DEPRESSION IS ASSOCIATED WITH CHRONIC DISORDERS IN CHILDREN AND ADOLESCENTS

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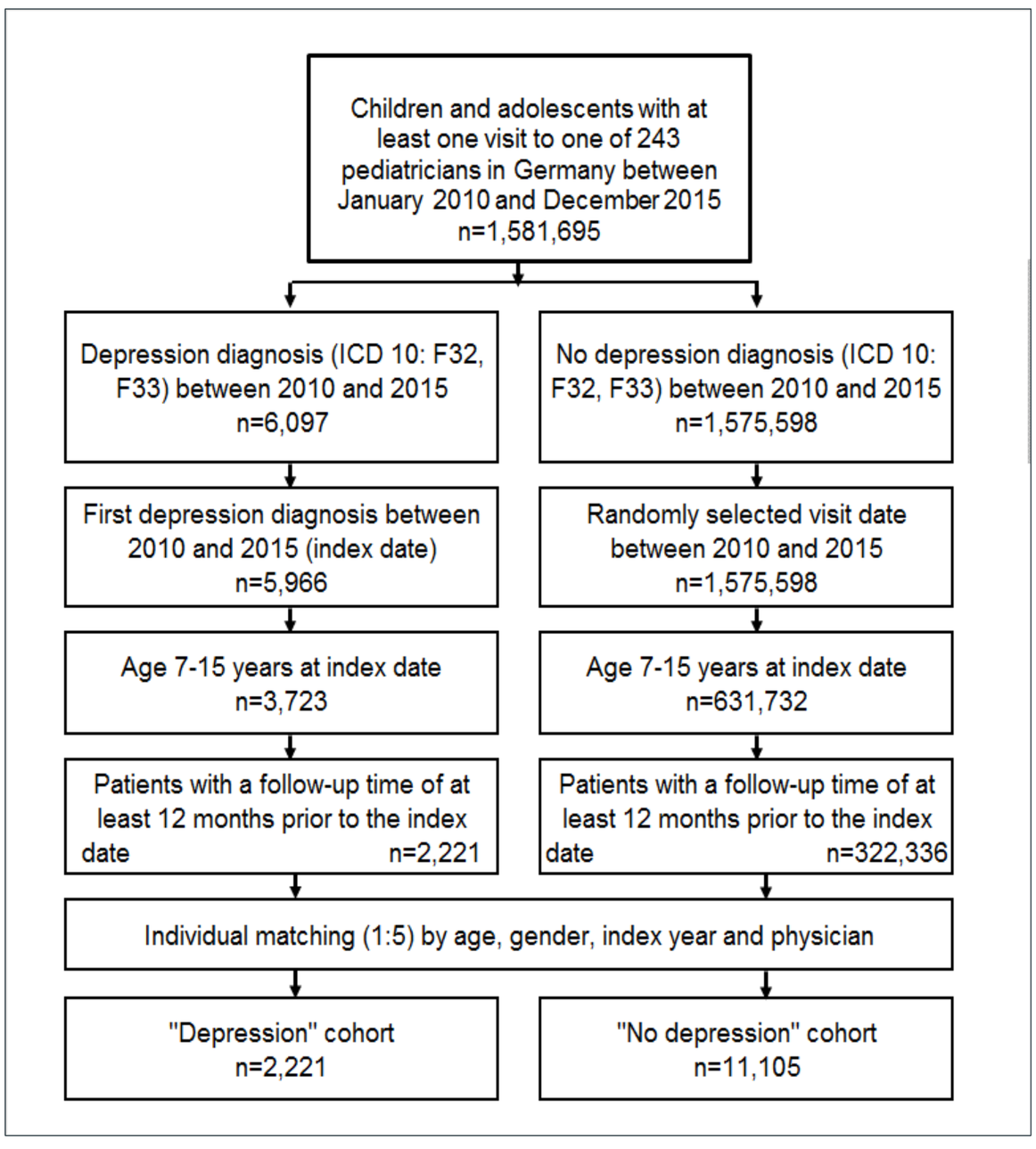
Background

- In Germany, a recent study yielded that more than 10% of children and adolescents exhibited signs of depression (1).
- In recent years, only few authors have focused on the impact of common conditions on depression in childhood and adolescence. Although these works are of great interest, no study has yet analyzed the collective impact of these comorbidities with regard to the odds of a subsequent depression diagnosis at a young age.
- Furthermore, even if multimorbidity is known to be positively associated with depression in adults (2), there is hardly any data concerning the effects of multimorbidity on this psychiatric condition in young patients.
- Therefore, the goal of this retrospective study conducted in pediatric practices in Germany was to study the association between chronic somatic conditions and depression.

Methods

- This retrospective study was based on data from the Disease Analyzer database (IQVIA). This database compiles demographic, clinical and pharmaceutical data obtained in an anonymous format from computer systems in clinical practices (3).



Results

Prevalence of documented depression diagnosis in children and adolescents followed in 243 pediatric practices in Germany (2010-2015)

Age	Children with at least one visit	Children with a depression diagnosis (N, %)
7	39,839	79 (0.2%)
8	43,674	120 (0.3%)
9	42,127	170 (0.4%)
10	41,024	208 (0.5%)
11	38,324	227 (0.6%)
12	33,709	271 (0.8%)
13	32,092	304 (0.9%)
14	29,066	387 (1.3%)
15	22,481	455 (2.0%)
Boys	168,203	1,071 (0.6%)
Girls	154,133	1,150 (0.7%)
Total	322,336	2,221 (0.7%)

Association between depression and defined chronic conditions in children and adolescents followed in 243 pediatric practices

Diagnoses documented within 12 months prior to the index date (ICD 10 code)	Odds Ratio (95% CI)	P-value
Significant effects		
Anorexia nervosa (F50.0)	6.69 (3.05-14.71)	<0.001
ADHD (F90)	2.32 (1.96-2.55)	<0.001
Chronic sinusitis (J32)	1.82 (1.57-2.12)	<0.001
Short stature due to endocrine disorder (E34.3)	1.70 (1.28-2.24)	<0.001
Obesity (E66)	1.57 (1.36-1.81)	<0.001
Disorders of thyroid gland (E00-07)	1.53 (1.26-1.87)	<0.001
Certain disorders involving the immune mechanism (D80-89)	1.42 (1.17-1.72)	<0.001

Association between depression and the number of chronic conditions in children and adolescents followed in 243 pediatric practices

Diagnoses documented within 12 months prior to the index date (ICD 10 code)	Odds Ratio (95% CI)	P-value
No chronic diagnosis	reference	
1 diagnosis	1.69 (1.50-1.91)	<0.001
2 diagnoses	1.81 (1.58-2.07)	<0.001
>2 diagnoses	2.03 (1.78-2.31)	<0.001

Conclusions

- Overall, anorexia nervosa, ADHD, chronic sinusitis, short stature due to endocrine disorder, obesity, disorders of the thyroid gland, and certain disorders involving the immune mechanism were associated with a depression diagnosis in children and adolescents.
- The number of chronic conditions had an additional impact on the probability of being diagnosed with depression.
- Therefore, depression should be regularly assessed in young patients affected by chronic disorders.

Sources

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2. Spangenberg, L.. et al. Psychogeriatrics, 2011; 11(4), 227–2
3. Rathmann W, et al.I nt J Clin Pharmacol Ther. 2018 Oct;56(10):459-466

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