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## Catalysts and Treatments for Dental Anxiety in Children

We've all been there before; sitting in the strange-smelling waiting room reading expired magazines, the walls usually painted some shade of a dull pastel. It's bad enough that we adults have to wait in this environment as a prequel to getting our teeth drilled on, but at least we know what is about to happen. Suddenly, through the door comes the screaming, terrified child with his mother pulling him along up to the receptionist desk; she's seen this situation countless times before. The child continues to scream and cry throughout his duration in the waiting room, but it doesn't escalate until it's his time to go back to the dentist's chair. More than 10% of people worldwide have this fear, with most being children (McMahon 2). But why is it that kids are so afraid of the dentist? What are the causes and rationalities for these fears? Social conditioning, exposure, and many other aspects play a huge role in dental anxiety manifesting in children, but fortunately, many treatment techniques are available.

Anxiety is defined as being a fear of the unknown. Dental anxieties arise in many adults and have a wide prevalence in children because of just that; the unknown. Not knowing what to expect but hearing a drill, or seeing a dentist in a face mask is all that most people need to start feeling anxious and afraid. Many studies have been done worldwide to research the causes of Dental fear in order to find ways to properly treat patients and help soothe their anxieties. Gunilla Klingberg, a researcher of pedentology in Sweden, is one of these many researchers. She has done studies on exploring the relationship between etiological factors and

dental fear in children, and has found through her research that children with a parent who also has dental anxiety are much more likely themselves to have a fear of the dentist. I've seen this phenomenon personally through an interview with Emily Vansell, a seven year old whom when asked why she is afraid of the dentist claimed "I'm scared of the dentist's drill because my mommy said she is scared of it." Conditioning obviously plays a very large role in fear for these children. Kids look up to their parents to learn how to react in any situation, when you are taught by the person who protects you that something is dangerous; you will in turn see it the same way. Conditioning in this same way also comes from society, when children see other kids afraid of the dentist on television shows, in books, or in real life, they learn to have these same fears. For such a widespread phobia, it is thought that it must stem from a psychological experience shared by many. Dr. Eddie Cotter, of the Irish Dental association explains his theory on the origin of this common fear:

"The first life experiences for a newborn are through the mouth in terms of breastfeeding, and as infants explore the world, they do so by putting everything in their mouth, the eruption of baby teeth can signal an end to breastfeeding and this may be traumatic for the child, who may subconsciously link the mouth with a sense of upset. The loss of baby teeth can also be traumatic for young children, as they may not understand that new teeth will appear (McMahon 2)."

Conditioning and psychological factors play a huge role in dental phobias, but many other catalysts for these fears have also been identified.

Children with behavioral management problems have also been found to have higher numbers of Dental Fear. Klingberg's research study on 3,024 Swedish children showed that dental fears were prevalent in 27% of the children identified as having behavioral management problems (Klingberg 405). Dental phobias can also bring out undesirable behavior problems in children that otherwise don't have prevalent issues with misbehaving. 61% of the children she surveyed manifested their dental fears by acting out with behavioral management problems (Klingberg 405) such as kicking, screaming, and crying. It is apparent and obvious that a child's temperament can change when faced with a scary situation, but parents should be warned that certain personality traits have been shown to produce dental fears and thus leading to behavioral outbursts when visiting the dentist, more often. In another study on one hundred twenty-four five to twelve year old children done by Klingberg, Dental fear was measured by the Emotionality, Activity, Sociability (EAS) Temperamental Survey, which was used to assess four aspects of temperament: negative emotionality, shyness, sociability, and activity (Klingberg 237). Children that scored high in shyness and negative emotionality were found to have a much more significant risk of dental fears than children who scored lower in the same areas (Klingberg 237). Timid and easily upset personality traits in children are usually a red flag warning for future outbursts at the dentist because of phobias.

Exposure to certain treatments at the dentist have also been found to impact phobias. M. Berge, of the Academic Centre for Dentistry in Amsterdam, did a research study that aimed to examine the relative importance of invasive treatment experiences on the impact of dental fear. four hundred and one children all between five and ten years of age had their dental records examined containing information beginning from their first dental visit at before four

years of age. Parents and dentists were asked to fill out a questionnaire consisting of fifteen items related to several aspects of dental procedures the children underwent; with each item can being rated on a five-point scale from (1) "not afraid at all" to (5) "very afraid." Total scores could range from fifteen to seventy-five, treatments such as "injections," "drilling," "having somebody examine your mouth," "having the nurse clean your teeth" and "having to open your mouth" were items on the survey (Berge 321). There was a correlation found between invasive procedures and amount of fear in children, however the relation of fear with the amount of dental work done was only slightly moderate, but enough to support the theory that exposure to invasive dental procedures, such as drilling, can cause early fear in children ( Berge 321). Personality traits and exposure to dental treatments impacts on childhood dental phobias are apparent. Without ways to appease these fears and help children calm down, proper dental care is almost impossible for dentists to administer. Many techniques and treatments have proven helpful in the fight against dental fears.

When you have a screaming, uncooperative child and a desperate parent, A dentist that can remedy this chaotic scene by calming the child is seen as a superhero. The various techniques for dealing with situations like this have been discussed amongst dental professionals for ages.

It has been found that factors as simple as dentist's response and attitude to fears have a huge impact on children's anxiety levels. A study done in the Netherlands on forty children showed that dentists who took a more direct and authoritative approach, rather than an ignorant, meek one during the treatment of highly fearful children had a large impact on their lowering fear levels (Veerkamp 36). Dental Professionals who use a non-threatening, yet still

authoritative approach still have problems soothing some especially difficult children; and other techniques must be utilized.

The use of escape and reward for uncooperative, fearful children has proven to work wonders. Escape and reward work hand in hand in a study done by KD Allen and TF Stokes. Blood pressure rates, heart rates and observable fear were taken into account in the experiment. Five three to six years olds were presented with stickers and small toys as an “escape” during dental procedures and a “reward” of praise and reassurance throughout and after the treatment. This approach showed that children with 90% fear at the initial beginning of the visit had a huge decline in anxiety by showing as low as 15% fear by the end of the visit (Allen, Stokes 381). Other uses of escape in Dental settings have implemented the use of handheld video games, and televisions on the ceiling above dental chairs.

Some Dentists are using even more radical approaches on extremely fearful children. Special dentists are now being trained to run “anxiety clinics” on especially anxious adults and children alike. Hypnosis has proven to be the only way for many extremely fearful individuals to receive proper dental care. This treatment does not involve anything like the swinging of a watch in front of patient’s eyes, strange chants, or anything that you may expect. It is, surprisingly, simply a case of talking to the patient about their fears, and usually only lasts about twenty minutes (Smith). Patients are taken slowly through the whole procedure, with their fears being listened to and rationalized until they are in a calm, peaceful state. Then The procedure can take place. James Gall, a founder of the British Society of Medical and Dental Hypnosis, believes that hypnosis can be 90% effective in completely eliminating patient’s

phobia and states that for it to be successful, “You need a degree of empathy with people, to realize that they really need the help. It takes a lot of patience (Smith).”

Dedication, experience, and careful procedures are what it takes for Dentist’s to be successful in eliminating dental phobias in children. In a world where most adults live with dental problems and tooth aches out of fear rather than taking a trip to the dentist; wouldn’t it be much easier if we could soothe and eliminate phobias during childhood? Dental Anxiety is a very real and prevalent problem that must be addressed in order for proper dental procedures to take place. Oral cancer and gum disease can result without proper, periodic dental visits. In a time where cancer takes countless lives every day; isn’t better if we can eliminate one more form of it by getting as many people as possible into Dental clinics? Fear shouldn’t stop anyone, and curing children of these phobias is where better health begins.

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