



ABSTRACT

Purpose: The aim of this study is to evaluate and assess the oral surgery needs in a pediatric hospital dental clinic at Children's Mercy Hospital in Kansas City.

Methods: Following IRB approval, appointments over a 6-month time-period were reviewed and recorded when a referral was placed to an oral surgeon. The reason for referral, patient age and medical history were recorded and analyzed. **Results:** Half of the patients needing oral and maxillofacial procedures were between the ages of 8-10 years old. There was an equal number of patients needing extractions due to carious/non-restorable teeth with and without special health care needs. Two-thirds of the patients were referred from an outside provider to Children's Mercy Hospital. **Conclusion:** Due to the oral surgery needs of patients that are seen in the Children's Mercy dental clinic, it would be beneficial to the patient population to have an oral surgeon on staff. This would provide better access to care by eliminating barriers in the referral process and reducing time to treatment completion.

BACKGROUND/INTRODUCTION

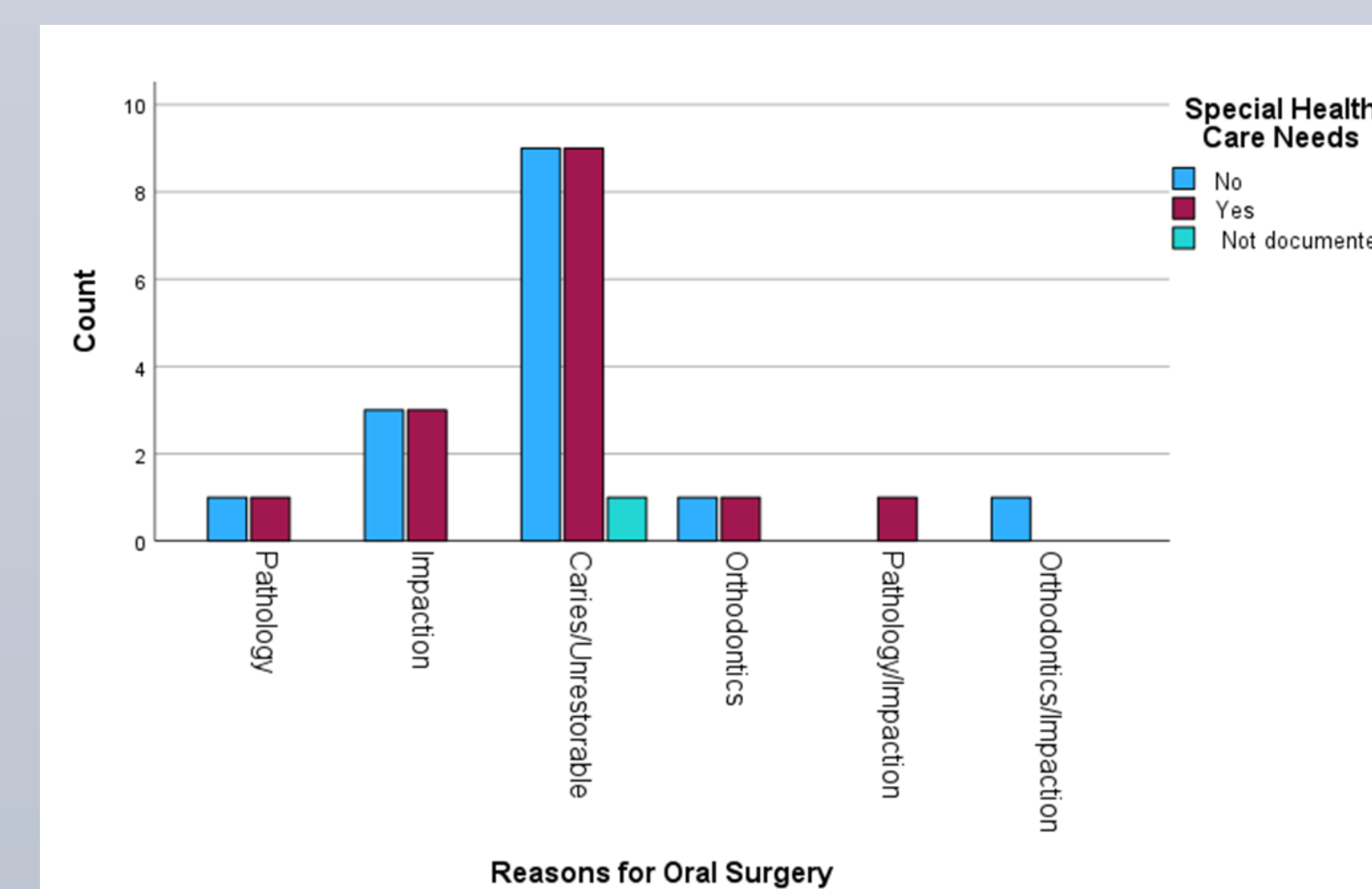
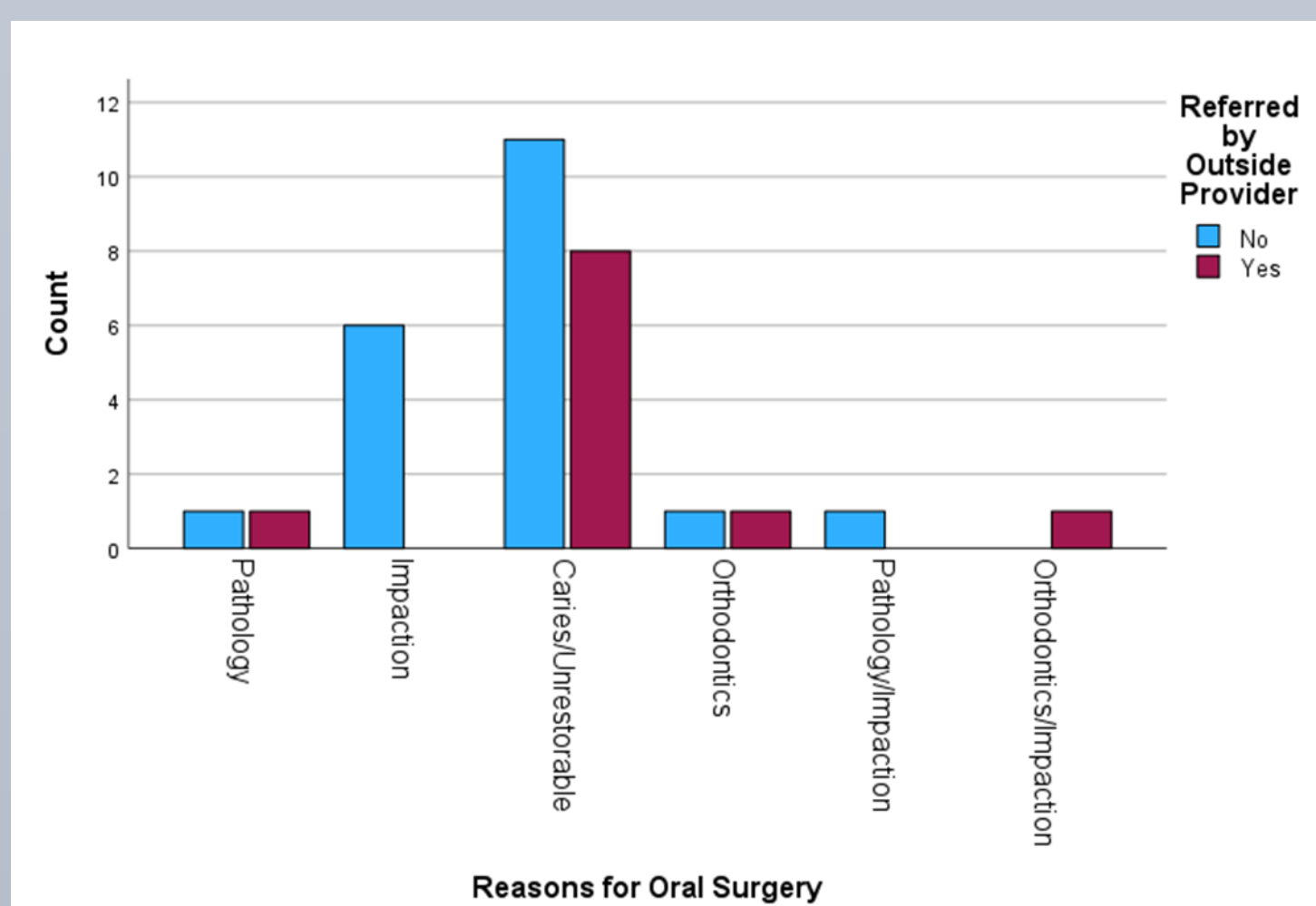
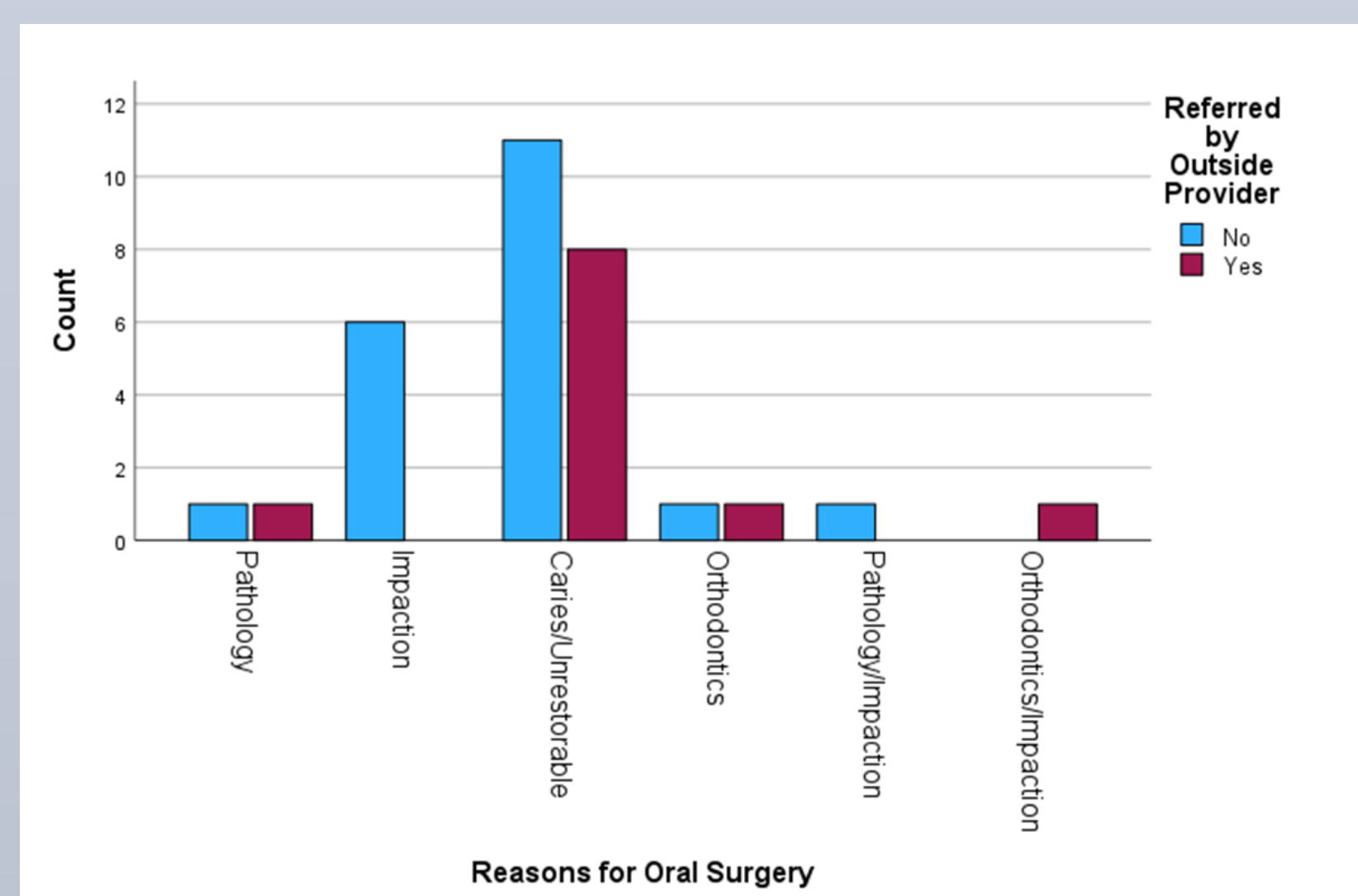
Children's Mercy Hospital (CMH) in Kansas City, Missouri houses numerous pediatric specialties including pediatric dentistry. Within the hospital, there is an outpatient dental clinic that also has a pediatric dental residency program. The dental clinic and residency program are well equipped to see patients of all medical and social backgrounds for pediatric dental treatment including exams, cleanings, fillings, crowns, and extractions. However, there are patients that require more extensive treatment beyond the scope of the CMH dental clinic and require referral to an oral and maxillofacial surgeon. This treatment includes extraction of impacted, non-restorable permanent, or ankylosed teeth as well as pathology related procedures. The CMH dental clinic does not have an oral surgeon on staff and relies on referrals to oral surgeons at the nearby general hospital and private offices for this treatment to be completed. Due to the referral process and lengthy wait times, this has created prolonged treatment timelines for CMH dental patients. The aim of this study was to evaluate the oral surgery needs in the dental clinic patient population by determining the reasons for referral and to assess the value of having an oral surgeon at Children's Mercy Hospital.

MATERIALS/METHODS

Following IRB approval, data was collected and based upon patient appointments and treatment notes from March 1st, 2023, to September 30th, 2023, at Children's Mercy Hospital Dental Clinic. A record was made in a RedCap survey when a referral was placed for a patient 8 years and older with oral surgical needs. Reasons for referral included pathology, impacted teeth, carious or unrestorable teeth, extractions for orthodontics, and impaction related to pathology or orthodontia. In addition to referral reasons, patient demographics including age, special health care needs and if they were referred by an outside dentist were also recorded. Data analysis: Descriptive statistics were used to compare oral surgical needs across our given population at CMH Dental Clinic. Chi squared tests were used to evaluate correlations between age, special health care needs, referral reason and outside provider referral.

RESULTS

Data analysis was completed with a chi-square test and revealed no statistically significant associations between referral reason, age, special health care needs or an outside referral source. The oral surgical needs between patients with special health care needs and those without were equal. In addition, almost two-thirds of the patients with oral surgical needs were patients of CMH dental clinic. The greatest number of referrals were needed for carious/unrestorable teeth in patients aged 8-10 years old.



DISCUSSION/CONCLUSION

CMH Dental Clinic serves a wide patient population, with diverse needs dentally, behaviorally, and medically. Therefore, an analysis of what services we provide is important to ensure we can adequately serve our population. Oral surgical needs are an important piece of these services, and although pediatric dentists do some surgical procedures, such care could be completed more efficiently with a skilled surgical provider. Per the Commission on Dental Accreditation, an oral surgeon should be able to perform "major oral and maxillofacial surgeries...in children". This is in contrast to pediatric dentists whose requirements include the detection and diagnosis of "common and important oral and maxillofacial lesions". This study has given us preliminary data on what specific needs our patients are presenting with and at what rate they are being referred to an oral surgeon. Looking at the reasons for referral, there was no significant association in regard to patient age, special healthcare needs, or being referred by an outside provider based on our chi square tests. However, there was still a portion of our population with oral surgical needs we were unable to treat, which required an outside referral. This additional referral can cause a delay in treatment, which has not only oral health impacts, but social impacts as well including other clinics' accessibility and/or willingness to treat children with or without special healthcare needs. Overall, this data indicates that consistent access to an oral surgeon for surgical care in our clinic would be beneficial. As this study was completed using data collected over a relatively short period of time, obtaining additional data to update the results reported may assist in further validating the reported findings.

REFERENCES

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