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# Adolescent Sexual Health in Mizoram a School-Based Assessment of Knowledge and Attitudes.

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**ABSTRACT**

Adolescence is a crucial developmental stage characterized by various physical, psychological, emotional, and behavioral transformations. Alarmingly, it is estimated that 21 million girls aged 15-19 in developing countries become pregnant annually, with 12 million giving birth. In light of these challenges, a study was conducted in Mizoram to evaluate the knowledge and attitudes related to sexual health among adolescents in selected schools.

The research aimed to gauge not only the level of knowledge and attitudes towards sexual health but also the correlations between these factors and specific demographic characteristics. Utilizing a quantitative, non-experimental research design, the study employed a non-probability purposive sampling method to select 100 students from the Falkawn and Muallungthu regions. A structured questionnaire was administered to gather data.

The findings revealed that 95.45% of students aged 11-13 exhibited poor knowledge, while 44.2% of those aged 14-16 demonstrated average knowledge. In contrast, an impressive 87.5% of students aged 17-19 showed excellent knowledge of sexual health. Regarding attitudes, 67% of students maintained a neutral stance, 31% exhibited a positive attitude, and only 2% expressed negative views towards sexual health. Notably, the study identified a weak positive correlation between knowledge and attitudes towards sexual health among the adolescents. Significant associations were observed between knowledge levels and both academic class (significant at $p<0.01$) and the educational background of mothers (significant at $p<0.06$). The overall findings suggest that incorporating sexual health education into the school curriculum could enhance adolescents' knowledge and foster a more positive attitude toward sexual health issues.

**Keywords:** Adolescence, physical, psychological, emotional, behavioral changes, Mizoram

## 1. Introduction:

Adolescence is a significant period of one's life and the individuals entering the adolescent phase will undergo physical, psychological, emotional and behavioural changes. It is estimated that 21 million girls between the ages of 15-19 in developing countries become pregnant every year and 12 million give birth. The World Health Organization states that one in twenty adolescents is projected to contract a STI per year. So, an adolescent should have knowledge about sex education in order to handle the changes undergoing in an adolescent phase. Therefore, sex education plays an important part in adolescent life.

The purpose of sexual health is the enhancement of life and personal relations, normally counselling and care related to reproduction and sexually transmitted diseases. Counselling and creating awareness among people about reproductive organs, adolescence and associated changes, safe and hygienic practices, STDs including AIDS etc is the primary step toward sexual health. It also addresses the problem like menstrual irregularities, pregnancy related aspects delivery, MTPSTD, etc. It also means empowering young people to know and exercise their rights- including the rights to delay marriage and the rights to refused unwanted sexual advances.

## 2. Review of related literature:

**K. Chitralekha, Guite Z and Kula Bidhu H (2018)** conducted a study aims to analyze the sexual behavior pattern of young people aged 10 to 24 years attending sexually transmitted infection (STI) clinic in a tertiary health- care center. Manipur, over a five-year period. A retrospective cross-sectional study was used for assessing adolescents and young people between 10 and 24 years presenting to STI clinic as a part of their risk assessment in the department of dermatology in a tertiary health-care center. All clients attending the sexually transmitted disease (STD) clinic over the period of 5 years from January 2012 to December 2016 were included in the study. Adolescents and youth comprised a total of 17.13% (165) among 963 STI clinic attendees. Around 42.27% (78) were students at various levels of education. Among the attendees, 64.24% (106) were single and 35.75% of clients. The onset of sexual activity earlier in females with 24.6% having sex before the age of 18 years as compared to 15.4% in males. The average number of sex partners was more in males.

**Royal J, Sharma V Fatima J (2018)** conducted a study to access the knowledge and attitude regarding sexual health among adolescents in selected school of New Delhi October 2018. A quantitative and non-experimental research approach with a descriptive survey design was adopted for the study. Sample consisted of 100 adolescents aged 13 to 16 years studying in 9 to 11 class. Tagore Senior School, New Delhi, selected using systematic random sampling technique. Results showed that approximately 50% had good knowledge, 32% were having fair knowledge and 189% were having poor knowledge regarding sexual health. More than half of the adolescent had unfavorable attitude regarding sexual health. The study revealed that there was significant relationship between knowledge and demographic profiles of the study subject's i.e. religion, father's education status and mother's education status.

**Jemimah VR Martis M, Shafqat, Subbiah N (2022)** conducted a study about sexual and reproductive health in Bhopal (Madhya Pradesh) in the year 2022. They conduct a study to access adolescent's knowledge and attitude towards sexual and reproductive health among students in the 9$^{th}$ to 12$^{th}$ grades (n=322) in Bhopal district, Madhya Pradesh. Data was collected in schools from adolescents aged 14 to 18 years using researcher developed structured questionnaire. The finding revealed that the majority (50.9%) of participants had poor knowledge, 34.5% showed moderate knowledge and 14.6 % exhibited good knowledge. About 60% of the participants expressed a favorable attitude toward sexual and reproductive health. The relationship between knowledge and attitude was positive but weak. Most (69.8%) of adolescents who studied in co-ed schools had poor knowledge but a favorable attitude while 50% of rural and urban adolescent had poor knowledge levels, most of the rural adolescents had favorable attitude towards sexual and reproductive health.

**Renuka Raj Y, Najammananar I Dr Dillepa S. Natekar (2024)** conducted knowledge and attitude regarding sexual and reproductive health among adolescent girls 12-19 years of Laximi Raganath High School Kelavadi, Balgalkot, in February 2024. Descriptive study design was used in this study. Purposive sampling was used to select the high school and stratified random sampling technique was used to select samples for the study. The tool used for the study was structured knowledge questionnaire to access the knowledge and five - point likert scale to access the attitude regarding sexual and reproductive health. The mean score of the knowledge is 7.733 and attitudes are 34.933. Area wise analysis of knowledge score was done. The correlation coefficient of knowledge and attitude is (0.60) which is positively correlated.

**Objectives of the study:** Among adolescent groups -

1. To assess the knowledge and attitude regarding sexual health.
2. To find out the association between knowledge and attitude regarding sexual health.
3. To find out the association between knowledge and attitude regarding sexual health and selected demographic variables.

**Hypothesis:**

- $H_{01}$: There is no significant correlation between the level of knowledge and attitude regarding sexual health among adolescents.
- $H_{11}$: There is a significant positive correlation between the level of knowledge and attitude regarding sexual health among adolescents.
- $H_{02}$: There is no significant association between the knowledge level regarding sexual health among adolescents and selected demographic variables (e.g., age, gender, education level, place of residence).
- $H_{12}$: There is a significant association between the knowledge level regarding sexual health among adolescents and selected demographic variables.
- $H_{03}$: There is no significant association between the attitude regarding sexual health among adolescents and selected demographic variables.
- $H_{13}$: There is a significant association between the attitude regarding sexual health among adolescents and selected demographic variables.

**Methodology of the study:**

**Study approach and design:** A non-experimental, cross-sectional study design was adopted.

**Setting of the study**: Four selected middle and high schools in Falkawn and Muallungthu.

**Population:** High school students.

**Sampling:** Non-probability, purposive sampling technique.

**Sample size**: 100.

**Tools of the study:**

**Section A: Demographic variables:** unstructured questionnaire with 7 items.
**Section B**: 5 point Likert scale to assess attitude regarding sexual health, comprising of 5 items.
Reliability Split half r= 0.8
**Section C:** Structured knowledge questionnaire comparing 16 multiple-choice items.
Reliability KR-20 = 0.73
**Validation:** The tool was validated by nine experts from various nursing colleges in Mizoram. The content validity index was 95%, modifications incorporated based on feedback.

**Data collection procedure:**

Written informed consent was obtained, participants were given 30 minutes to complete the questionnaire, Health education on sexual health was provided after data collection.

**Ethical consideration:** Written ethical clearance was obtained from the Institutional Ethics Committee of Mizoram College of Nursing. Written informed consent was obtained.

**Conflict of interest:** Non declared

**Funding:** No funding was received.

**Data analysis:** Descriptive statistics, Pearson's correlation coefficient, the Chi-square ($\chi^2$) test, Significance at $p<0.05$ using SPSS.

**Findings**

**Table 1**. Demographic Characteristics of Student Participants N=100

| Characteristic | Category | Percentage |
|---|---|---|
| **Age Group** | 14–16 years | 70 |
| | 17–19 years | 8 |
| | Other / Unspecified | 22 |
| **Education Level** | High School | 58 |
| | Middle School | 42 |
| **Gender** | Female | 51 |
| | Male | 49 |
| **Father's Education** | Undergraduate | 77 |

| Characteristic | Category | Percentage |
|---|---|---|
| | Postgraduate | 23 |
| **Mother's Education** | Undergraduate | 87 |
| | Postgraduate | 13 |
| **Parental Employment** | Father Employed | 77 |
| | Mother Employed | 60 |
| **Family Size** | 5–8 members | 60 |
| | 9–12 members | 6 |
| | Other / Unspecified | 34 |

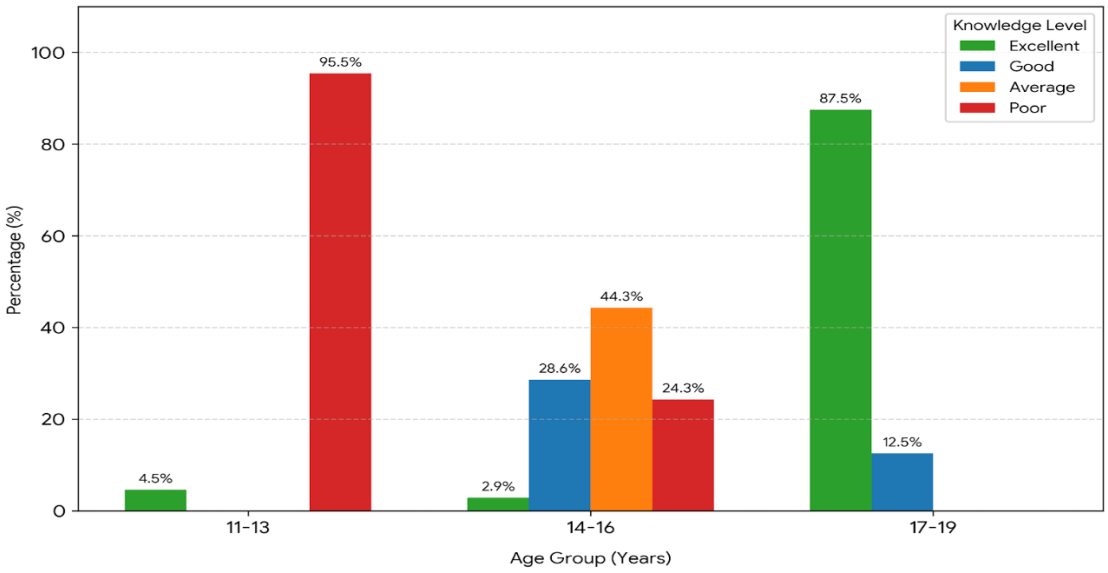


Fig 1 Knowledge regarding sexual health

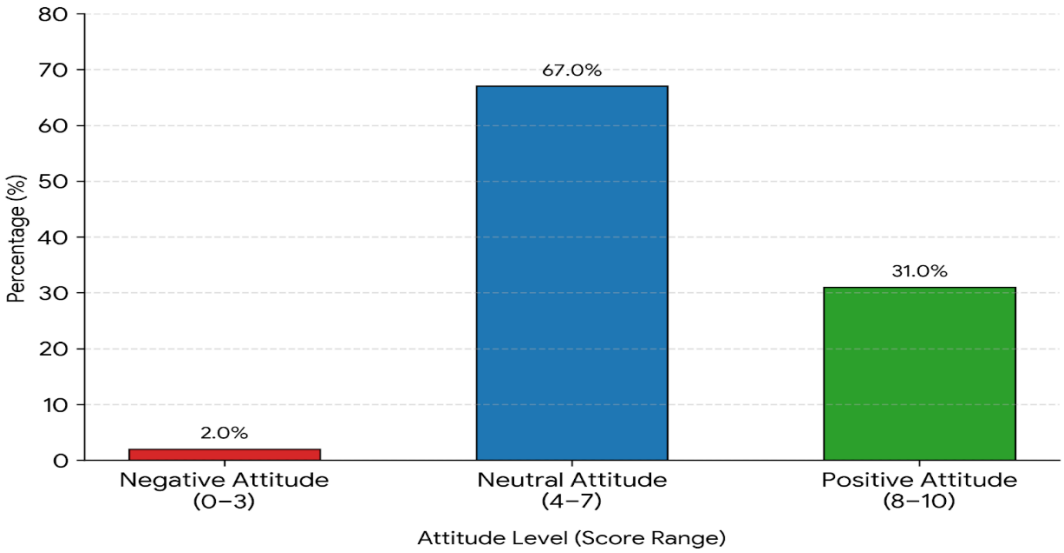


Fig 2 Overall distribution of participants' attitude levels regarding sexual health

Table 2 Pearson Product-Moment Correlation Between Knowledge and Attitude Scores Regarding Sexual Health

| **Variable** | **Knowledge Score** | **Attitude Score** |
|---|---|---|
| **Knowledge Score** | **1.000** | **0.392*** |
| **Attitude Score** | **0.392*** | **1.000** |

***$H_{O1}$ is rejected**

Table 3. Statistically Significant Demographic Associations with Knowledge and Attitude Scores N= 100

| Dependent Variable | Demographic Variable | Chi-Square ($\chi 2$) | Degrees of Freedom (df) | p-value | Statistical Inference |
|---|---|---|---|---|---|
| Knowledge Level | Class Level | 11.07 | 3 | 0.011* | Significant ($H_{02}$ Rejected) |
| | Mother's Education | 12.39 | 3 | 0.006* | Significant ($H_{02}$ Rejected) |

| Dependent Variable | Demographic Variable | Chi-Square ($\chi 2$) | Degrees of Freedom (df) | p-value | Statistical Inference |
|---|---|---|---|---|---|
| Attitude Level | Class Level | 11.63 | 2 | 0.003* | Significant ($H_{03}$ Rejected) |

*Statistically significant at the $p < 0.05$ level.

Out of all demographic variables analyzed, only Class Level and Mother's Education demonstrated statistically significant associations with participants' outcomes. Educational level (Class) significantly influenced both knowledge ($\chi^2 = 11.07, p = 0.011$) and attitude ($\chi^2 = 11.63, p = 0.003$), showing a direct trend toward higher sexual health literacy and positive attitudes as students progress to higher school grades. Additionally, Mother's Education was significantly associated with higher knowledge scores ($\chi^2 = 12.39, p = 0.006$). All other demographic factors (Age, Gender, Father's Education, and Type of Family) yielded non-significant associations ($p > 0.05$) across both knowledge and attitude domains.

## 3. Discussion:

The baseline evaluation revealed a clear developmental progression in sexual health knowledge, rising from predominantly poor knowledge among early adolescents aged 11–13 years (95.45%) to excellent levels among older participants aged 17–19 years (87.50%), reflecting the natural accumulation of health literacy through cognitive maturity and secondary school curricula. While overall attitudes were largely neutral (67.0%), a statistically significant, moderate positive correlation emerged between knowledge and attitude scores ($r = 0.392$), confirming that factual understanding serves as an essential baseline for fostering constructive sexual health perspectives. Inferential bivariate analysis further identified **Class Level** and **Mother's Education** as the sole statistically significant demographic determinants; higher grade levels strongly predicted superior knowledge ($\chi^2 = 11.07, p = 0.011$) and positive attitudes ($\chi^2 = 11.63, p = 0.003$), while maternal educational attainment significantly enhanced participant knowledge scores ($\chi^2 = 12.39, p = 0.006$). Conversely, variables such as age, gender, father's education, and family type yielded non-significant associations ($p > 0.05$). Together, these findings demonstrate that institutional schooling and maternal literacy exert a far stronger influence on adolescent health perspectives than structural household dynamics, highlighting an urgent need to introduce age-appropriate, comprehensive sexual health curricula earlier in middle school education.

## References:

1. Balaji, S. M., & Chakravarthi, M. A. (2021). Knowledge, attitude and perception of sex education among school going adolescents in urban area of Chennai, Tamil Nadu. Journal of Family Medicine and Primary Care, 10(4), 1628–1633. https://pmc.ncbi.nlm.nih.gov/articles/PMC8132756/
2. Chandra-Mouli, V., Ferguson, B. J., Plesons, M., Paul, M., Chalasani, S., & Amin, A. (2017). Improving adolescent sexual and reproductive health: A systematic review of potential interventions. Journal of Adolescent Health, 61(4), S1–S10. https://www.sciencedirect.com/science/article/pii/S1054139X16301689

3. Finer, L. B., Darroch, J. E., & Singh, S. (1999). Sexual partnership patterns as a behavioral risk factor for sexually transmitted diseases. Perspectives on Sexual and Reproductive Health, 31(5), 228–236. https://www.guttmacher.org/journals/psrh/1999/09/sexual-partnership-patterns-behavioral-risk-factor-sexually-transmitted
4. Jiménez-García, I., García-Pozo, A., & Fernández-Sánchez, J. (2022). Sexual health among youth in residential care in Spain: Knowledge, attitudes and behaviors. International Journal of Environmental Research and Public Health, 19(19), 12578. https://pubmed.ncbi.nlm.nih.gov/36232248/
5. Lee, S. H., & Yeo, K. J. (2022). Sexual and reproductive health knowledge among primary school students in Malaysia. Journal of School Health, 92(9), 859–867. https://pubmed.ncbi.nlm.nih.gov/35573611/
6. Martis, J. V. R., Shafqat, N., & Subbiah, N. (2022). Adolescents' knowledge and attitude towards sexual and reproductive health in Bhopal, Madhya Pradesh [Unpublished manuscript or conference presentation]. ResearchGate. https://www.researchgate.net/publication/379005860_Adolescents_Knowledge_and_Attitude_towards_sexual_and_Reproductive_Health_in_Bhopal_Madhya_Pradesh
7. Ministry of Education, Government of India. (n.d.). Reproductive health [Chapter 4, Class 12 NCERT Biology]. SATHEE ICAR. https://icar.iitk.ac.in/sathee-icar/student-corner/ncert-books/class-12/nb-bio-12/bio-12-chapter-4-reproductive-health/