


Background
The literature on the prevalence of mental disorders affecting children and adolescents has expanded significantly over the last three decades around the world. Despite the field having matured significantly, there has been no meta-analysis to calculate a worldwide-pooled prevalence and to empirically assess the sources of heterogeneity of estimates.

Methods
We conducted a systematic review of the literature searching in PubMed, PsycINFO, and EMBASE for prevalence studies of mental disorders investigating probabilistic community samples of children and adolescents with standardized assessments methods that derive diagnoses according to the DSM or ICD. Meta-analytical techniques were used to estimate the prevalence rates of any mental disorder and individual diagnostic groups. A meta-regression analysis was performed to estimate the effect of population and sample characteristics, study methods, assessment procedures, and case definition in determining the heterogeneity of estimates.

Results
We included 41 studies conducted in 27 countries from every world region. The worldwide-pooled prevalence of mental disorders was 13.4% (CI 95% 11.3–15.9). The worldwide prevalence of any anxiety disorder was 6.5% (CI 95% 4.7–9.1), any depressive disorder was 2.6% (CI 95% 1.7–3.9), attention-deficit hyperactivity disorder was 3.4% (CI 95% 2.6–4.5), and any disruptive disorder was 5.7% (CI 95% 4.0–8.1). Significant heterogeneity was detected for all pooled estimates. The multivariate metaregression analyses indicated that sample representativeness, sample frame, and diagnostic interview were significant moderators of prevalence estimates. Estimates did not vary as a function of geographic location of studies and year of data collection. The multivariate model explained 88.89% of prevalence heterogeneity, but residual heterogeneity was still significant. Additional meta-analysis detected significant pooled difference in prevalence rates according to requirement of functional impairment for the diagnosis of mental disorders.

Conclusions
Our findings suggest that mental disorders affect a significant number of children and adolescents worldwide. The pooled prevalence estimates and the identification of sources of heterogeneity have important implications to service, training, and research planning around the world.