Title	***5.*** ***Prevalence and impact of depression and anxiety in patients with cystic fibrosis and their caregivers***
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Internal Collaborators	Dott.ssa Moira Picchi, Psychologist
Study design	Observational, prospective, multicentric (CF Centres: Ancona, Bari, Genova, Livorno, Milano, Palermo, Parma, Potenza, Roma, Torino-Adult, Torino-Paediatric)
Grant by	- Italian CF Foundation (Project #18/2007; 1 year; Euro 7.000) - CF Centre Florence (1 year; Euro 4.000)
Background and aims	The impact of cystic fibrosis (CF) on psychological functioning has been the focus of several studies over past 20 years. In general, having a chronic illness has been shown to be a significant risk factor for the development of depression and anxiety; however, few data assessing the prevalence of these symptoms in CF patients and their caregivers has been published. Estimating the prevalence of depression and anxiety is important, as there is new evidence that these symptoms may have significant impact on health outcomes. Furthermore, severity of depressive symptoms seems to impact the adherence to medical treatment in patients with chronic illness: results from a current meta-analysis indicated that depressed patients were three times more likely to be noncompliant with medical treatment recommendations that non-depressed patients with chronic illness. The purpose of this study is to estimate the national prevalence of depressive and anxious symptoms in adolescents and adults with CF and their caregivers. In addition, we will examine associations between depressive and anxious symptoms and demographic-clinical data.
Inclusion criteria	A. Confirmed diagnosis of CF or to be a caregiver of a minor child with CF. B. Subjects with CF aged from 12 to 17 years and more than 18 years
Exclusion criteria	Children aged from 0 to 11 years and subjects with CF, who have received an organ transplant (lung transplant, liver transplant, etc.).
Methods	CF subjects aged 12-17 years and older and parents of CF children aged from birth to 17 years will complete a depression/anxiety screening measure at a routine clinic visit. Anxiety and depression symptoms will then be linked with demographic and medical variables, recorded in the Centre database and analyzed cross sectionally. The administered measures are: 1) the Hospital Anxiety and Depression Scale (HADS; Zigmond and Snaith,1983), a 14-item self-reported questionnaire for parents and patients; 2) the Centre for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977), a 20-item, self-reported questionnaire for parents, because it contains the somatic items. Each CF Centre should have a minimum of 75 patients. We will attempt to recruit at least 70% of the clinic population at each Centre, considering three age groups (0-11, 12-17 and >18 years of age). The geographical distribution will be 40% in the North, 30% in the Center and 30% in the South of Italy. The study is a part of a larger, international effort to gather data on these symptoms in Europe, North America, Latin America and Australia.
Expected results and anticipated output	To evaluate and propose the modalities for monitoring and assessing anxiety and depression symptoms and a possible therapeutic approach.
Start of recruitment	January, 2007
End of experimental plan	December, 2009
Pubblication on medical Journal	December, 2010