Children are normally anxious and have fear when they visit the dental clinic, because of various reasons. Pain prevention can be made possible by creating a healthy relationship between dentist and patient, that is by establishing trust, eliminating fear and anxiety. However, the pain perception, being subjective, may change the patient’s response to the treatment thereby preventing the accurate diagnosis and treatment, and in turn, affecting the accurate assessment of the scale against painful stimuli. A wide variety of techniques have been suggested to banish a child’s dental fear. This includes the tell-show-do (TSD) technique, diverting attention, positive orientation, and self control. Lately, the use of technological equipment and unusual stimuli began to be employed in the process of gaining the attention of the child. In the present fast-moving world of technological advancements, Robotics is one of the most marvelous inventions of human beings which has made its impact on the field of healthcare in various ways, and now, it is also used in dentistry. Robots positively reduce the pain perception of children undergoing dental procedures. Robots use a multi-model interaction with pediatric patients like the use of the combination of visual, auditory, and tactile stimuli to reduce pain and stress during the dental treatment. Moreover, the cumbersome task of repetitive communication with their patients by a pediatric dentist could be taken over by the computer technologies. Subsequently, minimizing chair time. Wizard-of-Oz is an approach whereby a human operator, unknown to the participants, operates a robot. In child-robot interaction, the wizard interacts with the child through a robot. Robots are also being studied for cavity preparation, oral prophylaxis, radio imaging, and various other procedures. Robotic technologies will give the pediatric patients an illusion of companionship without the demand of friendship.

References

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