

Efficiency of Telehealth Medical Nutritional Therapy for Dental Caries Management

Shivani Saith¹, Christie Custodio-Lumsden¹, Richard Yoon¹

¹ Columbia University College of Dental Medicine

BACKGROUND

Early childhood caries (ECC) is the presence of ≥ 1 decayed, missing, or filled tooth in children under 6 years, disproportionately affecting low socioeconomic and minority populations

Caries is a multifactorial disease with diet a main modifiable risk factor

Anticipatory guidance to provide oral health recommendations constitutes a substantial portion of pediatric dental appointments

Medical Nutritional Therapy (MNT) is focused nutrition counseling assessing an individual's diet and offering personalized recommendations

The emergence of telehealth services amid the global COVID-19 pandemic increased access to crucial health services, including MNT

OBJECTIVES

To evaluate the efficiency and feasibility of implementing telehealth MNT with parents of young children for behaviorally-focused disease management of ECC

MATERIALS & METHODS

Recruitment

Well-children 2-6 years with ECC and parents presenting for routine appointments at the Columbia University Pediatric Dental Clinic

Intervention

Parents were scheduled to complete three video conference-based MNT sessions with a nutrition program graduate student over six weeks to promote low-cariogenic dietary behaviors and were offered a \$25 incentive/session

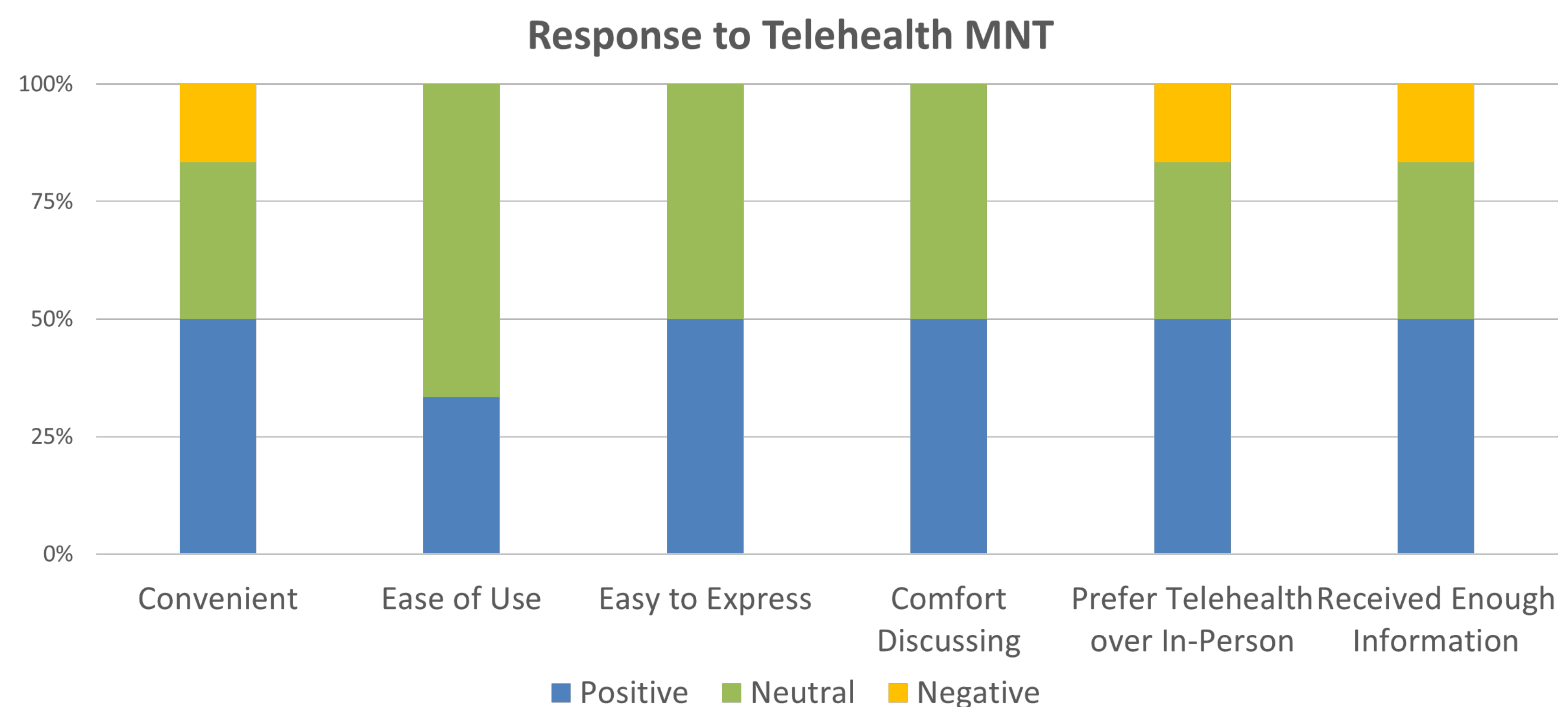
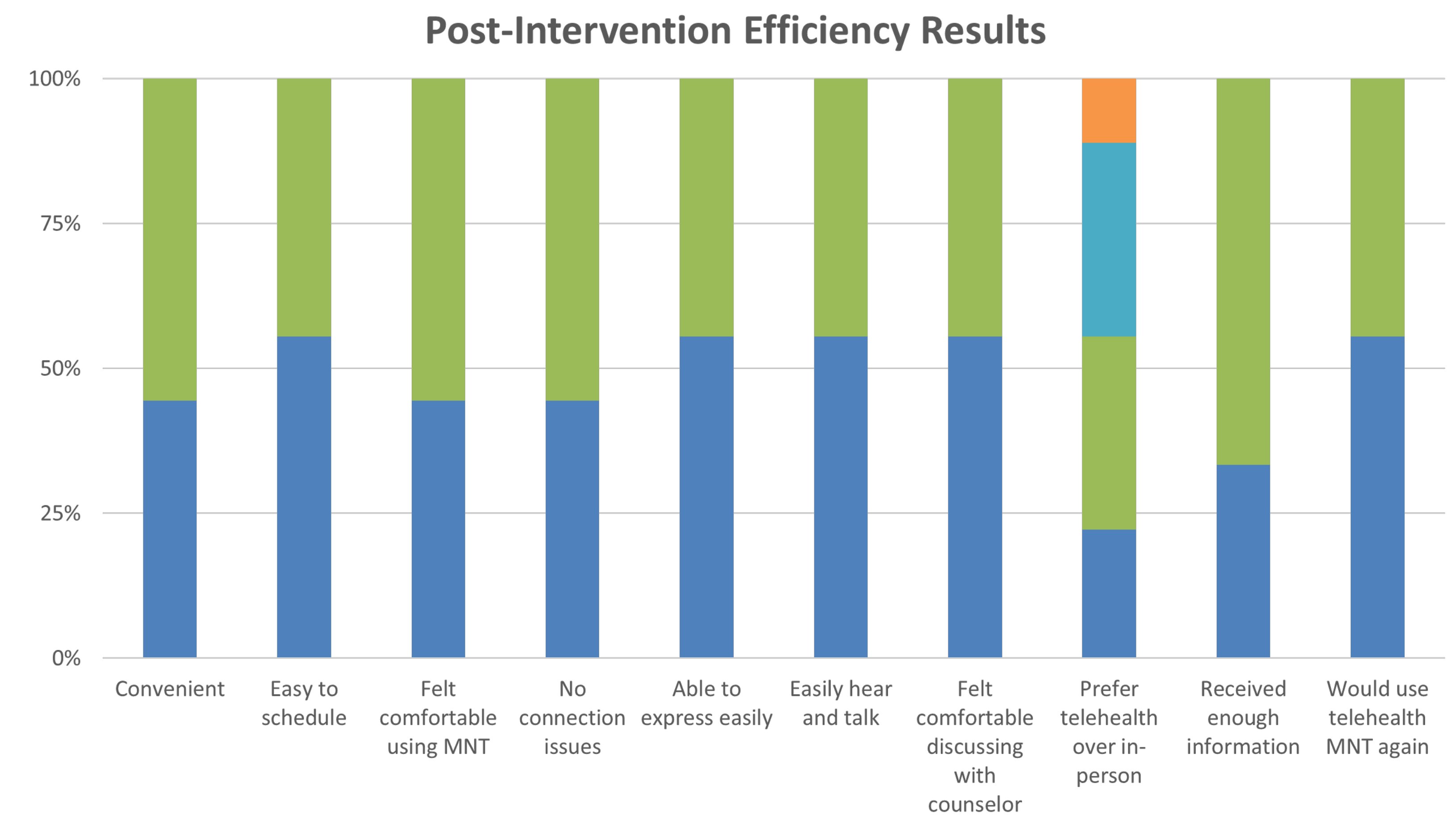
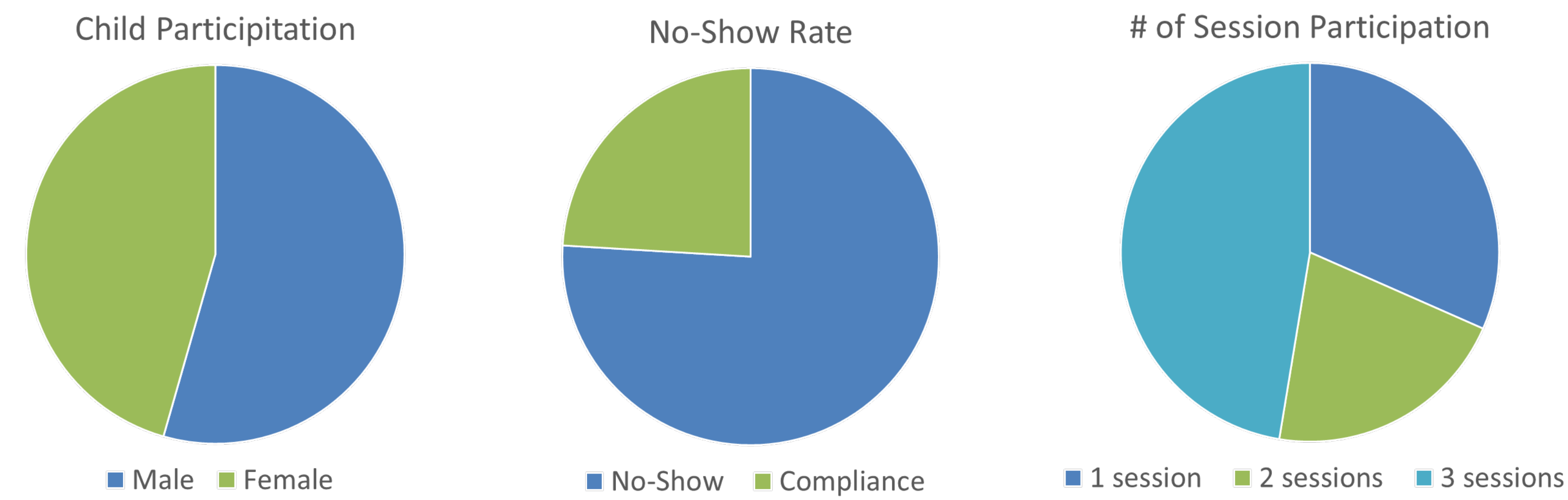
Assessment

Pre-/post-intervention surveys assessed changes in dietary and oral health knowledge and experience with telehealth and MNT

Analysis

Statistical analysis performed using descriptive, Wilcoxon Scores and Kruskal-Wallis tests

RESULTS



DISCUSSION

No-Show Rate

The study had a high no-show rate of parents who agreed to participate but did not complete in any MNT sessions, which may have been due to coordinating schedules

MNT Impact

All parents who completed pre- and post-intervention surveys reported making changes (e.g., reducing juice, more diligent about brushing routine, limiting junk food) as a result of MNT

Telehealth Efficiency

All parents answered positively to post-intervention statements about telehealth efficiency (i.e. convenient, easy to schedule) and would be willing to use telehealth for nutrition counseling again

CONCLUSIONS

While telehealth MNT may be efficient for those who participated, the high no-show rate in this study limits the feasibility of this intervention. For those who participated, parents had a positive experience with the telehealth MNT.

NEXT STEPS

Future studies should investigate the most preferred delivery method for MNT with parents in high-risk populations. Telehealth MNT could be a possibility if the structure of the MNT was more streamlined with scheduling and survey administration.

ACKNOWLEDGEMENTS

I would like to thank my research team- Dr. Lumsden, Dr. Yoon, Jennifer Chou, Emily Alcon, Shannon Scott, and the dental assistants of CDM Pediatric Dental for making this project possible. Research supported by Health Resources and Services Administration/DHHS Postdoctoral training grant (D88HP37554).