IJPSR (2025), Volume 16, Issue 8 **(Research Article)**

INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES AND RESEARCH

Received on 22 March 2025; received in revised form, 07 April 2025; accepted, 15 April 2025; published 01 August 2025

PERCEPTION ABOUT HEALTH STATUS, SELF MEDICATION PRACTICE AND QUALITY OF LIFE OF ADOLESCENTS IN WEST TRIPURA: A CROSS-SECTIONAL STUDY

Kunal Chakraborty [* 1], Ananya Chakraborty [2] and Uttam Kumar Bhattacharya [3]

Department of Community Medicine [1], Department of Ophthalmology [3], Agartala Government Medical College, Agartala - 799006, Tripura, India.
Department of Pharmacology [2], Vydehi Institute of Medical Sciences and Research Centre, Bengaluru - 560066, Karnataka, India.

Keywords:

Adolescents, Health status, Quality of Life, Factors, West Tripura, Health problems

Correspondence to Author:
Dr. Kunal Chakraborty

Associate Professor,
Department of Community Medicine,
Agartala Government Medical College, Agartala - 799006, Tripura, India.

E-mail: drkunalchakraborty@gmail.com

ABSTRACT: Background: The study has been carried out to assess the perception health status, self-medication practice and quality of life of adolescents in West Tripura and to find out the factors affecting them. **Methods:** A cross-sectional study has been carried out in West Tripura district. The students of all the schools of randomly selected sub-division were the study population. For data collection, SF-36 item short item Health Survey instrument was used. Data were analyzed using descriptive statistics, chi-square test, multiple linear regression, one sample t test, independent sample t test and ANOVA test. For self medication including illicit drug use separate tool was used. **Results:** 49.1% of adolescents were found to have adequate health status in this study. Quality of life was found to be high in 44.4% of adolescents. Age, gender and study class of adolescents was found to be significantly associated with their health status. Mean score was found to be significantly different between different father: s occupation and different study classes. **Conclusion:** The study concludes that that the perception about health status was adequate and quality of life was high in 49.1% and 44.4% of study participants. 54.7% of the study participants practiced self medication. Age, gender and study class were found to be significantly associated with the health status. Mean score of health status was found to be significantly different between various study classes and between service and non-service type of occupation.

INTRODUCTION: Adolescence (from Latin adolescere to mature") is a transitional stage of physical and psychological development that generally occurs during the period from puberty to adulthood. Age provides only a rough marker of adolescence. The World Health Organization definition officially designates adolescence as the phase of life from 10 to 19. It is the healthiest period of life but full of different problems.

QUICK RESPONSE CODE

DOI: 10.13040/IJPSR.0975-8232.16(8).2398-02

This article can be accessed online on www.ijpsr.com

DOI link: https://doi.org/10.13040/IJPSR.0975-8232.16(8).2398-02

Rapid physical, social, psychological development with sexual maturity and onset of sexual activity is the unique characteristics of this period. Transition from total socioeconomic dependence to relative independence is one of the major traits of that stage of life. Experimentation and development of adult mental process and adult identity are hallmarks of this period. 1/5 th of total world population are adolescents.

85% of them live in Developing countries. 22.8% of Indian population are adolescent [1]. Investing in approximately 253 million adolescents is the best way to leverage the nation's competitive advantage its "demogeaphic dividend [2]." Though they are thought to be the healthiest stage of human life, but

this stage is full of different problems of diverse origin like biomedical illness, consequence of risk-taking behaviour, substance abuse, STI, nutritional problems, reproductive health problems, mental health problems.

Quality of life (QOL) is defined as," an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns [3]." The health status of adolescents is vital because it is one of the most important determinants of development which can give them opportunity to engage fully in the building of the nation. Health status is one of the important determinants of quality of life [3].

From their different health problems unique for this age bracket, they often practice self-medication which further affects their health. Sometimes from curiosity, they become indulge in usage of illicit drugs. From that, they become addicted to drug usage. Therefore, it is very pertinent to know the health status of the adolescents of West Tripura and their quality of life. It is also vital to know the factors affecting the health status of the adolescents in west Tripura district [4].

Therefore, the present study has been carried out to assess the health status, self medication practice to reverse the negative health to positive health and the quality of life of the adolescents and to find out the factors affecting the health status. The study findings will be helpful for policy makers and health planners of the state and the country to find out the gap [5] between the expected and observed health status of adolescents and the factors responsible for that.

MATERIALS AND METHODS:

Study Design: It was a descriptive cross-sectional study carried out in west Tripura district for twenty days from 3rd June' 2024.

Study Setting: The study was conducted in west Tripura which is the most populous district of the state and the capital, Agartala, it's headquartered. There are three sub-divisions in west Tripura namely Sadar, Mohanpur and Jirania.

Study Population: All the adolescents of west Tripura district who were residing in the district for a minimum of one year period and were styding in the schools [6] of the district were the study population.

Inclusion Criteria: Those adolescents gave assent to participate in the study were included.

Exclusion Criteria: Adolescents who refused to participate in the study or were absent on the day of data collection were excluded.

Sample size and Sampling: Assuming the prevalence of adolescent health status is 76.2%, precision 5%, sample size for his study comes to 278. The sampling was done by multistage random sampling method. West Tripura district has been sub divided into three sub-divisions.

By Simple random sampling, one subdivision (Mohanur) has been selected. Samples have been taken from all the schools of Mohanpur sub-division by probaability proportionate to size (pps) technique, then by simple random sampling.

Study Tool: 36 item Short Form Survey instrument (SF-36) [7] has been used as study tool. It is comprised of thirty-six questions covering eight domains of health.

Out of 36 questions, 27 were related to health status and the remaining 9 questions were about quality of health of adolescents. For self medication including illicit drug use separate tool was used. These tools have been validated in the local context. Responses were given in the 5 points likert scale.

Data Collection: Data collection was done by visiting all the schools of Mohanpur sub-division.

Statistical Analysis: Scoring was done for each response of all the study participants. Score 100, 75, 50, 25 and 0 were given for responses indicating highest to lowest health status or quality of life [8] respectively.

So, the maximum and minimum possible score were 3600 and 0. Data were analyzed using descriptive statistics like percentage, mean, median and test of significance like chi square test, linear regression, independent sample t test and ANOVA test. A p value less than 0.05 was considered statistically significant.

RESULTS:

TABLE 1: DISTRIBUTION OF STUDY PARTICIPANTS ACCORDING TO GENDER

Gender	Number (N=278)	Percentage (%)
Male	96	34.5
Female	182	65.5

The table shows that maximum of the study participants female.

TABLE 2: DISTRIBUTION OF STUDY PARTICIPANTS ACCORDING TO STUDY CLASS

Class	Number (N=278)	Percentage (%)
5-8	93	33.5
9-12	185	66.5

The table shows that maximum of the study participants was studying in class 9-12.

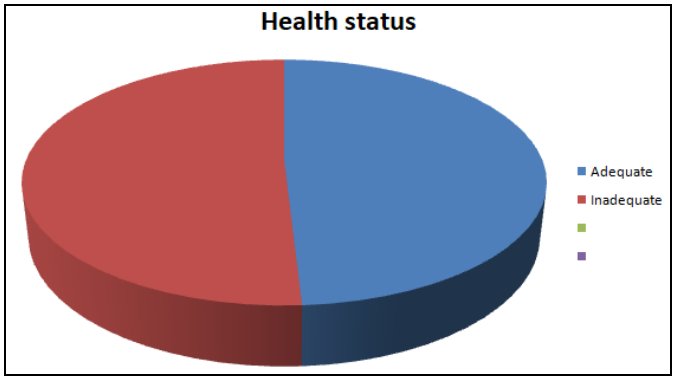

FIG. 1: HEALTH STATUS OF ADOLESCENTS IN WEST TRIPURA DISTRICT. This figure shows that health status was almost at the same level for both the categories.

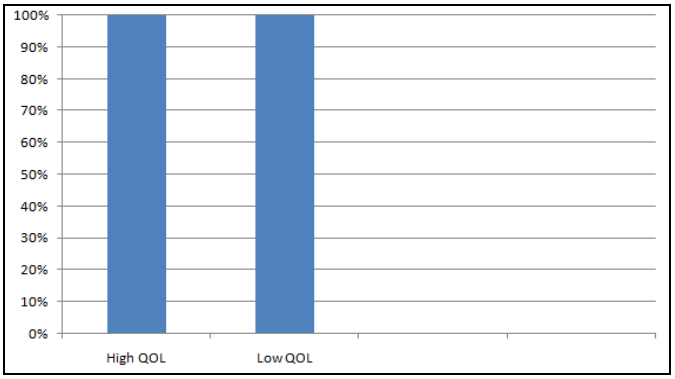

FIG. 2: QUALITY OF LIFE OF ADOLESCENTS IN WEST TRIPURA DISTRICT. This figure shows that Quality of life was at almost same level for both the categories.

QOL Decision:

TABLE 3: DISTRIBUTION OF ADOLESCENTS ACCORDING TO THEIR PRACTICE OF SELF MEDICATION

Self medication practice	Number (N)=278	Percentage (%)
Never	152	54.7
Sometimes	126	45.3

The table shows that the majority of the study participants never practiced self medication.

TABLE 4: SHOWING ASSOCIATION BETWEEN AGE OF STUDY PARTICIPANTS AND THEIR HEALTH STATUS

Age/Health status	adequate	inadequate		X2=0.000
11-15 years	87	48	135	
15-17 years	26	38	64	
17-19 years	19	51	70	
	132	137	269	

The table shows that age of the study participants was significantly associated with their health status.

TABLE 5: SHOWING ASSOCIATION BETWEEN STUDY CLASS OF STUDY PARTICIPANTS AND THEIR HEALTH STATUS

Study class/Health status	adequate	inadequate		X2=0.000
5-8	70	21	91	
9-10	43	51	94	
11-12	19	65	84	
	132	137	269	

The table shows that study class of the study participants was significantly associated with their health status.

TABLE 6: MULTIPLE LINEAR REGRESSION SHOWING THE RELATIONSHIP BETWEEN THE STUDY VARIABLES AND HEALTH STATUS SCORE

Study variables	B	Standard error	Beta	t	P value
Age	75.359	55.459	-.146	-1.359	.175
Gender	-137.845	50.673	-.153	-2.720	.007

Class	338.977	58.110	.631	-5.833	.000
Occupation	-1.864	20.3664	-.005	-;092	.927
Income	24.698	29.783	-..o45	-.829	0408
Religion	23.069	74.582	.017	.309	0.757

The table shows that gender and study class can predict the health status score of adolescents independently.

TABLE 7: ONE SAMPLE T TEST SHOWING DIFFERENCES IN MEAN SCORE OF HEALTH STATUS OF STUDY PARICIPANTS AND POPULATION MEAN

	Number (N)	Mean	SD	SEM
Score	278	2502.774	429.288	25.747

	t	df	Sig (2 tailed)	MD	Lower	Higher
Score	97.206	277	0.000	2502.774	2452.091	2533.452

The table shows that the mean score of health status was significantly different from the population mean.

TABLE 8: INDEPENDENT SAMPLE T TEST SHOWING DIFFERENCES IN MEAN SCORE OF HEALTH STATUS OF STUDY PARICIPANTS AND BETWEEN SERVICE AND NON-SERVICE TYPE OCCUPATION

Occupation	Mean score	SD	SEM	tvalue	Df	P-value
Service	2607.762	360.967	58.557	2.095	104	0.039
Non-service	2437.873	420.622	51.008			

The table shows that the mean score of health status was significantly different between service and non-service type of occupation of fathers.

TABLE 9: ANOVA TEST SHOWING DIFFERENCES IN MEAN SCORE OF HEALTH STATUS OF STUDY PARICIPANTS AMONG THREE STUDY CLASSES

ANOVA Test:

Between Study Classes:

Total score	Mean square	F	Sig
Between groups (Combined)	5647324.739	39.067	0.000

The table shows that the mean score of health status was significantly different among the study classes.

DISCUSSION: The study was conducted after visiting all the schools of the selected subdivision of Mohan pur) of West Tripura District. Our study finding of the level of adolescent health in West Tripura district was higher than that of the country which was obtained from systematic review and meta-analyses [9]. Perception about health status and quality of life of adolescents were similar (49.1% and 44.4%). This finding is in line with other studies describing health as an important determinant of quality of life [10]. Age, gender, study classes, occupation, income of parents were found to be significantly associated with the health of the adolescents which is in line with findings of other studies [11, 12, 13, 14].

About one-fourth of our people are adolescents. It is evident from the study that health status and quality of life of adolescents were significantly associated. It means that by ensuring their health status, we can optimize their quality of life. This is in line with other studies [15, 16]. Three domains of health (Physical, Psychological, social) and perception about their interference in daily activities were measured objectively by giving score for each item. These increased the validity of measurement of self-rated scales. Application of regression analysis enhanced the precision of the study.

The study inferred that by addressing the socio-demographic factors, we can not only improve the health status of the adolescents but can also give them high quality of life which is very much pertinent for a country with a vision to be a developed nation within 2047.

CONCLUSION: The study concludes that that the perception about health status was adequate, and quality of life was high in 49.1% and 44.4% of study participants respectively. 54.7% of the study participants practiced self medication to get rid of these health problems. Age, gender and study class were found to be significantly associated with health status. Mean score of health status was found to be significantly different in various study classes and occupation of the parents of adolescents.

Recommendations: As the perception of health status was adequate in nearly half of the study participants, there is need for improvement. Health status of younger age group (11-15 years), female adolescents, parents with lower income and non-service occupation to be addressed properly. Adolescents of those socio-economic brackets should be brought within special categories under RMNCAH+ and other health programmes. Purchase of drugs by adolescents without proper prescription should be banned totally by strict enforcement of laws. The school education, child and women empowerment department all should act holistically to bring changes in the health status and quality of life of adolescents of those groups. Proper implementation of school health programs with particular focus on mental health for reduction of stress among the teenagers is the need of the hour.

ACKNOWLEDGEMENT: We would like to thank all the participants who willingly agreed to spare some moments to give some time to participate in the study by availing themselves with giving proper support and co-operation.

Funding: No funding sources.

CONFLICT OF INTEREST: None declared

Ethical Approval: Not required

REFERENCES:

1. United Nations Children's Fund (UNICEF), The state of the World's children: UNICEF, New York, July 2021 [Retrieved from https:www. unicef.org/reports/about unicef publications, April 2, 2025]
2. United nations Children's Fund (UNICEF). Progress for children: A report card on adolescents, UNICEF, New York, April, 2022.
3. The World Health organization. Quality of life assessment (WHO-BREF), Geneva, Switzerland, 2021.
4. Kleszczewska D and Dziekska A: What factor do young people define as determinants of their well being? Findings from the improve the yout aged. Good Health 2022; 25(3): 170-177.
5. Newby H and Mansh AD: A scoping review of Adolescent Health Indicators 2021; 69(3): 365-374.
6. Sanctis VD and Soliman AT: Prevalence, attitude and practice of self medication among adolescents in different countries. Acta Biomed 2021; 91(1): 182-192. Published online 2021, doi-10.23750/PMCID-7569583.
7. Lim Y and Yu Y: Comparing the reliability and and validity of the SF36 and SF12 in measuring quality of life among adolescents in China: a large sample cross-sectional study. Health and quality of life outcomes BMC. 2020; 36: doi. 134589. PMID- 33168020.
8. Lec RL and Chien WT: Association between quality of life, psychological well being and health related behaviours among adolescent in Chinese, Japanese, Taiwanese- A cross sectional survey. Serial online 2020; 17/7, doi- 103390/ijcmpjer.
9. Rajkumar E and Julia GJ: Prevalence of mental health problems among rural adolescents in India Sci Rep 2022; 1216573. doi.10.1038/341598. PMID-19732.
10. Ko H and Cho B: Changes in the health status and health related quality of life of community-dwelling older adult living alone: one year follow up from a cohort study. Front Public Health 2023; 11: 127800 doi. 107772. PMID-381192567.
11. Bideraksh A and Foroushani AR: Does adult socioeconomic status mediate the relationship between adolescent socioeconomic status and adult qoe. J. child Reasearch 2025; 26-38. P.O 2024, Oct 2021.doi:10.1177. PMID- 1088307382.
12. Chu-ko F and Chong ML: Exploring the factors related to adolescent health literacy, health-promoting life style profile and health status. BMC Public Health 21, Article number: 2196(2021).01.12.2021.
13. Ikwara AE and Atwijiikire H: Self medication ,medication storage patterns among Universities. Front Public Health 2023; 11: 1259279. Published online 2023. doi: 10.3389/pubmed 2023.125 9279. PMCID- PMC 10654784.
14. Ko Fc and Chang ML: Exploring the factors related to adolescent health profile and life style. BMC Public Health 2021; 21: 2196. Serial Online, doi: 101186, 12819-021-122309-20
15. Hole DR and Viner RM: How adolescent health influences education, employments and quality of life: investigating longitudinal association. J Epidemiial Community Health 2019; 72(6): 465-70, Serial online 2018 doi. 10.111.36, jech2017-209605
16. Ayalew MB: Self medication practices and quality of life in Ethiopia: a systematic review.BMC public Health 2022; 12: 1248252, published online, 2022, oct, doi 1034569.5338978.

How to cite this article:
Chakraborty K, Chakraborty A and Bhattacharya UK: Perception about health status, self medication practice and quality of life of adolescents in west Tripura: a cross-sectional study. Int J Pharm Sci & Res 2025; 16(8): 2398-02. doi: 10.13040/IJPSR.0975-8232.16(8).2398-02.