

Table 1. Prevalence of depression and anxiety in cystic fibrosis patients and parent caregivers.

Journal (Authors)	Population	Sample Size	Measures	Depression Rate	Anxiety Rate	Country	Review	Matched Healthy	Notes
Thorax (Quittner et al., 2014)¹	Adults	N=4739	HADS, CES-D	HADS: 13% CES-D: 29%	32%	9 countries (US, UK, Spain, Belgium, Turkey, Germany, Italy, Netherlands, Sweden)	No	No	
Psychosomatics (Quon et al, 2014)²	Adults	N=153	PHQ-9, GAD-7	7% (Symptom definition) 22% (composite definition)	5% (symptom definition) 10% (composite definition)	US	No	No	5% endorsed suicidality item on PHQ-9
Health Psychology (Hilliard et al., 2014)³	Adults Mean age: 29.2	N=128	CES-D	23%	N/A	US	No	No	
J Cyst Fibros (Duff et al., 2014)⁴	Adults	N=1780(CF) N=1788 (Control)	HADS	Men(CF):13.1% Women(CF):11.9% Men(non-CF): 9% Women(non-CF):14%	Men(CF):30.1% Women(CF):38.5% Men(non-CF):27% Women(non-CF):39%	UK	No	Yes	For men (but not women): significant differences between CF and non-CF on anxiety and depression
J Cyst Fibros (Latchford et al., 2013)⁵	Adults	N=232	HADS, PHQ-9	5.6% (HADS) 33.4% (PHQ-9)	N/A	UK	No	No	10.4% endorsed suicidality item on PHQ-9
Journal of Affective Disorders (Kopp et al., 2013)⁶	Adults Mean age: 26.1	N=30	CES-D	50%	N/A	US	No	No	Hospitalized patients

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Respiratory Care (Yohannes et al., 2012)⁷	Adults 18-70 years	N=121	CF-QOL, HADS	17% (HADS)	33%	UK	No	No	
Chest (Goldbeck et al., 2010)⁸	Adults with CF Mean age: 23.1 years Adults (Control) Mean age: 24.6	N=670 (CF) N=2629 (Control)	HADS	Ages 21-30: 11.3% (CF) v. 7.0% (non- CF) (ns) Ages 31-50: 14.0% (CF) v. 16.4% (non-CF)(ns)	Ages 21-30: 18.5%(CF) v. 9.5%(non-CF) (p<.05) Ages 31-50: 27.3%(CF) v. 19.2%(non-CF) (p<.05)	Germany	No	Yes	Overall depression rate: 9.6%(CF) Anxiety rate: 20.6%(CF)
J Cyst Fibros (Havermans et al., 2008)⁹	Adults Mean age=26.7	N=57	HADS	13%	30%	Belgium	No	No	
Chest (Riekert et al., 2007)¹⁰	Adults Mean age=30.6	N=76	BDI	30.3%	N/A	US	No	No	
Chest (Anderson et al., 2001)¹¹	Adults Mean age= 28.5	N=34	MMPI-2	5.9%	5.9%	US	No	No	Prevalence of anxiety and depression were similar to general population
J of Child & Adolescent Psychiatry (Pearson et al., 1991)¹²	Adults Mean age=24.8	N=36	STAI, Self- report depression inventory	42.4%	22.2%	US	No	No	

Journal (Authors)	Population	Sample Size	Measures	Depression Rate	Anxiety Rate	Country	Review	Matched Healthy	Notes
Thorax (Quittner et al., 2014)¹	Adolescents	N=1286	HADS, CES-D	HADS:5% CES-D: 19%	22%	9 countries (US, UK, Spain, Belgium, Turkey, Germany, Italy, Netherlands, Sweden)	No	No	
Psychosomatics (Smith et al., 2014)¹³	Children/ Adolescents 7-17 years	N=38	CDI	28%	N/A	US	No	No	Vitamin D insufficiency associated with depressive symptoms
Annals of Pharmacotherapy (Ploessl et al., 2013)¹⁴	Children/ Adolescents 6-18 years	N=190	ICD-9 codes	9%	N/A	US	No	No	Depressed patients had lower lung function and more hospitalizations
J Cyst Fibros (Besier et al., 2011)¹⁵	Children/ Adolescents 12-17 years	N=162	HADS, CES-D	7.4%	12.3%	Germany	No	No	
Pediatr Pulmonology (Smith et al., 2010)¹⁶	Children/ Adolescents 7-17 years	N=39	CDI, CES-D, DPD	29% total 7-12: 33% 12-17: 25%	N/A	US	No	No	Depressive symptoms significantly predicted adherence to airway clearance
J Child Adolesc Psychiatry (Burke et al., 1989)¹⁷	Children/ Adolescents	N=52	K-SADS	11.5%	11.5%	US	No	No	

Journal (Authors)	Population	Sample Size	Measures	Depression Rate	Anxiety Rate	Country	Review	Matched Healthy	Notes
Thorax (Quittner et al., 2014)¹	Parents	N= 3127 Mothers, 975 Fathers	HADS, CES-D	Mothers HADS: 20%, CES-D: 34% Fathers HADS: 18%, CES-D: 25%	Mothers: 48% Fathers: 36%	9 countries (US, UK, Spain, Belgium, Turkey, Germany, Italy, Netherlands, Sweden)	No	No	
J Cyst Fibros (Ltluczek et al., 2013)¹⁸	Parents	N=72 (CF=33, non-CF=39)	CES-D	Children diagnosed from newborn screening: 58% Standard diagnosis: 27% Non-CF: 22%	N/A/	US	No	Yes	
Pediatr Pulmonol (Besier et al., 2011)¹⁵	Parent	N=650	CES-D HADS	28%	37.2%	Germany	No	No	
J Cyst Fibros (Besier & Goldbeck, 2011)¹⁹	Parent	N=162	HADS CES-D	26.4%	37.7%	Germany	No	No	
J of Pediatr Psychol (Driscoll et al., 2010)²⁰	Parent	N=87	CES-D	32.2%	N/A	US	No	No	

Journal (Authors)	Population	Sample Size	Measures	Depression Rate	Anxiety Rate	Country	Review	Matched Healthy	Notes
Pediatr Pulmonol (Smith et al., 2010)¹⁶	Parent	N=39	CES-D	Mothers: 35% Fathers: 23%	N/A	US	No	No	
Pediatr Pulmonol (Driscoll et al., 2009)²¹	Parent (100 mothers, 22 fathers)	N=122	CES-D HADS	Mothers: 28%(CES-D), 20%(HADS) Fathers: 31%(CES-D), 14%(HADS)	N/A	US	No	No	
Health Psychology (Quittner et al., 1998)²²	Parent	33 couples with child with CF 33 control couples	CES-D	Women (CF): 36.4% Women (non-CF): 21% Men (CF):12% Men (non-CF): 15%	N/A/	US	No	Yes	

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