

Association of Social Demographics and Pediatric Dental General Anesthesia Appointments

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Objective

The primary aim of this study was to assess reasons that pediatric dental patients missed treatment appointments under general anesthesia (GA). The secondary outcome was to evaluate sociodemographic variables between patients who missed and kept their GA appointments.

Materials and Methods

- A prospective chart review of 81 patients from the University of Maryland School of Dentistry (UMSOD) scheduled for GA appointments at the University of Maryland Medical Center between January 20, 2022 to July 31, 2022 was reviewed.
- Patients above 18 years old were excluded.
- Clinical and sociodemographic data were collected.
- Reasons for missed appointments included:
 - Environmental and social determinants, acute illness, did not follow protocol, treatment plan change, and unknown (Table 1).
- Associations of each factor for failed and kept GA appointments were analyzed using Chi-Square, Fisher's exact test, and Multiple Linear Regression.

Table 1. Reasons for missed general anesthesia appointments

Reasons for Missed GA Appointments	N = 39 N(%)	Examples
Environmental and Social Determinants	7 (17.9)	<ul style="list-style-type: none"> Weather issue Transportation issue Guardian/family work/schedule conflict Dental provider illness Financial conflict (insurance, other financial barrier)
Acute Illness	8 (20.5)	<ul style="list-style-type: none"> Guardian/family member/child illness COVID-19 positive
Did Not Follow Protocol	18 (46.2)	<ul style="list-style-type: none"> Guardian forgot/not able to be contacted Did not follow NPO instructions Missed/did not schedule history and physical (H&P) Further medical pre-op/clearance needed Did not follow COVID-19 protocol*
Treatment Plan Change	6 (15.4)	<ul style="list-style-type: none"> Patient being seen by other dental provider Guardian chose alternate treatment plan Provider determined OR not indicated

*Until November 15, 2022, patients being seen for GA at UMMS had to obtain a negative COVID-19 test within 48-96 hours prior to OR hospital visit.

Table 2. Assessment of factors associated with patients who missed and kept their dental appointments utilizing general anesthesia

Demographic/Clinical Characteristics	Missed appointments N = 39 N(%)	Kept appointments N = 42 N(%)	P-value**
Age group (years)			
<5	10 (38.5)	16 (61.5)	0.2459
≥5	29 (52.7)	26 (47.3)	
Types of insurance			
Maryland Healthy Smiles Dental Program (Medicaid)	35 (48.6)	37 (51.4)	>0.999
Private insurance	4 (44.4)	5 (55.5)	
Distance from where a patient lives to the UMMC (miles)			
Mean/Median	21.3/15.9	22.7/9.15	0.945
Patient's PCP is affiliated with UMMC clinic			
Yes	5 (31.3)	11 (68.8)	0.167
No	32 (50.8)	31 (49.2)	
Unknown	2 (100.0)	0 (0.0)	
Special health care needs			
Yes	21 (51.2)	20 (48.8)	0.659
No	18 (45)	22 (55)	
Primary language spoken by guardian			
English	29 (43.9)	37 (56.0)	0.154
Non-English/Unknown	10 (66.7)	5 (33.3)	
Emergency dental care provided between consultation appointment and definitive care visit			
Yes	1 (20.0)	4 (80.0)	0.361
No	38 (50.0)	38 (50.0)	
Number of days between consultation appointment and definitive care visit			
Mean/Median	237.3/227 *	141.4/118	0.012
Nonsurgical caries management was utilized			
Yes	17 (44.7)	21 (55.3)	0.658
No	22 (51.2)	21 (48.8)	

*Only included patients who returned for a GA appointment after missing one in research timeframe.

**Statistically significant (P<0.05)

Results

- Of 81 patients, 39 missed appointments (mean age 6.9, 51% of males) and 42 kept appointments (mean age 6.9, 67% of males).
- Almost half of the subjects' reason for missing a GA was "did not follow protocol" (Table 1).
- Mean days between consultation appointment and surgery visit for subjects who missed the appointments were significantly higher than the subjects who kept the appointments (mean days: 237.3 vs. 141.4; p=0.012).
- There was no significant difference in patients who missed and kept appointments regardless of the patient's language spoken, type of insurance, distance from the hospital or other patient demographics and clinical variables.

Conclusions

- The number of days between consultation appointment and surgery visit for subjects who missed appointments were significantly higher than patients who kept their GA appointment.
- The primary reason that patients missed GA appointments was due to incomplete adherence to hospital protocols.