# Differences in pediatric caries risk by childcare setting among an urban safety net population





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### Introduction

- Children aged <4 either stay at home</p> with a parent or legal guardian, or in the care of a trained caregiver (e.g. at daycare or preschool, or with a babysitter)
- > According to a study in 2017 [1], parents may not understand the importance of oral healthcare, as they are not trained in childcare to the same extent as professional child caregivers are, so this can pose a higher caries risk
- Children in low SES families are at higher caries risk due to diet and inadequate education [3]
- Hypothesis: Children who attend daycare or preschool or live with a trained caregiver may receive a better diet and/or oral hygiene, and thereby have a lower caries risk

## Objectives

- 1. Assess the caries risk of low SES children aged 0-4 who go to daycare and/or have a babysitter compared to those who stay at home with their parent/guardian
- 2. Assess for differences in **diet** and oral hygiene among the above population of children with respect to type of childcare

### Methods

- > 7 question survey was distributed to parents of patients aged 0-4 at a pediatric dental clinic in an urban safety net medical center
- > DMFT (decayed, missing, filled teeth) score was abstracted from respondents' electronic medical record
- > Statistical analysis conducted using Stata





Childcare: Trained caregiver, daycare and/or preschool No Childcare: Parent/guardian only

### Results

- ➤ 60 surveys were collected
- Having childcare (daycare or babysitting) was associated with an increased odds of having high caries risk (DMFT >=1): OR 3.385 (p = 0.038, CI 1.068-10.727)
- > The mean DMFT score was 65% higher in children who had childcare (4.85 vs 2.94), but this relationship was not significant (RR 1.65, p = 0.522
- > The association between DMFT score and having childcare (daycare or babysitting) was not significant when adjusted for other variables (race, age, juice intake, and milk intake): RR 1.028 (p = 0.799)
- However, age was strongly associated with having childcare (RR 7.088, p = 0.003) and the association between older age and high caries risk had an OR of 2.5 (though this relationship was not statistically significant, p = 0.098)
- > Juice intake was also associated with age (p < 0.05)

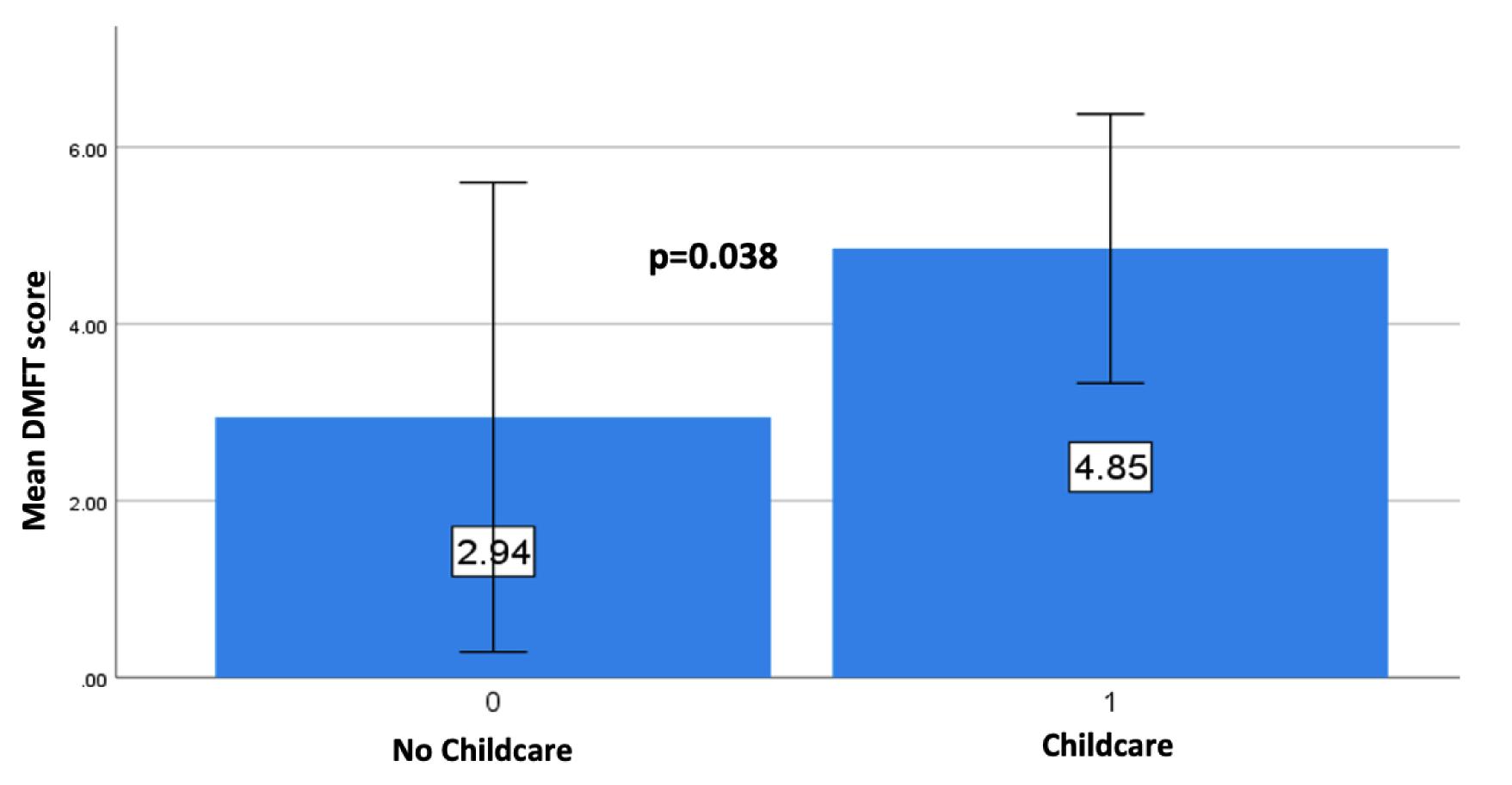
### Conclusion

➤ Our study showed that childcare was associated with an increased odds of having high caries risk, but this relationship may be confounded by variables such as age (childcare group was older) and juice intake (increased in older kids)

### References

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# Results



Error bars: 95% CI