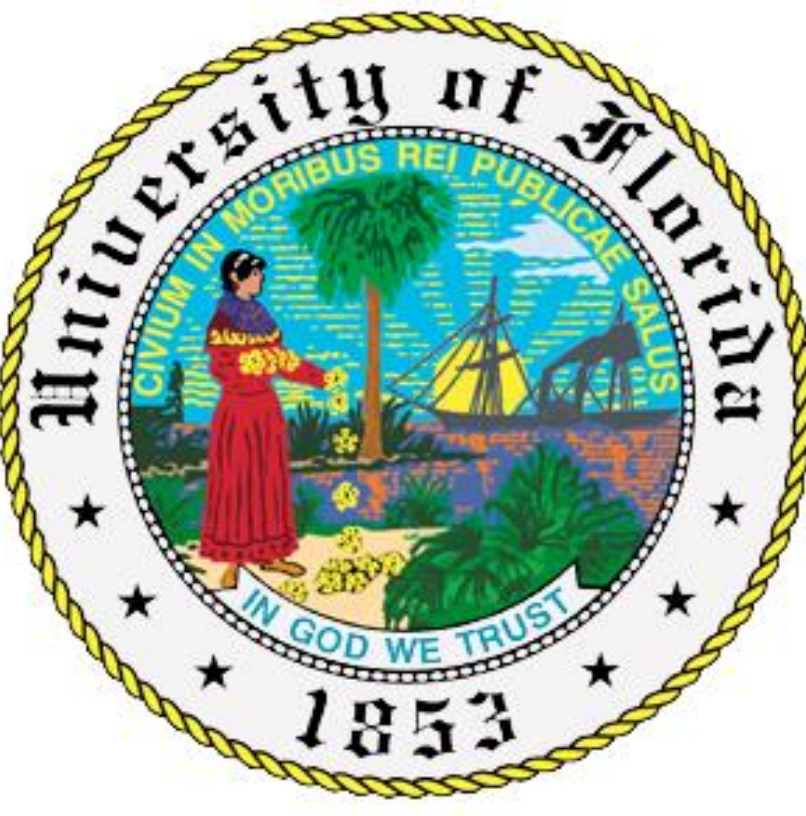


Awareness, Utilization, and Barriers of Virtual Reality in Pediatric Dentistry

Buckles A, Vasilopoulos T, Guelmann M, University of Florida, Gainesville, FL

University of Florida, Dept. of Pediatric Dentistry¹ and Dept. of Anesthesiology², Gainesville, Florida



INTRODUCTION

- Virtual Reality (VR) application in medicine and dentistry has been shown to significantly reduce anxiety, pain, and misbehavior in children.
- Despite the preponderance of evidence of the efficacy of VR in pediatric dentistry, it remains underutilized.

OBJECTIVE

- This study aimed to evaluate current awareness, utilization, and barriers of VR application in pediatric dentistry.

MATERIALS AND METHODS

- An online questionnaire (Qualtrics) was sent to Alumni of the University of Florida Pediatric Dental Residency Program.
- Participants were surveyed regarding their awareness, utilization of, and barriers to implementation of VR in pediatric dentistry.

RESULTS

AWARENESS OF VIRTUAL TECHNOLOGY

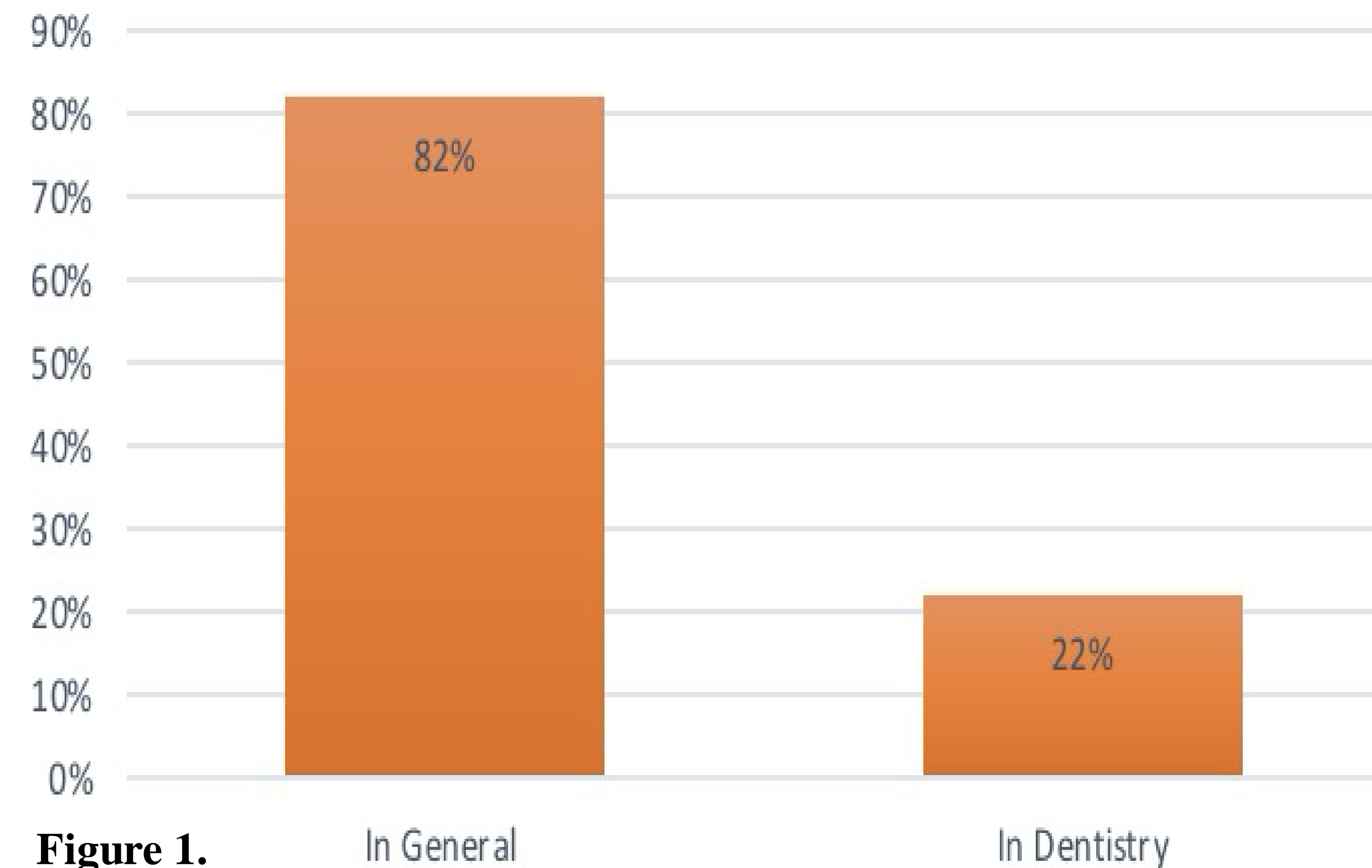


Figure 1.

BARRIERS TO VIRTUAL TECHNOLOGY IMPLEMENTATION

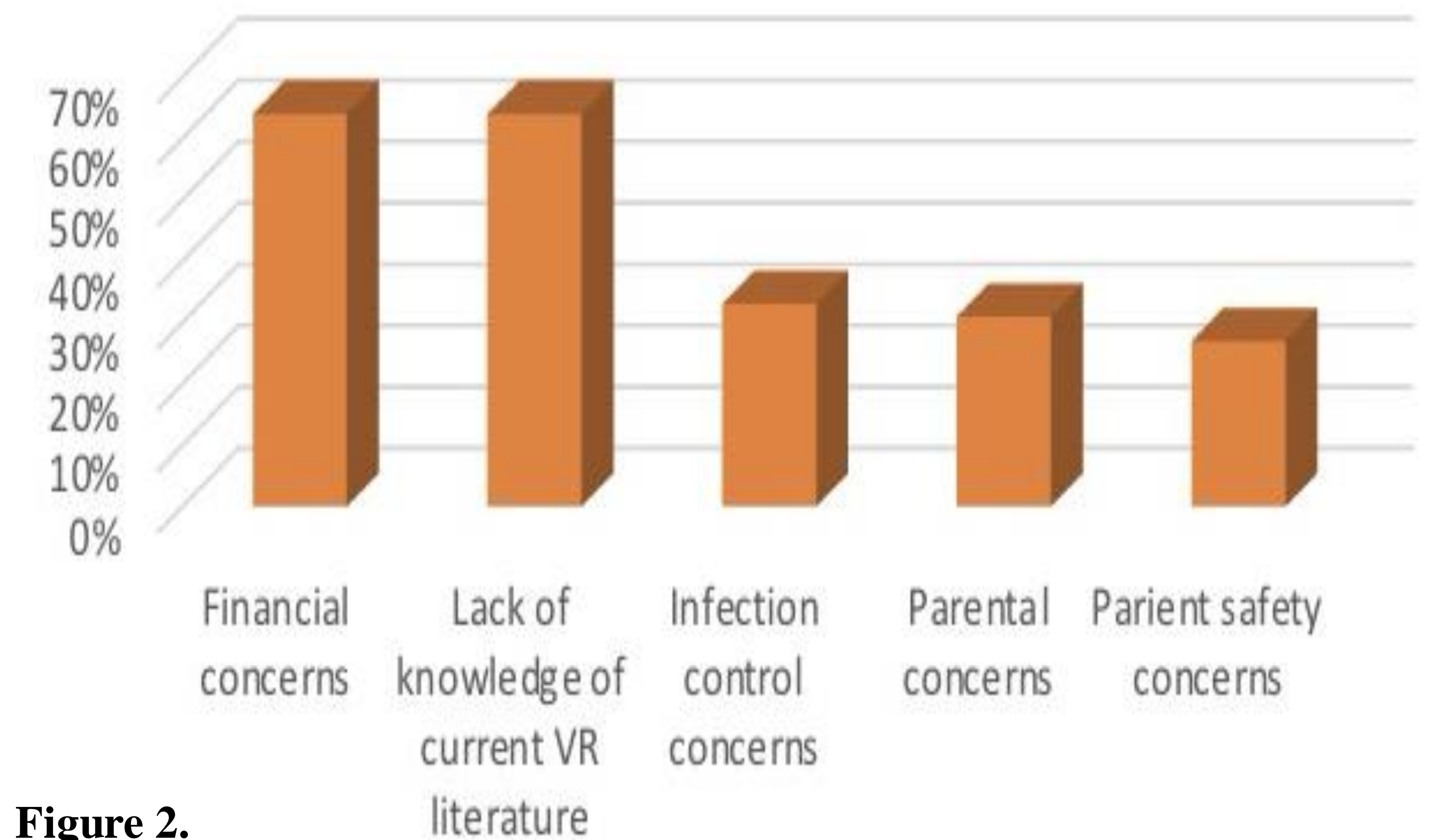


Figure 2.

- Of the 57 respondents 82% reported awareness of VR technology, however, only 22% acknowledged familiarity with VR platforms available for clinical use in pediatric dentistry. **Figure 1.**
- Of the respondents, 64% reported lack of knowledge of current literature, and financial concerns as barriers to VR implementation. Additional barriers included infection control concerns (33%), parental concerns (31%), and patient safety concerns (27%). **Figure 2.**
- None of the respondents reported currently offering VR in their practice.

CONCLUSIONS

- Despite the wide knowledge of VR technology, only a small percentage of respondents reported awareness of its application in pediatric dentistry, resulting in its continued underutilization.
- Lacking knowledge of VR literature, specifically as applied to pediatric dentistry, along with cost concerns, presents the greatest challenge to overcoming barriers to implementing VR in pediatric dentistry.
- Bridging the gap between VR technology and pediatric dentistry is most effectively accomplished through more education - dental school, residency programs, and continuing education.

