The Effects of Medical Play on Young Children's Pain and Distress During Burn Wound Care

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Background
- Children with burn injuries face multiple painful procedures.
- Long-term negative effects associated with painful medical procedures.
- Directed medical play may decrease distress during invasive procedures.
- Caregivers show increased anxiety and depression compared to the general population.

Purpose
- To determine the effect of type of procedural preparation on child and parent outcomes.
- Types of preparation:
  - Directed medical play delivered by a child life specialist
  - Standard preparation delivered by burn clinic staff
- Outcomes:
  - Child pain and distress
  - Parent anxiety and satisfaction with care

Research Design
- Quasi-experimental design
- Participants assigned to groups based on day of clinic appointment
- Group assignment:
  - Monday, Tuesday or Friday received directed medical play intervention
  - Wednesday and Thursday received standard procedural preparation by the burn clinic nurse

Sample Selection
Inclusion Criteria:
- Children: Between 3 and 7 years old
- Able to read and understand English

Exclusion/Withdrawal Criteria:
- Child requires intravenous sedation during procedure
- Child is non-verbal and/or does not speak English

Directed Medical Play
- Directed medical play provides children the opportunity to:
  - Examine and manipulate medical equipment
  - Process procedural information, and
  - Gain mastery over the healthcare environment

Study Intervention
- Preparation for procedure by a child life specialist
- Set of play items in treatment room for distraction

Standard Care
- Standard care included:
  - Preparation for the procedure from the burn clinic nurse
  - Support during the procedure using play items

Research Questions
- How Did We Do?
- What did we learn?
- How could we improve?

Key Study Variables
- FACES Pain Scale (FPS)
- FLACC
- State Anxiety Scale (STAI)
- Dillman's Form for the State Anxiety Scale
- How Did We Do Scale
- Parent satisfaction with care

Procedures
- Pre-procedural care
- Observation of child's behavioral pain/distress during dressing change
- Parent self-report of anxiety

Sample Selection
Inclusion Criteria:
- Children: 18 years or older
- Able to read and understand English

Exclusion/Withdrawal Criteria:
- Child requires intravenous sedation during procedure
- Child is non-verbal and/or does not speak English

Directed Medical Play
- Directed medical play provides children the opportunity to:
  - Examine and manipulate medical equipment
  - Process procedural information, and
  - Gain mastery over the healthcare environment

Data Analysis
- Results favorable for effect of medical play on pain/distress outcomes of young children
- Further research required to confirm these trends

Summary and Implications
- Children who received medical play reported less pain and exhibited less distress than those who received standard care; this was not statistically significant
- Type of preparation did not affect parent anxiety or satisfaction with care
- Results favorable for effect of medical play on pain/distress outcomes of young children
- Further research required to confirm these trends