# Child Life Support Reduces Distress and Improves Family Satisfaction in the ED

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Children's Hospital Colorado

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## Background

When not accompanied by appropriate control of pediatric pain and distress, stressful and invasive medical procedures can lead to posttraumatic stress symptoms, negative reactions and noncompliance during subsequent medical encounters (Blount et al., 2009; Kain, Mayes, Wang, & Hofstadter, 1990; Wintgens, Boileau, & Robaey, 1997). Needle-related procedures can be especially stressful for children and are often completed during Emergency Department (ED) visits. The role of a Child Life Specialist (CLS) is to prepare and support children for their healthcare experience to help ease their distress; however, currently many children do not receive CLS support for PIV placement.

# Objectives

In an effort to understand the impact of Child Life involvement during stressful pediatric procedures in the Emergency Department, this study aims to compare patient distress, procedure efficiency, and family satisfaction during PIV catheter placement in groups of children that either received standard care and procedural preparation from medical staff or Child Life preparation and procedural coping support.

## Methods

#### Participants:

 78 pediatric patients, ages 3 to 13 years, who required PIV placement in the ED from February 2015 to November 2015.

#### Design:

- Patients were categorized into the intervention or control group based on child life staff schedule. Patients who presented outside of CLS working hours were enrolled in the control group.
- Control group received standard care and PIV preparation from RN.

## **Key Interventions:**

- Child Life psychological preparation for PIV placement
- Use of a stuffed bear and medical props to demonstrate PIV placement
- CLS coping plan development with child, caregiver, and staff
- Coping support from CLS during PIV procedure

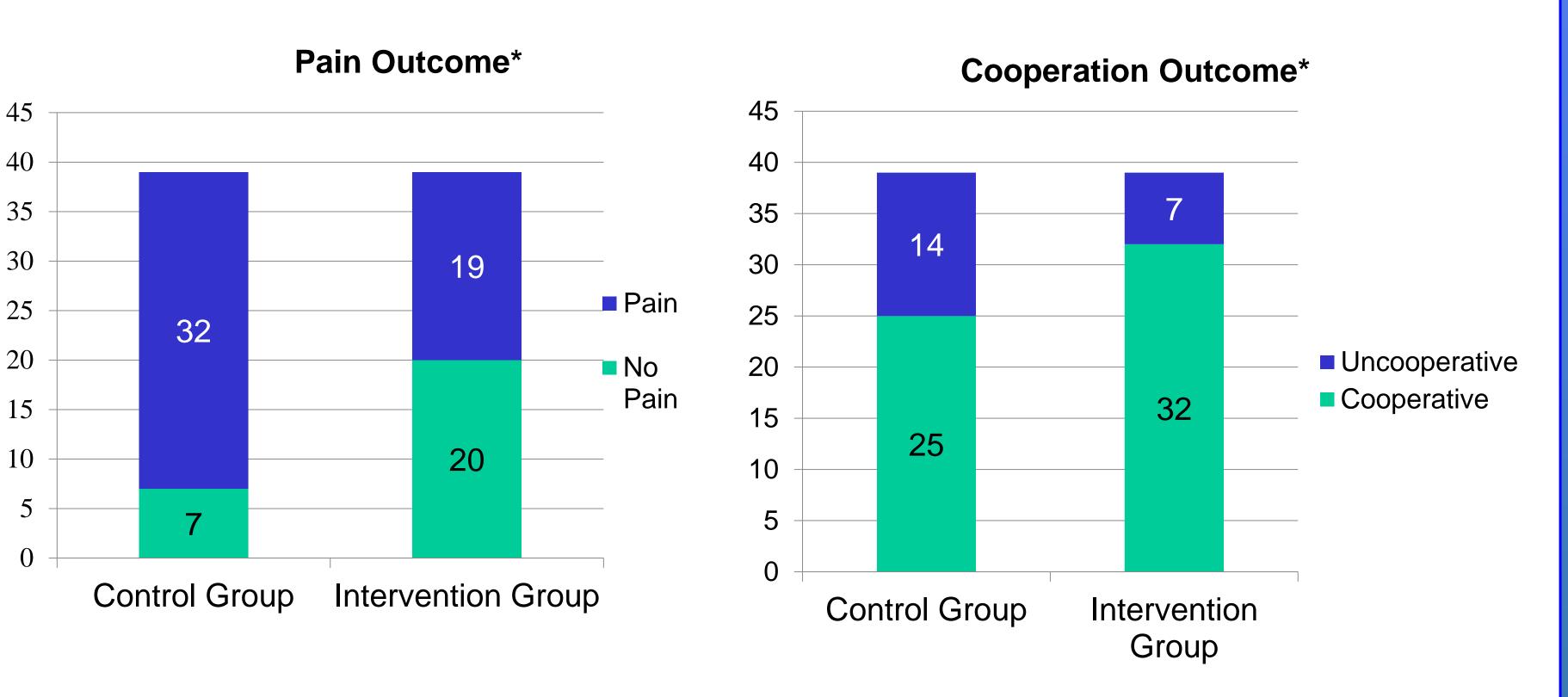
#### **Outcomes Measures:**

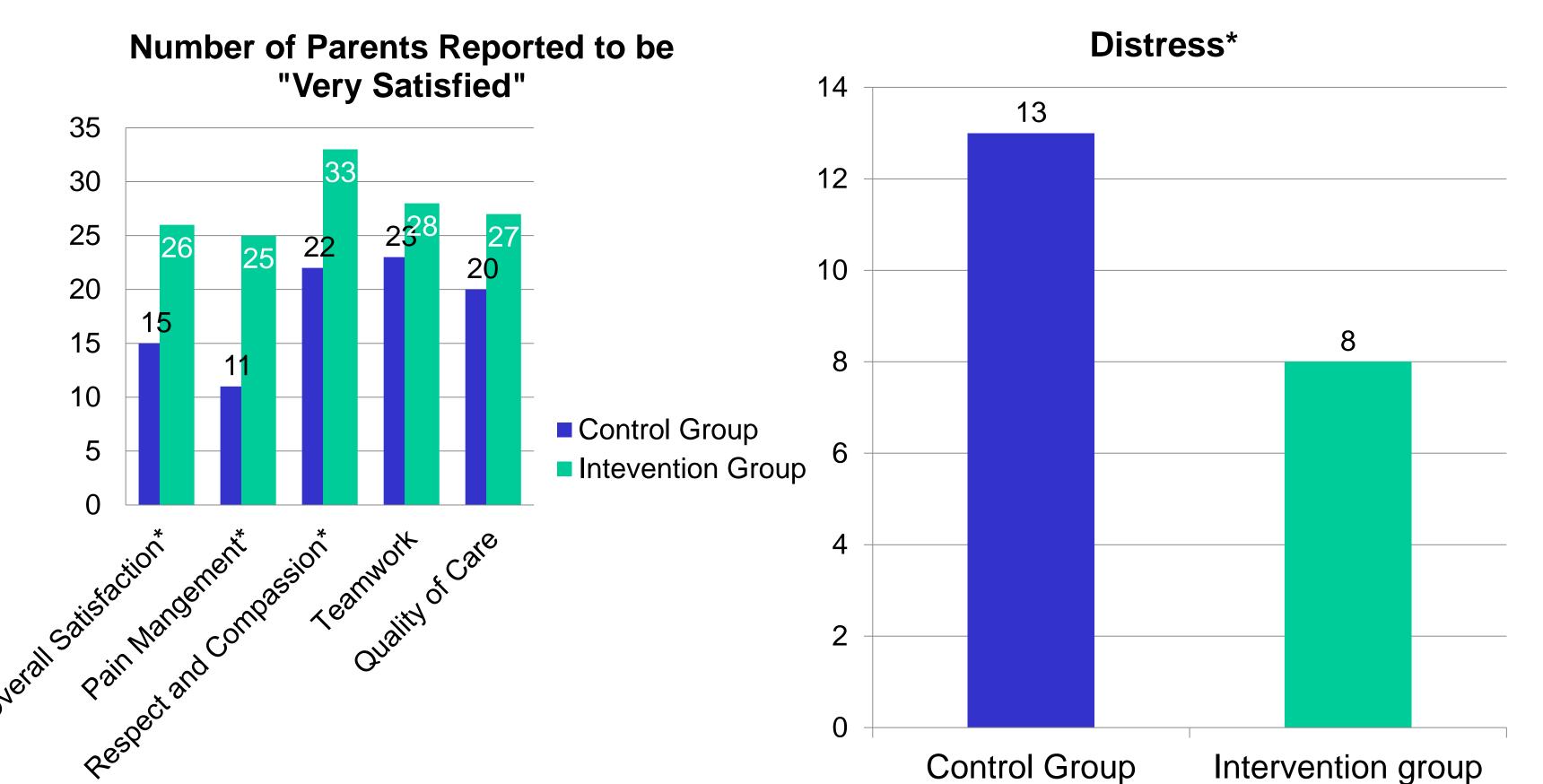
- Patients Distress:
- Children's Emotional Manifestation Scale (CEMS)
- Parent Report
- Provider Report
- Cooperation
  - Parent report
  - Provider report
- Pain
- Self report
- Parent report
- Provider report
- Procedural efficiency
- Number of staff holding patient
- Number of attempts to insert PIV
- Visit Satisfaction Survey

## Results

There were no statistically significant differences in age, gender, race/ethnicity, previous PIV education, and number of previous PIV attempts between the groups.

#### **Table: Control Group VS Intervention Results**





Note \* = significance at P< .05

#### **Additional Findings:**

- J-tip use increased in intervention group (not a confounding variable)
- No difference in number of holders or poke attempts ( $\mu$ = 1)
- Patients who received PIV placement from a provider with more years of experience were more likely to exhibit higher levels of pain and distress during the procedure. In addition, their caregivers reported being less satisfied with the level of respect and compassion they experienced from staff during their visit.

# Implications

- Child life services in a pediatric ED not only help provide beneficial nonpharmacological pain and distress management to patients, but can also help improve the pharmacological methods implemented for children undergoing medical procedures.
- Child life specialists can provide key insight and leadership to help evaluate and implement best practices and protocols to positively impact the ED "culture" to improve pain management and visit satisfaction.

## Conclusions

This study demonstrates that child life intervention can have an impact on important outcomes in the pediatric ED such as pain, distress, and procedural compliance. Improvement of pain management in the ED takes a multidimensional approach, combining both nonpharmacological and pharmacological approaches. Child life specialists can play a crucial role in helping to improve and develop best practices regarding pain management for children undergoing needle-related procedures.