

Let's Go to the Virtual Pediatric Dental Room: The Implementation and Feasibility of a Behavioral Health Tool in Pediatric Dentistry

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Introduction

- Dental anxiety in children and teens is a common concern which
 often leads to behavioral disruption at the dentist or avoidance of
 important dental procedures (Botto et al., 2014).
- Although chairside techniques are effective in helping patients, pre-survey results from Eastman Institute for Oral Health (EIOH) staff (n=18) suggested that there are barriers to fully addressing their patients' needs, including: time, resources, and level of comfort with behavioral interventions.
- Technology-based interventions have been suggested as a helpful tool in promoting behavioral health in underserved populations and high-volume clinical environments without adding to staff workload (Aronson et al., 2011; Marsch, 2011).

Current study:

- Assess the feasibility of implementing a technologybased tool for patients to use before or during their visit
- Introduce the virtual dental room (VDR) to patients and staff at EIOH and assess perceived benefits and barriers to effective implementation

Methods

- Location: Eastman Dental Pediatric Dentistry Department
- Designed age-specific virtual dental rooms based on needs of staff and patients for use at EIOH (accessed via QR code)
- Taught staff and patients how to access and use the virtual dental room while in the waiting room and/or during their appointment
- 5 -item patient feedback survey on perceived helpfulness (n=35)
- Post-survey distributed to attendings, residents, dental assistants, and other staff on perceived helpfulness and utilization of virtual dental room (n=11)
- Analyses: descriptive statistics

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Virtual Dental Room Level of Helpfulness Not helpful at all Somewhat helpful Very helpful Not helpful at all Somewhat helpful Very helpful Sunfi Level of Helpfulness Patient Level of Helpfulness

- About 39% of patients who completed the survey were between 0-5 years old, 6% of patients were between 14-18 years old, 41% were between 6-13 years old, and 15% were 19 or older
- About 71% of the surveys were filled out by a parent or guardian
- More than half of those that completed the survey reported spending less than 5 minutes or between 5-10 minutes using the VDR



Results

- Patients and parents reported that the educational videos, books, and the virtual tour of the dentist office were the most helpful resources.
 - Staff also reported educational videos and the virtual tour of the dentist office were the most helpful resources, as well as mindfulness/relaxation videos.
- Staff-reported barriers to using the VDR were limited time in waiting room, patient knowledge of resource, patient interest, access to necessary technology (mobile device or tablet), and trouble with scanning QR code.

Discussion

- Providers are interested in promoting behavioral health during their interactions with patients, but barriers include time, environmental distractions, and patient distress.
- In response to these barriers, the virtual dental room was introduced to patients in the waiting room for use with their phone or tablet.
- Overall, the virtual dental room was reported to be helpful for both patients and staff.
- Increasing knowledge of this resource and encouraging use before their visit will likely continue to help patients while minimizing staff burden.

Future Directions

- Gather more patient and provider specific feedback.
- Add specialized and tailored content to virtual room (resources specific to EIOH and population served).
- Improve access and patient knowledge of this resource prior to visits and increase provider use during visits.
- Conduct further research on the utility and benefits of this behavioral health tool.

