DO INFANT PAIN RESPONSES FROM THE FIRST YEAR OF LIFE PREDICT ANTICIPATORY DISTRESS TO IMMUNIZATION AT 4-5 YEARS OF AGE?

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INTRODUCTION / AIM

A growing body of evidence has demonstrated that preschool and school-aged children experience moderate to severe levels of fear, anxiety, and distress prior to a painful medical procedure. The aim of the current study was to investigate whether infant pain-related distress during immunization from the first year of life predicts anticipatory distress to preschool immunization.

METHODS

Two hundred and two caregiver-child dyads from the OUCH cohort were observed from their 2-month immunization to their preschool immunization. Pre-needle pain, pain reactivity (needle pain), and the change in infant pain-related distress across the immunization appointment (needle to 3-minutes post-needle) at four time points (2, 4, 6, and 12 months) were investigated as predictors of anticipatory distress to the preschool immunization. Latent growth curve modelling using a structural equation modelling framework was used.

RESULTS

Pre-needle pain-related distress, pain reactivity, and pain regulation across the first year of life did not predict anticipatory distress at preschool.

DISCUSSION / CONCLUSIONS

Results suggest that infant pain reactivity and pain regulation have minimal roles in predicting anticipatory distress at the preschool age. Other factors such as parent behaviour, as demonstrated in other work by our group (Racine et al., submitted) are more important in predicting anticipatory distress than pain responses in the first year of life.

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