|  |
| --- |
| **Anxiety, resilience, and quality of life in paediatric Cystic Fibrosis** |
| Maddison Deery1, Tamara Blake1, Vanessa Cobham2,3, Hayley Kimball2, Peter Sly1, Claire Wainwright4,5, Tonia Douglas4,5 |
| *1* *Children’s Health and Environment Program, Child Health Research Centre, University of Queensland, South Brisbane, Australia*  *2* *School of Psychology, University of Queensland, Brisbane, Australia*  *3* *Child and Youth Mental Health Service [CYMHS], Children’s Health Queensland Hospital and Health Service, Brisbane, Australia*  *4* *Cystic Fibrosis Service, Queensland Children’s Hospital, Brisbane, Australia*  *5* *School of Medicine, University of Queensland, Brisbane, Australia* |
| **Introduction:** Children with Cystic Fibrosis (CF) may experience poorer health-related quality of life (HRQoL) and mental health outcomes compared to their healthy peers. Anxiety is 2-3 times more prevalent in CF adolescents and adults than the general population. The prevalence of anxiety and protective factors, such as resilience, are under-reported and poorly understood in children with CF. We investigated respiratory HRQoL, and levels of resilience and anxiety among children attending CF clinics at the Queensland Children’s Hospital (QCH).  **Method:** Parent- and Child-report versions of Spence Child Anxiety Scale (SCAS), Child & Youth Resilience Measure Revised (CYRM-R) and Cystic Fibrosis Questionnaire-Revised (CFQ-R) questionnaires were administered to 160 patients (2.5-17 years-of-age) and their caregivers between July 2022-October 2023. Abnormal\* results were defined as elevated anxiety (SCAS T-score >60) and low resilience (CYRM score <63).  **Results:** SCAS and CYRM questionnaires were fully completed respectively by 137/160 (86%) and 112/158 (71%) parents, and 83/85 (98%) and 68/72 (94%) children. Elevated anxiety was demonstrated in 26% of preschool children, decreased with age (parent-reported), and was more commonly reported by parents than children (15% vs.7%). Children in our cohort self-reported lower anxiety scores than the general population (mean[SD]: 23.2[16.7] CF vs. 27.4[16.5] norm). Resilience was low in 21% children (self-reported), worsened with increasing age (parent- and child-reported), and more children self-reported low resilience compared with parent-reports (21% vs. 6%). Parents reported higher scores in the CFQ-R respiratory domain.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Questionnaires** | | **N=** | **Raw Score**  **Mean (Standard Deviation)** | **Abnormal\* (%)** | | Child | SCAS Child (8-15yrs) | 83 | 23.2 (16.7) | 6(7%) | | CYRM Child (5-9yrs) | 29 | 71.8 (10.1) | 5 (17%) | | CYRM Youth (10-18yrs) | 39 | 71.5 (9.9) | 9 (23%) | | CFQ-R Child Respiratory (6-11yrs) | 36 | 77.3 (16.3) | - | | CFQ-R Child Respiratory (12-13yrs) | 10 | 77.5 (15.7) | - | | CFQ-R Adolescent Respiratory (14yrs+) | 22 | 86.4 (18.9) | - | | Parent | SCAS Pre-School (2.5-5yrs) | 23 | 24.1 (18.9) | 6 (26%) | | SCAS Child (6-18yrs) | 114 | 17.6 (14.0) | 15 (13%) | | CYRM Child (5-9yrs) | 53 | 77.3 (5.1) | 0 (0%) | | CYRM Youth (10-18yrs) | 59 | 74.2 (8.1) | 7 (12%) | | CFQ-R Respiratory (6-13yrs) | 82 | 85.1 (15.7) | - |   **Conclusion:** Child-reported mean anxiety scores in this cohort were lower than population norms. Elevated anxiety was more frequent in preschool children and reduced with age. In contrast resilience worsened with increasing age. Discordance between parent and child reported scores highlights the need to also assess the child’s perspective. Further research is warranted to better understand the relationship between anxiety, resilience and HRQoL in children with CF.  **Key Words:** Cystic Fibrosis, Paediatric, Anxiety, Resilience, Health-Related Quality of Life  **Grant Support:** This work has been supported by the Cystic Fibrosis Foundation (USA) and Child Health Foundation (AUS). |