

## Research Week 2021

# Identifying Psychosocial Risk Factors in Pediatric Kidney Transplant Evaluations

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### Keywords

Psychosocial, pediatrics, kidney transplant, social determinants, psychology

#### **Abstract**

#### **Background:**

Psychosocial evaluations before renal transplant (Tx) are critical to investigate variables that affect the health, readiness, and long-term graft survival of pediatric patients and their ability to adapt to medical changes within their surrounding social determinants of health. Currently, there is no standardized protocol to evaluate psychosocial factors before Tx or predict Tx outcomes for pediatric patients.

#### Objective:

In 2017, our center implemented a modified version of the Society for Transplant Social Workers Psychosocial Assessment Tool for Potential Organ Transplant Recipients. The objective is to see if this adult-focused tool is beneficial to evaluate psychosocial factors pre-Tx and predict Tx outcomes for pediatric patients.

#### Design/Methods:

We conducted a chart review of pediatric renal Tx patients between 2017-2020. Pre-Tx evaluation social work notes with the modified assessment tool were used to create Psychosocial Risk Profiles for patients' ability to adhere to medical regimens and predict success post-Tx. Bedside Schwartz equation (eGFR) estimated graft function at 12 months post-Tx. Linear regression examined the impact of psychosocial factors on eGFR. Spearman correlations examined relationships between psychosocial factors.

#### Results:

Analysis included 22 patients, mean age  $14.0 \pm 5.0$  years at Tx. Results show predicted compliance is significantly correlated to eGFR (p=0.046). Parent coping skills significantly correlate to parental mental health (p=0.007). Understanding Tx is significantly correlated to children's compliance and coping skills (p=0.028). Spearman correlations showed correlations (p<= 0.05) between parental coping skills to parental mental health and motivation to Tx. Child coping skills correlated (p<= 0.05) to child and parent mental health, understanding of Tx, cognitive functioning, and functional status.

#### **Conclusions:**

Our results are limited by sample size and retrospective design but show parental/child mental health, coping skills, level of understanding Tx, and child functioning level are important to address pre-Tx to promote healthy coping skills and medical adherence in children post-Tx.