

INTRODUCTION

Oral health is an essential component of overall health, yet it remains an area in which many non-dental providers receive limited formal training. Medical professionals, including family medicine practitioners, pediatricians, pharmacists, obstetricians, gynecologists, and mental health professionals, frequently take call and encounter dental emergencies. Given the increasing role of non-dental professionals in triage and management of dental health, there is a need to evaluate provider knowledge gaps in oral health and trauma management and its impact on clinical practice.

PURPOSE

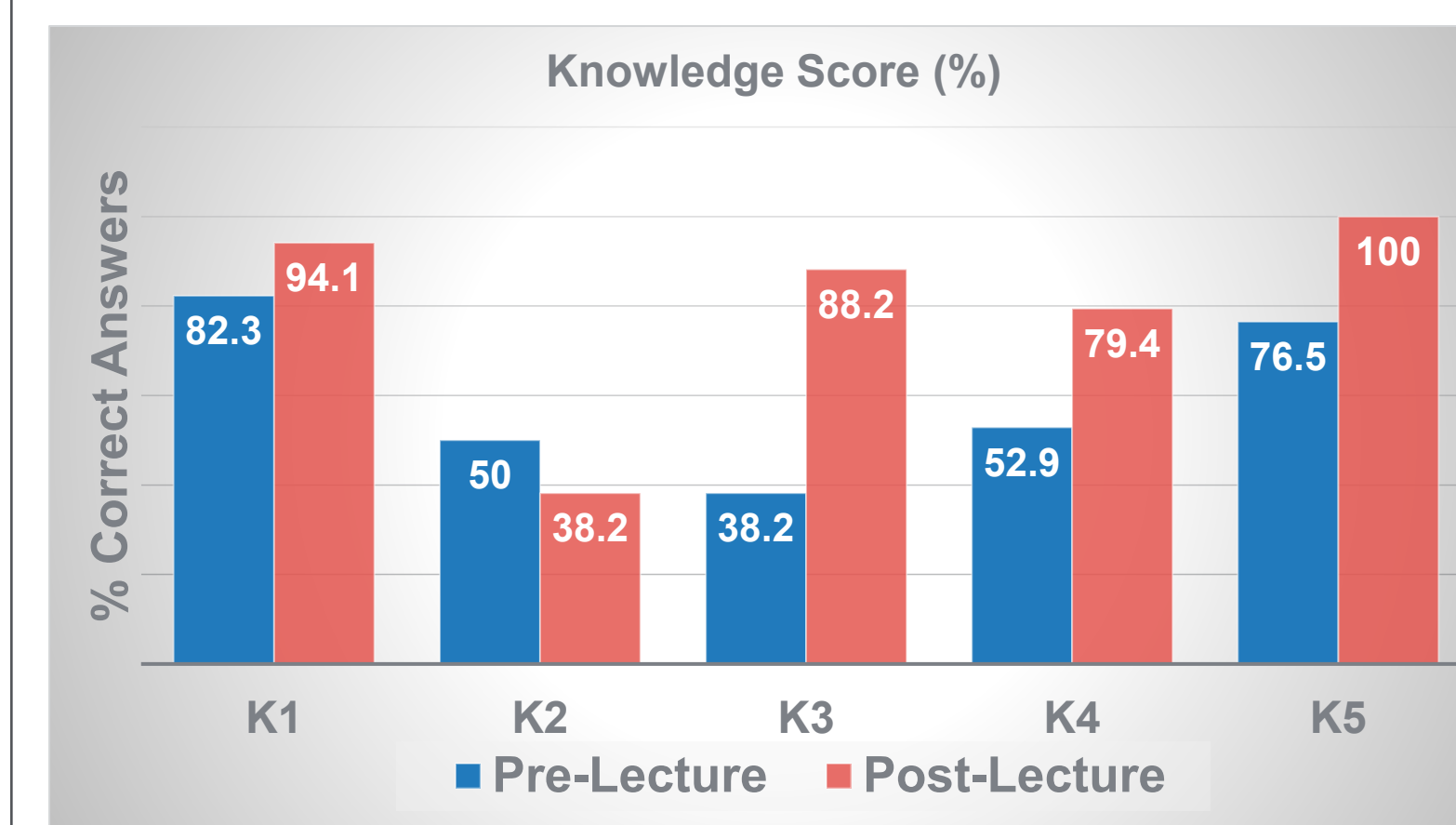
The aim of this quality improvement study was to evaluate if interprofessional oral health education can improve healthcare provider's knowledge, confidence, and self-reported practices in preventative oral health and dental trauma management in pediatric dental patients at Chesapeake Health Care, a Federally Qualified Health Center.

METHOD

A survey was conducted to assess oral health knowledge gaps and identify areas for improvement among health care providers within Chesapeake Health Care (CHC) on the Eastern Shore of Maryland. CHC is a multi-site facility located in an underserved area with a predominantly Medicaid patient population. A self-guided interprofessional oral health education module, which focused on pediatric oral health preventative care and trauma prevention and management, was developed and distributed to providers to complete over a 3 week period. A post-evaluation survey was conducted 3 months later. Participants included adult medicine providers, pediatricians, OBGYN providers, pharmacists, and mental health providers.

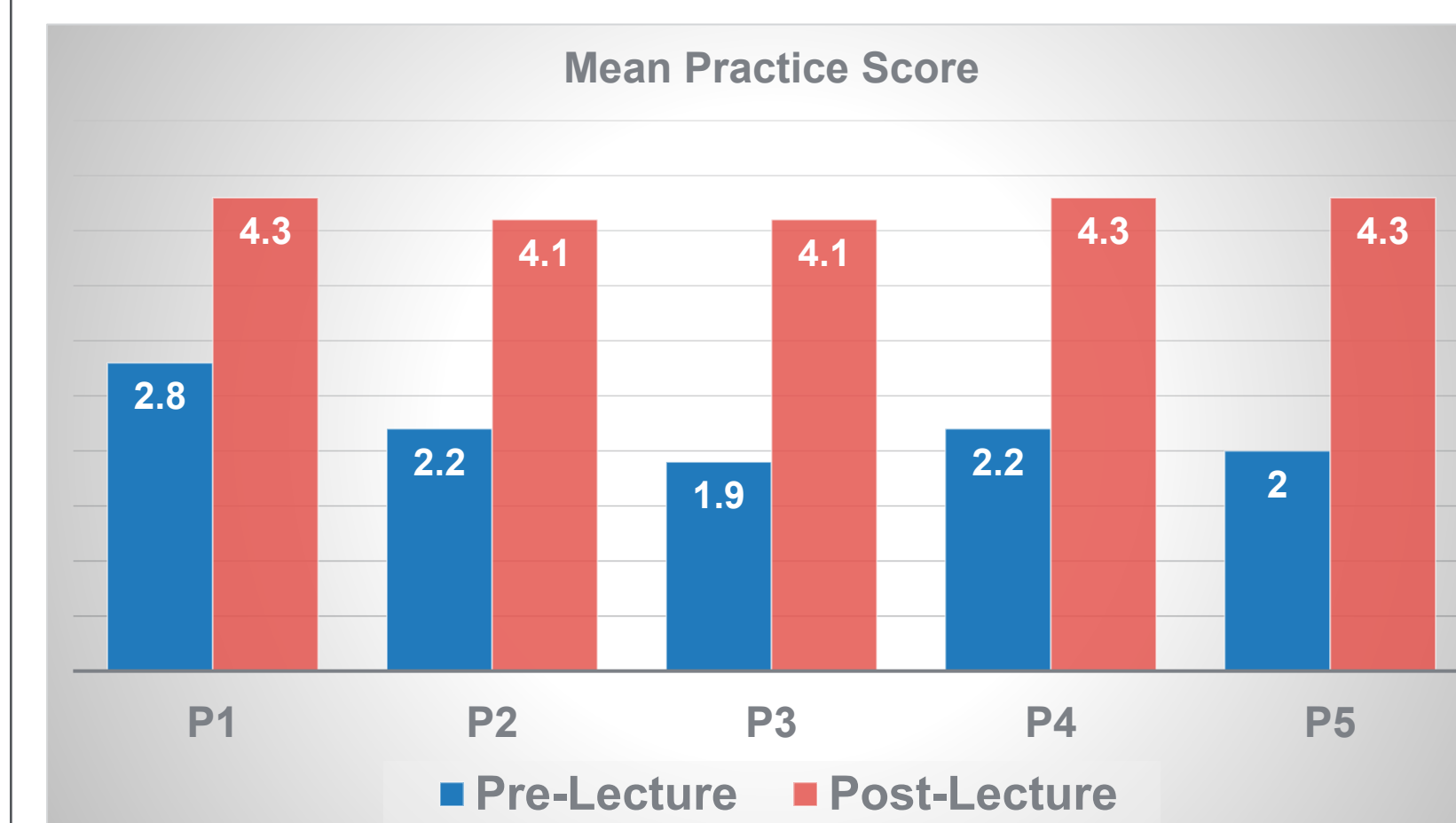
FIGURES

Figure 1. Knowledge on Preventative Oral Care and Dental Trauma Management



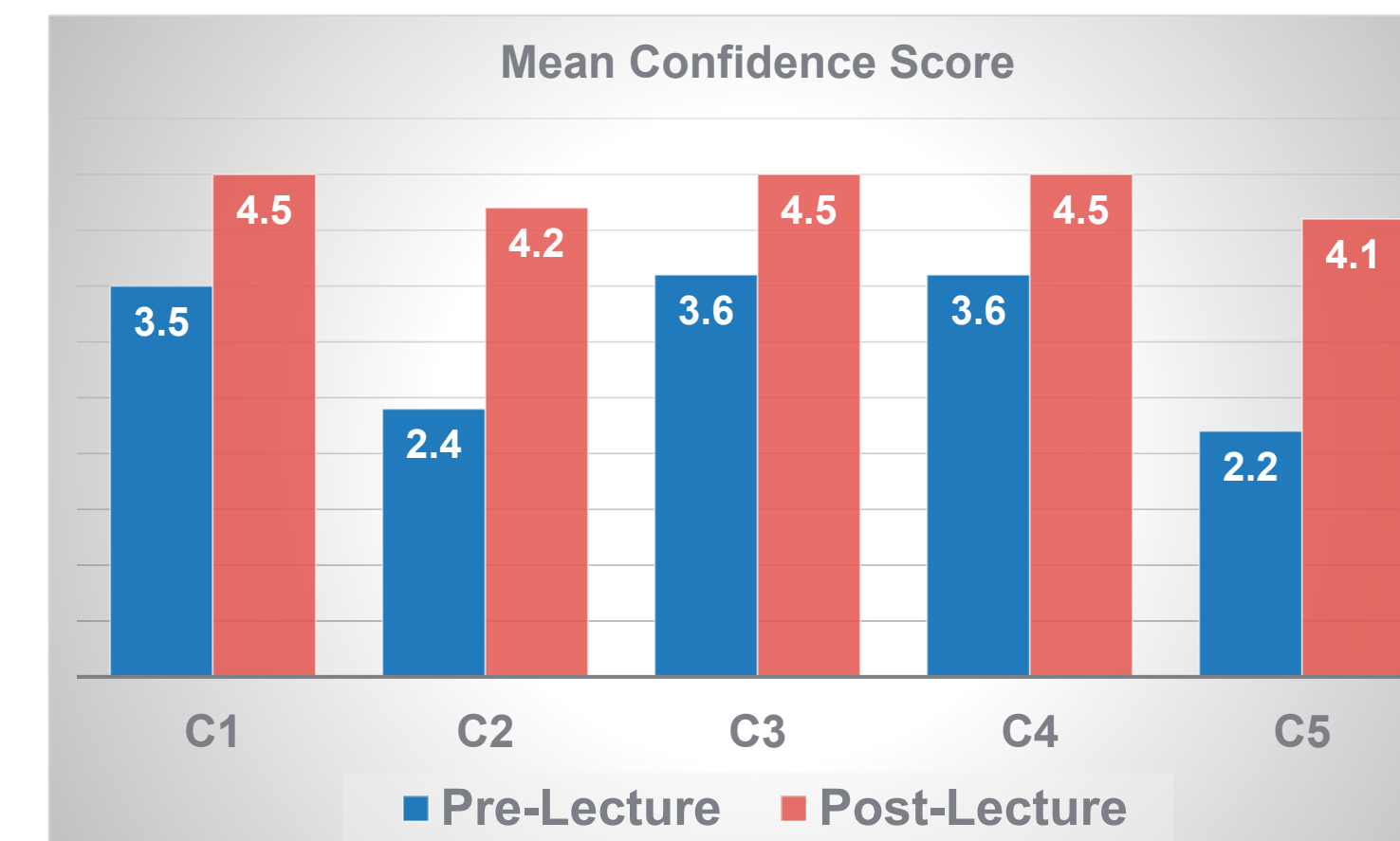
- K1. Children should establish a dental home by age 1.
- K2. Children first receive fluoride varnish application once their permanent teeth erupt.
- K3. Primary tooth trauma should be managed the same way as permanent tooth trauma.
- K4. Antibiotics are routinely indicated for all types of dental trauma.
- K5. Educating parents about dental care and trauma management has a significant impact on emergency dental outcomes.

Figure 3. Practice/Behavior in Oral Care and Dental Trauma Management



- P1. How often do you provide oral hygiene and nutritional counseling?
- P2. How often do you provide education on oral trauma management and prevention?
- P3. I use and refer to dental trauma guidelines and protocols regularly.
- P4. I have a structured approach to address dental related concerns.
- P5. I regularly update my knowledge on dental preventative care and trauma management.

Figure 2. Confidence in Oral Care and Dental Trauma Management



- C1. I feel confident recommending routine dental care information to patient.
- C2. I feel confident giving advice about dental trauma management.
- C3. I feel confident in properly referring dental cases to a dentist.
- C4. I feel confident in referring patient to the emergency department for dental issues.
- C5. I feel confident in prescribing or recommending fluoride, mouth rinses, or antibiotics when appropriate.

RESULTS

- The 34 participants included pharmacists (5, 14.7%), adult medicine and pediatric providers (17, 50%), OBGYN providers (5, 14.7%), mental health providers (5, 14.7%), and 2 (5.9%) unspecified providers.
- The most substantial increase in knowledge was on the topic of primary tooth trauma management (50%), followed by antibiotic use in dental trauma (26.5%).
- There was a significant increase in the total mean confidence score ($P<.0001$) post-lecture (21.8, SD: 3.1) vs. pre-lecture (15.3, SD: 4.4).
- There was a significant increase in the overall mean practice score ($P<.0001$) post-lecture (21.2, SD: 3.1) vs. pre-lecture (11.1, SD: 5.3).

CONCLUSIONS

- Interprofessional oral health education improved healthcare providers' knowledge, confidence, and self-reported practices in preventative oral health and trauma management.
- These findings highlight the important role of educating non-dental professionals in early recognition, counseling, and initial management of pediatric oral health conditions, especially in settings where dental professionals are not immediately available.
- While this study is limited by a small sample size, short term follow-up and reliance on self-reported outcomes provides encouraging evidence that even brief and focused education interventions can have an impact.

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