

Abstract

Objective: The primary strand of research describing the provision of comfort in dental practices focuses on a small minority of the regular patient population, the dental phobic patient. Recent studies show that a higher percentage of patients than previously thought, up to 40%, are anxious in some way about their dental visit. We describe comforting strategies which were performed by dentists, dental assistants, and hygienists for their patient population as a whole. **Methods:** As part of the Direct Observation Study, 120 dental practices in Ohio were observed over a 4 day period by trained research hygienists. Researchers observed and recorded 3,803 patient interactions with dentists and hygienists at 30 second intervals using 24 behavior-specific codes. In addition, researchers composed qualitative notes detailing specific provider-patient interactions. Following established grounded-theory methodology, we utilized qualitative notes, field jottings, and in-depth debriefing session information to identify specific comforting actions performed by dentists, hygienists, and dental assistants. **Results:** The qualitative notes revealed that while dental providers draw on a variety of comforting strategies, the most frequent behaviors observed included: environmental distractions, verbal responses to visual cues of patient discomfort, communicative behaviors and relaxation techniques, and pharmacologic tactics designed to alleviate physical pain. All practices utilized *some* type of comforting behavior for *some* of their patients. However, the qualitative data reflected clear missed opportunities to provide comfort to patients. Statements and examples from the qualitative notes will illustrate the typology of these strategies and behaviors and how they are enacted during the dental visit. **Conclusion:** Providing comfort to dental patients may play a role in the therapeutic relationship. While dental providers make use of a number of distinct comforting mechanisms to alleviate patient anxiety and pain, there is a significant range of utilization of these strategies. This study was supported by NIH/NIDCR IR01DE015171.

Participants & Data Collection As part of the Direct Observation Study, 120 general dental practices in 22 Ohio counties from the CROWN (Community Research Oral Wellness Network) were observed over a 4 day period by trained research hygienists. Both the hygienist and dentist participated at each practice and 3,803 patient encounters were observed. During the observation, provider and patient behaviors were recorded using a list of 24 specific codes at 30 second intervals (the Dental DOC). The research hygienists took additional field notes throughout the day about patient-provider interactions. These notes were expanded electronically at the end of each day into qualitative notes. The observers and other members of the research team met bi-monthly to debrief and discuss the qualitative notes. These debriefing sessions allowed for further in-depth probing of the dentist and hygienist practice style, practice environment, and patient population, among other variables.

Analysis The qualitative notes, including transcripts of the debriefing sessions, were exported into QSR NVIVO 2.0, a qualitative statistical package, for organizational and analytical purposes. This software allows for inductive or “open” coding based on themes that are grounded in the data or emerge in the text itself⁴⁴. Emerging themes were discussed throughout data collection and the research team collaborated on producing a comprehensive codebook used for coding all practice notes. After all the text was coded, attention was given to codes of interest to identify patterns within a given code. By analyzing all text coded “comfort” for example, we identified specific strategies dental providers used to provide comfort, how comfort emerged within a dental encounter, and the possible benefits of providing comfort.

Discussion & Conclusion Research on provider-patient interactions has shown that what happens during the medical encounter impacts patient outcomes such as satisfaction and compliance. For example, the communicative relationship between a dentist and patient may impact the patient’s perception of control and trust, two elements which are strongly associated with anxiety and fear⁴⁵. Satisfaction studies provide clear evidence that good communication, including information about current dental treatment and what patients should expect, has been one key area that dental patients consistently rank as unsatisfactory⁴³. The comforting strategies described in this poster exemplify straightforward and uncomplicated behaviors that providers may adopt in order to communicate effectively and alleviate anxiety within their general patient population.

Table 1. Comfort distributions from the Dental DOC

OBSERVED COMFORT	% of visits in which comfort occurred	Average number of 30-sec intervals of comfort	Min/Max number of comfort intervals
DDS	44.3	3.2	0/25
HYG	40.6	2.3	0/21

Table 2. Comfort strategies observed during patient-provider encounters

COMFORTING STRATEGIES	DESCRIPTION	QUOTES FROM OBSERVATION NOTES
ENVIRONMENTAL DISTRACTIONS	Actions taken to make the office more comfortable and inviting can be expensive or free.	(1) Pt.#33 was telling me that the doctor used to have a mural of a big tree and she used to love looking at it while she got her teeth worked on because it was so relaxing. The hygienist stated she had something better, she dimmed the lights, and put in a relaxation CD – the patient loved it. (2) It is very important to this office that the patients are comfortable and happy. Every chair in the operatories has a massage pad on it and a remote they give the patients. Every patient is offered headphones and given a list of CDs to choose from. The patients with long apps are offered virtual glasses to watch a movie. If they are going to have a break in their app they are offered water or juice. In the bathroom there were notes on the mirror saying “Items inside are for you from the Drs”, inside were toothbrushes, floss, and lotions.
PHARMACOLOGICAL	The use of topical gel, administering adequate anesthesia for patient numbness, taking the time to wait for numbness, and stopping when patients indicate pain during a procedure.	Providers who stopped when their patients indicated pain keep their patient’s trust and comfort. (1) Pt.#01 was a woman who came in for an extraction...he was very pleasant and joked with her, he wanted to insure her comfort, and while pulling her tooth, she gave a slight moan. He stopped and immediately and added more anesthesia and sat right with her for a couple of minutes talking with her before attempting to painlessly remove it. (2) I notice the assistant and DDS spend a lot of effort making sure the patient is comfortable. They stop often to ask the patient how they are doing. The DDS takes his time giving anesthetic and offers a lot of encouragement. They both had conversations with their patients before the procedure about patient comfort; they would say, “if something is bothering you please raise your hand” or “we want to make sure you are numb before we start”...they were always asking the patients, the patients didn’t have to initiate anything. Conversely, providers who numbed too quickly or did not stop when patients indicated pain may sacrifice patient comfort and trust: (3) Pt.#03 told me I would get to see “a big wuss” today. She kicked her feet on the chair and moaned the whole time he gave her anesthetic, he does not use topical before giving an injection. The DDS did not give the anesthetic much time to set in and she was visibly uncomfortable during the procedure...
CHECKING IN & NOTICING	This category includes behaviors aimed at actively making sure patients are comfortable during the appointment.	Many providers directly asked patients how they were doing or if they could feel anything; this was one of the most frequent strategies: (1) Pt.#32 was a surgical extraction. The DDS checked in with her every minute or so to make sure that she was OK and not feeling any pain. The assistants also check in with the patients during procedures to see how they are feeling. Some providers were tuned into their patient’s responses and noticed when a patient indicated discomfort through their body language: (2) While they were working on the patient he had his mouth open unnecessarily, the assistant noticed it and touched his face and said you can close down and relax. While Pt.#25 was getting anesthetic, the assistant tapped the patient gently on the arm and rubbed their arm to comfort them because she could see them tense up. Some patients were visibly uneasy and providers who did not notice or ask them about what they were experiencing missed opportunities to make their patients more comfortable: (3) The DDS rushed through all his procedures and was very rough. Pt.#29 was in for a wax try-in for dentures - they were really big at first. The DDS gave no warning or explanation and when he put both tops and bottoms in the patient started immediately gagging. The assistant asked if she could sit him up; when she did the patient threw up into a baggie he brought his dentures in. The DDS never once asked if he was okay during this long appointment. He kept right on working.
STRUCTURING THE INTERACTION	This strategy describes actions taken by providers to explain the procedure & clarify what patients should expect.	(1) The DDS explained every single thing he was doing. He provided lots of comfort, he would say to the patient, “next what I am going to do is use this drill to drill away this decay and it will feel like this, it shouldn’t hurt but let me know if it does...” He did it in a way that the appointment kept moving and the patients were comfortable. He took the time to do that. (2) Pt.#13 was a child who was scheduled for a filling. This child had never had an injection before and was frightened and crying, the DDS was exceptional with her. She took the time needed for the girl to be comfortable and talked her through the entire procedure and let her know things like, “I am going to use this instrument, you are going to feel a slight vibration.” She has a way of building trust with her patients.
ADDRESSING PATIENT ANXIETY	All of these strategies were especially important for patients who suffered from dental anxiety or phobia.	(1) Pt.#36 was a young boy who was apprehensive about his first filling appointment. The DDS believes he was so nervous because both of his parents have dental anxiety. The DDS talked him through the whole appointment with praise and explained everything that was happening. He gave him a hand mirror several times to see what his tooth looked like and let him touch the equipment. (2) Pt.#02 had not been to a dentist in 40 yrs. During the initial consult the patient told of some pretty bad experiences she had when she was younger and just sat there shaking. The DDS spent a lot of time calming her...the office offered “Happy Visits” where someone could come in at no charge and get to know the office and ask questions until they felt comfortable. The Pt. made it to the back, the DDS was able to do an initial exam and during the exam the doctor told her what to expect every step of the way.