

Using Child Life and Facility Dogs to Decrease Pediatric Pain during Painful Procedures

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Description

The importance of the study, "Impact of Facility Dog and Certified Child Life Specialist Dyad on Children's Pain and Anxiety during Needlestick Procedures in a Pediatric Hematology Oncology Clinic Setting," is clear given the breadth of research done on the impact of frequent painful procedures and treatments on pediatric hematology oncology patients and their families[1-3]. The results of this study show a statistically significant decrease in patient reported pain in the group which included the facility dog. The impact of these results cross many disciplines and provide an opportunity to explore how non-pharmacological pain management interventions can decrease pain and anxiety during pediatric hematology/oncology treatments. There are many aspects of this study that contribute to it being impactful in the pediatric hematology oncology, Child Life and Animal Assisted Therapy (AAT) fields including the use of a Certified Child Life Specialist (CCLS) facility dog dyad to impact needle sticks procedures on pediatric hematology oncology patients and the potential impact of its secondary findings on the impact of these supportive services on ambulatory workflow.

Novelty of a CCLS and facility dog dyad

The inclusion of a CCLS and full-time facility dog make this article unique. In addition, it is the first study of its kind to incorporate any animal into needlestick procedures with a goal of pain management. Although the previous research on AAT is compelling given its details on reducing experience of pain, stress, anxiety and fear, and decreases in blood pressure and stress hormones, these studies have been limited to adult populations and volunteer pet therapy dyads [4-12]. The impact of a clinician trained to work with pediatric hematology oncology patients incorporating a full-time facility dog is a novel concept to the available literature. Specifically, CCLSs have been documented using evidence-based interventions including play, preparation and education with the goal of increasing coping, and AAT is a new innovative tool being added to this skillset [13-15]. Child life programs in many pediatric hospitals are incorporating full-time facility dogs into their clinical teams, aimed at performing goal-based interventions to help meet patient treatment goals. CCLSs design and implement a variety of therapeutic interventions to help alleviate the pain and distress related to these procedures, and as AAT

is a growing tool for this profession, studies such as this help to document its clinical impact.

Needlestick procedures in pediatric hematology oncology

Due to the nature and complexity of their illness, patients in the pediatric hematology oncology clinic undergo frequent painful needlestick procedures. Both the anticipation of venipuncture and the associated pain cause extreme distress in pediatric populations [16]. It is well documented in the literature that needlesticks are one of the main sources of pediatric pain and distress [17,18]. Overall, patient pain and anxiety scores self-reported by patients and reported by caregivers were lower among patients working with the facility dog. Self-reported patient pain was substantially lower in the intervention group, indicating that the presence of a facility dog during a needlestick procedure is an effective tool in reducing patient pain. This is a substantial finding as self-reported patient pain in pediatrics is recommended as the primary source of evidence around pain intensity and is often considered the "gold standard" of pain assessment when clinical application gives consideration to age and developmental understanding of pain scales [19-21].

Secondary outcomes

Potential implications on ambulatory flow: Patients in this study receiving the facility dog intervention required fewer needlesticks to successfully complete their procedure compared to patients who did not receive the facility intervention. Twelve percent of the control group required two or more needlestick attempts, with a maximum number of five attempts. Only 5.6 percent of the intervention group required two or more needlestick attempts with a maximum of three attempts. Minimizing needlesticks through a CCLS and facility dog dyad's intervention highlights the importance of this modality during invasive procedures. Fewer needlestick attempts may lead to less distress, faster procedures, lower healthcare worker distress and higher patient satisfaction. During procedures in pediatric clinics, additional staff members are sometimes needed to help a child stay still [22]. In this study, patients in the intervention group required fewer staff members present to successfully complete the procedure as compared to patients in the control group. This was specifically true for patients ages. This is important as it indicates improved coping in an age group that commonly experiences distress during

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procedures [23]. Overall, decreased staff presence during the procedure indicates better patient coping while supporting smoother clinic flow and efficiency. Decreased staff presence may also lower financial costs for an ambulatory setting if fewer staff members are needed. Both of these secondary findings present promising work, but require additional research.

Future research on AAT in pediatrics

Future research could incorporate a broader eligibility window and utilize multisite models for a more comprehensive approach. Studies might also consider a time-series research design in order to observe patient pain and anxiety during two procedures, one with the facility dog and one without the facility dog, to precisely quantify the impact of the facility dog on a patient's specific procedural outcomes. Components of this study's design such as a large sample size, observation of individual patient baseline, and assessing time to return to baseline serve to minimize the impact of this limitation. Future research on CCLS interventions utilizing facility dogs might extrapolate on these significant findings by evaluating other pain management interventions. As trained professionals who provide individualized care to promote coping and resilience, CCLSs are uniquely positioned to provide AAT during invasive procedures and evaluate their impact. This study underscores the significance of child life and facility dog programs within pediatric hospitals. It highlights the direct correlation between favorable clinical outcomes and the integration of facility dogs into the skill set of Certified Child Life Specialists (CCLSs) in pediatric hematology oncology settings.

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