# Self-Reported Dental Health Perception, its Consequences and Utilization of Oral Health Services among School Going Adolescent Girls in a Selective School of Dhaka Mohanagar: A Cross-Sectional Study

Ahmed A.<sup>1</sup>, Sharmin S.<sup>2</sup>, Lucky J.S.<sup>3</sup>, Jahan M.S.<sup>4</sup>, Mannan H.<sup>5</sup>, Tabassum F.<sup>6</sup>, Yeasmin M.<sup>7</sup>

# Abstract

**Background:** Oral health is an essential part of overall health and quality of life. The aim of the study was to assess the self-reported perception of dental condition, its consequences and utilization of oral health services among school girls in a selective secondary school of Dhaka Mohanagar.

**Methods:** This cross-sectional study was carried out among 155 adolescents' girls aged between 15 to 18 years at Siddheswari Girls' High School, Dhaka in December 2023 using a convenient sampling method. After obtaining informed written consent from participants, data were collected through face-to-face interview using a pretested semi-structured questionnaire (Bengali language) regarding sociodemographic characteristics, self-perception of dental health condition & its consequences and utilization of oral health services. Collected data were edited and analyzed using IBM Statistical Package for the Social Sciences (SPSS) software version 27. Descriptive statistics presented by frequency, percentages, mean, standard deviation and bivariate analysis was done by Chi-square test (level of significance <.05).

**Results:** The sample comprised adolescents' girl aged 15 to 18 years (M = 17.03, SD = 1.12, 95% CI [16.85, 17.21]). A majority of the students (68.4%) were in the 17-18 age group, while 31.6% were 15-16 years old. Regarding educational status, nearly half of the students (49.7%) were in 10th grade and all were belonged from (89.7%) Muslim and (92.3%) nuclear families. Moreover, the most of students mentioned their monthly family's income (49.68%) reported income between 30,000 and 49,999 Taka. Regarding self-reported perceived dental condition (table 2), the majority of students reported their teeth to be in average (45.2%) or good (40.6%) condition. In addition, most of girls rated their gum condition as good (45.8%) or average (40.6%). Whereas, the most prevalent consequence was dental sensitivity and pain (56.4%) often, and 21.3% reported it sometimes and gum bleeding during tooth brushing was reported as occurring sometimes by 47.8% and often by 13.0%. Most of students (70.3%) reported having access to such programs, while the vast majority (85.2%) did not. There is statistically signification association found between age with last visit to dentist (<.001), reason for receiving dental treatment (<.001) with periodic oral health checkup by school authority.

**Conclusion:** School authority should take necessary steps to promote oral health classrooms and enhance periodic school based oral health programs biannually for achieving optimal oral health.

Keywords: Dental health perception, Utilization of oral health Services, School going adolescent, Oral health

Journal of Dentistry And Allied Science, Vol 7, No 2 Article Received : 10 Apr 2024, Accepted: 18 May 2024

1. Anam Ahmed, Associate Professor, Department of Dental Public Health, University Dental College, Dhaka.

2. Salma Sharmin. Professor & Head, Department of Dental Public Health, University Dental College, Dhaka.

# \*Corresponding Author:

**Dr. Anam Ahmed,** Associate Professor, Department of Dental Public Health, University Dental College, Dhaka. Email: dph.udc@gmail.com, ORCID: https://orcid.org/0000-0002-7051-3990.

- 3. **Jesmin Sultana Lucky**, Asst. Prof. & Head, Dept. of Dental Public Health, Shaheed Suhrawardy Medical College, Dental Unit, Dhaka.
- 4. Md. Shahed Jahan, Professor & Head, Department of Dental Public Health, Update Dental College, Dhaka.
- 5. Huda Mannan, Associate Professor (CC), Department of Pedodontics, University Dental College, Dhaka.
- 6. Faiza Tabassum, Intern Doctor, University Dental College, Dhaka.
- 7. Momota Yeasmin, Intern Doctor, University Dental College, Dhaka.

# Introduction

"Oral health is the state of the mouth, teeth and orofacial structures that enables individuals to perform essential functions such as eating, breathing and speaking, and encompasses psychosocial dimensions such as selfconfidence, well-being and the ability to socialize and work without pain, discomfort and embarrassment"[1]. Oral health is an essential part of overall health and quality of life, due to its impact on dentofacial functions and social interaction [2]. Dental diseases are among the utmost common noncommunicable diseases afflicting an estimated 3.5 billion individuals worldwide. Common oral diseases and conditions such dental caries, periodontal disease, edentulism, oral cancer and dental trauma etc., causing chewing problem, disturbances in sleep leading to school absenteeism that adversely affects school and work activities [1,3]. Moreover, 600 million children across the globe are estimated to have early childhood caries [4]. In the USA, Oral diseases cause 2.4 million and 1.6 million days of work and school lost respectively. Dental problems accounted for 1,900 hours lost from school per 1,000 children in Thailand. This means oral diseases are among the most important contributors to both individual and countries', social loss and economy burden in the world [5]. Study suggested that oral health outcomes of school going children can be improved by a comprehensive, multicomponent, and theory based oral health promotion approach in school premises [6]. Bangladesh has a significant prevalence of untreated dental caries aged 5 years and older (30.4%), as well as severe periodontal disease in those aged 15 years and older (23.4%) [7]. Despite the seriousness of these concerns, there is limited research regarding selfperception of dental health condition, consequence of dental diseases and utilizing of oral health services by school going adolescent's girl in Dhaka city. Hence, this study aimed to assess the self-reported perception of dental condition, its consequences and utilization of oral health services among school girl in a selective secondary school of Dhaka Mohanagar.

# Methods

A cross-sectional study was carried out among 155 adolescents' girls aged between 15 to 18 years at Siddheswari Girls' High School, Dhaka in December 2023 using a convenient sampling method. After obtaining informed written consent from participants, data were collected through face-to-face interview using a pretested semi-structured questionnaire (Bengali language) following World Health Organization (WHO) Oral Health Survey form 5th edition [8]. In addition, the questionnaire was translated into participant's mother language by two independent translators [9,10]. Then, the content validity of the questionnaire was confirmed through independent assessments by a panel of three associate professors of dental public health from three different dental colleges of Bangladesh. The experts were adequately primed with an overview of the study's objectives, but the panel members identifiers remained concealed. A pilot study was conducted on 16 subjects to ensure the appropriateness of the questionnaire. Data were included regarding sociodemographic characteristics, self-perception of dental health condition & its consequences and utilization of oral health services. Collected data were edited and analyzed using IBM Statistical Package for the Social Sciences (SPSS) software version 27. Descriptive statistics presented by frequency, percentages, mean, standard deviation and bivariate analysis was done by Chisquare test (level of significance <.05). Permission was taken from University Dental College authority and the administrative head of the school.

# Results

The study examined sociodemographic characteristics of 155 students, as presented in Table 1. The sample comprised adolescents' girl aged 15 to 18 years (mean = 17.03, SD = 1.12, 95% CI [16.85, 17.21]). A majority of the students (68.4%) were in the 17-18 age group, while 31.6% were 15-16 years old. Regarding educational status, nearly half of the students (49.7%)

were in 10th grade, followed by 9th grade (18.7%), 8th grade (16.8%), and 7th grade (14.8%). This distribution suggested a concentration of older adolescents in the sample. The monthly family income of the students ranged from 30,000 to 109,999 Taka, with a mean of 50,548.39 Taka (SD = 19,432.93, 95% CI [47,464.87, 53,631.91]). The majority of students reported monthly families (49.68%) income between 30,000 and 49,999 Taka, indicating a predominantly middle-income

sample. In terms of religious affiliation, Islam was the predominant religion (89.7%), followed by Hinduism (9.0%) and Christianity (1.3%). This distribution reflects the religious demographics of the region where the study was conducted. The family structure of the students was predominantly nuclear, with 92.3% reporting living in nuclear families, while only 7.7% resided in joint family arrangements.

Attributes	f (%)	$Mean \pm SD$
Age		(9576 CI)
15-16	49 (31.6%)	17.03±1.12
17-18	106 (68.4%)	(16.85-17.21)
Class		
7	23(14.8%)	
8	26(16.8%)	
9	29(18.7%)	
10	77(49.7%)	
Monthly family income (in Taka)		
30000-49999	77 (49.68%)	50540.20
50000-69999	46(29.68%)	50548.39 +19432 93
70000-899999	21(13.55%)	-17 132.75
90000-109999	11(7.10%)	47464.87-53631.91
Religion		
Islam	139(89.7%)	
Hinduism	14(9.0%)	
Christianity	2(1.3%)	
Types of family		
Nuclear family	143(92.3%)	
Joint family	12(7.7%)	

Table 1: Sociodemographic cl	haracteristics (n=155)
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SD= Standard deviation, CI= confidence interval

Regarding self-reported perceived dental condition (table 2), the majority of students reported their teeth to be in average (45.2%) or good (40.6%) condition. A small percentage of students rated their teeth as very good (5.8%) or excellent (0.6%). Conversely, 5.8% of students considered their teeth to be in bad condition, and 1.3% reported very bad teeth condition. Only one participant (0.6%) was unable to assess their teeth condition. The self-assessment of gum condition showed a similar pattern. Most girls rated their gum condition as good (45.8%) or average (40.6%). A slightly higher percentage of students reported very good gum condition (6.5%) compared to those who reported very good teeth condition. Only one student (0.6%) rated their gum condition as excellent. On the lower end of the scale, 4.5% of students reported bad gum condition, and 1.9% reported very bad gum condition. Whereas, the pie chart (figure 1) indicated that a majority of the individual's students, 109(70.3%) do not report experiencing dental issues. In contrast, 46 students, or 29.7% of the sample, reported experiencing some form of dental problem.

Attributes	f (%)
Teeth Condition	
Don't know	1 (0.6%)
Very bad	2 (1.3%)
Bad	9 (5.8%)
Average	70 (45.2%)
Good	63(40.6%)
Very good	9 (5.8%)
Excellent	1 (0.6%)
Gum Condition	
Very bad	3(1.9%)
Bad	7(4.5%)
Average	63(40.6%)
Good	71 (45.8%)
Very good	10(6.5%)
Excellent	1(0.6%)

## Table 2: Self-perception of dental health condition (n=155)

# **Figure 1: Distribution of Dental Problem**



Table 3 presented the frequency and severity of various consequences related to dental problems among the 46 students who reported experiencing dental issues. The data provided insights into how dental problems affect different aspects of daily life for these adolescents. The most prevalent consequence was dental sensitivity and pain, with 56.4% of school going girl reporting experiencing this often, while 21.3% reported it sometimes, and another 21.3% never experienced it. Gum bleeding during tooth brushing was reported as occurring sometimes by 47.8% of respondents and often by 13.0%. However, more severe gum problems such as swelling or

pus discharge were less common, with 73.9% never experiencing gum swelling and 97.8% never experiencing pus discharge. Functional difficulties such as problems with biting or chewing food were relatively infrequent, with 82.6% and 84.7% of respondents never experiencing these issues, respectively. Interestingly, no students reported difficulty with speech due to dental problems. While 82.6% of respondents never felt embarrassed about their teeth, 10.9% sometimes did, and 6.5% often felt embarrassed. Similarly, 89.1% never avoided smiling due to their teeth, but 8.7% sometimes did, and 2.2% often did. Sleep disturbances due to dental pain were re-

ported by a small fraction of students, with 6.5% experiencing this sometimes. School attendance was minimally affected, with only 2.2% reporting sometimes being absent due to dental pain. Notably, dental problems did not cause any issues with work or reduced participation in social activities for the vast majority of respondents

	Never	Sometimes	Often	Total
Consequence of dental problem				
	f (%)	f (%)	f (%)	f (%)
Sensitivity & pain	10 (21.3%)	10 (21.3%)	26 (56.4%)	46(100%)
Gum bleeding during tooth brushing	18 (39.1%)	22(47.8%)	6(13.0%)	46(100%)
Gum swollen	34(73.9%)	10(21.8%)	2(4.3%)	46(100%)
Pus discharge	45(97.8%)	0(0.0%)	1(2.2%)	46(100%)
Difficulty in Biting Food	38(82.6%)	7(15.2%)	1(2.2%)	46(100%)
Difficulty in Chewing Food	39(84.7%)	6(13.0%)	1 (2.2%)	46(100%)
Difficulty in Speech	46(100.0%)	0(0.0%)	0(0.0%)	46(100%)
Dry Mouth	36(78.3%)	6(13.0%)	4(8.7%)	46(100%)
Felt Embarrassed for Teeth	38(82.6%)	5(10.9%)	3(6.5%)	46(100%)
Avoided Smiling for Teeth	41(89.1%)	4(8.7%)	1(2.2%)	46(100%)
Sleep Problem for Dental Pain	43(93.5%)	3(6.5%)	0(0%)	46(100%)
Absent in School for Dental Pain	45(97.8%)	1(2.2%)	0(0%)	46(100%)
Problem in Work for Dental Pain	46(100.0%)	0(0.0%)	0(0.0%)	46(100%)
Reduced Participation in Social Activities	44(95.6%)	1(2.2%)	1(2.2%)	46(100%)

# Table 3: Consequence of dental problem (n=46)

#### Table 4: Utilization of dental services

Attributes	f (%)
Last visit to the dentist (n=155)	
Less than 6 months	15(9.7%)
6-12 months	5(3.2%)
1 years- 2 years	8(5.2%)
More than 2 years	18(11.6%)
Never	109 (70.3%)
Reason for visit to dentist (n=46)	
Filling	22(47.8%)
Scaling	12(26.1%)
Extraction	10(21.7%)
Root Canal Treatment	2(4.3%)
Periodic School Oral health checkup (n=155)	
Yes	23 (14.8%)
No	132 (85.2%)

In table 4, a striking majority of students (70.3%) reported never having visited a dentist, highlighting a significant gap in dental care utilization within this population. Among those who had received dental care, 11.6% had their last visit more than two years ago, while only 9.7% had seen a dentist within the past six months. For the 46 students who had visited a dentist, the most common reason was for dental fillings (47.8%), followed by scaling (26.1%) and tooth extraction (21.7%). Only a small percentage (4.3%) reported receiving root canal treatment. The study also investigated the presence of periodic school-based oral health check-ups. Alarmingly, only 14.8% of students reported having access to such programs, while the vast majority (85.2%) did not.

The study examined the association between various sociodemographic characteristics and the frequency of dental visits among the adolescent students. Table 5

presents these relationships, with statistical significance determined at p < .05. Among the sociodemographic factors analyzed, age group emerged as the only variable showing a statistically significant association with dental visit frequency (p = .041). The data revealed distinct patterns of dental care utilization between the two age

groups. In the younger cohort (15-16 years), 5.2% had visited a dentist within the last six months, while 21.9% had never had a dental visit. Conversely, in the older group (17-18 years), 4.5% had a dental visit in the past six months, but a notably higher proportion (48.4%) had never visited a dentist.

	Last Visit to dentist						
Attributes	Less than 6 months	6-12 months	1 years- 2 years	More than 2 years	Never	F (%)	P value
Age Group							
Group A (15-16)	8(5.2%)	0(0.0%)	0(21.9%)	7(4.5%)	34(21.9%)	49(31.6%)	.041
Group B (17-18)	7(4.5%)	5(3.2%)	8(5.2%)	11(7.1%)	75(48.4%)	106(68.4%)	
Class							
7	6(3.8%)	0(0.0%)	0(0.0%)	3 (1.9%)	14(9.1%)	23(14.8%)	002
8	2(1.3%)	0(0.0%)	0(0.0%)	4(2.6%)	20(12.9%)	26(16.8%)	.092
9	2(1.3%)	1(.6%)	2(1.3%)	0(0.0%)	24(15.5%)	29(18.7%)	
10	5(3.2%)	4(2.6%)	6(3.9%)	11(7.1%)	51(32.9%)	77(49.7%)	
Monthly family							
income (in							
Taka)	10(6.50/)	1(0 (0/)	2(1, 20/)	7(4,50/)	57(2( 90/)	77(40,70/)	
30000-49999	10(6.5%)	1(0.6%)	2(1.3%)	/(4.5%)	57(36.8%)	//(49./%)	
50000-69999	2(1.3%)	2(1.3%)	3(1.9%)	6(3.9%)	33(21.3%)	46(29.7%)	
70000-89999	3(1.9%)	2(1.3%0	2(1.3%)	3(1.9%)	11(7.1%)	21(13.5%)	.267
90000-109999	0(0.0%)	0(0.0%)	1(0.6%)	2(1.3%)	8(5.2%)	11(7.1%)	
Religion							
Islam	13(8.4%)	5(3.2%)	8(5.2%)	15(9.7%)	98(63.2%)	139(89.7%)	
Hinduism	1(0.6%)	0(0.0%)	0(0.0%)	2(1.3%)	11(7.1%)	14(9.0%)	
Christianity	1(0.6%)	0(0.0%)	0(0.0%)	1(0.6%)	0(0.0%)	2(1.3%)	
Types of family							.551
Nuclear family	15(9.7%)	4(2.6%)	8(5.2%)	17(11.0%)	99(63.9%)	143(92.3%)	
Joint family	0(0.0%)	1(0.6%)	0(0.0%)	11(0.6%)	10(6.5%)	12(7.7%)	

Table 5: Association between	sociodemographic	characteristics	and last visit to dentist
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The study investigated the relationship between various sociodemographic factors and the reasons for dental visits among adolescents who had sought dental care. Table 6 presents these associations, with statistical significance set at p < .05. Among the sociodemographic characteristics examined, age group emerged as the only variable showing a statistically significant association with the reason for dental visits (p = .007). These finding merits closer examination. The data revealed distinct patterns of dental treatment needs between the two age groups. In the younger cohort (15-16 years), dental fillings were

the predominant reason for visits, accounting for 23.9% of cases, followed by extractions at 8.7%. Notably, this group did not report any scaling or root canal treatments. In contrast, the older group (17-18 years) displayed a more diverse range of dental treatment needs. While fillings remained a common reason (23.9%), scaling emerged as equally prevalent (26.1%). Extractions were reported by 13.0% of this group, and root canal treatments, though less common, were exclusively reported in this age category (4.3%).

Reason for visit to dentist						
Attributes	Filling	Scaling	Extraction	Root canal Treatment	f(%)	P value
Age Group (in years)						
Group A (15-16)	11(23.9%)	0(0.0%)	4 (8.7%)	0(0.0%)	15(32.6%)	.007
Group B (17-18)	11(23.9%)	12(26.1%)	6(13.0%)	2(4.3%)	31(67.4%)	
Class						
7	7(15.2%)	0(0.0%)	2(4.3%)	0(0.0%)	9(19.6%)	208
8	4(8.7%)	0(0.0%)	2(4.3%)	0(0.0%)	6(13.0%)	.208
9	2(4.3%)	2(4.3%)	1(2.2%)	0(0.0%)	5(10.9%)	
10	9(19.6%)	10(21.7%)	5(10.9%)	2(4.3%)	26(56.5%)	
Monthly family						
income (in						
Taka)	13(28 3%)	2(4, 3%)	5(10.9%)	0(0.0%)	20(43.5%)	
30000-499999	5(10.00/)	2(4.370)	J(10.970)		20(43.370)	
50000-69999	3(10.9%)	4(8.770)	4(8.770)	0(0.0%)	13(28.5%)	.051
70000-89999	2(4.3%)	5(10.9%)	1(2.2%)	2(4.3%)	10(21.7%)	
90000-109999	2(4.3%)	1(2.2%)	0(0.0%)	0(0.0%)	3(6.5%)	
Religion						
Islam	20(43.5%)	11(23.9%)	8(17.4%)	2(4.3%)	41(89.1%)	178
Hinduism	1(2.2%)	0(0.0%)	2(4.3%)	0(0.0%)	3(6.5%)	.+/0
Christianity	1(2.2%)	1(2.2%)	0(0.0%)	0(0.0%)	2(4.3%)	
Types of family						
Nuclear family	21(45.7%)	12(26.1%)	9(19.6%)	2(4.3%)	44(95.7%)	522
Joint family	1(2.2%)	0(0.0%)	1(2.2%)	0(0.0%)	2(4.3%)	.322

<b>Fable 6: Association be</b>	tween sociodemographic	e characteristics and	l reason for visit to dentist
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The study examined the association between sociodemographic characteristics and the provision of periodic oral health checkups by school authorities. Table 7 presents these relationships, with statistical significance determined at p < .05. Three sociodemographic factors showed statistically significant associations with the occurrence of school-based oral health checkups: age group, class level, and monthly family income (p < .001). Age group demonstrated a stark contrast in access to school-based oral health checkups. Among the younger cohort (15-16 years), 14.8% received periodic checkups, while 16.8% did not. Strikingly, none of the older group (17-18 years) reported receiving these checkups. This finding suggests that school-based oral health initiatives were primarily targeted at or accessible to younger adolescents. Class level analysis revealed that oral health checkups were exclusively provided to students in the 7th grade, with all 23 students (14.8% of the total sample) in this grade receiving checkups. Students in higher grades (8th, 9th, and 10th) did not report any school-based oral health checkups.

Periodic oral health checkup						
Attributes	No	Yes	f(%)	P value		
Age Group (in years)						
Group A (15-16)	26(16.8%)	23(14.8%)	49(31.6%)			
Group B (17-18)	106(68.4%)	0(0.0%)	106(68.4%)	<.001		
Class						
7	0(0.0%)	23(14.8%)	23(14.8%)			
8	26(16.8%)	0(0.0%)	26(16.8%)	. 0.0.1		
9	29(18.7%)	0(0.0%)	29(18.7%)	<.001		
10	77(49.7%)	0(0.0%)	77(49.7%)			
Monthly family income (in Taka)						
30000-49999	54(34.8%)	23(14.8%)	77(49.7%)			
50000-69999	46(29.7%)	0(0.0%)	46(29.7%)			
70000-89999	21(13.5%)	0(0.0%)	21(13.5%)	<.001		
90000-109999	11(7.1%)	0(0.0%)	11(7.1%)			
Religion						
Islam	119(76.8%)	20(12.9%)	139(89.7%)			
Hinduism	11(7.1%)	3(1.9%)	14(9.0%)	507		
Christianity	2(1.3%)	0(0.0%)	2(1.3%)	.397		
Types of family						
Nuclear family	122(78.7%)	21(13.5%)	143(92.3%)	(02		
Joint family	10(6.5%)	2(1.3%)	12(7.7%)	.693		

Table 7: Association between sociodemographic characteristics and periodic oral health checkup	by
school authority	

# Discussion

Our study revealed that the majority of secondary school girls reported their dental condition as average (45.2%) or good (40.6%), with a smaller proportion reporting very good (5.8%) or excellent (0.6%) teeth that is inconsistent with another study [11] where only 27% of Tanzanian students considered their dental appearance good while only 14.4% of 15-year-olds in Russia [12] believed their dental health excellent or very good. In Particular, our results closely resemble those of New Zealand [13,14], in which a comparable proportion of students rated their teeth as average or good. Moreover, our study showed fewer students reporting excellent gum conditions, similar to another study [14] where most adolescents rate their gum condition as average or good, with few considering it excellent. The diverse perceptions in our study are similar to another study [15] where many students rated their gum as good or average.

Besides, the most of the girls (70.3%) reported that they had no dental problems, while a smaller proportion (29.7%) suffered some form of dental condition. These

findings are similar with other regions where a high rate of dental issues [14] and frequent dental pain [15] among school-going girls was reported. Our study found that almost 56.4% of adolescent girls are affected by dental sensitivity and pain, the most common consequences of dental disease. This finding is consistent with previous study among school-aged children where prevalence rates of dental pain ranging from 15.6% to 56.4% [15,16]. Furthermore, few studies [17,18] emphasized the influence of socioeconomic factors, sex and practice of oral hygiene frequency and severity of dental pain. These studies suggest that school going adolescents are more susceptible to these problems. Regarding gingival condition, 47.8% of participants reported occasional gum bleeding, which is lower than to other studies where gingival bleeding in adolescents ranging from 54.2% to 96.21%. [19,20] but higher than in other finding (18.4%) [21]. Although severe gum problems such as swelling and pus discharge are uncommon, the frequent occurrence of gum bleeding may indicate inadequate oral hygiene practices. This observation is consistent with a study where adolescents might cease brushing when

experiencing bleeding [22] thereby worsening their oral health. The impact of socioeconomic status and oral health behaviors, may further elucidate the variations in gingival health among teenagers [23]. Only 6.5% of the respondents reported frequent embarrassment about their teeth, which differs from where 13.6% of Brazilian students avoided smiling due to dental appearance concerns [24]. This discrepancy might be attributed to cultural or socioeconomic differences in awareness of dental aesthetics. In our study, sleep disturbances (6.5%)and school absenteeism (2.2%) were infrequently reported due to dental pain. These rates are inconsistent than those found in other studies [25], where 18% of Saudi Arabian students missed school because of dental problems. There was a significant correlation between dental pain and poor school attendance noted [26], which was less evident in our sample.

In addition, we found most of the students (70.3%) reported never visiting a dentist, highlighting a noteworthy gap in dental care utilization within this population. For the 46 students who had visited a dentist, the most common reason was for dental fillings (47.8%), followed by scaling (26.1%) and tooth extraction (21.7%). Alarmingly, only 14.8% of students reported having access to such programs, while the vast majority (85.2%) did not. In our study, we found significant association (p < .05) between age with last visit to the dentist and reason for receiving dental treatment that is similar with previous studies [27,28] due to financial hardship and parental employment status affecting adolescents' dental attendance. Besides, concerning the reasons for dental visits, younger teenagers often require routine treatments such as fillings, whereas older adolescents may require more advanced procedures such as root canal therapy that is our consistent with previous study [29]. These results support the concept that dental care needs become more complex with age, as noted who linked lower socioeconomic status to increased treatment requirements, including extractions. Furthermore, we also found significant association (p< .05) found between sociodemographic characteristics especially age, class and monthly family income with the provision of periodic oral health checkups by school authorities which will align with various study in different region [30,31].

# Limitation

The study had a narrow geographical scope, was limited only to adolescent school going girl which may not be representative of all defined aged groups of different gender identities so that we may not gain insights of comprehensive oral health behaviors. Moreover, self-reported evaluation of dental and gum conditions may create information bias since students may not correctly evaluate their oral health condition without clinical assessments by dental professionals. While, the cross-sectional nature of the study gives only a single point in time picture for dental health and utilization of services by students.

# Conclusion

The study highlights variation in self-reported perceived dental health conditions, consequences, dental service utilization, and access to dental services among adolescent girls between the ages of 15-18 years. Tooth sensitivity and pain were the common dental problems reported by the participants, whereas, the majority of students have never visited the dentist resulting in a high proportion of the girls that lack access to oral care yearly. Moreover, age and family income were significantly associated with utilization of dental health services and school based dental check-ups facility was unmet among the studied group. Further research is needed to find out the gap to solve this problem. In addition, school authorities should take necessary steps to promote oral health classrooms and enhance periodic school based oral health programs biannually for achieving optimal oral health.

## Acknowledgements

We would like to express gratitude to the authority of University of Dental College for giving us permission to conduct this study. Our sincere thanks to Dr. Md. Wahiduzaaman Prof. Dr. Hosne Ara Begum, Pof. Dr. Md. Zakir Hossain and Dr. Sharafat Hossain for their valuable guidance and support. We are also deeply thankful to the Dr. Nasrin sultana and Dr. Ashique Qureshi for their monitoring data collection. Lastly, I appreciate the efforts of the intern of 23<sup>rd</sup> batch who played a vital role in data collection as well as school authority, students and their guardian for permission.

#### **Ethical Declarations**

The study was conducted following the World Medical Association Declaration of Helsinki and approved by review board of dept. of Dental Public Health, University Dental College (Ref. 2023/UDCDPHIRB/022). Written & verbal informed consent was taken from all participants and from their legal guardians.

## **Competing interests**

The authors declare no competing interests.

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