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Assessing Knowledge Regarding The Reproductive Health Among The Adolescence

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ABSTRACT

Reproductive health is a vital component of adolescent development and overall well-being. It encompasses a state of complete physical, mental, and social well-being in all matters relating to the reproductive system. Despite its importance, many adolescents have inadequate knowledge due to cultural taboos and lack of formal education. The objectives of the study are to assess the knowledge regarding reproductive health among adolescents. and to determine the association between knowledge scores and selected demographic variables. A quantitative research approach and a descriptive non-experimental research design was employed to conduct the study. Total 200 adolescents age between 17-19 years are selected by using convenient sampling technique from the selected university. A structured questionnaire was used to collect the socio-demographic variables and to assess their knowledge on reproductive health. Out of 200 participants, 46% had average knowledge, 35% had good knowledge, and 19% had poor knowledge regarding reproductive health. Statistically significant associations were found between knowledge level and variables such as gender, academic course, residence, attendance at Reproductive health programs, and access to Reproductive Health education ($p<0.05$). The study concludes that knowledge about reproductive health among adolescents is often insufficient. Structured health education and awareness programs are necessary to promote informed and healthy behaviors in this age group.

KEYWORDS: *Assess, Knowledge, Reproductive health, Adolescence.*

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1. INTRODUCTION

Adolescence is a crucial stage in human development characterized by significant changes in physical growth, emotional maturity, and social interactions. One of the essential aspects of this phase is reproductive health, which plays a vital role in shaping the overall well-being and future health outcomes of adolescents. However, reproductive health often remains a sensitive topic, rarely discussed openly due to cultural and societal taboos. Many adolescents face challenges in accessing reliable and accurate information about reproductive health. This lack of knowledge can lead to misconceptions, risky behaviors, and negative health consequences such as early pregnancies, sexually transmitted infections (STIs), and unsafe abortions. These issues not only affect individuals but also have broader implications for public health and social development.

Globally, adolescents constitute over 1.2 billion people, with a significant proportion residing in developing nations. In India, approximately 243 million adolescents account for about 21% of the total population. Yet, despite their large representation, the reproductive health needs of adolescents are frequently overlooked.

Furthermore, external influences such as peer pressure, unregulated media content, and early exposure to sexual material without proper guidance exacerbate the problem. Adolescents often turn to the internet or peers for information, where they may encounter harmful myths for instance, the belief that contraceptives cause infertility or that HIV spreads through

casual contact. Such misconceptions can have lasting and dangerous effects.8

Adolescents represent a vital and expanding segment of the global population, bringing with them distinct health needs that warrant focused attention. Among these, reproductive health stands out as one of the most critical yet frequently neglected areas. As adolescents navigate the complex transition from childhood to adulthood, they undergo numerous physical, emotional, and psychological changes, many of which directly relate to their reproductive health. However, due to insufficient education, deeply rooted cultural taboos, and limited opportunities for open dialogue, many young people remain uninformed or misinformed about these essential topics.

Recognizing the importance of early and effective reproductive health education, global health organizations such as the World Health Organization (WHO) emphasize the need for comprehensive strategies to address the knowledge gap among adolescents. Education, awareness programs, and accessible health services can empower young people to make informed decisions and adopt healthy practices.

2. OBJECTIVES:

1. To assess the knowledge regarding reproductive health among adolescents.
2. To determine the association between knowledge scores and selected demographic variables.

3. METHODOLOGY:

The present study employed a quantitative research approach utilizing a descriptive cross-sectional research design to assess the knowledge of reproductive health among adolescents. The study was conducted in a selected university within the Vadodara District of Gujarat, targeting adolescent students between the ages of 17 to 19 years. A sample of 200 participants was recruited using a non-probability convenience sampling technique, ensuring the inclusion of those who were easily accessible and met the defined inclusion criteria. These criteria included adolescents aged 17–19 years who were available at the time of data collection and willing to participate voluntarily. Participants who were absent, unwell, or declined to participate were excluded from the study.

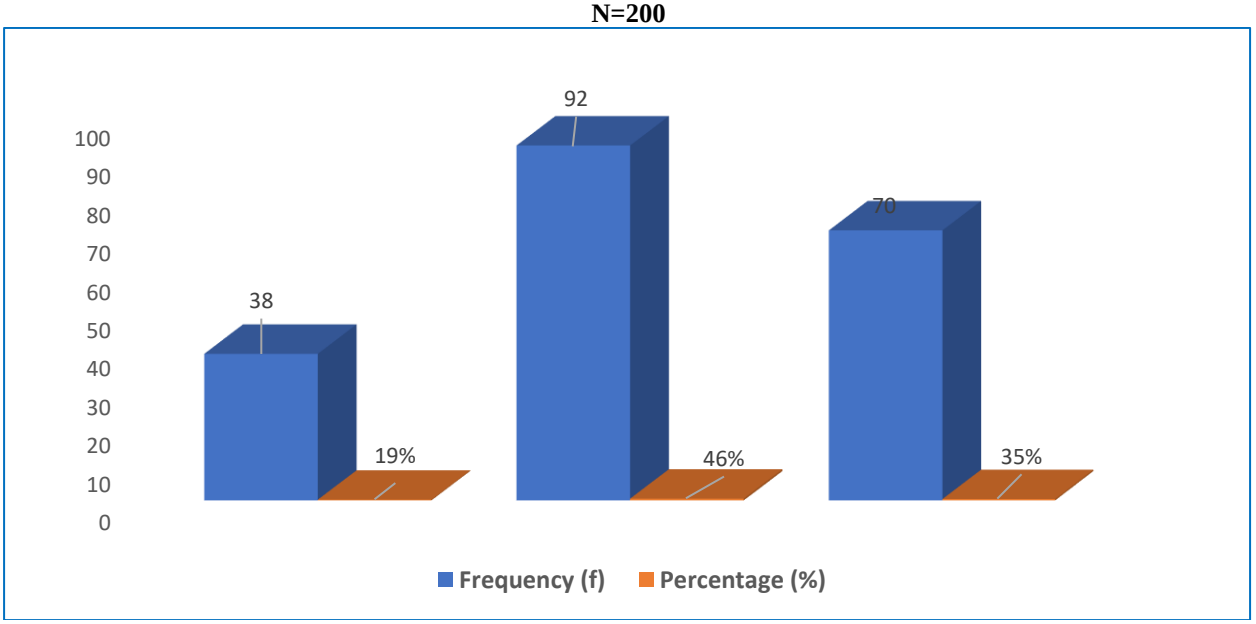
For data collection, a structured questionnaire was developed and divided into two major sections. Section A focused on gathering socio-demographic information, including variables such as age, gender, academic course and year of study, type of family, place of residence religion, monthly family income, and prior exposure to reproductive health education, whether provided at home or through school- or college-based programs. This section helped in understanding the background characteristics that might influence the participants' knowledge and awareness levels.

Section B was designed to assess knowledge related to reproductive health, specifically focusing on aspects of ovarian health. This section comprised multiple-choice questions that addressed various domains such as risk factors, signs and symptoms, diagnostic procedures, preventive measures, and possible complications associated with reproductive and ovarian health conditions. The questionnaire was validated by experts in the field to ensure content validity. After obtaining informed consent from all participants, data were collected in a structured and confidential manner. Ethical clearance was also obtained from the institutional review board prior to the commencement of the study with the approval no. PUIECHR/PIMSR/00/081734/8233. Once the data collection was completed, the responses were coded for analysis. Descriptive statistics, including frequency, percentage were used to summarize the socio-demographic characteristics and knowledge levels of the participants. In addition, inferential statistical methods, such as the chi-square test were applied to determine significant associations between participants' knowledge scores and selected demographic variables.

4. RESULTS

A total of 200 adolescents participated in the study. Regarding age, 20% of the respondents were 17 years old, 30% were 18 years old, 35% were 19 years old, and 15% were 20 years old. In terms of gender, 55% of the participants were male, while 45% were female. Concerning their course of study, 65% of the adolescents were enrolled in Engineering, and 35% were studying Law. With respect to the year of study, 27.5% of the respondents were in their 1st year, 25% in 2nd year, 30% in 3rd year, and 17.5% in 4th year. For the type of family, 60% belonged to nuclear families, 32.5% to joint families, and 7.5% to extended families. Regarding residence, 60% of the adolescents lived in urban areas, while 40% resided in rural areas. In terms of religion, 75% of the participants were Hindu, 15% were Muslim, and 10% belonged to other religions. Looking at monthly family income, 15% of the respondents reported earnings below ₹10,000, 32.5% had incomes between ₹10,001–₹25,000, 35% between ₹25,001–₹50,000, and 17.5% earned above ₹50,000. When asked about access to reproductive health (RH) education, 55% of the participants responded yes, while 45% had no access. Regarding participation in a reproductive health program, 42.5% had attended such programs, whereas 57.5% had not attended any.

Fig 1: Bar graph showing Frequency and Percentage Distribution of Knowledge Level Regarding Reproductive Health Among Adolescents
N=200



The analysis of knowledge scores revealed that out of 200 adolescents, the majority, 92 participants (46%), demonstrated an average level of knowledge regarding reproductive health, scoring between 11 and 20. This indicates that nearly half of the respondents had a moderate understanding of the subject. A considerable proportion, 70 participants (35%), scored between 21 and 30, indicating a good level of knowledge, suggesting that over one- third of the adolescents were well-informed about reproductive health. However, 38 participants (19%) had a poor level of knowledge with scores ranging from 0 to 10, reflecting a lack of adequate awareness and understanding.

The association between knowledge level and selected demographic variables was assessed using the Chi-square test with a sample size of 200 participants. The results revealed a significant association we found between knowledge level and gender, course (Engineering and Law), residence, attend awareness program, access to reproductive health education with $P<0.05$.

Table 1: Association Between Knowledge Level and Selected Sociology-Demographic Variables Using Chi-Square Test
N=200

Variable	Degree of freedom (df)	Chi-Square (χ^2)	p-value	Association
Age	1	3.28	0.070	Not Significant
Gender	1	6.15	0.013	Significant
Course (Engg/Law)	1	4.96	0.026	Significant
Year of Study	3	2.45	0.484	Not Significant
Residence	1	3.85	0.049	Significant
Religion	2	1.45	0.485	Not Significant
Attended Awareness Program	1	7.02	0.008	Significant
Access to RH Education	1	8.35	0.004	Significant

Access to RH Education	1	8.35	0.004	Significant

5. DISCUSSION

The findings of the present study reveal that among 200 adolescent participants, 46% exhibited average knowledge, 35% demonstrated good knowledge, and 19% had poor knowledge regarding reproductive health. These results indicate that while a majority of adolescents possess a moderate to satisfactory understanding of reproductive health concepts, a considerable proportion still lack essential knowledge, thereby underscoring the need for comprehensive educational interventions.

A statistically significant association was found between knowledge levels and several socio-demographic factors, including gender, academic course, place of residence, participation in awareness programs, and access to reproductive health education. This suggests that these variables play a critical role in shaping adolescents' understanding of reproductive health, and targeted educational strategies based on these determinants may help bridge existing knowledge gaps.

The findings are consistent with several national and international studies, highlighting similar patterns in knowledge distribution and the influence of demographic variables. For instance, a study conducted by Suman Khatkar (2021) found that 53.33% of adolescent girls had a low level of knowledge, while 46.67% had an average level, and notably, none had a very low level of knowledge. The current study, however, highlights that awareness programs and institutional education significantly impact adolescents' understanding of reproductive health, reinforcing the importance of structured school- and college-based reproductive health education. Adolescents who reported exposure to health education sessions or awareness campaigns showed higher knowledge levels compared to their peers who lacked such exposure. The study also examined how demographics variables influenced adolescents' knowledge levels. A clear correlation was observed between reproductive health awareness and factors such as age, parental education, school type, and residential setting. Older adolescents (aged 16–18 years) demonstrated significantly higher levels of knowledge compared to their younger counterparts (aged 13–15 years), likely due to greater academic exposure and maturity. Participants whose parents had completed secondary or higher education were also better informed, suggesting that family background plays a vital role in shaping attitudes and knowledge about reproductive health. Adolescents attending private or urban schools were generally more knowledgeable than those in government or rural schools, a trend supported by the findings of Kumar et al. (2020), who reported 25% higher awareness among urban adolescents. Similarly, Josephine et al. (2021) highlighted that adolescent from educated households or those with access to digital platforms demonstrated better reproductive health literacy. These results are in alignment with broader regional and global findings.

6. CONCLUSION

The study concludes that reproductive health knowledge among adolescents is inadequate for many, particularly those from rural backgrounds or without access to educational programs. Gender, course of study, and prior exposure to RH education significantly influence knowledge. Effective adolescent-centered health education programs and awareness campaigns are needed to promote informed decisions and healthy behaviors.

7. CONFLICT OF INTEREST AND FUNDING

The research study has no any conflict of Interest and the research study was entirely self-funded

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