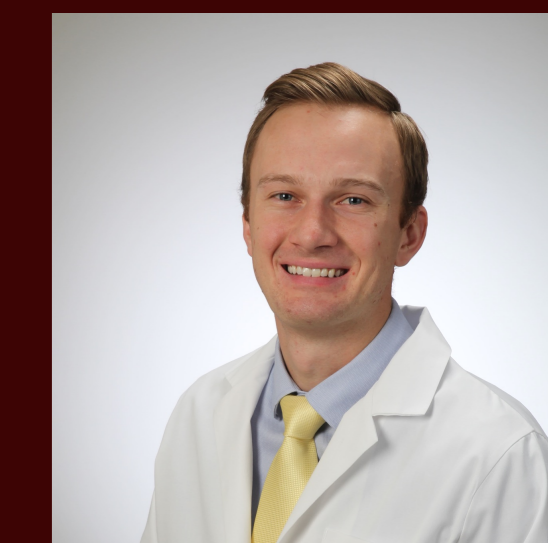




Distribution of Patients' Age Receiving Operative Dental Treatment within the Texas A&M Pediatric Dentistry Residency

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BACKGROUND

An important aspect of a well-rounded pediatric dental residency is the opportunity to treat a broad-range of pediatric patients. This can include patients from various backgrounds, medical histories, or age. One method that Texas A&M's pediatric dental residency has implemented to provide its pediatric dental residents the opportunity to treat a wider variety of patients is providing treatment to patients in various community dental clinics throughout Dallas. Patients seen at each clinic come various backgrounds. For example, patients seen at the Healing Hands community clinic are predominantly patients who have immigrated to the United States recently, whereas patients see at the North Dallas Shared Ministries clinic are specific to that zip code.

OBJECTIVE

The purpose of the study was to determine if the community dental clinics where TAMU pediatric dentistry residents provide dental restorative treatment allow residents to treat a significantly different ages of patients than those who are treated at the Texas A&M School of Dentistry pediatric dental clinic, thus allowing residents to see a wider range of patients during their residency training.

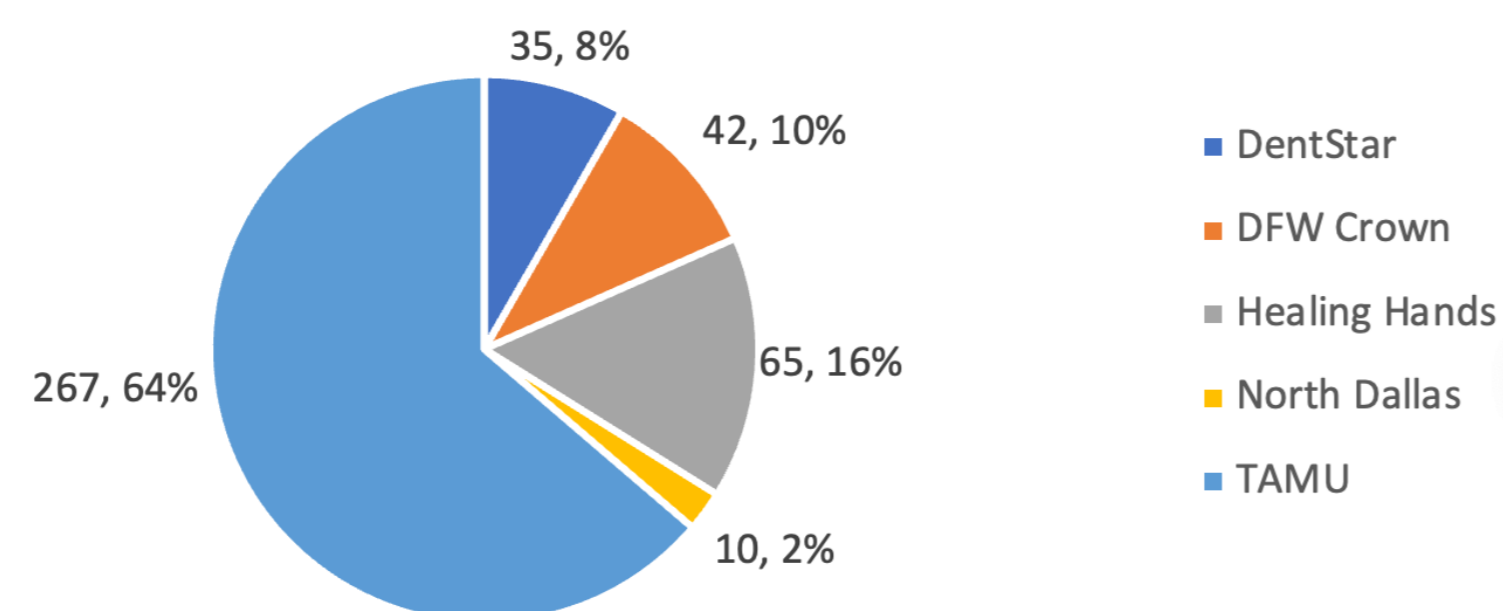
MATERIALS AND METHODS

This was a retrospective study of logged treatments from January to November 2023 by residents at TAMU Pediatric Dental Residency and associated school and community dental clinics. The data did not include patients treated at hospital clinics. Data included: patient age, medical history, procedure date, provider role, clinic location, and if pharmacological behavior guidance was used to complete treatment. Logged treatments were then categorized by clinic.

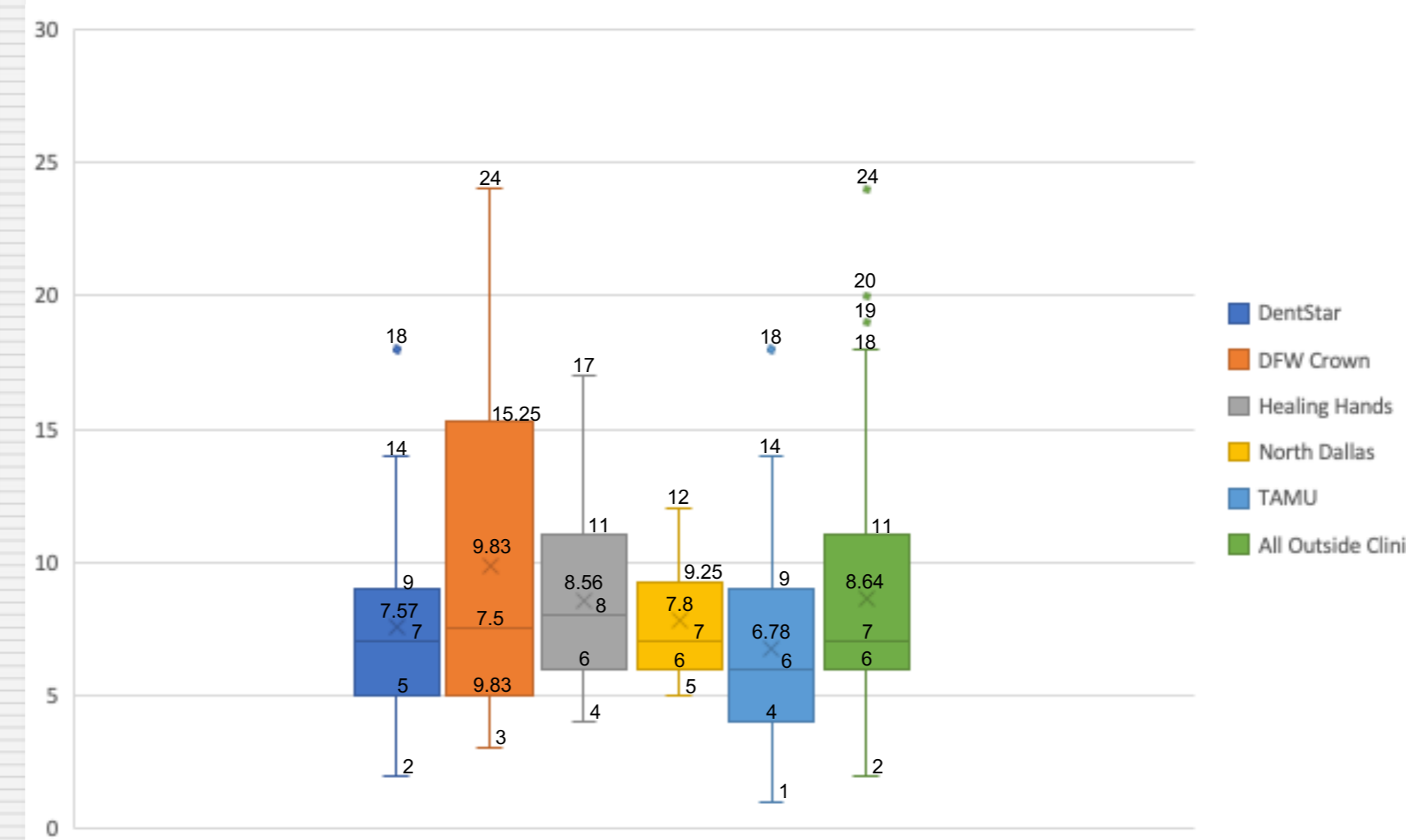
Results

- A Kruskal-Wallis test showed that there is a significant difference in age of patients treated between the various community dental clinics and school clinic ($p=0.00032$)
- Follow-up Mann-Whitney U test with Bonferroni corrections showed that the only significant difference in age was between patients treated at the Dallas Healing Hands community clinic and the TAMU school clinic ($p < 0.00001$)
- When a Mann-Whitney U test was applied to test for a significant difference between the ages of all patients treated at community dental clinics vs. the TAMU school clinic, a significant difference was found ($p < 0.00001$)

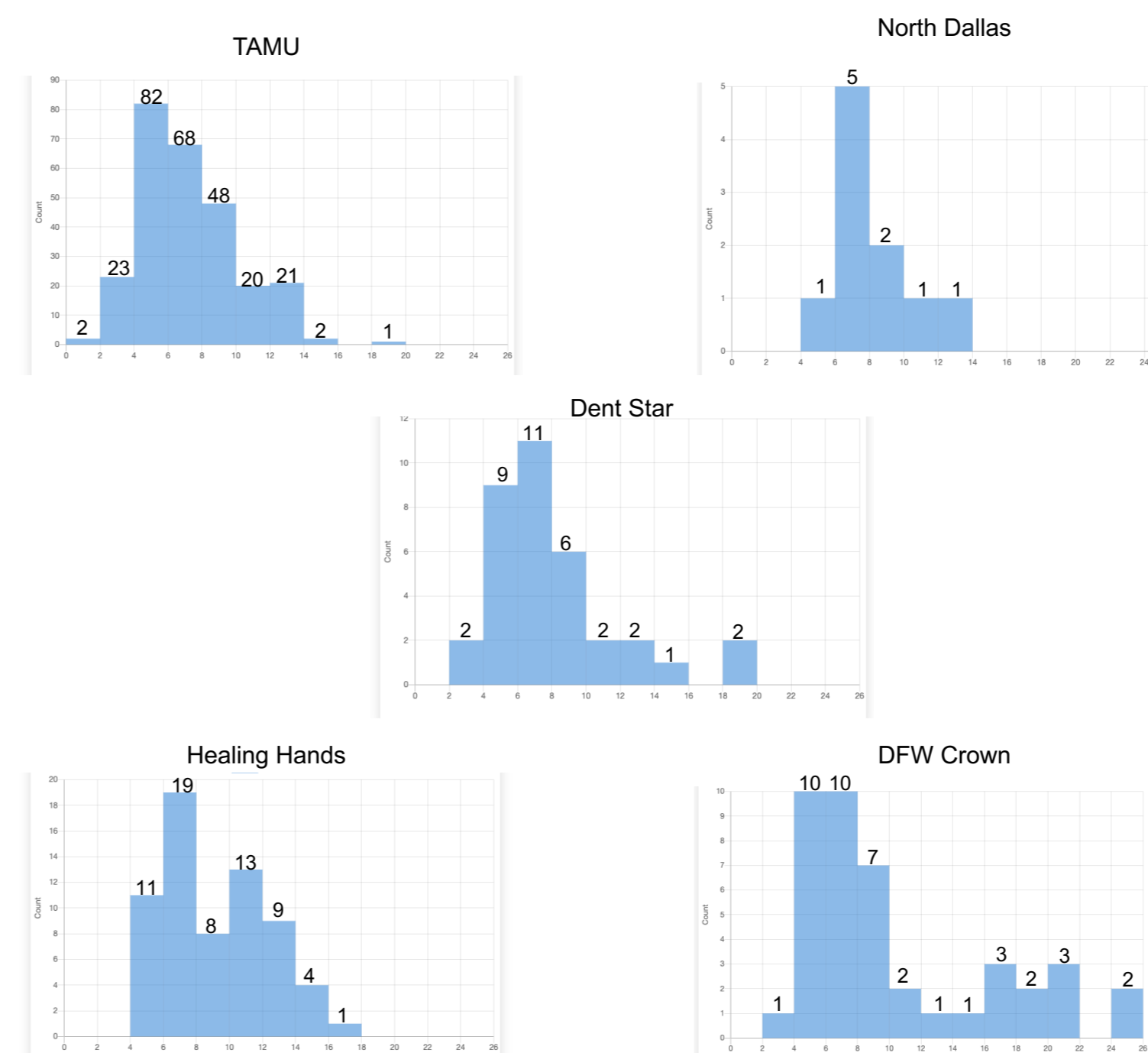
Distribution of Patients by Clinic



Box Plot of Patients' Age at Each Clinic



Histogram for Each Clinic



DISCUSSION

Based on these results, it can be concluded that the Dallas-based community dental clinics do provide TAMU pediatric dental residents the opportunity to provide treatment to a statistically significant different age group than the school clinic, but a significant difference is not noted between the community clinics. One reason for this statistical difference may be due to the fact that many patients are referred to the TAMU school clinic for moderate or IV sedations, which may be more correlated to patients of a younger age while moderate sedations are not completed at four out of the five community clinics. Whether this difference in age of patients treated provides a clinically significant difference to a resident's training and their comfort level with different ages of patients can not be determined at this time. Further research is recommended to determine the effect of the various Dallas-based community TAMU pediatric dental resident's comfort level with a broader range of patients.

CONCLUSIONS

1. Community dental clinics in Dallas allow for TAMU to provide treatment to a significantly different age of patients
2. More research is needed to determine if treating patients in the community dental clinics allows TAMU pediatric residents to feel more prepared for future practice