contact (Female Perspective):** This variable explores the perceived reasons or motivations behind individuals' involvement in premarital sexual activity from a female perspective.

17. **Health Problems Associated with Premarital Sexual Contact:** This variable examines the health issues or challenges that individuals may face as a result of engaging in premarital sexual activity.

18. **Problems or Issues Experienced after Premarital Contact:** This variable investigates the problems or issues that individuals may have encountered after engaging in premarital sexual activity.

19. **General Problems Associated with Premarital Sex**: This variable explores the potential problems or challenges commonly associated with individuals involved in premarital sexual activity.

20. **Decision to Stop Premarital Sexual Contact (Yes, Why & How):** This variable assesses whether individuals decided to cease their involvement in premarital sexual activity and the reasons and methods behind their decision.

21. **Decision to Continue Premarital Sexual Contact (No, Why):** This variable examines the reasons why individuals chose to continue their involvement in premarital sexual activity despite potential challenges or concerns.

22. **Diagnosis Code**: This variable assigns a code or category to indicate the diagnosis of various conditions or infections, including non-venereal diseases (NVD), curable and non-curable sexually transmitted infections (STIs/RTIs), HIV/AIDS, infertility, and sexual problems such as erectile dysfunction or other infections.

The data description provides a comprehensive overview of the key aspects covered in the project, enabling effective understanding and analysis of the dataset.

3. DATA ANALYSIS

3.1 METHODS AND MATERIALS

The first step is to import the data into SPSS, ensuring its proper integration into the software environment. This involves carefully configuring the import settings to accurately represent the dataset's structure and variables.

Next, data recoding techniques are employed within the same variables. This process involves transforming and reorganizing the existing data to enhance its suitability for analysis. By utilizing SPSS functions and syntax, variables can be recoded to better align with the study's research objectives and analytical requirements.

Furthermore, data recoding may extend to the creation of new variables. This allows for the representation of specific concepts or measurements that are not explicitly captured by the original variables. SPSS facilitates the creation of these new variables through recoding techniques tailored to the research context.

To ensure clarity and precision in subsequent analyses, it is crucial to define the variables in terms of their intended outcomes. This involves specifying the measurement scales, variable types, and assigning appropriate labels and value codes to ensure accurate interpretation of the data.

By following these professional practices within the SPSS tool, researchers can effectively screen and preprocess the data, ensuring its suitability for further analysis and providing a solid foundation for drawing meaningful conclusions and insights.

In the process of conducting data screening, the SPSS tool is utilized to effectively manage and analyze the collected data. This involves several key steps, including data import, data recoding within the same variables, data recoding into different variables, and defining the variables for the desired outcomes and subsequent analysis.

1. Data Import: Start by importing your data into SPSS. You can do this by going to "File" and selecting "Open" or by using the "Import Data" option. Choose the appropriate file format and

locate the file on your computer. Once imported, SPSS will display the data in a spreadsheet-like format.

2. Data Recoding within the Same Variables: If you need to recode certain values within the same variables, you can use the "Recode" function in SPSS. Go to "Transform" and select "Recode into Same Variables." Specify the variable you want to recode and define the old and new values according to your requirements. This allows you to transform and update the existing data within the same variables.

3. Data Recoding into Different Variables: In some cases, you may want to create new variables based on existing data. To do this, go to "Transform" and choose "Recode into Different Variables." Select the variable you want to recode and define the old and new values. SPSS will create a new variable with the recoded values while preserving the original variable.

4. Defining Variables for Desired Outcomes and Analysis: After importing and recoding the data, it's important to define the variables you will use for analysis. Go to "Variable View" in SPSS, where you can specify the name, type, and measurement level for each variable. Ensure that the variables are correctly labeled and assigned appropriate properties, such as numeric or categorical.

5. Using IF Statements: SPSS allows you to apply conditional statements using the "IF" function. This feature is useful for filtering data based on specific criteria. For example, you can use IF statements to select only certain cases or to apply calculations selectively. Write your IF statement in the syntax editor or use the graphical user interface provided by SPSS.

6. Filtering Data: To filter data based on specific information, you can use the "Filter" function in SPSS. Go to "Data" and select "Select Cases." Choose the condition that determines which cases should be included in the analysis. SPSS will temporarily hide the excluded cases, allowing you to work with a subset of the data.

7. Creating a Graph: Start by selecting the variables you want to include in your graph. Go to the "Graphs" menu and choose the desired graph type, such as bar chart, line graph, or scatter plot. Specify the variables for the X and Y axes or any additional parameters required for the selected graph type.

8. Editing Graph Elements: Once the graph is created, you can edit various elements to customize its appearance. In SPSS version 16, you can right-click on different parts of the graph to access editing options. Here are some common elements you can edit:

- Chart Title: Right-click on the title and select "Edit Content" to modify the text, font, size, and alignment.
- Axes Labels: Right-click on the axis labels and select "Edit Content" to change the labels or format them as needed.
- Legends: Right-click on the legend and choose "Properties" to modify its position, font, size, or hide it if not required.
- Data Points or Bars: Right-click on individual data points or bars to customize their appearance, such as color, shape, or size.
- Background and Gridlines: Right-click on the graph background or gridlines to adjust their visibility, color, or style.
- Annotations: You can add text or shapes to annotate specific parts of the graph. Right-click on the graph, select "Annotate," and choose the desired annotation type.

9. Formatting Options: SPSS version 16 provides several formatting options to enhance the appearance of your graph. To access these options, right-click on the graph and choose "Properties." Here, you can modify various settings, including:

- **Fonts and Sizes:** Customize the font type and size for different elements, such as the title, axis labels, or legends.
- **Colors and Patterns:** Change the colors used for data points, bars, lines, or fill patterns.
- **Line Styles:** Adjust the thickness or style of lines in line graphs or scatterplots.
- **Scale and Range:** Specify the minimum and maximum values for axes or choose automatic scaling options.
- **Gridlines and Ticks:** Customize the appearance of gridlines and tick marks on the axes.

10.Saving and Exporting: Once you are satisfied with the graph's appearance, you can save it in various formats. Go to "File" and select "Save As" to save the graph as an SPSS output file or export it as an image file, such as PNG, JPEG, or PDF, by choosing the appropriate option.

3.2. SOCIO DEMOGRAPHIC OBSERVATION

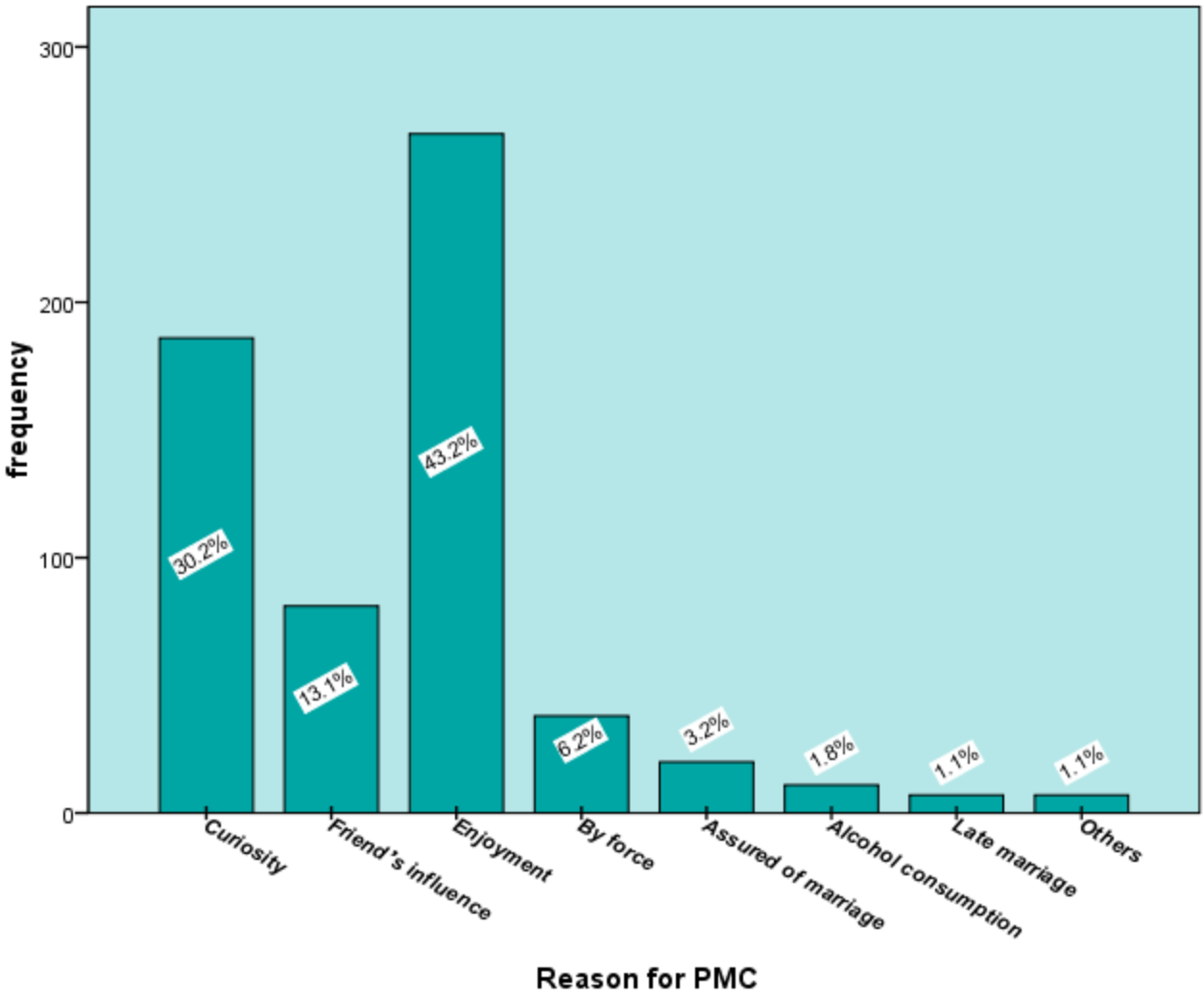
Table 1:Socio Demographic profile of STD Clinic Attendees

Background Characteristics		Gender		Total (616)
		Male (567)	Female (49)	
Age Group	11-20	17	13	30
	21-30	263	23	286
	31-40	169	11	180
	41-50	100	2	102
	51-60	17	0	17
	>=60	1	0	1
Marital Status	Unmarried	264	28	292
	Married	294	20	314
	Separated	4	1	5
	Divorced	3	0	3
	Widowed	2	0	2
Occupation	Daily wage earners	145	14	159
	Drivers	86	1	87
	Skilled	111	2	113
	Unskilled	42	6	48
	Professional/staff	43	2	45
	Student	14	11	25
	Agriculture/farmer	18	0	18
	Business/salesman	43	2	45
	Not collected	8	4	12
	Private company	48	1	49
	House wife	0	2	2
	Unemployed	9	4	13
Education	Illiterate	48	8	56
	Can read and write	7	0	7
	Primary education	101	11	112
	Secondary education	47	3	50
	High Secondary school	240	15	255
	Above HSS	124	12	136

The table provides important demographic information on the background characteristics of STD clinic attendees at Rajiv Gandhi Memorial Government Hospital. Among the 616 individuals, 92% were male, while 8% were female. In terms of age group, the majority (46%) fell into the 21-30 range, followed by 31-40 (29%). In terms of marital status, 47% were unmarried, and 51% were married. Daily wage earners constituted the largest occupational group (26%), followed b y skilled workers (18%). The majority of attendees had at least a high secondary school education (41%), with illiterate individuals comprising 9% of the sample.

3.3 PMC ANALYSIS

Dig.1. Primary Motivations for Sexual Contact



The chart provided above illustrates the reasons behind premarital sexual contacts (PMC), with the majority of people engaging in PMC for the purposes of enjoyment and curiosity with 73%

The finding that a significant number of individuals engage in PMC for enjoyment (43%) suggests that they may seek pleasure, physical intimacy, or emotional fulfillment through these encounters. It indicates that sexual activity is seen as a source of pleasure and personal

gratification among this group. This could be driven by a variety of factors, including the desire for exploration, intimacy, or the pursuit of personal fulfillment and satisfaction.

The presence of curiosity (30%) as a prominent reason for PMC indicates that individuals may engage in sexual activity to satisfy their natural inquisitiveness about their own bodies, sexual experiences, and relationships. This curiosity-driven behavior may stem from a desire to explore and understand their own sexuality, gain experience, or develop a deeper understanding of sexual dynamics and relationships.

It is important to note that these interpretations are based on the information provided, and individual motivations for engaging in PMC can vary greatly. The findings suggest that a significant portion of individuals engage in PMC primarily for enjoyment and curiosity, highlighting the need for comprehensive sexual education and access to information about safe sexual practices. By addressing these motivations and providing accurate information about sexual health, consent, and contraception, professionals can play a crucial role in promoting responsible and informed decision-making regarding premarital sexual activity.

The preferences of adolescents and Adults Type of Sex along with their Age group

The below table 2 represents the distribution of sexual activity types across different age groups. Vaginal intercourse was the most prevalent type of sexual activity, with a total of 512 occurrences. It was most commonly reported among individuals aged 21-30, followed by the age group of 31-40. The occurrence of vaginal intercourse decreased with increasing age.

Anal intercourse was the second most reported type of sexual activity, with a total of 55 occurrences. It was less frequent compared to vaginal intercourse and showed a similar pattern, being more prevalent among individuals aged 21-30 and declining with age.

The combination of vaginal and anal intercourse was reported in 28 instances, with the highest occurrence among individuals aged 21-30.

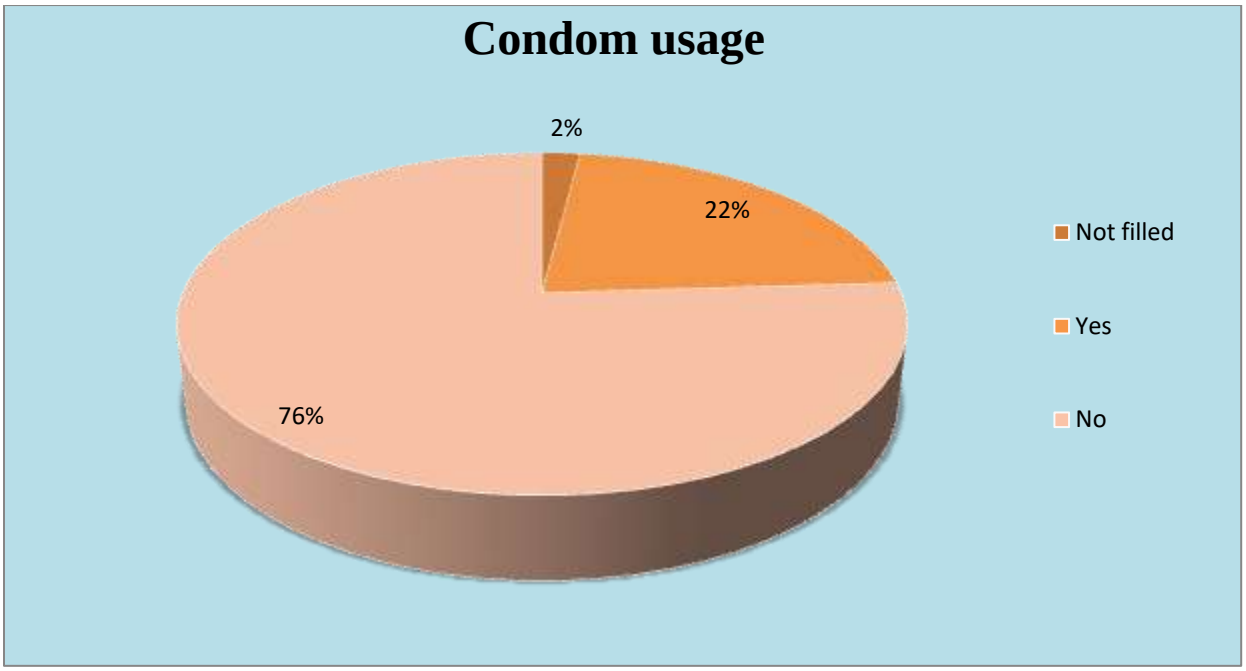
Oral sex had a total of 21 occurrences, with the highest frequency among individuals aged 21-30.

Overall, this data suggests that vaginal intercourse is the most common type of sexual activity, followed by anal intercourse. The frequency of sexual activities generally declines with age, with individuals aged 21-30 being the most sexually active group.Table.2

Table 2: The preferences of adolescents and Adults Type of Sex along with their Age group

Type of sex	Age group						Total
	11-20	21-30	31-40	41-50	51-60	>=60	
Vaginal	24	216	157	97	17	1	512
Anal	6	36	10	3	0	0	55
Vaginal and anal	0	20	7	1	0	0	28
Oral	0	14	6	1	0	0	21
Total	30	286	180	102	17	1	616

Dig.2 Condom Usage Among STD Clinic Attendees



The data regarding condom usage among attendees at a sexually transmitted disease (STD) clinic reveals that 76% of individuals reported using condoms, while 22% did not. Additionally, 2% of the individuals surveyed expressed unawareness of condom usage in the Dig.,2

This information suggests that a significant majority of individuals attending the STD clinic are practicing safe sex by employing condoms, as indicated by the 76\% usage rate. However, the presence of a 22% non-usage rate indicates a notable proportion of individuals who are not utilizing condoms, potentially putting themselves at higher risk of contracting STDs. Furthermore, the 2% who lack awareness regarding condom usage underscores the need for comprehensive sexual education and promotion of safe sex practices to ensure adequate knowledge and protection among all individuals.

As professionals, it is crucial to recognize the importance of addressing and promoting safe sexual behaviors among all individuals, particularly those seeking care at an STD clinic. By providing education, resources, and support regarding condom usage and its role in preventing the transmission of STDs, healthcare providers can contribute to reducing the spread of infections and promoting overall sexual health in the population.

Association between Gender and the Gender of First Sexual Partners

The Below Table 3 provided, which represents the gender of individuals and their first sexual partners. Among the individuals surveyed in the STD clinic Attendees, there were 567 males, 49 females, and 616 individuals in total. Out of the male respondents, 81 reported their first sexual partner as male, 480 reported their first sexual partner as female, and 6 reported their first sexual partner as transgender. Among the female respondents, 44 reported their first sexual partner as male, 5 reported their first sexual partner as female, and none reported their first sexual partner as transgender.

Overall, this data suggests that the majority of males (84.4%) reported their first sexual partner as female, while a smaller proportion (14.3%) reported their first sexual partner as male. A very small percentage (1.1%) of males reported their first sexual partner as transgender.

Among the female respondents, the majority (89.8%) reported their first sexual partner as male, while a small proportion (10.2%) reported their first sexual partner as female. None of the female respondents reported their first sexual partner as transgender.

Most people tend to have sexual experiences involving both males and females. However, it is uncommon for transgender individuals and women to engage in sexual activities together.

Table 3: Exploring the Association between Gender and the Gender of First Sexual Partners

Gender	First Sexual Partner			
	Male	Female	Transgender	Total
Male	81	480	6	567
Female	44	5	0	49
Total	125	485	6	616

Table 4: Location of First Sexual Contact in Frequency Distribution

Place of Sex	Frequency	Percentage
At your home	114	19
At your partner’s home	256	41
Friends/relatives house	46	7
Lodge	60	10
Hotel room	30	5
In park	19	3
Others	91	15
Total	616	100

The table 4 shows that out of the 616 respondents surveyed, the majority engaged in sexual activity at either their own home or their partner's home. Specifically, 114 individuals reported having sex at their own home, accounting for 19% of the total. Meanwhile, 256 individuals (41%) engaged in sexual activity at their partner's home. These findings indicate that the home environment is the most common location for sexual encounters.

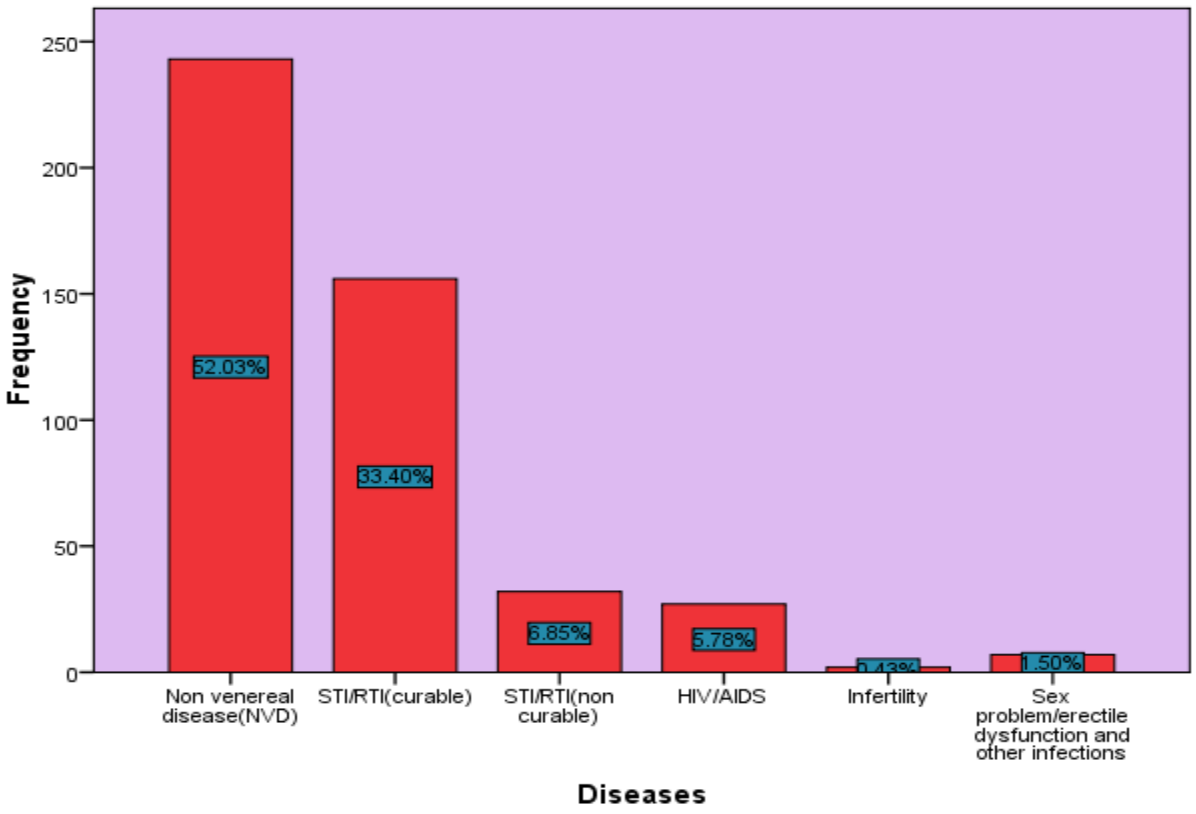
Another notable finding is that a significant proportion of individuals (10%) reported using a lodge for their sexual activities, while 5% mentioned using a hotel room. This suggests that some individuals prefer private accommodation options outside of their own or their partner's homes.

Additionally, a small percentage of respondents reported engaging in sexual activity at friends' or relatives' houses (7%) or in parks (3%). These findings indicate that a minority of individuals are comfortable engaging in sexual activities outside of traditional private settings.

Furthermore, the table 3 highlights that 15% of respondents mentioned engaging in sexual activity in other locations not specified in the table. This category includes various alternative places that individuals may choose for their sexual encounters.

This data provides insights into the preferences and behaviors regarding the location of sexual activities. The majority of respondents preferred the privacy and familiarity of their own or their partner's homes. However, a notable portion of individuals explored other options such as lodges, hotel rooms, and occasionally, public places like parks. These findings can be valuable for understanding patterns in the choices of sexual activity settings and informing discussions around factors that influence these decisions, such as privacy, convenience, and personal preferences.

Dig3. Prevalence of Diseases among Non-Condom Users among STD Clinic Attendees



The Dig 3. provided depicts the association between individuals who do not use condoms and the acquisition of sexually transmitted diseases (STDs). According to the study, approximately 33% of the individuals included in the analysis have been diagnosed with STDs.

These finding highlights a concerning trend, suggesting that a significant proportion of individuals who do not use condoms are at a higher risk of contracting STDs. It underscores the importance of consistent and proper condom usage as a preventive measure against the transmission of sexually transmitted infections.

Of particular concern is the identification that 7% of individuals in the study have contracted non-curable STDs. This subset of individuals likely includes those who have acquired infections such as herpes, human papillomavirus (HPV), or hepatitis B, among others. Non-curable STDs often require ongoing management and treatment to alleviate symptoms and reduce the risk of transmission to others.

Additionally, the study reveals that 6% of individuals in the sample have been diagnosed with HIV/AIDS. This statistic indicates a notable prevalence of a severe and life-threatening viral infection within the studied population. HIV/AIDS requires lifelong medical care and treatment, and individuals living with this condition often face numerous challenges related to their overall health and well-being.

These findings collectively emphasize the urgent need for comprehensive sexual education, accessible healthcare services, and awareness campaigns aimed at promoting condom use, regular testing, and prevention of STDs. By increasing awareness, addressing misconceptions, and promoting safer sexual practices, healthcare professionals and public health organizations can strive to reduce the incidence of STDs and improve the overall sexual health outcomes in the population.

Table 5: Health Problems Associated with Pre-Marital Sexual Contacts across Age Groups

Health Problem after PMC	Age group						Total
	11-20	21-30	31-40	41-50	51-60	>=60	
No problem	0	3	5	1	0	0	9
HIV/AIDS	13	102	56	27	3	1	202
STD/Venerable diseases(VD)	2	24	21	9	3	0	59
Genital infections: (sexual infection)	4	27	21	8	0	0	60
Sexual problem	1	5	4	4	1	0	15
Other organ problem	1	5	3	1	1	0	11
psychological problem	1	4	8	2	0	0	15
Other problems	4	90	42	41	8	0	185
Don't know/no idea	4	26	20	9	1	0	60
Total	30	286	180	102	17	1	616

In the above Table 5, represents the health problems reported by individuals after Pre Marital Sexual Contact (PMC) categorized by age groups.

The most commonly reported health problem after PMC was HIV/AIDS, with a total of 202 occurrences. This problem was most prevalent among individuals aged 21-30, followed by the age group of 31-40.

Sexually Transmitted Diseases (STD)/Venereal Diseases (VD) were reported by 59 individuals, primarily affecting individuals aged 21-30 and 31-40.

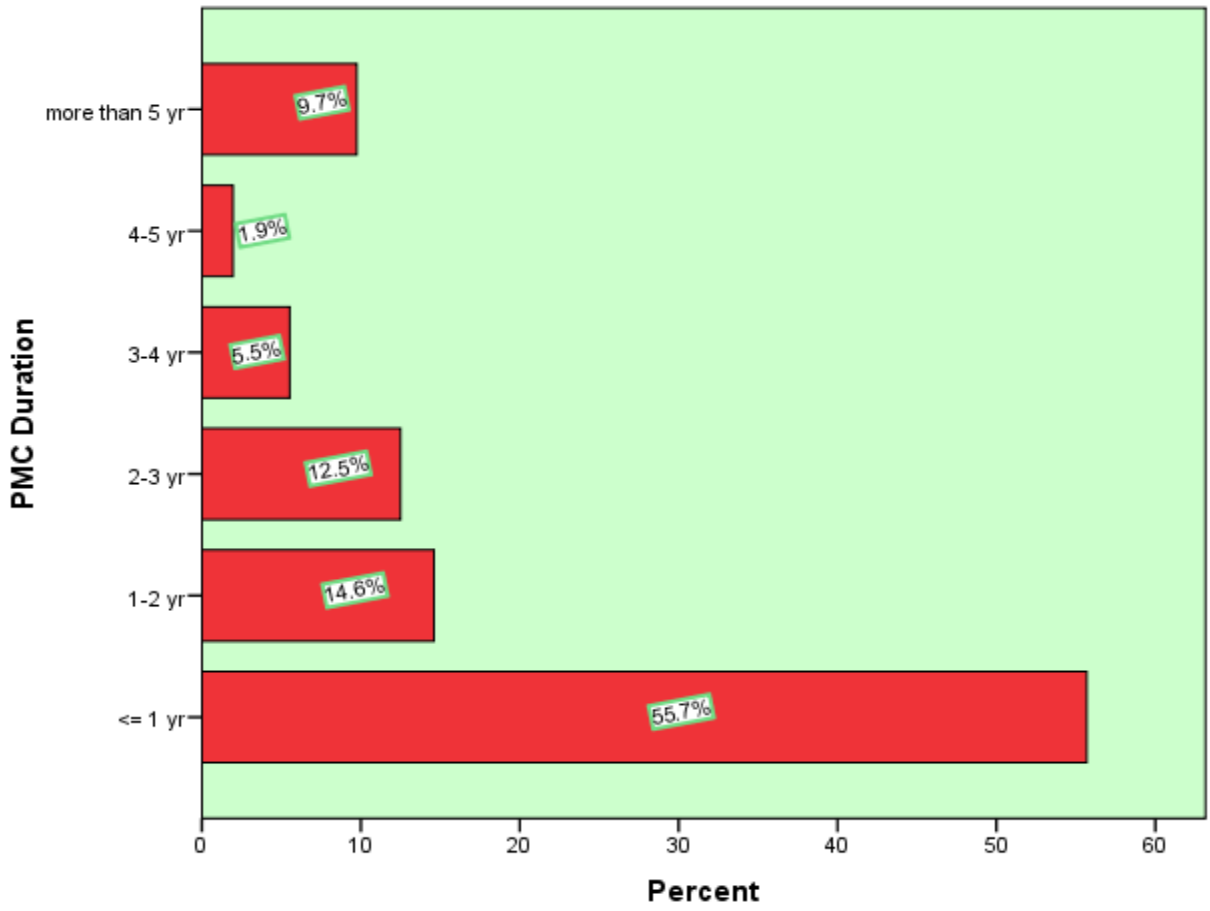
Genital infections were reported by 60 individuals, with the highest occurrence among individuals aged 21-30.

Other health problems, such as sexual problems, psychological problems, and other organ problems, were reported by smaller numbers of individuals across various age groups.

It is important to note that a significant number of individuals reported having no health problems (9) after PMC, while some individuals either had other unspecified problems or were unaware of their health status.

Overall this data suggests that post-PMC, there is a need for continued focus on HIV/AIDS prevention and awareness, as well as education and intervention programs to address STD/VDs and genital infections among individuals, particularly those in the 21-30 age group. Additionally, providing support for individuals experiencing sexual or psychological problems could contribute to overall well-being after PMC.

Dig.4 The below diagram illustrates the PMC Duration of "Male" and "Female"



The Graphical representation reveals that males tend to engage in Pre marital sexual contact for a longer duration compared to females. This suggests a noticeable difference between genders regarding the length of the time spent in such activities before marriage. Over to male Nearly 55% of males had a pre marital sexual almost 1year before marriage.10% of male continue pre marital sexual contact more than 5 years

Table 6: Attitudes towards Premarital Sex among Males and Females based on Place of Residence

Place of Residence / Attitude towards PMC		Urban (336)	Semi Urban (134)	Rural (146)	Total (616)
If male	Acceptable	78	34	21	133
	Not acceptable	253	97	123	473
	Not filled	5	3	2	10
If female	Acceptable	60	26	15	101
	Not acceptable	232	102	115	449
	Not filled	44	6	16	66

The above Table 6 shows the attitudes towards premarital sex among males based on their place of residence. If it is “Male”, the attitudes towards premarital sex vary among males based on where they live. Urban areas generally have higher acceptance, while rural areas tend to have more disapproval. If it is “Female” a considerable number did not state their opinion on premarital sex, ranging from 16 to 44 individuals across different residential areas. However, a significant portion of females (ranging from 60 to 232 individuals) find premarital sex acceptable, with higher acceptance observed in urban areas. On the other hand, a notable number of females (ranging from 102 to 115 individuals) expressed disapproval of premarital sex, particularly in rural areas

Table 7 : Health Problems after PMC and Associated Risk Behaviors

Health problems After PMC	Healthy habits	Unhealthy habits	Total
HIV/AIDS	68	134	202
STD/Venerable diseases(VD)	16	43	59
Genital infections: (sexual infection)	16	44	60
Sexual problem	2	13	15
Other organ/ system problem	2	9	11
psychological problem	6	9	15
Other problems	60	125	185
No problem	4	5	9
Don't know/no idea	23	37	60
Total	197	419	616

The Table 7 presents data on the health issues experienced by individuals following premarital sexual contact (PMC), along with their corresponding habits categorized as either healthy or unhealthy. Unhealthy habits in this context refer to behaviors such as smoking, drinking, oral drug use, and injected drug use.

Out of the total sample of 616 individuals, a group of 9 reported no health problems after PMC. However, a variety of health concerns were identified among the remaining participants.

The most prevalent health issue observed was HIV/AIDS, affecting a total of 202 individuals. Among them, 68 individuals reported adopting healthy habits, while 134 exhibited unhealthy habits, including smoking, drinking, or drug use. This indicates that a substantial number of

individuals with HIV/AIDS engaged in behaviors that could worsen their condition or pose risks to others.

Another category of health problems reported was STD/Venerable diseases (VD), with a total of 59 individuals experiencing such conditions. Among them, 16 individuals followed healthy habits, while 43 individuals had unhealthy habits, which may involve smoking, drinking, or drug use. This underscores the significance of promoting healthier lifestyles and raising awareness about the risks associated with engaging in unhealthy habits alongside unsafe sexual behaviors.

Genital infections related to sexual infections were reported by 60 individuals. Among them, 16 individuals practiced healthy habits, while 44 individuals exhibited unhealthy habits, including smoking, drinking, or drug use. This emphasizes the need for preventive measures, regular check-ups, and addressing unhealthy habits to effectively manage and prevent such infections.

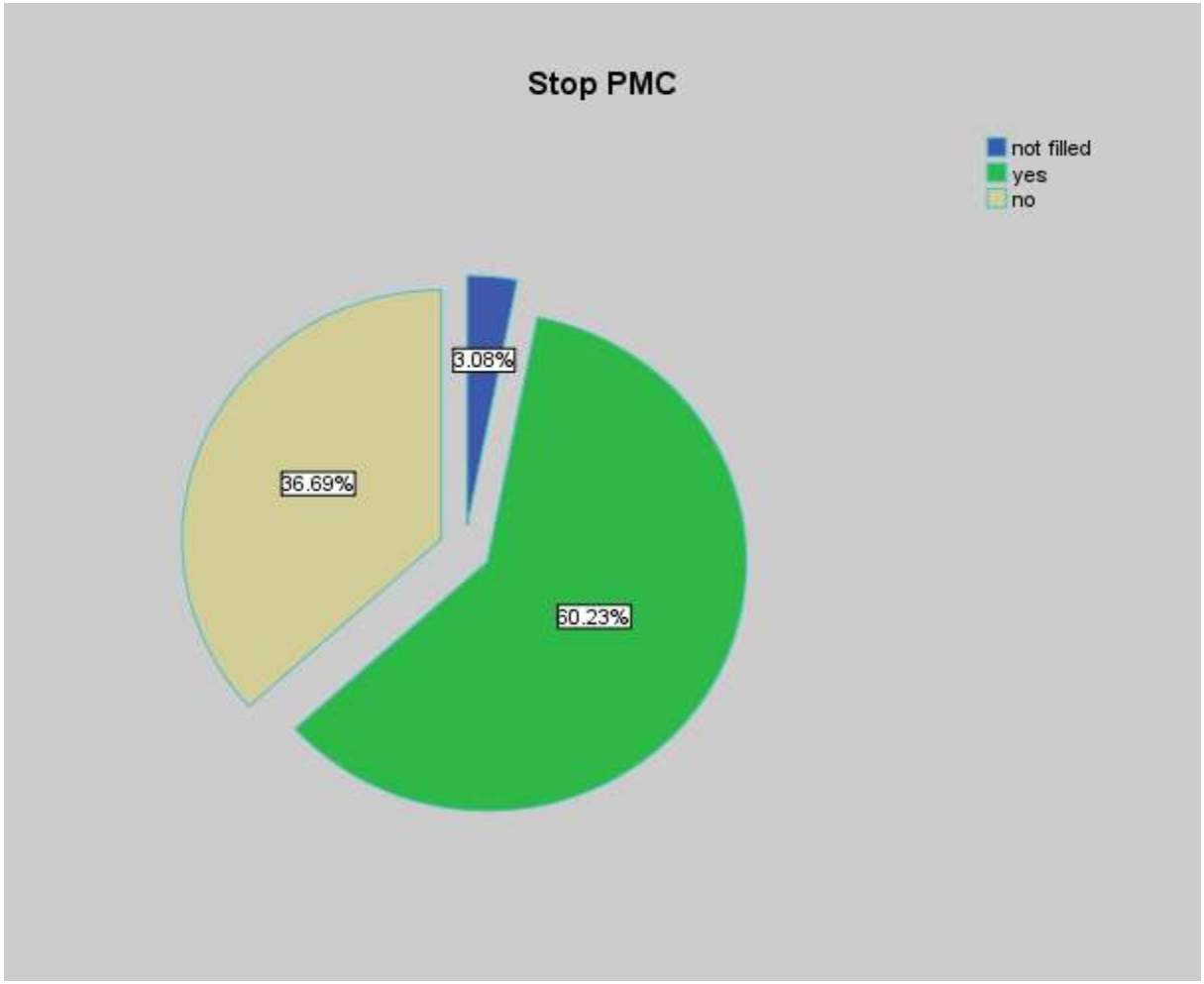
Moreover, a smaller number of individuals reported other specific health problems, such as sexual problems (15 individuals), psychological problems (15 individuals), and issues related to other organ/system problems (11 individuals).

Additionally, a considerable group of individuals (185) reported experiencing unspecified "other problems." These may encompass a wide range of health issues not explicitly mentioned in the table, and may or may not be associated with unhealthy habits.

Interestingly, a significant number of individuals (60) indicated uncertainty or lack of knowledge regarding their specific health problems. This underscores the importance of providing comprehensive sexual health education and promoting healthier habits, while addressing smoking, drinking, and drug use as risk factors for various health issues.

Overall, the table highlights the need to promote healthier habits and address unhealthy behaviors, such as smoking, drinking, oral drug use, and injected drug use, in order to mitigate health problems associated with premarital sexual contact. Comprehensive sexual health education an accessible healthcare services play a crucial role in ensuring the well-being and safety of individuals engaging in such behaviors.

Dig.5 Attitudes Towards Stopping Pre Marital sexual contact with others of STD Clinic Attendees



The pie chart presented above depicts the attitudes towards stopping premarital sexual contact (PMC) among attendees of an STD clinic. The data reveals that approximately 60% of individuals express a willingness to stop PMC, while 37% are not ready to do so. Additionally, 3% of individuals did not provide an answer to the question.

The finding that around 60% of people are open to stopping PMC suggests that they acknowledge the potential risks associated with engaging in premarital sexual activity and are willing to make changes in their behavior to mitigate those risks. This group may have a greater awareness of the importance of practicing safe sex and may be more inclined to prioritize their sexual health and well-being.

On the other hand, the presence of 37% of individuals who are not ready to stop PMC indicates that a significant portion of attendees at the STD clinic may still have reservations or personal reasons for continuing premarital sexual activity. These individuals may require additional support, education, or counseling to address their concerns, enhance their understanding of the potential consequences, and promote safer sexual practices.

The 3% of individuals who did not answer the question may have chosen not to disclose their stance on stopping PMC or may have been unsure about their position. It is important to respect individual choices and preferences while also providing them with accurate information and resources to make informed decisions about their sexual health.

These findings emphasize the importance of comprehensive sexual education, counseling, and support services to address the attitudes and behaviors surrounding PMC. By promoting open dialogue, providing accurate information, and offering guidance tailored to individual needs, healthcare professionals can contribute to fostering healthier attitudes and safer practices regarding premarital sexual contacts among individuals attending the STD clinic.

Table 8: Pre Marital sexual Duration in years along with their Marital Status

Marital status	PMC Duration in Years						Total
	<=1 year	1-2 years	2-3 years	3-4 years	4-5 years	>= 5 years	
Unmarried	189	35	32	7	7	22	292
Married	150	55	40	26	5	38	314
Separated	0	0	5	0	0	0	5
Divorced	2	0	0	1	0	0	3
Widowed	2	0	0	0	0	0	2
Total	343	90	77	34	12	60	616

The provided Table 8, provides insight into the relationship between marital status and the duration of pre-marital sexual contact, highlighting the differences in PMC patterns based on marital status.

Among the respondents, the majority were unmarried individuals, accounting for a total of 292. Among this group, the highest number of individuals (189) reported having a PMC duration of less than or equal to 1 year. The number of unmarried individuals gradually decreased as the duration of PMC increased.

In contrast, married individuals represented a total of 314 respondents. The distribution of PMC duration among married individuals was relatively more evenly spread across the different time intervals, with the highest number of individuals (55) having a PMC duration of 1-2 years.

Only a small number of respondents were classified as separated (5), divorced (3), or widowed (2), indicating a smaller representation of these marital statuses in the dataset.

This analysis provides insight into the relationship between marital status and the duration of pre-marital sexual contact, highlighting the differences in PMC patterns based on marital status.

In 292 of unmarried individual 65% of people were in PMC duration 1 year.out of 314 Married individual 48% of people had PMC duration of 1 year. The individual who separated from their marriage life had PMC duration of 1-2 years.

This data suggests that the majority of respondents were unmarried individuals who engaged in pre-marital sexual contact. The duration of PMC varied among both unmarried and married individuals, with shorter durations being more prevalent among unmarried individuals. The distribution of PMC duration was relatively more evenly spread among married individuals.

4. RESULTS

- The study found that the primary motivations for engaging in premarital sexual contact (PMC) among participants were enjoyment (43%) and curiosity (30%). These findings underscore the importance of comprehensive sexual education and access to information about safe practices to promote responsible decision-making regarding premarital sexual activity.
- The analysis of results indicates that vaginal intercourse is the most prevalent type of sexual activity, followed by anal intercourse. The frequency of sexual activities declines with increasing age, with individuals aged 21-30 being the most sexually active group.
- Regarding condom usage in the STD clinic Attendees The Results indicates that 76% of individuals attending the STD clinic reported using condoms, highlighting a significant proportion practicing safe sex. However, the presence of a 22% non-usage rate and 2% unawareness emphasizes the need for continued education and promotion of condom usage to ensure comprehensive protection against STDs.
- The results indicates that the majority of males (84.4%) reported their first sexual partner as female, while a smaller proportion (14.3%) reported their first sexual partner as male. Among females, the majority (89.8%) reported their first sexual partner as male, and none reported their first sexual partner as transgender.
- The majority of respondents (60%) engaged in sexual activity at either their own home or their partner's home, indicating a preference for familiar and private environments. However, a significant proportion of individuals (15%) reported using alternative locations such as lodges, hotel rooms, and occasionally public places like parks. These findings provide insights into the preferences and behaviors surrounding the choice of sexual activity settings, highlighting factors such as privacy, convenience, and personal preferences.
- The results indicate that approximately 33% of individuals who do not use condoms have been diagnosed with STDs, highlighting a higher risk of contracting sexually transmitted infections. Furthermore, 7% of individuals have non-curable STDs and 6% have been diagnosed with HIV/AIDS, emphasizing the need for comprehensive sexual education and prevention strategies to reduce the prevalence of these infections.

- The results highlight a higher prevalence of HIV/AIDS among individuals aged 21-30 after pre-marital sexual contact (PMC), emphasizing the importance of prevention and awareness efforts. Additionally, addressing sexually transmitted diseases (STDs/VDs) and genital infections among individuals in the 21-30 age group is crucial. Comprehensive support for sexual and psychological problems after PMC can contribute to overall well-being.
- Males tend to engage in pre-marital sexual contact for a longer duration compared to females, with approximately 55% having a duration of nearly 1 year and 10% continuing for more than 5 years.
- Among males, attitudes towards premarital sex vary based on place of residence, with higher acceptance observed in urban areas and more disapproval in rural areas. Among females, a significant number find premarital sex acceptable, particularly in urban areas, while a notable number express disapproval, especially in rural areas.
- Health problems after Pre Marital sexual contacts (PMC) are reported among individuals with both healthy and unhealthy habits, including HIV/AIDS, STD/VDs, genital infections, sexual problems, and psychological issues. Unhealthy habits are associated with a higher occurrence of other health problems after PMC, emphasizing the importance of interventions and awareness campaigns to address these issues. Comprehensive education and promotion of healthy habits can help prevent and manage health problems related to PMC.
- Approximately 60% of STD clinic attendees express a willingness to stop premarital sexual contact, highlighting their awareness of associated risks and readiness to make changes. However, 37% are not ready to stop, indicating the need for additional support and education.
- The majority of unmarried individuals (65%) and married individuals (48%) had a pre-marital sexual contact duration of 1 year. Overall, the data indicates that pre-marital sexual contact duration varies between different marital statuses, with shorter durations being more common among unmarried individuals.

5. CONCLUSION

The study conducted at Rajiv Gandhi Memorial Government Hospital, analyzed 616 attendees at the STD clinic, On the Basis of the Study revealing a gender disparity with 92% being male. 47% were unmarried, while 51% were married and engaged in premarital sexual contact. Among participants, 85% preferred opposite-gender partners, and 76% reported using condoms. However, there was a 22% non-usage rate and 2% unawareness rate, indicating a need for ongoing condom education. HIV/AIDS prevalence was higher among individuals aged 21-30 after premarital sexual contact, emphasizing the importance of prevention and awareness efforts. Addressing STDs/VDs and genital infections among the 21-30 age group is crucial. Around 60% expressed a willingness to discontinue premarital sexual contact, reflecting awareness and readiness for change.

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- AWARENESS AND UTILIZATION OF FEMALE CONDOMS AMONG STREET YOUTHS IN IBADAN, AN URBAN SETTING IN SOUTH-WEST NIGERIA, OBIOMA CHUKWUDI UCHENDU,[1,&] OLUWAPELUMI ADEYERA,[1] AND EME THEODORA OWOAJE[1] ; HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC6756805/