



BACKGROUND

The presence of oral disease can have significant psychosocial impacts which reduce quality of life. Hispanic preschool children are reported to have higher amounts of dental caries on average than non-Hispanic white children.¹ Social support, which is defined as “an exchange of resources between at least two individuals perceived by the provider or recipient to be intended to enhance the well-being of the recipient,” has been studied for its relationship with overall health.² Social support can impact health by affecting knowledge, thoughts, attitudes, and behaviors so as to promote health outcomes.³ Several studies have shown a relationship of social support with dental caries and dental care utilization. This study explored the association of dental caries in children and the quantitative level of social support in Hispanic caregivers.

METHODS

- Cross-sectional study design
- Study population: 157 caregiver-child triads
- *Basic Research Factors Questionnaire* survey assessed caregivers’ oral health knowledge, attitudes, behavior, and other psychosocial measures⁴
- Main predictor variable: social support
- Outcome variable: dental caries
- Overall social support was divided into four sub-categories: errand help, money help, transportation help, and childcare help.
- Bivariate associations between independent variables and dmfs conducted
- Independent variables with bivariate association of $P < .2$ with outcome variable included in the multivariable linear regression model

RESULTS

- Dental caries decreased by 10 units for every 1-unit increase in the overall parental social support.
- Dental caries decreased by 7.70 units for every 1-unit increase in one of the social support sub-scales—transportation help.
- A significant association was observed between parental knowledge on dental utilization and dental caries. Dental caries decreased by 2.7 units for every 1-unit increase parental knowledge on dental utilization.

Variables	Estimate	P-Value
Overall Social Support	-11.18185	0.02
Knowledge on Dental Utilization	-3.84791	0.01

Multivariate linear regression analysis: Association between parental social support and dental caries in children adjusting for knowledge on dental care utilization and parent stress index (overall model p-value: 0.004)



Variables	Estimate	P-Value
Overall Social Support	-10.10	0.03
Errand Help	-8.07	0.07
Money Help	-6.93	0.05
Childcare Help	-6.78	0.11
Transportation Help	-7.70	0.03
Knowledge on Dental Utilization	-2.70	0.04

Bivariate linear regression analysis: Association between parental social support, knowledge on dental care utilization and parent stress index and dental caries in children

DISCLOSURES

This research study received no external funding. Support was provided by the Children’s Hospital Colorado and University of Colorado Anschutz Medical Campus. There were no conflicts of interest.

CONCLUSIONS

Social support and knowledge on dental care utilization can be significant factors to determine caries status in Latino children of Spanish-speaking mothers. A higher level of social support and knowledge on dental utilization for Latino caregivers is correlated to lower amounts of dental caries in their children.

IMPLICATIONS

In Latino communities, social support is an essential component of child caregiving. Further research can be conducted as to how specifically each of the aspects of social support affects childhood caries. This study shows that continual research into social support can reveal how children can achieve higher levels of oral health.

REFERENCES

1. Weintraub JA. The Oral Health in America Report: A Public Health Research Perspective. *Prev Chronic Dis* 2022;19:220067. DOI: <http://dx.doi.org/10.5888/pcd19.220067>
2. Shumaker, S. A., & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. *Journal of Social Issues*, 40(4), 11–36. <https://doi.org/10.1111/j.1540-4560.1984.tb01105.x>
3. Callaghan P, Morrissey J. Social support and health: a review. *Journal of advanced nursing*. 1993 Feb;18(2):203-10.
4. Albino, J., Tiwari, T., Gansky, S. A., Henshaw, M. M., Barker, J. C., Brega, A. G., . . . Borrelli, B. (2017). The basic research factors questionnaire for studying early childhood caries. *BMC Oral Health*, 17(1), 83.