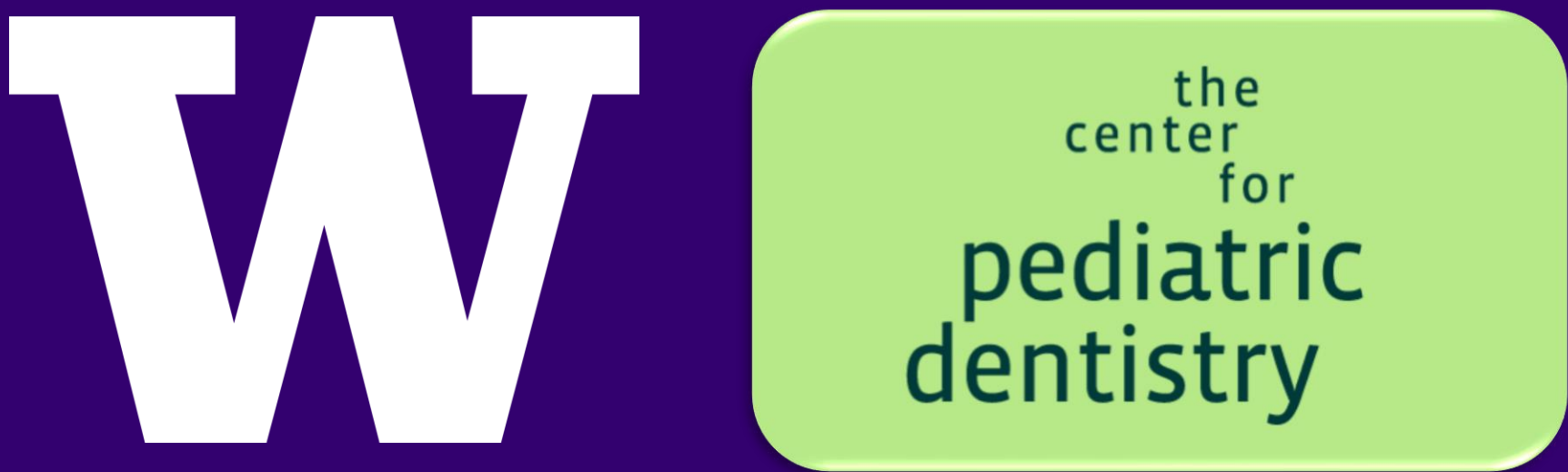


LONGITUDINAL ASSESSMENT OF DENTAL UTILIZATION IN PEDIATRIC REFUGEES RESETTLED IN WASHINGTON STATE

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INTRODUCTION

Across the globe, there is an ongoing crisis of refugees being forced from their homes in record numbers. At the close of 2020, there were a staggering 82.4 million displaced peoples, including an estimated 35 million children.

- Refugee children are at increased risk for poor health due to adversity experienced early in life that may impact long-term health, development and wellbeing.
- Since 1980, the USA has admitted over 3.1 million refugees. Washington State is a top 3 state for resettling refugees.
- Literature surrounding pediatric refugee oral health is limited

AIMS

This study investigates the overall dental utilization and types of dental services accessed by pediatric refugees resettling in WA state between 2015-2018

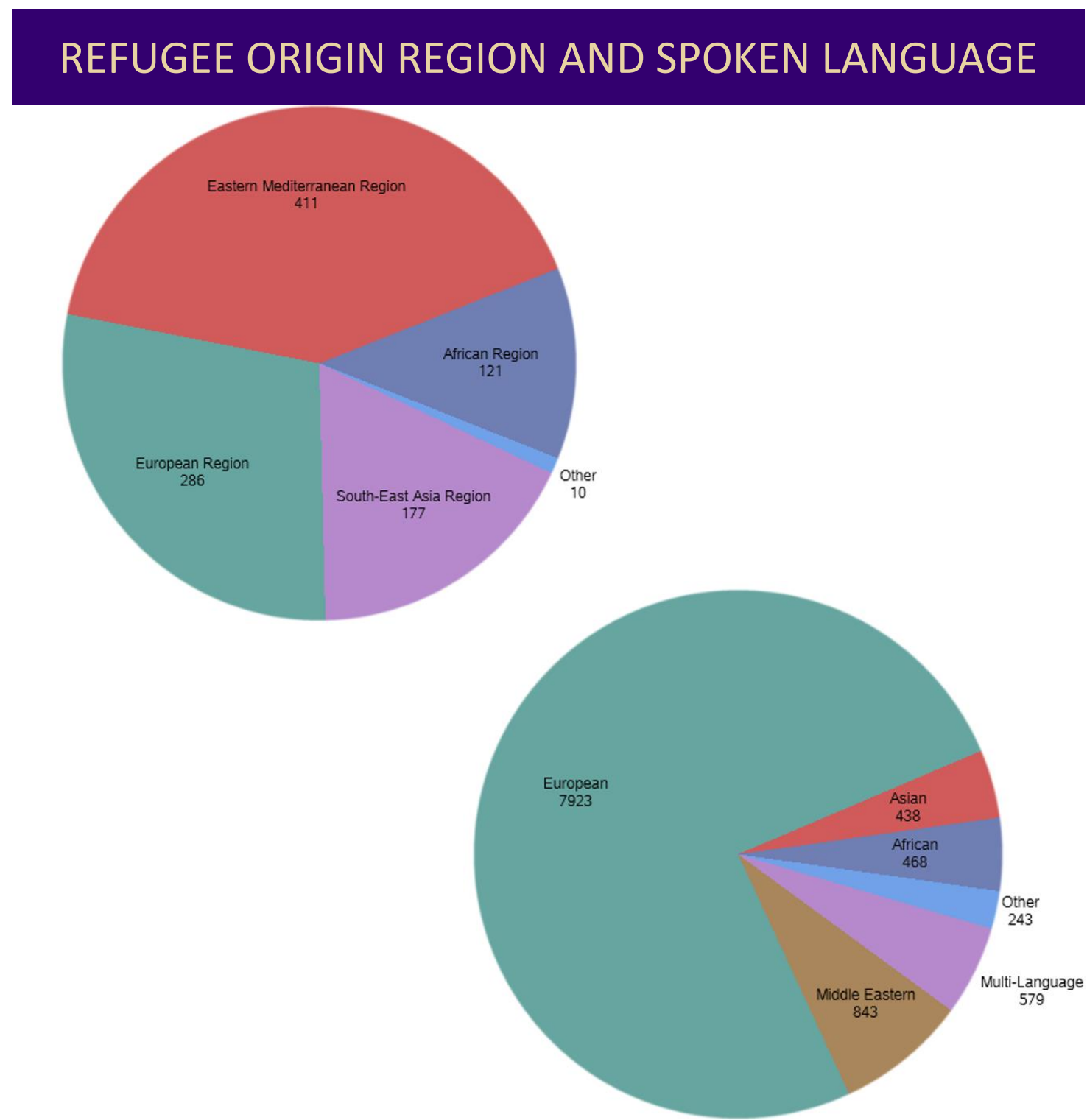
- Comparison of dental utilization between pediatric refugees vs Medicaid eligible pediatric non-refugees

METHODS



- De-identified data housed by 3 states agencies: DOH, HCA and DSHS
- Retrospective cohort study design with 36 months follow-up
- Comparison of pediatric refugees with pediatric non-refugee Medicaid users. Non-refugees matched to refugees in ratio of 3:1.
- Data: Demographics, Claims Data (dates, CDT-9 codes)
- Analysis: Descriptive Analysis and ANOVA

FINDINGS



UTILIZER %, MEAN CLAIMS OVER 3 YEARS			
Claims	Refugee (N=1125)	Control (N=3462)	p-value
Utilizer (N, %)	1012(89.96%)	2809(81.14%)	<.0001
All claims	29.92(18.26)	21.42(13.55)	<.0001
Diagnostic	11.60(7.26)	8.68(5.85)	<.0001
Preventive	7.55(5.15)	7.13(5.05)	0.0232
Restorative	6.75(5.78)	2.83(4.02)	<.0001
Surgery	1.19(2.08)	0.61(1.36)	<.0001
Orthodontics	0.15(0.88)	0.31(1.36)	0.0003
Miscellaneous	0.61(2.27)	0.71(1.60)	0.1215

DEMOGRAPHICS				
Variables		Refugee	Non-Refugee	p-value
Age group	Group 1: 0 - 6	417 (37.07%)	1249 (36.08%)	0.0848
	Group 2: 7 -12	307 (27.29%)	1062 (30.68%)	
	Group 3: 13-20	401 (35.64%)	1151 (33.25%)	
Sex	Female	494 (43.91%)	1567 (45.26%)	0.2140
	Male	623 (55.38%)	1883 (54.39%)	
	Other	8 (0.71%)	12 (0.35%)	
Race/Ethnicity	Asian/Pacific Islander	105 (9.33%)	159 (4.59%)	<.0001
	Black	209 (18.58%)	419 (12.10%)	
	Other	176 (15.64%)	739 (21.35%)	
	White	350 (31.11%)	1553 (44.86%)	
	Not Provided	250 (22.22%)	275 (7.94%)	
Disability	N	1106 (98.31%)	3115 (89.98%)	<.0001
	Y	19 (1.69%)	347 (10.02%)	

MEAN CLAIMS BY YEAR									
Claims By Years	Year 1			Year 2			Year 3		
	Refugee	Control	p-value	Refugee	Control	p-value	Refugee	Control	p-value
All claims	13.98(11.77)	7.67(7.34)	<.0001	8.66(8.82)	7.15(6.99)	<.0001	7.28(7.21)	6.59(6.86)	0.0070
Diagnostic	4.81(3.89)	3.02(2.78)	<.0001	3.48(3.50)	2.88(2.88)	<.0001	3.30(3.28)	2.78(2.96)	<.0001
Preventive	3.02(2.73)	2.56(2.62)	<.0001	2.38(2.53)	2.39(2.46)	0.9687	2.15(2.30)	2.19(2.48)	0.6521
Restorative	3.91(4.71)	1.08(2.57)	<.0001	1.77(3.31)	0.95(2.30)	<.0001	1.07(2.44)	0.80(2.17)	0.0013
Surgery	0.75(1.71)	0.21(0.79)	<.0001	0.25(0.89)	0.20(0.77)	0.0705	0.20(0.67)	0.20(0.81)	0.7686
Orthodontics	0.03(0.24)	0.11(0.55)	<.0001	0.05(0.36)	0.11(0.55)	0.0017	0.07(0.45)	0.10(0.54)	0.1245
Miscellaneous	0.24(1.18)	0.30(0.75)	0.0739	0.20(0.78)	0.24(0.68)	0.1562	0.17(0.68)	0.18(0.55)	0.7275

CONCLUSIONS

- A total of 1,125 refugees resettled in Washington in 2015. Majority of children were 6 years old or younger (37%), male (55%) and non-disabled (98%). Race was reported as 31% White, 19% Black, 9% Asian, and 16% as Other. Roughly a quarter (22%) of refugees did not report race. Race and disability status were significantly different between refugee and non-refugee (p<.0001).
- Utilizer percentage was significantly (p<.05) different between refugees (90%) and non-refugees (81%). From 2015-2018, mean # of claims for refugees was higher in all categories except for orthodontics and miscellaneous. Differences were significant in all categories (p<.05) except for miscellaneous.
- In year 1, refugees showed higher claims in all categories except for orthodontics and miscellaneous. Differences were significant (p<.05) in all categories except miscellaneous. In year 2, refugees showed higher mean claims in all categories except preventative, orthodontics and miscellaneous. Differences were significant (p<.05) in all categories except preventative, surgery and miscellaneous. In year 3, refugees displayed higher mean claims in the categories of diagnostic and restorative. Differences in year 3 were significant (p<.05) for the diagnostics and restorative claims categories.

- Refugees showed a year over year decrease in both mean total claims and mean claims by categories in all areas except orthodontics. Notably restorative and surgical claims were substantially higher in refugees at year 1 but reduce by year 3 to be similar to non-refugees.

- Data from this study will provide foundational data to construct future interventional studies seeking to improve the oral health of pediatric refugees resettled in Washington State.

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