



“A Health Problems And Their Determinants Among Adolescent Girls: An Urban–Rural And Family-Type Comparison In Kutch District, Gujarat”

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Abstract

The present study examined health problems and their determinants among adolescent girls in Kutch District, Gujarat. A quantitative descriptive and comparative research design was adopted. The sample consisted of 200 adolescent girls selected through stratified random sampling from urban and rural areas. Data were collected using the Adolescent Girls Health Problems Scale (AGHPS) and analyzed using mean, standard deviation, and independent samples t-test. The findings revealed a significant difference in health problems between urban and rural adolescent girls, with urban girls reporting higher health problem scores than rural girls. A significant difference was also found between school-going and non-school-going adolescent girls, indicating greater health problems among non-school-going girls. However, no significant difference was observed between adolescent girls belonging to joint and nuclear families. The study concludes that area of residence and school status are important determinants of adolescent girls' health, whereas family type has limited influence.

Keywords: adolescent girls, health problems, urban-rural differences, family type, school status, Kutch District.

Introduction

Adolescence (10–19 years) is a critical period of physical, psychological, emotional, and social development. According to the World Health Organization (WHO), adolescents constitute nearly one-sixth of the global population and represent an important human resource for national development. Health problems experienced during adolescence may have long-term consequences on adult health, educational attainment, productivity, and reproductive outcomes. Adolescent girls, in particular, face unique health challenges due to rapid growth, hormonal changes, menstruation, nutritional demands, and socio-cultural influences.

In India, adolescent girls constitute a significant proportion of the population and are vulnerable to various health problems, including anemia, malnutrition, menstrual disorders, reproductive health issues, mental health problems, and inadequate health-seeking behavior. These health challenges are often influenced by socioeconomic conditions, educational status, family environment, and place of residence. The transition from childhood to adulthood requires adequate nutritional intake, healthcare support, and family guidance; however, disparities continue to exist between urban and rural populations.

Recent evidence from Gujarat has further demonstrated the magnitude of the problem. Chaudhary et al. (2026) found that approximately 39.6% of adolescent girls in Gujarat were anemic and identified poor dietary diversity and micronutrient deficiencies as major contributing factors. Their study included participants from Kutch district and highlighted significant regional variations in nutritional status. Menstrual health is another important component of adolescent well-being. The analysis of NFHS-5 data by UNFPA India (2022) reported that menstrual hygiene practices among adolescent girls are strongly influenced by education, household wealth, and place of residence. The study emphasized persistent inequalities in access to hygienic menstrual products and menstrual health information. Similarly, Roy, Kasemi, Halder, and Majumder (2024) reported that socioeconomic status, educational attainment, and urban residence significantly influenced the use of hygienic menstrual practices among adolescent girls in India. Their findings suggest that disparities in living conditions continue to affect adolescent girls' reproductive and menstrual health.

Methodology

Aims: To assess health problems and their determinants among adolescent girls in Kutch District, Gujarat, and to compare health problems across urban-rural residence and family type (joint and nuclear families).

Objectives of the Study:

- To assess the health problems among adolescent girls in Kutch District, Gujarat.
- To compare the health problems of adolescent girls residing in urban and rural areas.
- To compare the health problems of adolescent girls belonging to joint and nuclear families.

Null Hypotheses:

Ho1: There is no significant difference in health problems between urban and rural adolescent girls of Kutch District, Gujarat.

Ho2: There is no significant difference in health problems between adolescent girls belonging to joint families and those belonging to nuclear families.

Ho3: There is no significant difference in health problems between school-going and non-school-going adolescent girls.

Research Design: A quantitative descriptive and comparative research design was adopted.

Sample: The sample consisted of 200 adolescent girls selected from urban and rural areas of Kutch District, Gujarat, using stratified random sampling. Used scale adolescent Girls Health Problems.

Table 1: Distribution of Sample according to Area, School Status, and Family Type

Types of Family	Areas				Total
	Urban		Rural		
	School-going	Non-school-going	School-going	Non-school-going	
Joint Family	25	25	25	25	100
Nuclear Family	25	25	25	25	100
Total	50	50	50	50	200

Tools:

- Adolescent Girls Health Problem Scale (AGHPS)

Procedure: Permission was obtained from relevant authorities. Participants were informed about the purpose of the study and confidentiality was assured. The scales were administered in group settings, and responses were scored according to manual guidelines.

Statistical Analysis: Data were analyzed using SPSS. Mean, standard deviation, independent samples t-test.

Results**Table 2: Comparison of Health Problems Scores between Urban and Rural Adolescent Girls**

Group	N	Mean	SD	t value	Sig. Level
Urban	100	65.42	7.23	7.190	0.01
Rural	100	57.67	8.00		

The data presented in Table 2 show the comparison of health problem scores between urban and rural adolescent girls. The mean health problem score of urban adolescent girls was found to be 65.42 (SD = 7.23), whereas the mean score of rural adolescent girls was 57.67 (SD = 8.00). The calculated t-value was 7.190, which was significant at the 0.01 level of significance. This indicates that a statistically significant difference exists between urban and rural adolescent girls regarding health problems.

Further, the mean score of urban adolescent girls was higher than that of rural adolescent girls, suggesting that urban adolescent girls reported a greater level of health problems as measured by the Adolescent Girls Health Problems Scale. Therefore, the null hypothesis stating that was rejected.

Table 3: Comparison of Health Problems Scores between Adolescent Girls Belonging to Joint Families and Nuclear Families

Family Types	N	Mean	SD	t value	Sig. Level
Joint Family	100	61.21	8.61	0.559	Not Significant
Nuclear Family	100	61.88	8.49		

The data presented in Table 3 reveal the comparison of health problem scores between adolescent girls belonging to joint families and those belonging to nuclear families. The mean health problem score of adolescent girls from joint families was 61.21 (SD = 8.61), whereas the mean score of adolescent girls from nuclear families was 61.88 (SD = 8.49). The calculated t-value was 0.559, which was not significant at the 0.05 level of significance. This indicates that there is no statistically significant difference in health problems between adolescent girls belonging to joint families and those belonging to nuclear families. Although adolescent girls from nuclear families obtained a slightly higher mean score than those from joint families, the difference was too small to be considered statistically significant. Therefore, the null hypothesis stating that was accepted.

Table 4: Comparison of Health Problems Scores between School-Going and Non-School-Going Adolescent Girls

Group	N	Mean	SD	t value	Sig. Level
School-going	100	59.35	8.71	3.753	0.01
Non-school-going	100	63.74	7.81		

The data presented in Table 4 show the comparison of health problem scores between school-going and non-school-going adolescent girls. The mean health problem score of school-going adolescent girls was 59.35 (SD = 8.71), whereas the mean score of non-school-going adolescent girls was 63.74 (SD = 7.81). The calculated t-value was 3.753, which was found to be significant at the 0.01 level of significance. This indicates that a statistically significant difference exists between school-going and non-school-going adolescent girls with respect to health problems. Further, the mean score of non-school-going adolescent girls was higher than that of school-going adolescent girls. Assuming that a higher score indicates a greater level of health problems, the findings suggest that non-school-going adolescent girls experience more health problems than school-going adolescent girls. Therefore, the null hypothesis stating that was rejected.

Discussion

The present study aimed to assess health problems among adolescent girls in Kutch District, Gujarat, and to compare these health problems based on area of residence, family type, and school status. The findings revealed significant differences in health problems between urban and rural adolescent girls and between school-going and non-school-going adolescent girls. However, no significant difference was observed between adolescent girls belonging to joint and nuclear families.

The first objective was to compare the health problems of urban and rural adolescent girls. The results indicated a significant difference between the two groups, with urban adolescent girls reporting higher health problem scores than rural adolescent girls. This finding suggests that place of residence plays an important role in influencing the health status of adolescent girls. The result may be attributed to the changing lifestyle patterns, sedentary habits, increased academic pressure, dietary irregularities, and psychosocial stress experienced by adolescents in urban areas. The finding is supported by UNFPA India (2022), which reported that adolescent girls' health and menstrual hygiene practices are strongly influenced by place of residence and socioeconomic conditions. Similarly, Roy et al. (2024) found that urban residence significantly affects health-related practices and reproductive health outcomes among adolescent girls. The present finding confirms that environmental and social conditions associated with urban living may contribute to greater health concerns among adolescent girls.

The second objective was to compare health problems between adolescent girls belonging to joint families and nuclear families. The findings revealed no significant difference between the two groups. Although girls from nuclear families obtained slightly higher mean scores, the difference was statistically insignificant. This indicates that family type alone may not be a determining factor in adolescent health problems. In contemporary society, both joint and nuclear families are increasingly exposed to similar educational opportunities, healthcare services, and social environments, thereby reducing differences in health outcomes. The finding is consistent with studies conducted by Prajapati (2013) and Agarwal and Bahadur (2023), which reported that family structure has a limited influence on adolescent well-being when other socioeconomic factors are taken into consideration. Thus, factors such as parental education, income, healthcare access, and awareness may exert a stronger influence on adolescent health than family type itself.

The third objective was to compare health problems between school-going and non-school-going adolescent girls. The results showed a significant difference between the two groups, with non-school-going adolescent girls reporting higher levels of health problems. This finding suggests that education and school participation play a protective role in promoting adolescent health. School-going girls are more likely to receive health education, nutritional awareness, menstrual hygiene information, and access to school-based health programs. In contrast, non-school-going girls may have limited exposure to health-related information and preventive healthcare services. The finding supports the observations of UNFPA India (2022), which emphasized the importance of education in improving menstrual hygiene awareness and overall health practices among adolescent girls. The result also aligns with the findings of Roy et al. (2024), who reported that educational attainment significantly influences health behaviors and health outcomes among adolescents.

Conclusion:

Overall, the findings of the study demonstrate that area of residence and school status are significant determinants of health problems among adolescent girls, whereas family type does not appear to have a substantial impact. The study highlights the need for targeted health promotion programs, particularly for urban and non-school-going adolescent girls, to address their specific health challenges. Special

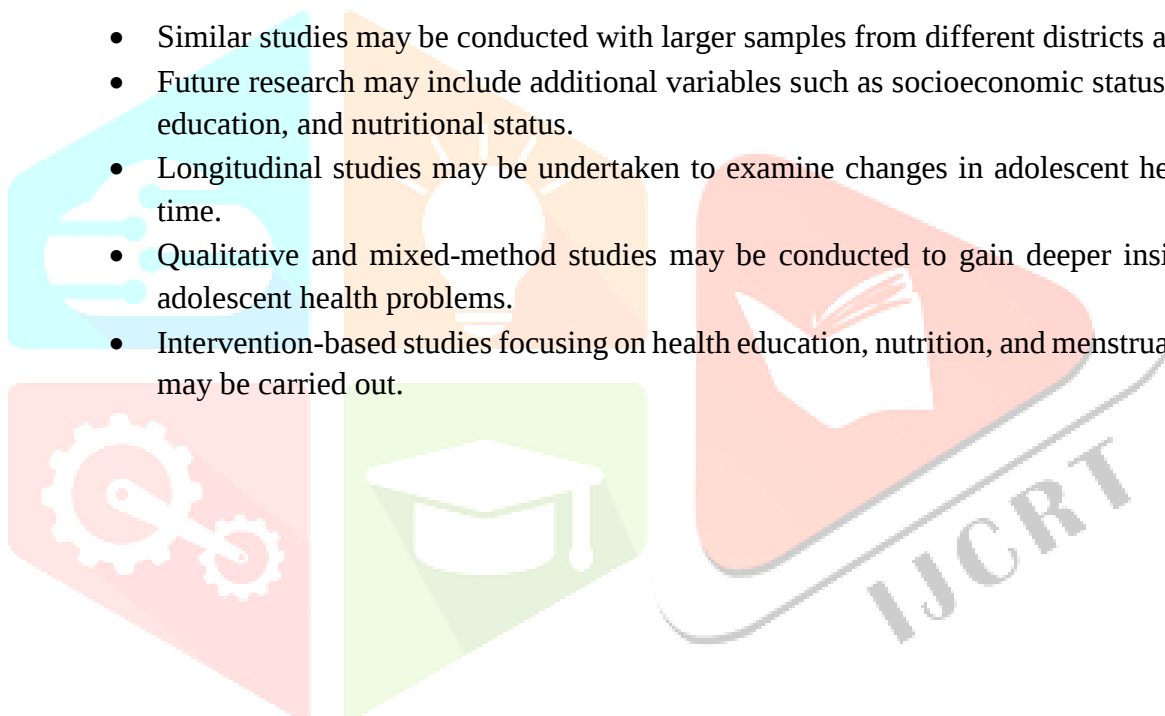
attention should be given to nutritional education, menstrual health awareness, preventive healthcare services, and adolescent-friendly health interventions in order to improve the overall well-being of adolescent girls in Kutch District, Gujarat.

Limitations:

- The study was limited to 200 adolescent girls from selected urban and rural areas of Kutch District, Gujarat.
- The findings are based on self-reported responses, which may be influenced by personal bias.
- The study used a cross-sectional design; therefore, causal relationships could not be established.
- Only selected variables (area, family type, and school status) were examined.
- The results may not be generalizable to all adolescent girls in Gujarat or India.

Future Suggestions:

- Similar studies may be conducted with larger samples from different districts and states.
- Future research may include additional variables such as socioeconomic status, parental education, and nutritional status.
- Longitudinal studies may be undertaken to examine changes in adolescent health over time.
- Qualitative and mixed-method studies may be conducted to gain deeper insights into adolescent health problems.
- Intervention-based studies focusing on health education, nutrition, and menstrual hygiene may be carried out.



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