Effectiveness of Medical Play in Decreasing Stress and Anxiety in the Siblings of N.I.C.U. Patients

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METHODS

In this study, the Ronald McDonald House in Greenville, North Carolina will be outfitted with a medical play area that will allow participants to be led through predetermined medical play scenarios. From the group of voluntary participants, several families will be selected that meet two criteria for the study. First, the family must have a child who is currently or has previously been admitted to the Neonatal Intensive Care Unit at the James and Connie Maynard Children’s Hospital at Vidant Medical Center. Second, the family must have a healthy child who is staying with them in the Ronald McDonald House. The children involved will be asked to sign a waiver and then will take a pre- and post-play questionnaire that will be an abbreviated version of the State-Trait Anxiety Inventory for Children (STAIC).

REFERENCES

CDC. (2008). The Effects of Childhood Stress on Health Across the Lifespan. Cdc, 1–18. papers2://publication/uuid/6077FB60-B088-4DB5-B9C1-AF9DFDE3EA2F


IDEA

This study will investigate the effectiveness of medical play in decreasing the anxiety and stress experienced by the younger siblings of N.I.C.U. patients throughout their stay in the Ronald McDonald House.

RATIONALE

It has been found that prolonged exposure to toxic stress in children can cause long term alterations to their brain circuitry resulting in a lower threshold for stress and a permanent increase in body cortisol levels (CDC, 2008). As a result of these consequences, medical professionals have begun to seek means of preventing young children from experiencing these “medical traumas” (NCTSN, 2014). While the benefits of medical play in decreasing children’s stress levels have been documented for children in the inpatient setting, few studies have been tailored toward the siblings and families of these patients. Therefore, studies on the effectiveness of medical play in decreasing the stress and anxiety experienced by the healthy siblings of ill patients are necessary (Dinleyici & Şahin Dağlı, 2018).

EVALUATION PLAN

Children who choose to participate in the organized scenarios will be asked to take both a pre-medical play and a post-medical play questionnaire that will be modeled after the State-Trait Anxiety Inventory for Children (STAIC). The STAIC is a paper-and-pencil questionnaire composed of 40 items measured on a self-reported scale of 1 (not at all) to 4 (almost always). The questions in the traditional STAIC gage the participant’s current level of anxiety referred to as ‘state anxiety,’ and their propensity towards being anxious, known as ‘trait anxiety’ (Spielberger et al., 1983). The questionnaire will result in a score range of 5 to 40 for each of the two subcategories, with higher scores indicating a greater amount of anxiety or a higher propensity to become anxious in unknown clinical spaces.

Following these questionnaires, the scores will be averaged for the groups and the mean modified scores for STAIC will be reported with standard deviations. Finally, a group x time interaction will be calculated with an assumed statistical significance of P < 0.05 to determine the success of the medical play interventions in lowering the child’s anxiety.

POTENTIAL IMPACT

This study is aimed at filling the need for an assessment of the effectiveness of medical play in reducing the stress and anxiety in the siblings of N.I.C.U. patients. Ideally, it will be shown that medical play is an effective means of reducing both the state and trait anxieties of the child participants. Then this study will have identified a viable therapeutic method for potentially preventing young children from experiencing medical traumas. This study could potentially highlight the necessity for medical care facilities to implement medical play areas into their services in order to better address the needs of their pediatric visitors.