USING 12-MONTH TRAJECTORIES OF PAIN-RELATED DISTRESS TO PREDICT PAIN-RELATED DISTRESS IN PRESCHOOL

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INTRODUCTION / AIM

Previous research discerned a number of subgroups of 12-month old infants with significantly different regulatory patterns of pain-related distress post-immunization. Three groups were most dominant, with one group regulating slowly over two minutes post-needle, one group regulated slowly initially but then fully regulated by two minutes, and the last group completely regulated by 1-minute (Pillai Riddell et al., 2013). The current study had two research aims: (1) examine interrelationships between 12-month and preschool pain-related distress, and (2) determine whether pain-related distress at 4 to 5 years of age during immunization can be predicted based on the aforementioned patterns of regulation of pain-related distress at 12-months.

METHODS

The current study used existing data (n=154) from a longitudinal cohort that video recorded caregiver-infant dyads during routine immunization appointments. Videotapes were coded for pain-related distress immediately before the needle, during the needle, and 1- and 2-minutes after the needle during 12-month (Modified Behaviour Scale; Taddio et al., 1995) and preschool (FLACC; Merkel et al., 1997) immunizations.

RESULTS

Bivariate correlations revealed no significant relationships between 12-month and preschool immunization pain-related distress at baseline, needle, 1- and 2- minutes post needle. Not surprisingly, the 12-month trajectory groups also did not predict patterns of pain-related distress during preschool immunizations.

DISCUSSION / CONCLUSIONS

There appears to be no predictive relationship between 12-month and preschool pain-related distress during immunizations. Moreover, infant patterns of pain regulation during immunizations at 12-months do not predict preschool pain-related distress. These results suggest that pain responding in the immunization context changes significantly across development.

OTHER AUTHORS

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