

# Parental Rates of Anxiety and Depression Across Patient Age and Colorado Organ Type Among Pediatric Transplant Patients

Children's Hospital Colorado Organ Type Among Pediatric Transplant Patients

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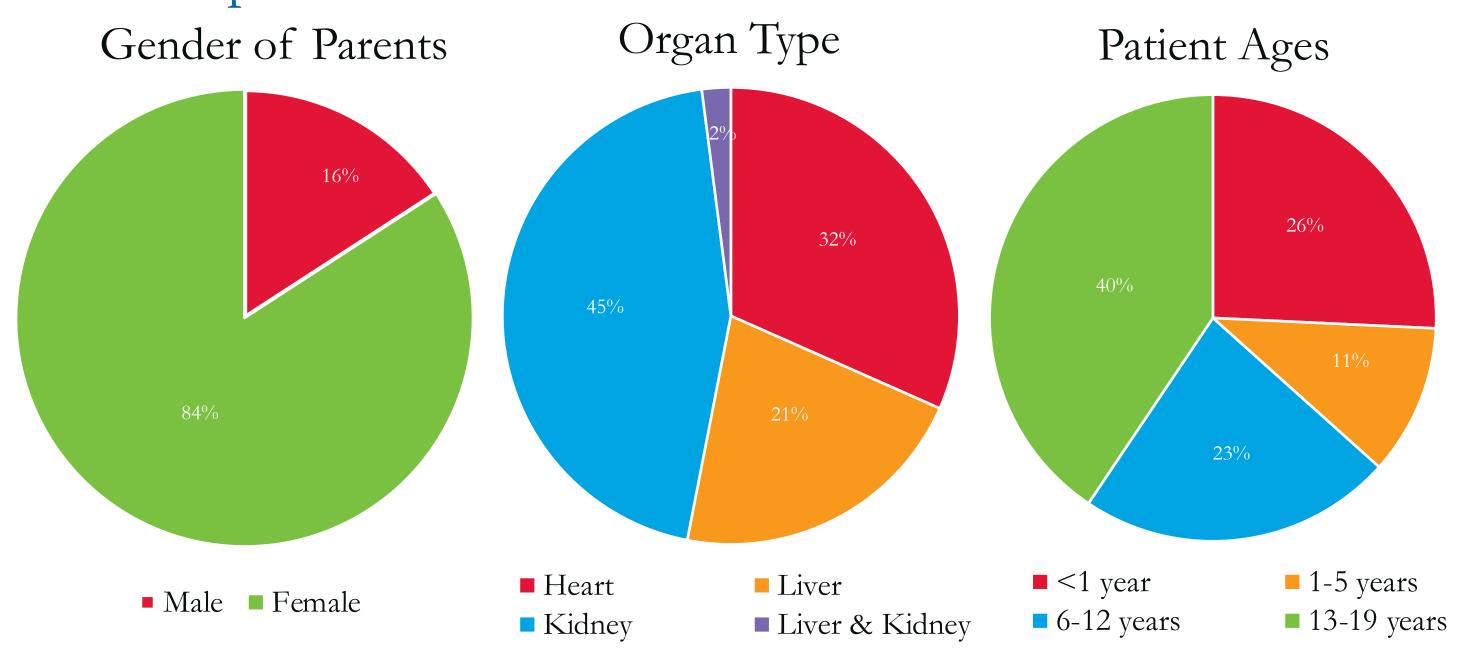
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### BACKGROUND

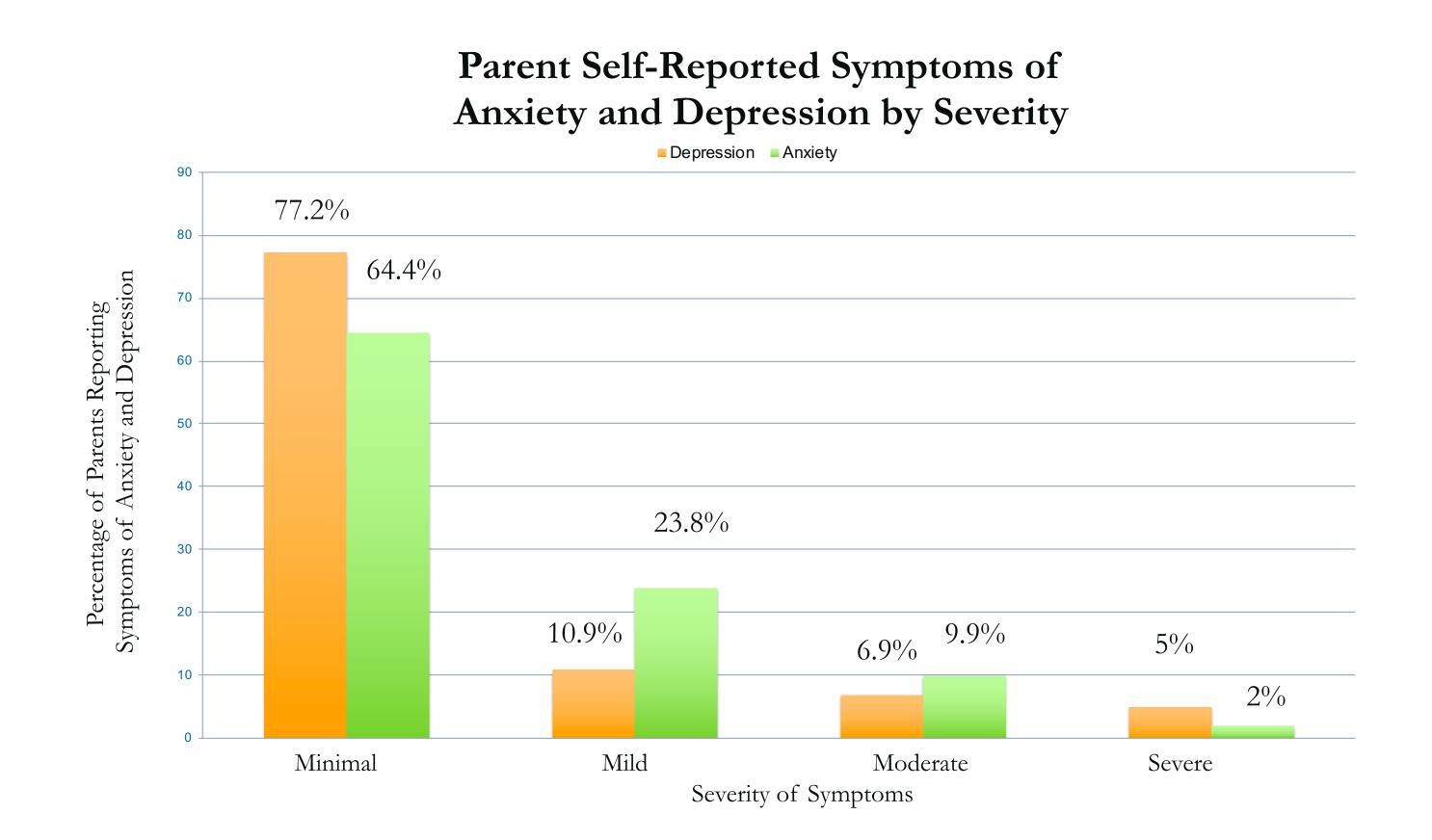
- Family functioning and parental mental health are related to health outcomes for pediatric transplant recipients. Specifically, parental mental health is a risk factor for poor post-transplant outcomes, such as rejection and graft failure.
- Previous research shows parents of pediatric transplant patients often experience elevated stress and symptoms of depression and anxiety.<sup>2</sup> However, less is known about parental functioning at the pre-transplant phase.
- The current study examines rates of parental self-reported symptoms of anxiety and depression, including differences across patient ages and organ types, to better understand parental functioning during the pre-transplant phase.

# **METHODS**

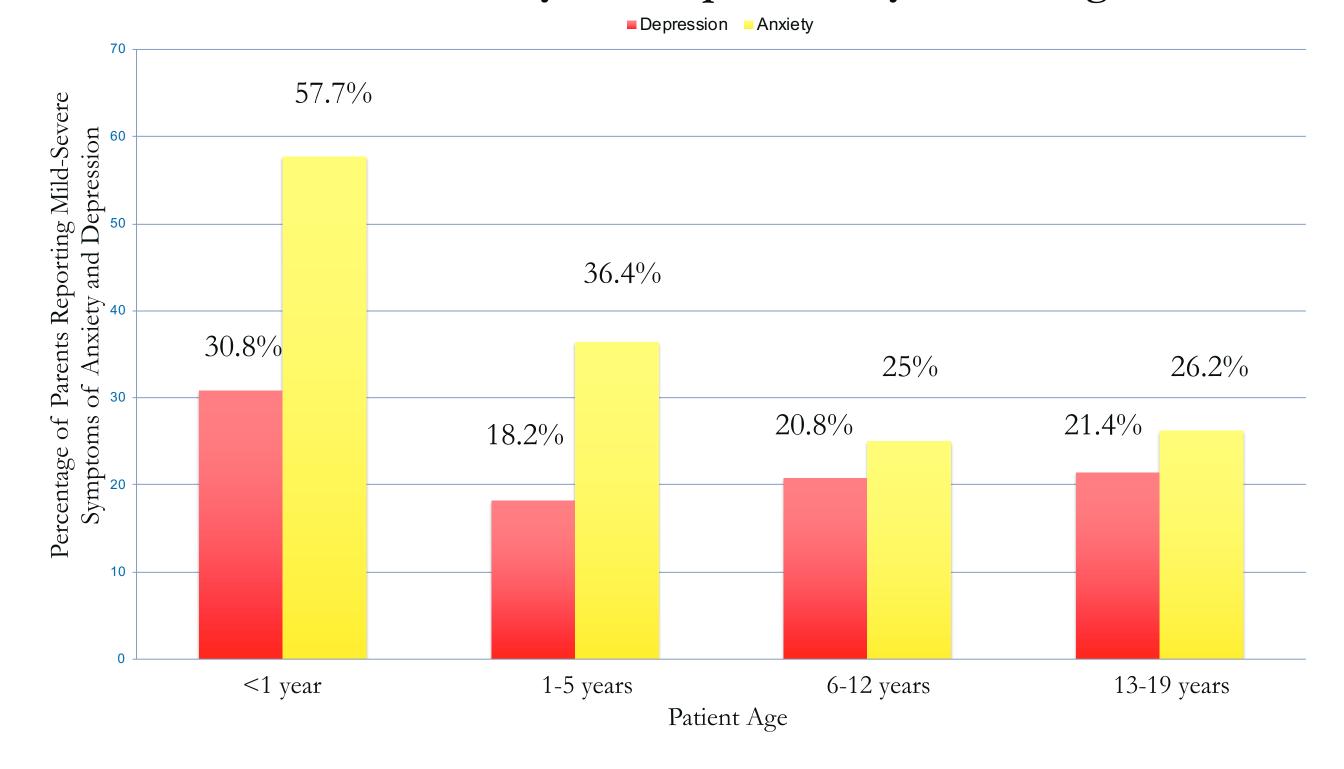
- IRB approved retrospective review study.
- Parental symptoms of anxiety and depression were measured by the Beck Anxiety Inventory (BAI) and the Beck Depression Inventory, Second Addition (BDI-II).
- Data was gathered from a pre-transplant clinical registry and analyzed in SPSS.
- Subjects (N=101): Parents/caregivers of patients ages 0-19 evaluated for heart, liver, or kidney transplant between 2013 and 2018 at a large regional children's hospital.



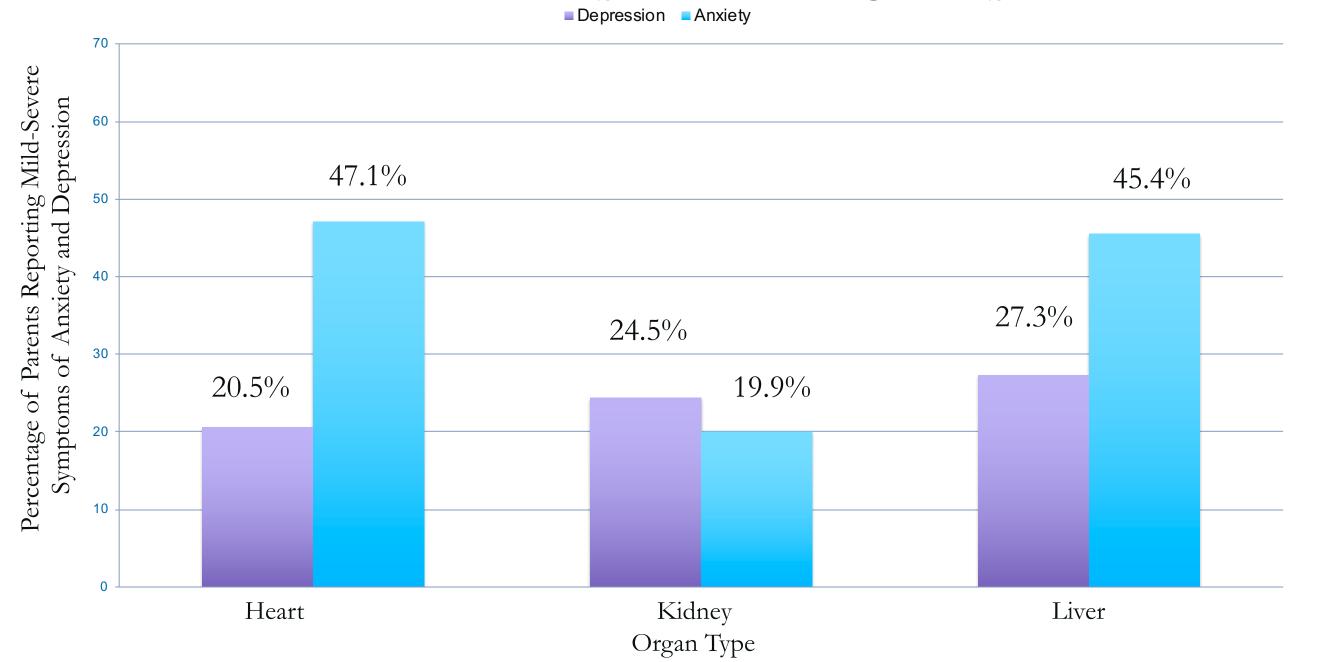
## RESULTS



#### Parent Self-Reported Symptoms of Anxiety and Depression by Patient Age



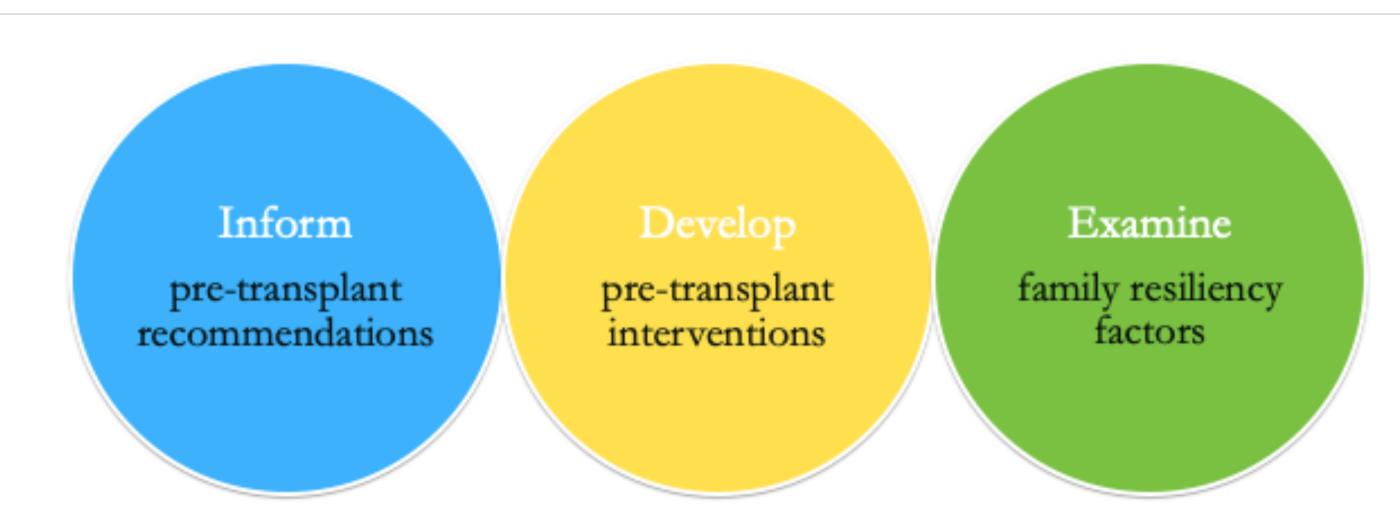
#### Parent Self-Reported Symptoms of Anxiety and Depression by Organ Type



#### CONCLUSIONS

- Parental rates of both anxiety and depression were highest among children less than one year old, compared to other patient age groups. Specifically, 57.7% reported symptoms of anxiety and 30.8% reported symptoms of depression.
- Parental rates of anxiety were highest among heart transplant patients (47.1%) compared to liver and kidney patients. Parental rates of depression were highest among liver transplant patients (27.3%).
- Higher rates of parental symptoms of anxiety and depression among heart and liver patients and patients under one year old during pre-transplant may be related to the acuity of these conditions and the stress associated with having an infant with a life-threatening condition.
- Learning more about parental symptoms of anxiety and depression in the pre-transplant phase will better inform clinical practices, facilitate early intervention, and ultimately improve health outcomes for pediatric patients.

## FUTURE DIRECTIONS



## REFERENCES

- 1. Cousino, M. K., Schumacher, K. R., Rea, K. E., Eder, S., Zamberlan, M., Jordan, J., & Fredericks, E. M. (2018). Psychosocial functioning in pediatric heart transplant recipients and their families. *Pediatric transplantation*, *22*(2), e13110.
- 2. Cousino, M. K., Rea, K. E., Schumacher, K. R., Magee, J. C., & Fredericks, E. M. (2017). A systematic review of parent and family functioning in pediatric solid organ transplant populations. *Pediatric transplantation*, 21(3), e12900.