

Background

- Although the overall incidence of new HIV infection in the United States decreased by 9% from 2015 to 2019, HIV disproportionately affects Black/African American gay and bisexual men, and youth aged 13-24 years account for 21% of all new HIV diagnoses.¹
- Washington, D.C., where this study was performed, continues to have the highest rate of new HIV infections in the nation.¹
- Adolescents usually transition to adult clinics in their early 20s, with an estimated 25,000 adolescents with HIV in need of transition in the next decade.²
- Adolescents living with HIV often experience social, emotional, behavior, and academic problems, which can be barriers when transitioning from pediatric to adult health care. With the expectation to be independent and autonomous, adolescents often encounter difficulties in keeping up with regular health visits and antiretroviral therapy.³
- Children and adolescents with HIV are at higher risk for poor oral health,⁴ and may present with intraoral lesions. Some contributing factors include poor nutrition, frequent consumption of sugar-containing medications, and potential HIV-related dysfunction of salivary glands.⁵
- Regardless of receipt of regular medical care, access to dental care may still be a challenge.

Objective

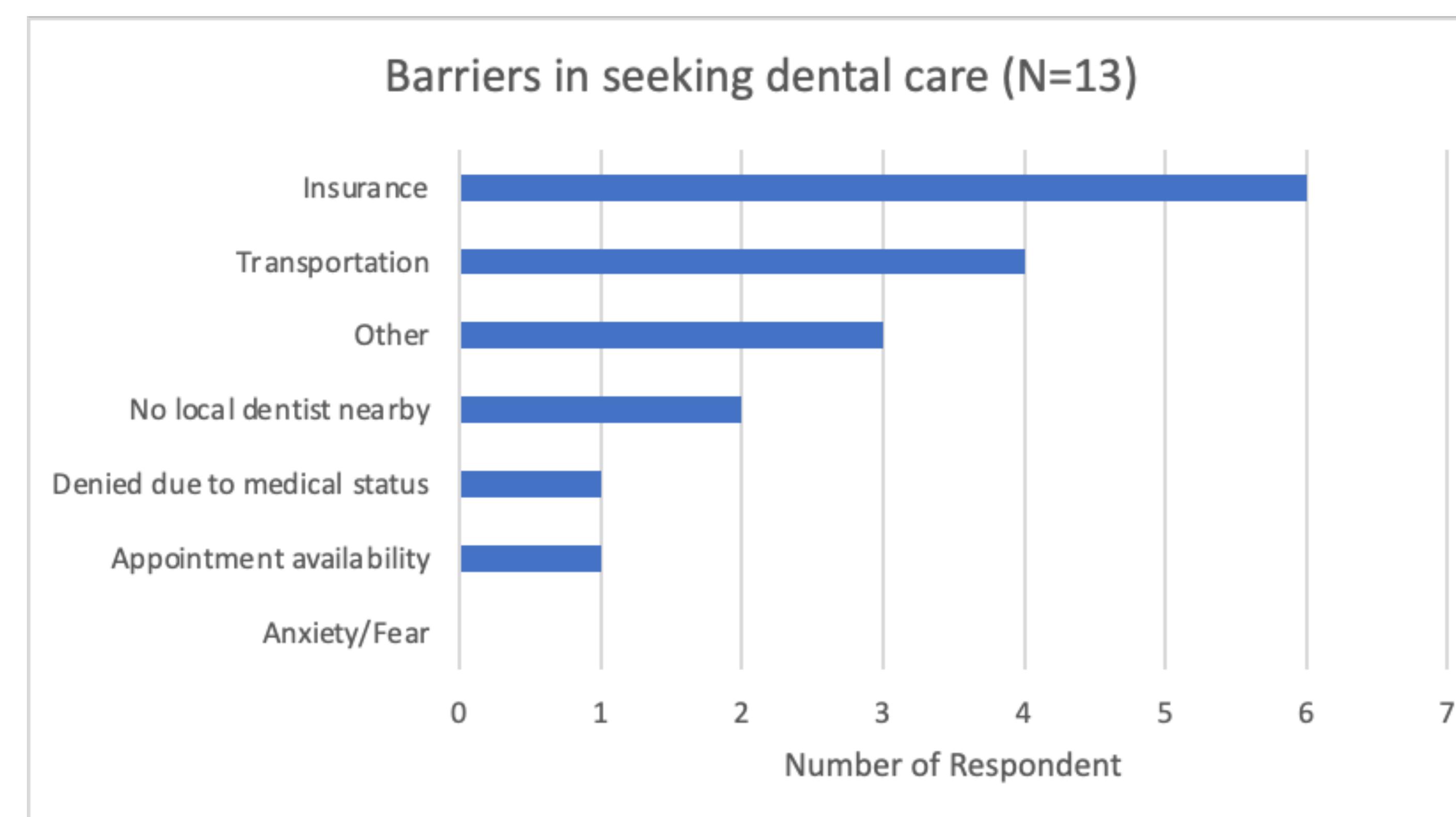
- The aim of this quality improvement (QI) study is to assess knowledge of oral health and identify barriers to accessing oral healthcare in children and adolescents (0-24 years) living with or at risk of HIV.

Methods

- The questionnaire specific to oral health access and quality of life were co-developed by the Children's National Hospital (CNH) Oral Health Department and CNH HIV Prevention and Treatment Services (HPTS) team. The surveys were distributed to patients living with or at risk of HIV and/or their caregiver during their routine visit at the CNH HPTS clinic. Among those who completed the surveys, some patients were randomly selected for personal interviews and dental clinical exams performed by a dental provider.
- This is a project undertaken as a QI initiative at CNH and it did not constitute human subject research. As such it was not under the oversight of the Institutional Review Board.

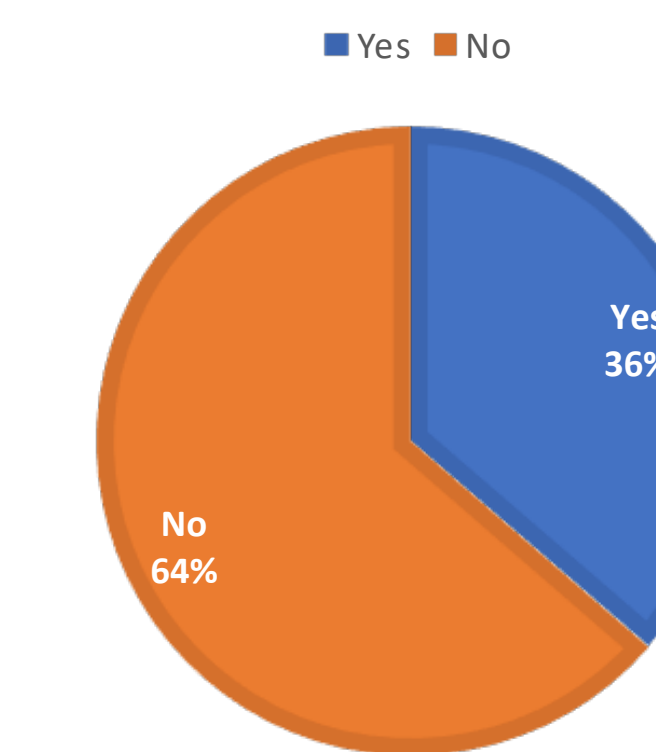
Results

- A total of 66 surveys were completed between July of 2022 and January of 2023. Among these patients, 22 participants were randomly selected for personal interviews and dental clinical exams.
- Overall, the total surveyed population is equally distributed by sex at birth with a mean age of 17 and the majority are Black/African American (85%), followed by Hispanic/Latino (8%), mixed race (4%), and White (3%). Among these participants, the focused interview group has more females (64%) than males (36%) with a mean age of 17 and the majority are Black/African American (91%), followed by White (9%).
- Almost two-thirds of the participants (65%, n=43) report having had a regular dental checkup and cleaning in the past year.
- 80% (n=53) of the total patients believe that routine dental care should occur every six months and 20% (n=13) believe that it should be annual.
- Out of total 66 participants, 17% (n=11) report history of having an emergency dental visit, and 12% (n=8) report history of having dental pain or discomfort.
- Among 20% (n=13) of the total participants that report having a difficulty in finding a dentist, the barriers include insurance (35%), transportation (23%), other reasons such as time, cost, and trust (18%), inability to find a local dentist (12%), denied due to medical status (6%), and lack of appointment availability (6%).
- Among 22 participants in the focused group, 36% have untreated dental caries. The caries risk is high (50%), moderate (32%), and low (18%). The oral hygiene exam is poor (45%), fair (41%), and good (14%). Dental recommendation includes maintenance (63%), urgent (23%), and non-urgent (14%). About two-thirds (68%) do not need a referral due to already having a dental home established.

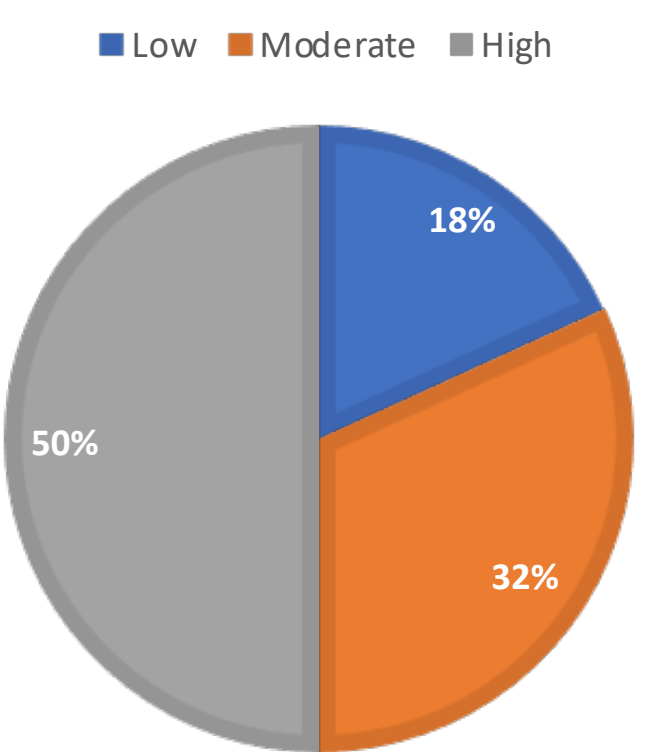


Results

UNTREATED DENTAL CARIES (N=22)



CARIES RISK (N=22)



Discussion

- Despite having a regular dental home or being aware of the need for a biannual dental visit, many patients do not find it necessary to go in for a routine dental care due to current absence of dental pain/discomfort. This represents the lack of understanding of the significance of oral health.
- Consistent with the study by Philbin et al., adolescents encounter various challenges, such as insurance and transportation, when transitioning into adult health care.
- Interestingly, in the focused group of 22 participants, at most only 36% have clinical caries and 45% have poor oral hygiene which put them at high caries risk, in contrast to the previous research by Mittal et al. and Oliveira et al. These past studies suggest that youth with HIV infection are at increased risk of caries due to sweetened medication, low salivary flow, and immunosuppression status. This inconsistency may be due to the small sample size and inability to obtain radiographs at the CNH HPTS clinic.
- The limitation of this study includes the small sample size and incomplete collection of detailed demographics. Therefore, the results of the surveys may not fully represent the general HIV population.

Conclusion

- There is a potential deficit in knowledge of the purpose and frequency of routine dental visits with a common misconception of symptom-driven dental care utilization, which indicate the need for further dental education.
- In order to encourage a smooth transition into adult care and long-term health outcomes for HIV patients, a comprehensive and collaborative protocol can be developed that can assist providers in offering proper care.
- Incorporating dental screening and referral as a component of HIV multidisciplinary team can have an impact on oral health and quality of life in children and adolescents living with or at risk of HIV.

References

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4. Oliveira, C. A., Tamure, P. N., de Souza, I. P., Maia, L. C., Portela, M. B., & Castro, G. F. (2015). Is dental caries experience increased in HIV-infected children and adolescents? A meta-analysis. *Acta odontologica Scandinavica*, 73(7), 481-487.
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