427 A psychopathological overview of adolescents with cystic fibrosis

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Adolescence is a critical period in CF patients on many points. However, there are only few studies on this problem. Most of them refer to quality of life but not psychological or psychopathological aspects. Therefore we undertook an observational study on the patients above 13 years in our CF Center. The aim was to study psychological functioning and to list psychopathological dysfunctions.
Patients completed the Cystic Fibrosis Questionnaire for the adolescent. We added to this self-questionnaire a semi-directive interview scale that we built. This scale includes medical, social, psychological and psychopathological fields. We used the ICD-10 to classify the psychopathological categories.
55 patients were included: mean age 15 years. We noticed that 50% of them present a psychopathology. 30% with a real psychological trouble such as mild, moderate or severe depression, global anxiety; and 20% with adjustment disorders. There was an increased prevalence of family dysfunction (51%) such as problems in relationship, or parental overprotection.
51% had a bad or moderate compliance. 50% of our patients complained about dorsal or abdominal pain. We realized that this dimension was primary underestimated in our interview.
This study demonstrates that CF adolescents have a specific psychopathological symptomatology that may interfere with the course of their disease. Careful psychological support should be reinforced during this period for the adolescent and his family.

428 Prediction of posttraumatic stress symptoms in the families of children with cystic fibrosis

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In line with the developments in medicine, the survival of cystic fibrosis patients has increased progressively and been extended beyond childhood. However, still being a life-threatening illness, cystic fibrosis has many consequences in terms of the psychosocial well-being. Family Systems Perspective, brought about the realization that a chronic illness does not only impact the individual child, but also transmit its effects to the entire family system. Living with a chronic illness, is an ongoing trauma especially for the parents as the primary caregivers. The present study aims to investigate the emergence of posttraumatic stress symptoms in the families of children with cystic fibrosis, by utilizing a conceptual model. Assuming that the factors influencing parents' responses to illness-related trauma are multiple, the model incorporates demographics, illness characteristics (both objective and appraised) and social-ecological variables as primary predictors. The sample of this ongoing research consists of parents of children with cystic fibrosis. The anticipated number of participants is 50 mothers and 50 fathers. The data has been gathered through the use of self-report questionnaires. Hierarchical Regression Technique will be used to analyze the data. The results are believed to provide a useful framework to organize researchers' and clinicians' thinking about the psychological responses of the families living with cystic fibrosis and the factors that influence them. An improved understanding of the role of different predictive variables, functioning either as risk or protective factors, is expected to be helpful in designing psychosocial interventions for the families.

429 Symptoms of anxiety and depression, pulmonary function and their association with life satisfaction in patients with cystic fibrosis

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Background: Having a chronic illness such as CF is a risk factor for the development of internalizing psychopathology, which in turn might affect psychosocial functioning and quality of life. As it has often been reported that quality of life is only modestly associated with disease severity, we expected life satisfaction to have a stronger association with mental health parameters, compared to parameters of physical health.
Method: During a routine clinic visit 348 German CF patients (12–64 yrs, M = 23.2, SD = 9.1) filled in the Hospital Anxiety and Depression Scale (HADS), screening for symptoms of anxiety and depression, and the Questions on Life Satisfaction (FLZ), measuring general, health-related and CF-specific life satisfaction. These were correlated with health parameters (BMI, FEV1%).
Results: 8.6% of patients had elevated depression scores, whereas 19.3% reported high levels of anxiety. Significant negative correlations ($r = -0.3$ to -0.6) were observed between the HADS scores and general, health-related and CF-specific life satisfaction. The correlations were highest for depression and life satisfaction ($r = -0.56$ to -0.61). Only slight negative correlations were found between symptoms of depression and anxiety and lung function ($r = -0.2$). BMI showed no significant association with the HADS scores. All correlations were maintained when the sample was analysed stratified by pulmonary function.
Discussion: As expected, life satisfaction was associated with the level of anxiety and depression reported. Addressing patients' psychopathology might help to improve patients life satisfaction, positively influencing therapy adherence and disease management.
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430 Anxiety and depression in dyads of adolescents with CF and their caregivers

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Background: Chronic conditions such as cystic fibrosis (CF) and mental health of patients and their caregivers are closely associated. Co-morbid psychopathology is a relevant factor in treatment of CF. In this exploratory cross-sectional study we looked at the correlation of anxiety/depression in adolescents with CF and their caregivers.
Method: 85 German CF patients (12–17 years, M = 14.2, SD = 1.6; 62% male) and their accompanying caregivers (88% mothers) independently filled in the Hospital Anxiety and Depression Scale (HADS), screening for symptoms of anxiety and depression. Separate ranking lists of the most prevalent symptoms were determined. Concordance rates of parents' and patients' screening results and correlations of symptom scores were calculated.
Results: Feeling tense, restless, or fearful were the most prevalent symptoms reported by parents and adolescents. 30.6% of the parents and 10.6% of patients had at least mildly elevated anxiety scores, whereas 18.8% of caregivers and none of the patients reported elevated levels of depression. The concordance rate for anxiety was 67% (6 of 9 nine dyads). Caregiver-patient anxiety scores were significantly correlated ($r = 0.36$, $p < 0.01$).
Discussion: Symptoms of anxiety are common in CF families, probably reflecting the life threatening character of the disease. Adolescent patients report to be free from depression, however every fifths caregiver is at least mildly depressed. High concordance rate of anxiety may be due to parental modelling and genetic factors. Further studies should investigate the impact of co-morbid psychopathology on the course of CF, especially with regard to interaction effects between adolescents and their caregivers.
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