COMPARATIVE PROJECTIVE DRAWING ANALYSIS OF ANXIOUS AND NONANXIOUS CHILDREN IN A DENTAL OFFICE - AN OBSERVATIONAL STUDY

INTRODUCTION

Assessment and monitoring of anxiety are indispensable to build a positive dental attitude in children in order to deliver effective dental services. Several tools have been developed for the measurement of the emotional status of the child in dental clinics. Drawing, a nonverbal, self-reported, projective and non-invasive technique may help in analyzing children's anxiety in the dental clinic.[1,2]

OBJECTIVE

To investigate the applicability of children's drawings as an indicator to measure their level of anxiety and compare it with pulse oximeter data and Venham Picture Tests scores.

METHODOLOGY

Sample size - 100 children

Age group - 4-6 years

Children were asked to draw dental operatory on an A4 sheet and colour it with a basic set of 12 colours. The drawing was scored using the Child Drawing: Hospital Scale (projective scale) (CD:H), and the results were compared with their pulse oximeter readings (physiological parameter) (control) and Venham Picture Test (VPT) scorings.

RESULTS
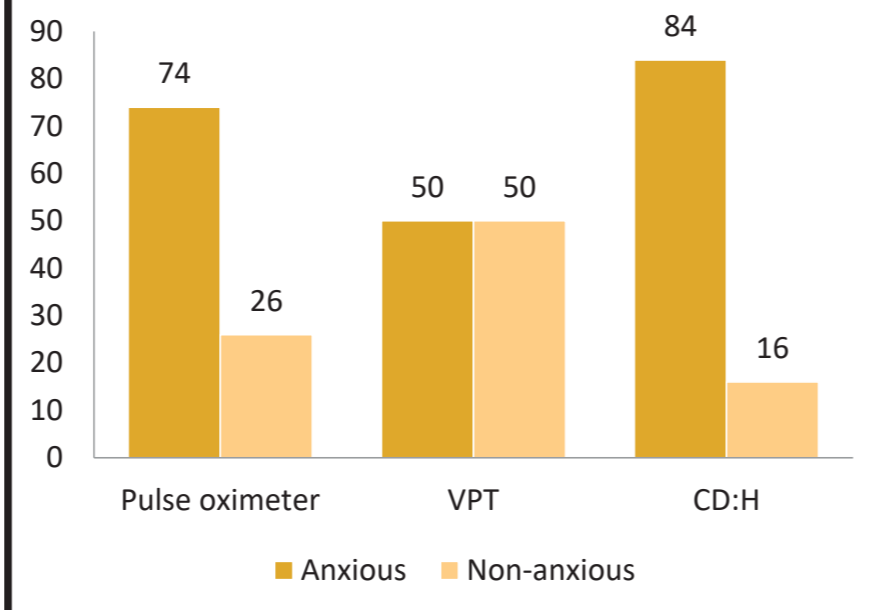
Children were marked anxious if:
- Pulse oximeter reading:110 and above
- Mean VPT score: 4 or more
- CD:H score: 130–167

Interpretation of CD:H Scoring
≤43: Very low stress
44–83: Low stress
84–129: Average stress
130–167: Above average
168 and over: Very high

Correlation between VPT, CD: H and Pulse oximeter

	Mean	SD	Correlation	Sig
VPT	4.44	0.760	-0.140	0.331
PO	127.6	8.898		
CD:H	146.5	9.546	0.125	0.290
PO	127.3	9.317		

DISCUSSION & CONCLUSION

The physiological changes in the body due to the release of stress hormones in the blood could be recorded by the pulse oximeter .[3] VPT is designed to allow the child to respond openly to an ambiguous stimulus to reveal internal conflicts and subconscious distress. Drawing helps children express themselves in ways that verbal language cannot and can provide helpful information on their emotional attitudes and well-being. Children requiring specialised behavioural techniques can be identified by the presence of stress markers in their drawings.[4] In 1999, the CD:H scale was developed as a means of measuring the anxiety of hospitalised school-age children and since it has also been used in a dental settings as an assessment tool for anxiety.[2] In our study, even though it does not correlate with projective scales (VPT) but does correlate with the physiological parameters, it can be used as an efficient tool for determining the level of the dental anxiety in young patients.

REFERENCES

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