

DOES A SMARTPHONE DENTAL GAME WITH MATERNAL PRESENCE ENHANCE COOPERATION OF PATIENTS IN PAEDIATRIC DENTISTRY: A clinical study of four behaviour modification techniques

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Introduction - Paediatric patients with their first dental visit are often anxious and apprehensive because of dental equipment and the newness of the environment. Behaviour modification techniques involving pre-exposure to dental equipment and procedures will give children a first-hand experience of their use, sounds, and clinical effects.

AIM

To compare and evaluate effectiveness of four different means of behaviour modification techniques for uncooperative paediatric dental patients.

METHODOLOGY

Sample size - A pilot study having a sample size of 40, randomly divided into 4 groups (A), (B), (C), (D) by chit method

Inclusion criteria - Age - 4 to 5 years, First dental visit, Frankl's negative / definitely negative, Pit and fissure caries involving primary molars were assessed using **RMS-PS scale**⁶ (*Raghavendra M. Sethi, M Khandelwal, S Rath pictorial scale*) (1 to 3-acceptable behaviour) and **FLACC scale**⁷ (*Face, legs, activity, cry, consolability scale*) (0 to 1-acceptable behaviour) during treatment

Exclusion criteria - Patients with special health care needs (SHCN)

Group(A)

TSD(Tell -Show -Do)



Group(B)

TSD + PP(Parental Presence)



Group(C)

TPD (Tell-play-do using smartphone dental game)

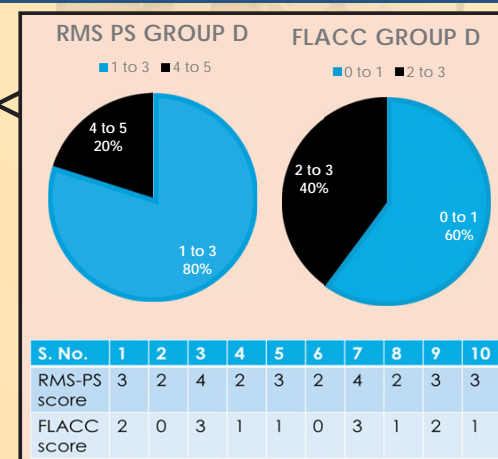
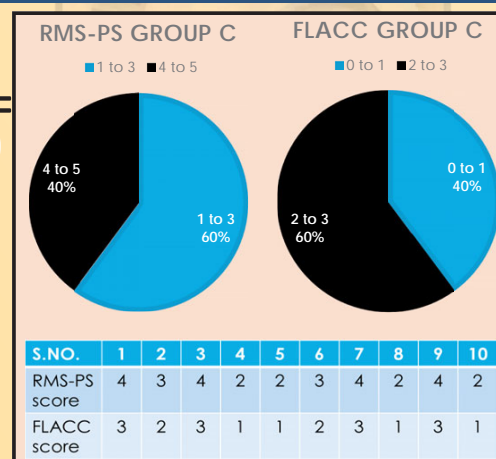
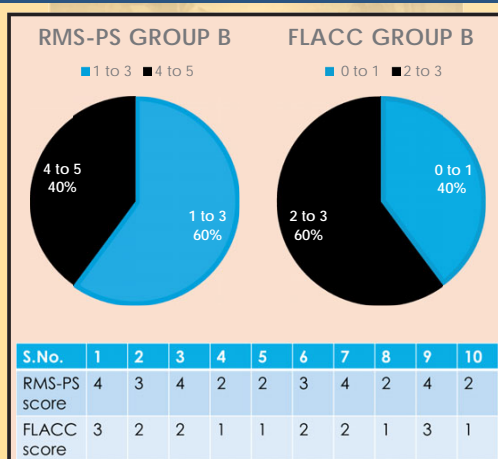
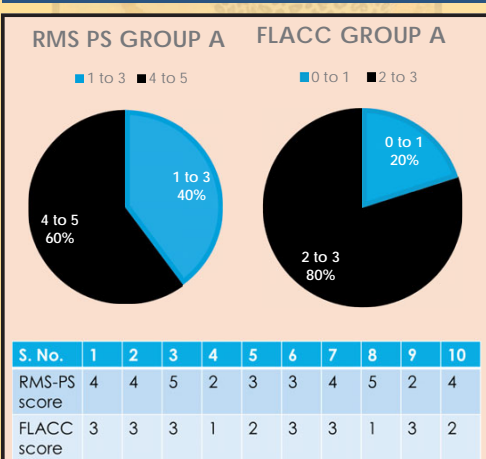


Group(D)

TPD + PP



RESULTS



DISCUSSION

- The parental presence reduces the physiological manifestations of anxiety in children. Parental presence is advocated to gain emotional support and avoid the effect of the traumatic separation.^{1,2}
- Effective handling of patients pre-operatively and during the procedure was observed in the smartphone dentist game technique when compared with the Tell-Show-Do technique.³
- Smartphones can be used as a part of distraction in behaviour management technique to reduce preoperative anxiety in children. The reduction in anxiety parameters was seen to be almost double with smartphone applications as compared to conventional behaviour management techniques.^{4,5}

CONCLUSION

All methods contribute in their own way in management of an uncooperative child. In the TSD technique, the patient understands reasoning, whereas a parental presence gives a sense of security to the child and the smartphone game acts as a virtual distraction technique as well as a desensitization method. In our study the best results are shown by group D, which means that smartphone dental games can be used as a behaviour management technique.

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