PSYCHOSOCIAL MORBIDITY FACTORS MEDIATE THE RELATIONSHIP BETWEEN HEART DISEASE COMPLEXITY AND LOWER QUALITY OF LIFE

ACC Moderated Poster Contributions
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Background: Pediatric patients with heart disease (HD) have lower quality of life (QOL) and often experience psychosocial morbidity. The purpose of this study was to explore the relationships between HD complexity, QOL, and psychosocial morbidity factors [family functioning and parental stress, and patient and parent post-traumatic stress (PTS) and trait anxiety].

Methods: Patients (age 8-18 years) and their parents at 6 cardiac centers in the United States and England completed: QOL [Pediatric Cardiac Quality of Life Inventory (PCQLI)], family functioning (Family Environment Scale), parental stress (Pediatric Inventory for Parents), PTS (Parent Post-traumatic Diagnostic Scale and Child Post-traumatic Stress Disorder Symptom Scale), and trait anxiety (Parent Spielberger Trait Anxiety Inventory and Revised Children’s Manifest Anxiety Scale) questionnaires. Complexity categories (High and Low) were created based on the clinical characteristics of the underlying HD. Path analysis was used to assess the direct and indirect effects (correlation) of complexity on PCQLI Psychosocial Impact (PI) score as mediated by family functioning, parental stress, PTS, and trait anxiety while controlling for patient age, sex, time since diagnosis, and parental education. A p-value < 0.05 was considered significant.

Results: A total of 815 patient-parent pairs participated (Complexity: High n=626 and Low n=189); mean patient age 12.5 ± 1.5 years and patient and parent sex (57% and 14% male), 56% of parents had some college education. Mean time since diagnosis was 10.6 ± 3.5 years. High complexity was associated with a lower PCQLI PI score (p<0.001). Higher parental stress, PTS Total Severity, and Total trait anxiety scores were associated with a lower PCQLI PI score (p<0.01). The association between High complexity and lower PCQLI PI score was mediated by worse parental stress, PTS, and trait anxiety [Total Correlation (direct and indirect effects) = -0.21 to -0.46; p<0.001] for both patients and parents.

Conclusions: The association between High disease complexity and lower QOL is mediated by parental stress, PTS, and trait anxiety. Interventions on these psychosocial morbidities may improve QOL.