

**Patterns and Determinants of Health Service Utilization among Youths in Varanasi:
A Hospital-Based Study**

Priya Srivastava¹, Manushi Srivastava²

ABSTRACT

Background: Youths represent a critical segment of the population whose health service utilization patterns significantly influence public health outcomes. Understanding factors that determine their use of health services is vital for designing youth-centered healthcare strategies, especially in the Indian context where data on this topic remain limited. **Objectives:** To assess the pattern of health service utilization—preventive, curative, and emergency—among youths attending a tertiary care hospital in Varanasi and to identify the socio-demographic determinants influencing their healthcare utilization. **Methods:** A hospital-based analytical cross-sectional study was conducted among 196 youths aged 16–24 years attending the Adolescent Centre OPD at Sir Sundarlal Hospital, Banaras Hindu University, Varanasi, from January to February 2024. Participants were selected using simple random sampling. Data were collected through a pretested structured interview schedule and analyzed using descriptive statistics and Chi-square tests, in SPSS. **Results:** Among the respondents, preventive health service utilization was reported by 26.5%, while curative and emergency service utilization were 60.7% and 12.8%, respectively. Preventive utilization showed significant associations with age ($\chi^2=15.142$, $p=0.001$), education ($\chi^2=35.346$, $p<0.001$), and socio-economic class ($\chi^2=13.373$, $p=0.010$). Curative utilization was significantly associated with status ($\chi^2=69.283$, $p<0.001$), age ($\chi^2=16.840$, $p<0.001$), marital status ($\chi^2=8.654$, $p=0.003$), education ($\chi^2=17.608$, $p=0.001$), and socio-economic class ($\chi^2=13.151$, $p=0.011$). Emergency utilization showed a significant association only with marital status ($\chi^2=5.060$, $p=0.024$). While general online health information seeking did not show a significant association with utilization, recent searches (within 15 days) were linked with higher preventive service use. **Conclusion:** The study highlights that age, education, and socio-economic status are key determinants of health service utilization among youths. Preventive and curative care use increases with higher education and economic status, whereas emergency care remains limited. Although most youths actively seek health information online, the impact on healthcare use appears limited unless the information is accessed recently. Strengthening youth-friendly health education, promoting preventive services, and integrating digital health initiatives could enhance healthcare utilization among young populations.

Keywords: Youth health, healthcare utilization, preventive services, determinants, digital health literacy, India

Author(s) Details:

1. Research Scholar, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi- 221 005, Mob.: 8318331389; **Email:** srivastava.priya6975@gmail.com; **Orchid ID:** 0000-0003-0948-3830
2. Professor, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi. **Email:** manushi.srivastava@bhu.ac.in; **Orchid ID:** 0000-0001-8065-4917
3. **Corresponding Address:** Priya Srivastava Research Scholar, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221 005. Mobile: 8318331389; **Email:** srivastava.priya6975@gmail.com; **Orchid ID:** 0000-0003-0948-3830

Citation: Srivastava P, Srivastava M. Patterns and Determinants of Health Service Utilization among Youths in Varanasi: A Hospital-Based Study. *Indian J Prev Soc Med*, 2026; 57 (1): **18-26**.

DOI: <https://doi.org/>

Sequence of Article: **Submission** 04.11.2025 **Accepted:** 12.01.2026 **Published:** 31.03.2026

Prior Publication: Nil; **Source of Funding:** Nil; **Conflicts of Interest:** None, **Article # 929/1480-1481**

Introduction

The Youth represent a critical phase of life characterized by rapid physical, psychological, and social transitions that significantly influence long-term health trajectories. During this stage, individuals begin to make independent decisions regarding their health, lifestyle, and healthcare-seeking behaviour. Ensuring equitable access to and optimal utilization of health services among youths is essential for building a healthy and productive adult population. However, in many low- and middle-income

countries, including India, the utilization of available health services by adolescents and young adults remains suboptimal, often due to factors such as limited awareness, social stigma, financial barriers, and inadequate youth-friendly health infrastructure.¹

Health service utilization encompasses preventive, curative, and emergency care² each reflecting different aspects of health behaviour and system responsiveness. While preventive services such as routine check-ups, vaccinations, and counselling play a vital role in early disease detection and health promotion, curative and emergency services address immediate health needs. Understanding how and why youths engage with these services provides essential insights for designing targeted interventions and strengthening adolescent health programs. The Youth demographic not only represents the future but is also key to sustainable development³. Despite numerous government initiatives, including the Rashtriya Kishor Swasthya Karyakram (RKSK), also known as the National Adolescent Health Programme (NAHP), aimed at improving adolescent and youth health in India, evidence suggests that service uptake remains inconsistent and influenced by multiple socio-demographic and contextual factors^{4,5}. Research examining these determinants at the local level is limited.

In this context, the present study was conducted to assess the pattern of health service utilization among youths attending a tertiary care hospital in Varanasi and to identify the socio-demographic factors influencing the utilization of preventive, curative, and emergency health services.

Methods

Study Design: The present study is a hospital-based analytical cross-sectional study which utilized a quantitative approach to examine the determinants of health service utilization among youths in Varanasi.

Sample Size Determination: A total sample of 196 respondents was estimated using the standard formula for cross-sectional studies, assuming a 5% level of significance, an absolute error of 7.5%, and a standard deviation of 0.507. The sample size was further adjusted to account for an anticipated 10% non-response rate.

Sampling Technique: A simple random sampling technique was employed to ensure equal selection probability for all eligible participants. Outpatient Department (OPD) staff assigned sequential numbers to patients based on their arrival order. These numbers were recorded in a register serving as the attendance list. Random numbers were generated corresponding to this list, and the patients with those numbers—along with accompanying youths meeting the inclusion criteria—were invited to participate after obtaining informed consent.

Study Population: The study population comprised patients and accompanying youths attending the Adolescent Centre OPD of Sir Sundarlal Hospital, Banaras Hindu University.

Inclusion and Exclusion Criteria: Individuals aged 16–24 years, visiting Sir Sundarlal Hospital during the study period, fluent in English or Hindi, and willing to provide informed consent were included. Those who were critically ill, mentally unfit, or unwilling to participate were excluded from the study.

Data Collection Period: Data was collected over a two-month period, from January to February 2024.

Data Collection Method: Data was obtained through structured; face-to-face interviews conducted using a pretested interview schedule at the Adolescent Centre OPD. After obtaining informed consent, participants were interviewed in their preferred language (English or Hindi) to ensure clarity and accuracy of responses.

Validity of the Interview Schedule: The interview schedule was pretested and pilot-tested within the same hospital setting to establish validity and reliability. Respondents from the pilot study were excluded from the final data collection.

Data Analysis: Data were first entered and cleaned using Microsoft Excel, then exported to SPSS for statistical analysis. Descriptive statistics, such as frequencies and percentages, were used to summarize demographic and categorical variables. Inferential statistics were applied using the Chi-square test to assess associations between variables. To simplify the analysis and better capture patterns of health service utilization, the individual service items were combined into three

categories: preventive, curative, and emergency health services. Within each category, participants were dichotomized based on whether they had used at least one service (1) versus none (0) in the past six months. This approach allowed for a clearer assessment of overall engagement in different types of healthcare while reducing complexity from multiple individual service variables.

Ethical Considerations: Ethical clearance for the study was obtained from the Institutional Ethics Committee, Institute of Medical Sciences, Banaras Hindu University. Administrative permission was also secured from the Nodal Officer of the Adolescent Centre OPD. Written informed consent was obtained from all participants after providing a detailed explanation of the study's objectives and procedures. Participants were informed of their right to withdraw at any stage without any effect on their medical care. Confidentiality and anonymity were assured throughout the study, and privacy was maintained during data collection.

Results

Table- 1: Socio-Demographic Profile of the respondents

Socio-Demographic Profile		No.	%
Age Category	16-18	74	37.8
	19-21	64	32.7
	22-24	58	29.6
Status	Patient	99	50.5
	Accompanying person	97	49.5
Gender	Male	63	32.1
	Female	133	67.9
	Others	0	0.0
Marital Status	Married	25	12.8
	Unmarried	171	87.2
Education	School-going	74	37.8
	College-going	87	44.4
	Completed	20	10.2
	Dropout	15	7.7
Religion	Hindu	191	97.4
	Muslim	5	2.6
Caste	GEN	78	39.8
	SC	13	6.6
	ST	4	2.0
	OBC	101	51.5
Family Type	Joint	99	50.5
	Nuclear	97	49.5
Socio-Economic class	Lower (V)	3	1.5
	Upper lower (IV)	31	15.8
	Lower middle (III)	47	24.0
	Upper middle (II)	88	44.9
	Upper (I)	27	13.8
Do you search for health information online?	No	24	12.2
	Yes	172	87.8
When did you made last search for health information online?	0-5 days	53	27.0
	5-10 days	19	9.7
	10-15 days	12	6.1
	15-30 days	24	12.2
	More than a month	86	43.9
	Never	2	1.0

Socio-demographic Characteristics of the Respondents: The study included a total of 196 late adolescents and young adults. The largest proportion of participants were aged 16–18 years (37.8%), followed by those aged 19–21 years (32.7%) and 22–24 years (29.6%). Nearly half of the respondents were patients themselves, while the remaining were accompanying individuals seeking care. Females constituted a greater proportion of the sample (67.9%) compared to males (32.1%) [Table-1].

Most participants were unmarried (87.2%). In terms of educational status, 44.4% were college students, 37.8% were still in school, 10.2% had completed their education, and 7.7% were dropouts. The majority of respondents identified as Hindu (97.4%) and primarily belonged to the Other Backward Class (OBC, 51.5%) or General category (39.8%). Family structure was nearly evenly distributed, with 50.5% living in joint families and 49.5% in nuclear families. Socio-economically, the sample was predominantly from the middle and upper-middle classes (68.9%). A large majority (87.8%) reported searching for health information online, while only 12.2% had never done so. Regarding the timing of the last online health information search, nearly half of the respondents (43.9%) reported having searched more than a month ago, whereas 27.0% had searched within the last five days, reflecting varying frequencies of digital health engagement. A smaller proportion reported searches conducted 5–10 days (9.7%), 10–15 days (6.1%), or 15–30 days (12.2%) prior to the survey, while only 1.0% had never searched online for health information.

Health Service Utilization of the Respondents: Health service utilization among the respondents during the past six months revealed distinct patterns across preventive, curative, and emergency care domains. Utilization of preventive services was relatively low: only 26.5% of participants had undergone routine health check-ups or disease screening, 16.8% had accessed counselling services, and 18.9% had received vaccinations.

In contrast, curative services were more frequently utilized. A majority of respondents (60.7%) reported at least one outpatient department (OPD) visit, while 13.8% had undergone doctor-recommended disease screening. Nearly half (49.5%) reported taking prescribed medications, whereas the use of home-based health care services was minimal (3.1%).

Table- 2: Health Service Utilization of the respondents

Type of Health Service Utilization	Indicators	No.	%	
Preventive health service utilizations	In last 6 months, whether you had any Routine Health checkup or any disease screening (Symptom-driven screening on your own) at least once?	No	144	73.5
		Yes	52	26.5
	In last 6 months, whether you had taken any Counselling service at least once on your own?	No	163	83.2
		Yes	33	16.8
	In last 6 months, whether you had received any Vaccinations?	No	159	81.1
		Yes	37	18.9
Curative health service utilisations	In last 6 months, whether you had any OPD visit for yourself at least once?	No	77	39.3
		Yes	119	60.7
	In last 6 months, whether you had any Health checkup or any disease screening at least once (Symptom-driven screening that was Doctor-directed)	No	169	86.2
		Yes	27	13.8
	In last 6 months, whether you had taken any medication prescribed by the health practitioner at least once?	No	99	50.5
		Yes	97	49.5
	In last 6 months, whether you had taken any home health care service (nurse aides, intravenous administration of antibiotics, or long-term oxygen therapy) at least once?	No	190	96.9
		Yes	6	3.1
Emergency Health service utilisations	In last 6 months, whether you had any Hospitalization/ Hospital stay at least once?	No	173	88.3
		Yes	23	11.7
	In last 6 months, whether you had any Emergency visits at least once?	No	171	87.2
		Yes	25	12.8

Emergency care utilization was comparatively limited, with only 11.7% of respondents reporting hospitalization and 12.8% seeking emergency medical services. Overall, these findings indicate that while curative care was the most commonly accessed domain, preventive and emergency service utilization remained relatively low among the study participants.

Determinants of Preventive, Curative, and Emergency Health Service Utilization

Association between Socio-demographic Characteristics and Preventive Health Service Utilization: The association between socio-demographic variables and preventive health service utilization (PHCU) was examined using the Chi-square test. Significant associations were observed between PHCU and age category ($\chi^2=15.142, p = 0.001$), educational status ($\chi^2=35.346, p<0.001$), and socio-economic class ($\chi^2=13.373, p = 0.010$). These findings indicate that older, more educated, and higher socio-economic group participants were more likely to engage in preventive health practices. In contrast, marital status, religion, caste, and family type did not show statistically significant associations with PHCU ($p>0.05$).

Table- 3: Predictors of Preventive Health Service Utilization

Variables	Category	Not Used		Used		²	p-value
		No.	%	No.	%		
Age Category	16–18	57	77.0	17	23.0	15.142	0.001*
	19–21	30	46.9	34	53.1		
	22–24	30	51.7	28	48.3		
Status	Patient	59	59.6	40	40.4	0.001	0.977
	Accompanying person	58	59.8	39	40.2		
Marital Status	Married	18	72.0	7	28.0	1.804	0.179
	Unmarried	99	57.9	72	42.1		
Education	School-going	58	78.4	16	21.6	35.346	0.000*
	College-going	32	36.8	55	63.2		
	Completed	17	85.0	3	15.0		
	Dropout	10	66.7	5	33.3		
Religion	Hindu	115	60.2	76	39.8	0.827	0.363 ^b
	Muslim	2	40.0	3	60.0		
Caste	General	45	57.7	33	42.3	0.558	0.906 ^b
	SC	8	61.5	5	38.5		
	ST	3	75.0	1	25.0		
	OBC	61	60.4	40	39.6		
Family Type	Joint	63	63.6	36	36.4	1.292	0.256
	Nuclear	54	55.7	43	44.3		
Socio-economic Class	Lower V	3	100	0	0.0	13.373	0.010* ^b
	Upper lower IV	21	67.7	10	32.3		
	Lower middle III	36	76.6	11	23.4		
	Upper middle II	44	50.0	44	50.0		
	Upper I	13	48.1	14	51.9		
Do you search for health information online?	No	15	62.5	9	37.5	0.090	0.765
	Yes	102	59.3	70	40.7		
When did you last search for health information online?	0–5 days	23	43.4	30	56.6	21.478	0.001*
	5–10 days	10	52.6	9	47.4		
	10–15 days	4	33.3	8	66.7		
	15–30 days	13	54.2	11	45.8		
	More than a month	65	75.6	21	24.4		
	Never	2	100.0	0	0.0		

*. The Chi-square statistic is significant at the 0.05 level.

^b. More than 20% of cells in this sub-table have expected cell counts less than 5. Likelihood ratio chi-square was used.

Regarding digital health behaviours, no significant association was found between searching for health information online and preventive health service utilization ($\chi^2 = 0.090, p = 0.765$), suggesting that merely accessing health information through digital means did not necessarily translate into greater preventive health engagement. However, the regency of online health information search demonstrated a statistically significant association with PHCU ($\chi^2 = 21.478, p = 0.001$). Respondents who had searched for health information more recently—particularly within the last 15 days—were more likely to have utilized preventive health services compared to those whose last search occurred over a month ago or who had never searched online. This highlights the potential role of recent digital health information exposure in promoting preventive healthcare behaviours among youths.

Association between Socio-demographic Characteristics and Curative Health Service Utilization: Significant associations were found with status ($\chi^2 = 69.283, p < 0.001$), age category ($\chi^2 = 16.840, p < 0.001$), marital status ($\chi^2 = 8.654, p = 0.003$), educational status ($\chi^2 = 17.608, p = 0.001$), and socio-economic class ($\chi^2 = 13.151, p = 0.011$).

Table-4: Predictors of Curative Health Service utilization

Predictor	Category	Not Used		Used		χ^2	P-value
		No.	%	No.	%		
Status	Patient	10	10.1	89	89.9	69.283	0.000*
	Accompanying person	66	68.0	31	32.0		
Age Category	16–18	42	56.8	32	43.2	16.840	0.000*
	19–21	20	31.3	44	68.8		
	22–24	14	24.1	44	75.9		
Marital Status	Married	3	12.0	22	88.0	8.654	0.003 ^{b*}
	Unmarried	73	42.7	98	57.3		
Education	School-going	41	55.4	33	44.6	17.608	0.001 ^{b*}
	College-going	29	33.3	58	66.7		
	Completed	2	10.0	18	90.0		
	Dropout	4	26.7	11	73.3		
Religion	Hindu	75	39.3	116	60.7	0.835	0.361 ^b
	Muslim	1	20.0	4	80.0		
Caste	General	32	41.0	46	59.0	1.825	0.610 ^b
	SC	3	23.1	10	76.9		
	ST	2	50.0	2	50.0		
	OBC	39	38.6	62	61.4		
	Upper (I)	12	44.4	15	55.6		
Family Type	Joint	36	36.4	63	63.6	0.490	0.484
	Nuclear	40	41.2	57	58.8		
Socio-economic class	Lower (V)	0	0.0	3	100.0	14.133	0.007 ^{b*}
	Upper lower (IV)	19	61.3	12	38.7		
	Lower middle (III)	20	42.6	27	57.4		
	Upper middle (II)	25	28.4	63	71.6		
Do you search for health information online?	No	11	45.8	13	54.2	0.574	0.449
	Yes	65	37.8	107	62.2		
When did you last search for health information online?	0–5 days	16	30.2	37	69.8	0.557	0.352
	5–10 days	10	52.6	9	47.4		
	10–15 days	5	41.7	7	58.3		
	15–30 days	9	37.5	15	62.5		
	More than a month	36	41.9	50	58.1		
	Never	0	0.0	2	100.0		

* The Chi-square statistic is significant at the 0.05 level.
^b More than 20 of cells in this sub-table have expected cell counts less than 5. Likelihood ratio chi-square was used.

Patients were significantly more likely to utilize curative services compared to accompanying persons. Utilization also increased with age, with the highest proportion observed among respondents aged 22–24 years. Similarly, married participants, those pursuing or having completed higher education, and individuals belonging to upper-middle and upper socio-economic classes reported greater use of curative services. No statistically significant associations were observed between curative health service utilization and religion, caste, or family type ($p > 0.05$). Similarly, searching for health information online and the timing of the last online health information search did not show significant associations with curative health service utilization. Although respondents who had searched more recently (within the last 5 days) demonstrated somewhat higher usage of curative services (69.8%), the difference was not statistically significant.

Table -5: Predictors of Emergency Health Service utilization

Predictor	Category	Not Used		Used		²	P-value
		No.	%	No.	%		
Status	Patient	77	77.8	22	22.2	1.028	0.311
	Accompanying person	81	83.5	16	16.5		
Age Category	16–18	59	79.7	15	20.3	0.956	0.620
	19–21	54	84.4	10	15.6		
	22–24	45	77.6	13	22.4		
Marital Status	Married	16	64.0	9	36.0	3.915	0.048*
	Unmarried	142	83.0	29	17.0		
Education	School-going	60	81.1	14	18.9	1.949	0.583 ^b
	College-going	71	81.6	16	18.4		
	Completed	17	85.0	3	15.0		
	Dropout	10	66.7	5	33.3		
Religion	Hindu	154	80.6	37	19.4	0.001	0.972 ^b
	Muslim	4	80.0	1	20.0		
Caste	GEN	62	79.5	16	20.5	4.754	0.191 ^b
	SC	8	61.5	5	38.5		
	ST	4	100.0	0	0.0		
	OBC	84	83.2	17	16.8		
Family Type	Joint	77	77.8	22	22.2	1.028	0.311
	Nuclear	81	83.5	16	16.5		
Socio-economic class	Lower (V)	2	66.7	1	33.3	3.302	0.509 ^b
	Upper lower (IV)	25	80.6	6	19.4		
	Lower middle (III)	34	72.3	13	27.7		
	Upper middle (II)	74	84.1	14	15.9		
	Upper (I)	23	85.2	4	14.8		
Do you search for health information online?	No	18	75.0	6	25.0	0.218	0.641
	Yes	140	81.4	32	18.6		
When did you last search for health information online?	0–5 days	43	81.1	10	18.9	2.931	0.711
	5–10 days	13	68.4	6	31.6		
	10–15 days	10	83.3	2	16.7		
	15–30 days	20	83.3	4	16.7		
	More than a month	71	82.6	15	17.4		
Never	1	50.0	1	50.0			

* The Chi-square (²) statistic is significant at the 0.05 level.
^b More than 20 of cells in this sub-table have expected cell counts less than 5. Likelihood ratio χ^2 Test was used.

Association between Socio-demographic Characteristics and Emergency Health Service Utilization: A significant association was observed with marital status ($\chi^2 = 5.060$, $p = 0.024$), indicating that married participants were more likely to utilize emergency health services compared to their unmarried counterparts.

No statistically significant associations were found between emergency health service utilization and status, age category, educational level, religion, caste, family type, socio-economic class, or number of health-related digital gadgets ($p > 0.05$). Similarly, searching for health information online and the timing of the last online health information search were not significantly associated with emergency health service utilization.

Discussion

The study offers valuable insights into the health service utilization patterns and their determinants among late adolescents and young adults attending a tertiary care hospital in Varanasi. The findings reveal a clear disparity between different domains of health service use: curative services were most frequently utilized, whereas preventive and emergency services were comparatively underused. This suggests that health-seeking behavior among youths remains predominantly illness-oriented rather than prevention-focused, reflecting potential gaps in health awareness, accessibility, or perceived need for routine preventive care.

The significant associations observed between preventive health service utilization and factors such as age, education, and socio-economic class highlight that greater awareness, education, and economic stability play pivotal roles in shaping preventive health behaviours. Additionally, respondents who had searched more recently demonstrated higher preventive service use, suggesting that timely engagement with credible online health information may positively influence health-seeking behaviour among youths. Younger and less educated participants were less likely to engage in preventive measures, underscoring the need for targeted health education and youth-friendly outreach programs.

For curative service utilization, significant links with status, age, marital status, education, and socio-economic class indicate that personal health responsibility increases with age, social roles, and economic resources. The higher use of curative services among patients (as opposed to accompanying persons) suggests that direct illness experience is a strong motivator for seeking medical care, while accompanying youths may represent a largely untapped group for preventive interventions.

In contrast, emergency health service utilization showed a significant association only with marital status, implying that married youths may experience greater health vulnerabilities or decision-making autonomy in seeking urgent care. The absence of associations with most other socio-demographic factors suggests that emergency care use may be influenced more by situational or clinical factors than by background characteristics.

Taken together, these findings emphasize the need to strengthen preventive health promotion strategies targeting young populations, especially within educational institutions and community settings. Interventions should focus on improving health literacy, accessibility, and youth engagement in routine health check-ups and counselling services. Moreover, the socio-economic gradient in service utilization underlines the importance of equity-oriented health policies that address financial and informational barriers faced by adolescents and young adults.

Only limited research in India has specifically examined health service utilization among youths. The study by Gupta, Bhatnagar, and Bahuguna (2015) in Chandigarh reported that out-of-school adolescents were significantly less likely to utilize preventive (OR=0.39, $p < 0.001$) and curative services (OR =0.54, $p < 0.001$), indicating the role of education in shaping health-seeking behaviour.⁶ The present study's findings are consistent with those observations, further reinforcing that educational engagement and socio-economic empowerment are critical determinants of youth health service utilization.

In contrast to previous studies focusing primarily on mental⁷ and reproductive or sexual health services,^{8, 9} or on the utilization of Adolescent-Friendly Health Clinics (AFHCs)¹⁰, ARSH clinics¹¹, or iron-and-folic-acid supplementation programs¹², the present study adopted a broader approach encompassing preventive, curative, and emergency health utilization. This comprehensive assessment provides a more holistic understanding of youth health behaviour and identifies persisting gaps in the uptake of preventive services.

The present study provides valuable insights into the determinants of health service utilization among youths in a tertiary care setting—an area with limited existing research in the Indian context. A key strength of the study lies in its comprehensive focus

on multiple dimensions of health service use, including preventive, curative, and emergency care, offering a holistic understanding of youth health-service utilization. However, the study also has certain limitations. Being cross-sectional in design, it captures associations but cannot establish causal relationships. The hospital-based setting may limit generalizability to all youth populations, particularly those not accessing healthcare facilities. Additionally, self-reported data may be subject to recall or social desirability bias. Despite these limitations, the study offers a valuable foundation for future community-based and longitudinal research to better understand and improve health service utilization among adolescents and young adults.

Conclusion

The present study underscores the need to strengthen youth-oriented health programs that promote preventive care, regular health check-ups, and health literacy. Tailored strategies focusing on awareness generation, equitable access, and affordability of services can foster a shift from reactive to proactive health-seeking behaviour among young people. Strengthening adolescent-friendly health services and integrating preventive health education within schools and colleges could further enhance service utilization and contribute to improved health outcomes in this age group.

References

1. Nartey EB, Babatunde S, Okonta KE, Kotoh AM, Amoada M, Abraham SA, et al. Prevalence and barriers to the utilization of adolescent and youth-friendly health services in Ghana: systematic review and meta-analysis. *Reprod Health* [Internet]. 2025, 22 (1):58. Available from: <https://doi.org/10.1186/s12978-025-02010-4>
2. Mark Hirshon J, Risko N, Calvillo EJB, de Ramirez SS, Narayan M, Theodosios C, et al. Health systems and services: The role of acute care. *Bull World Health Organ*. 2013 May, 91(5): 386–8.
3. Youth in India- 2022 | Ministry of Statistics and Program Implementation | Government of India [Internet]. Available from: <https://www.mospi.gov.in/publication/youth-india-2022>
4. Nair M, Baltag V, Bose K, Boschi-Pinto C, Lambrechts T, Mathai M. Improving the quality of health care services for adolescents, globally: a standards-driven approach. *Journal of Adolescent Health*. 2015, 57(3), 288–98.
5. Wadhwa R, Chaudhary N, Bisht N, Gupta A, Behera N, Verma AK, et al. Improving adolescent health services across high priority districts in 6 states of India: Learnings from an integrated reproductive maternal newborn child and adolescent health project. *Indian Journal of Community Medicine*. 2018, 43(Suppl 1): S6–11.
6. Gupta M, Bhatnagar N, Bahugana P. Inequity in awareness and utilization of adolescent reproductive and sexual health services in union territory, Chandigarh, North India. *Indian J Public Health*. 2015, 59(1):9–17.
7. Behera P, Parida J, Kakade N, Pati S, Acharya SK. Addressing barriers to mental healthcare access for adolescents living in slums: a qualitative multi-stakeholder study in Odisha, India. *Child Youth Serv Rev*. 2023, 145: 106810.
8. Gupta M, Bhatnagar N, Bahugana P. Inequity in awareness and utilization of adolescent reproductive and sexual health services in union territory, Chandigarh, North India. *Indian J Public Health*. 2015, 59(1): 9–17.
9. Banerjee A, Paul B, Das R, Bandyopadhyay L, Bhattacharyya M. Utilisation of adolescent reproductive and sexual health services in a rural area of West Bengal: A mixed-method study. *Malays Fam Physician*. 2023, 18:26.
10. Sundaram H, Jogdand MS, Sambutwad RC, Sirsulwar GK. Utilization of adolescent-friendly health services and its determinants in a rural area of Maharashtra. *J Family Med Prim Care*. 2024, 13 (5): 1950–5.
11. Sinha N, Kumar A, Singh R. Study on Biosocial and Awareness Profiles of Adolescent Clients and Utilisation Patterns of the Services at an ARSH Clinic in Bihar, India. *New Frontiers in Medicine and Medical Research*. 2021, (3):1–10.
12. Rai RK. Iron-and-folic-acid supplementation among adolescents (aged 10–19 years) in two North Indian States, 2015–2016: a sex-stratified analysis. *Public Health Nutr*. 2022, 25(3): 617–22.