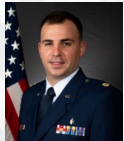


Oral Health Risk Factors and Overall Dental Treatment Needs for Incoming Air Force Recruits, Air Force Recruit Oral Health Study 2018



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Background:

- Air Force recruits' oral health unchanged over the last 30 years
- represents large, unknown pool of dental treatment needs of basic military training graduates.
- Prior recruit oral health survey studies have not explored known oral health risk factors associations with dental treatment needs
- represents a large gap knowledge gap that impacts unit readiness

Methodology:

- Air Force Recruit Oral Health Survey (ROHS) on BMT recruits—Feb 2018-Jan 2019, n = 1330
- Outcome variables:** Total dental treatment needs (excluding routine prophylaxis)
- Predictor variables:** Age, gender, race, education level, dental insurance coverage, home state, service component (i.e. AF Reserves), self-reported oral health, dental treatment need urgency, utilization of dental care, oral hygiene, tobacco product use, and sugar intake (by serving)
- Negative binomial modeling with normalize weights

Results:

- Overall median dental treatment needs: 7 (IQR: 4-11)
- "Poor" self-reported oral health the highest median treatment needs: 13 (IQR 8.5-20) "Excellent" lowest: 5 (IQR 2-7)
- Final adjusted model showed lack of insurance coverage, worse self-reported oral health, lack of dental care utilization, tobacco product use, and sugar intake associated with higher rates of treatment needs

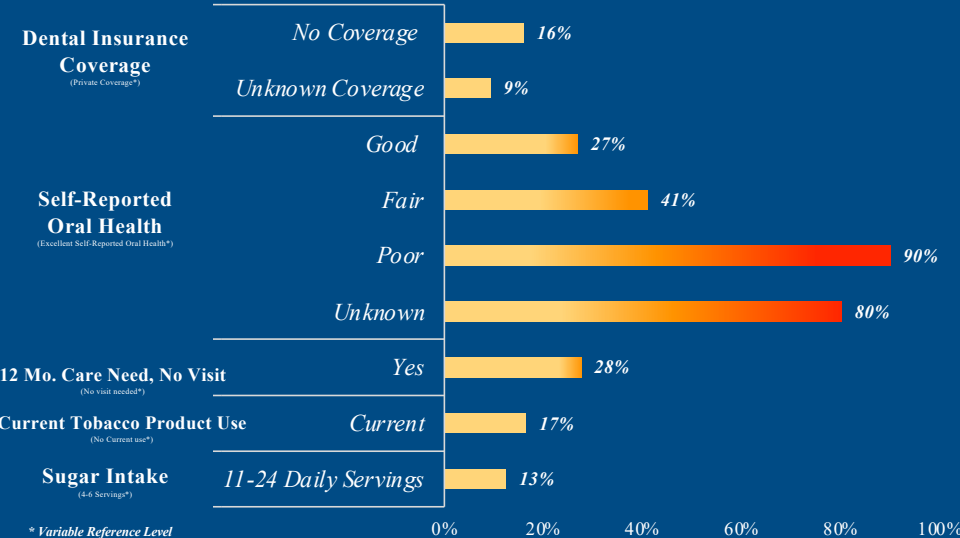
Conclusion:

Increased dental treatment needs for incoming Air Force recruits appears driven by both lack of access and failure to utilize care, factors that are harder to control versus habit-based risks, such as excessive sugar intake and tobacco use.



Elevated dental treatment needs in Air Force recruits prior to entering active duty are driven by lack of access and utilization of dental care

Percentage Increase in Rates for Recruit Dental Treatment Needs



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Characteristics of Incoming Air Force Recruit Population

	%* (n*)		%* (n*)
Overall	100.00 (1330)	Component	
Age		AD	83.5 (1110)
Q1 (18 or younger)	29.5 (393)	AFRES	5.8 (78)
Q2 (19)	25.1 (334)	ANG	10.7 (142)
Q3 (20-22)	25.4 (337)		
Q4 (23+)	20.0 (267)	Region	
Gender		Northeast	12.6 (167)
Male	76.2 (1012)	Midwest	21.9 (291)
Female	23.8 (316)	South	39.7 (527)
Race		West	22.5 (300)
White	59.9 (796)	Territories	3.3 (45)
Black	19.9 (265)	Self Reported Oral Health	
Asian	2.5 (33)	Excellent	8.4 (112)
Hispanic	13.7 (182)	Good	54.1 (720)
Other	4.1 (54)	Fair	31.2 (415)
Education		Poor	4.4 (59)
HS Grad or less	58.0 (772)	None	1.8 (24)
Some College/Technical	42.0 (558)	Past 12 Months Needed Care, no Visit	
Insurance		No Care Needed	64.3 (856)
Private	49.9 (663)	Yes	35.7 (474)
TriCare	7.8 (104)	Self Reported Oral Hygiene Level	
Gov Subsidized	8.2 (109)	Optimal	89.9 (1198)
No Coverage	11.3 (150)	Not Optimal	10.1 (132)
Unknown	22.8 (304)	Self Reported Treatment Need Urgency	
Time Since Last Dental Visit		None	51.2 (682)
Within 1 year	62.3 (799)	Immediate	8.5 (113)
1-2 years	22.1 (299)	Within 6 months	21.5 (285)
3+ years	9.4 (124)	Over 6 months	18.8 (250)
Any Tobacco Product Use		Sugar Intake (servings)	
No	54.6 (726)	Q1 (4-6)	28.2 (376)
Former	35.6 (473)	Q2 (5-8)	33.0 (440)
Yes	9.8 (130)	Q3 (9-10)	19.4 (258)
		Q4 (11-24)	19.4 (256)

*Normalized weighted percent representing all incoming recruits for CY2019
*Actual sample size

Recruit Median Dental Treatment Needs and Interquartile Range

