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Data supplement

Appendix DS1

Data abstracted from each primary reference

Year of publication
Definition of the disease being studied
Diagnostic criteria used to identify the disease being studied (where given)

Setting

Location of the studies included in the review (plus any restrictions on location)

Search strategy

Number of databases searched
Whether exact search terms given
Whether reference lists of primary papers identified by initial search were searched
Whether authors of identified studies were contacted to identify relevant studies
Whether lead researchers in the field were contacted to identify relevant studies
Whether journals were hand-searched for relevant studies
Number of studies in the review

Data extraction

Whether guidelines for abstracting data were given
Method of abstraction

Study quality

Whether any assessment was made
Whether inclusion criteria were used to include better-quality studies
Non-independence of primary studies
Were studies included more than once if several papers were found reporting on the same data?
What individual study results were reported?
Type of effect estimates synthesised
Method of statistical synthesis

Heterogeneity

Whether mentioned
Type of test employed
Result of the test
Method used to deal with heterogeneity (e.g. random effects models)
Confounding in primary studies
Whether mentioned/discussed in review paper
Whether confounders adjusted for in analysis of review paper

Publication bias

Whether mentioned/discussed
Type of test employed
Result of test
How publication bias was dealt with
Other biases in primary studies
Whether mentioned/discussed in review paper
Steps taken to limit bias (e.g. through inclusion criteria)
Included in analysis of review paper? (e.g. effects adjusted for, or compared)

Appendix DS2

Proposed guidelines for the reporting of systematic reviews and meta-analyses of observational studies in psychiatric epidemiology

Title

Identify the report as a meta-analysis (or systematic review) of observational studies in psychiatric epidemiology.

Abstract

Use a structured format.

Objectives

Describe explicitly the scientific question/hypothesis.

Data sources

Describe the databases and other important information sources used.

Review methods

Describe the selection criteria (e.g. population, sampling, exposure/risk measures, outcome and study design), methods of validity assessment, data abstraction and quantitative or qualitative data synthesis methods if used.

Results

Describe characteristics of the samples included and excluded; qualitative and quantitative findings (e.g. point estimates, estimates of association, prevalence estimates and confidence intervals/standard errors), stating clearly what is estimated: and subgroup analyses.

Conclusions

State the main results and their implications.

Introduction

Describe the scientific problem explicitly, theoretical rationale for the exposure/risk factor and rationale for the review.

Method

Searching

Describe the information sources in detail (e.g. databases, registers, personal files, expert informants, agencies, hand-searching), including keywords, search strategy and any restrictions (years considered, publication status, language of publication).
Describe special efforts to include all available data (e.g. contact with authors, searching the grey literature).
Describe the identification and characterisation of the populations and contexts to which studies claim to relate.

Selection

Describe the inclusion and exclusion criteria (disorder definition and measurement, exposure/risk factor assessment, principal outcomes/diagnostic groups, and study design) and setting.
List excluded studies and reasons for exclusion.

Validity and quality assessment

Describe the criteria and process used (e.g. blind assessments, quality assessment, and their findings).

Data abstraction

Describe the process or processes used (e.g. completed independently, in duplicate), including details on reproducibility, interrater agreement; also whether aggregate data or individual study respondent data are abstracted.

Study characteristics

Describe the type of study designs (cohort, case–control, cross-sectional, population or clinical series), sample characteristics (e.g. age, gender, ethnicity, occupational group), details of exposure/risk factor (including definition and instrument used and time coverage), outcome definitions and measurement (symptoms, behaviours, disorders).

Quantitative data synthesis

Describe reasons data synthesis was not possible or appropriate; describe the principal measures of effect, method of combining results (e.g. fixed and random effects; meta-regression; adjustment for heterogeneity), handling of missing data; how statistical heterogeneity was assessed; how data from different populations were dealt with; how data using different definitions or instruments were dealt with; adjustment for possible confounding variables; rationale for any *a priori* sensitivity and subgroup analyses; and any assessment of publication bias – all in enough detail to allow replication.

Results

Flow chart

Provide a meta-analysis profile summarising study flow, giving total number of studies included in the analysis.

Study characteristics

Present descriptive data for each study (e.g. age, gender, sample size, intervention/exposure, setting, time period, duration).

Quantitative data synthesis

Report agreement on the selection and validity of assessment and relevance to the scientific question or hypothesis; present simple summary results (e.g. forest plot); present data needed to calculate effect sizes and confidence intervals; identify sources of heterogeneity, impact of study quality and publication bias.

Discussion

Summarise key findings; discuss scientific and clinical inferences and generalisability based on internal and external validity; interpret the results in the light of the totality of available evidence, including data from earlier studies; consider whether a single new high-quality, well-reported study can be recommended instead of a statistical synthesis of heterogeneous studies; critically appraise potential biases in the review process (e.g. publication bias); suggest a future research agenda.

Online supplement: Brugha et al doi: 10.1192/bjp.bp.111.098103

Synthetic methods review and recommendations

Summary of included studies

PREVALENCE STUDIES WITH META-ANALYSIS

Study	Disease definition	Setting	Search strategy	Data extraction and study quality	Individual study results	Methodology
Gaynes et al, 2005(38)	Major & minor depression (perinatal)– DSM-III or later (EPDS, BDI, GHQ, SADS, SCID, SPI, CIDI, MINI v4.4, PSE, MADRS)	Prospective & retrospective studies *Location:* US, Europe, Australia, Hong Kong, Japan, Canada	*Search strategy:* • 5 databases • exact search terms • reference list search *Number of studies:* 30 prevalence (28 prospective)	*Data extraction:* • Guidelines given • Checked by another reviewer *Study quality:* • Inclusion criteria (clinical assessment or structured clinical interview for diagnosis) • Rated quality (reporting, external validity, internal validity, power of study) *Data excess*: No evidence	Sample size	*Effect estimates:* prevalence (95% CI) *Synthesis method:* Pooled inverse variance weighted random effects model *Heterogeneity:* • Q statistic plus reviewed forest plots. • Significant • Random effects & re-ran excluding outlier studies for which source of bias could be identified (6 studies) *Confounding:* • Analysed effects of confounders (trends overtime, socioeconomic status, low risk women, country, interview type, diagnostic criteria, quality rating scale) *Bias:* no mention *Publication bias:* no mention
Bennet et al, 2004(48)	Depression in pregnancy (Edinburgh postnatal depression score, Beck	Observational studies women aged 17+ *Location:* 13 countries (Europe, US,	*Search strategy:* • 5 databases • exact search terms • reference list	*Data extraction* • Guidelines given • 2 independent reviewers *Study quality*	Prevalence	*Effect estimates:* Prevalence rate (95% CI) *Synthesis method:* Pooled inverse variance weighted random effects meta analysis *Heterogeneity:*

	Depression inventory, structured clinical interviews)	Canada, Australia, Brazil, Hong Kong, Japan)	search • contacted researchers *Number of studies:* 21	• Rated quality (12 point checklist) • Sensitivity analysis omitting studies of poor quality *Data excess*: No mention, some studies appear to be included twice if used more than one instrument		• Chi squared test. • Significant • Random effects • Discuss possible sources • Search made for moderator variables to identify systematic bias. *Confounding:* • Analysed studies of women with low socioeconomic status separately *Bias:* • Discuss detection bias, non-response bias • Inclusion criteria: no language restrictions to avoid bias • found rates were significantly different by the 3 methods of identification *Publication bias:* • Funnel plots & Begy-Mazumdar test. • None detected *Additional:* conducted sensitivity analyses 1)omitting studies of low quality, 2)studies using modified screening tools, 3)each study in turn
Folsom et al, 2002(62)	Schizophrenia (DIS, CIDI, DSM-III-R, DSM-IV, PDI, PSE, PERI)	Studies of homeless persons *Location:* US, Australia, Brazil, Canada, Europe	*Search strategy:* • 2 databases • exact search terms • reference list search	*Data extraction* • Guidelines given *Study quality:* • Inclusion criteria • Used 10 studies that used	Sample size Mean age % male ethnicity Prevalence	*Effect estimates:* Prevalence *Synthesis method:* Inverse variance weighted mean prevalence *Heterogeneity:* • Discuss differences in definition of homeless person,

			Number of studies: 33 (10 in M-A)	standardized diagnostic measure & had representative sample for M-A *Data excess*: Original article included where 2 or more articles on same dataset		study location, sample methods, diagnostic methods *Confounding:* • Analysed effects of age & gender *Bias* No mention *Publication bias:* No mention
Fazel, 2005(75)	Serious mental disorder - Post-traumatic stress disorder, major depression, psychotic illnesses, generalised anxiety disorder – using validated diagnostic methods	Interview based studies of prevalence in refugees *Location:* High income Western Countries (US, Canada, N. Zealand, Australia, Italy, Norway, UK)	*Search strategy:* • 11 databases • exact search terms • reference list search • hand search journals • contacted lead researchers *Number of studies:* 20	*Data extraction:* • Guidelines given *Study quality:* • Discuss (most studies used opportunistic sampling) *Data excess:* 20 studies in 24 publications	Sample size Prevalence (n)	*Effect estimates:* prevalence (95% or 99% CI) *Synthesis method:* weighted average *Heterogeneity:* • Chi-square tests • Significant • Investigated possible sources – ethnic group, age, host country, duration of displacement, size of sample, diagnostic method, sampling method, language of interviewer (not all explained by these factors) *Confounding:* No mention *Bias:* • Excluded studies in which diagnoses solely on self report or that included refugees referred to clinical services, to avoid reporting and selection bias. *Publication bias:* No mention

Fazel et al, 2002(39)	Serious mental disorder - Psychotic illness, major depression, personality disorder diagnosed by clinical examination or diagnostic instrument (Diagnostic interview schedule, CIDI, structured clinical interview for diagnostic & statistical manual, CIS, present state examination-10, schedule for affective disorders, diagnostic interview for adolescents, schedule for clinical assessment in neuropsychiatry, personality disorder questionnaire & examination)	Prevalence studies of general prison populations *Location*: restricted to Western Countries (Australia, Canada, US, NZ & Europe)	*Search strategy:* • 4 databases • exact search terms • reference list search • hand searching journals • letters to authors *Number of studies:* 62	*Data extraction:* • Guidelines given *Study quality:* • Inclusion criteria (studies that did not sample already referred prisoners, diagnosed by clinical examination or diagnostic interview only) *Data excess*: 62 studies in 66 publications	Prevalence (N)	*Effect estimates:* Prevalence *Synthesis method:* Weighted average *Heterogeneity:* • Chi-squared tests • Significant • possible sources investigated by grouping studies according to potentially relevant characteristics *Confounding:* No mention *Bias:* No mention *Publication bias:* No mention

Waraich et al, 2004(19)	Mood disorders – Major depressive disorder, dysthymia, bipolar I disorder (DSM-III-R, ICD-10, CIDI-S)	general population studies and primary care settings, aged 15+ *Location:* Australia, Europe, Canada, US< NZ, Taiwan, Korea, Puerto Rico, Hong Kong	*Search strategy*: • 2 databases • exact search terms • reference list search *Number of studies:* 18 prevalence, 5 incidence	*Data extraction:* No mention *Study quality:* • Inclusion criteria (studies of 450+, studies using operationalised diagnostic criteria, standardized instruments or clinical diagnoses) *Data excess*: excluded studies with duplicate data	Prevalence 1 year incidence	*Effect estimates:* prevalence, incidence, 95% CI *Synthesis method:* Bayesian approach to M-A (Eddy) *Heterogeneity:* • Chi squared tests using Fleiss method. • significant • controlled for methodological factors *Confounding:* • Discussed (Rates were different by classification, country response rate) *Bias:* • Discuss recall bias *Publication bias:* no mention
MG Cole 1999(31) (PROGNOSIS)	Depression (Zung self rating depression score, CES-D, DSM-III, CATEGO, Geriatric mental-state AGECAT, General health questionnaire)	Prospective studies, community subjects or primary care patients – looking at prognosis *Location:* publications in English or French	*Search strategy:* • 2 databases • exact search terms • reference list search *Number of studies:* 12	*Data extraction:* • Guidelines given • 2 independent reviewers *Study quality:* • Rated quality (7 criteria for prognostic studies by the Evidence-based medicine working group) *Data excess:* 1 study included twice	Sample size number of men % depressed % died % well	*Effect estimates:* % well, depressed, died, range, 95% CI *Synthesis method:* mixed effects regression model *Heterogeneity:* • tested whether random effects variance of model is null • significant • adjust for length of FU, lower age limit • random effects model *Confounding:* • Adjustment for some confounders in model *Bias:* • Discuss selection bias *Publication bias:* • Not assessed, state unlikely to

						affect studies of prognosis
Posternak et al, 2001(76)	Major depressive disorder (Hamilton rating scale or BDI)	Psychotherapy trials that randomized adult outpatients to wait list control groups *Location:* No mention	*Search strategy:* • searched reference lists of 7 M-As • 0 databases *Number of studies:* 19	*Data extraction:* No mention *Study quality:* No mention *Data excess:* No mention	sample size numbers followed up % female number weeks on waiting list baseline depression score post scores % change	*Effect estimates:* mean, % decrease *Synthesis method:* weighted mean *Heterogeneity:* No mention *Confounding:* No mention *Bias:* • Discuss some subjects on other treatments *Publication bias:* No mention
Goldner et al, 2002(20)	Schizophrenia (standardized instruments or clinician diagnosis using ICD-9 or DSM-III or later criteria, mentions DIS & CIDI)	Community samples of 18+ years (prevalence) community samples or case registers of 15+ years (incidence) *Location:* US< Europe, Hong Kong, NZ, Canada, Taiwan, Korea, Puerto Rico	*Search strategy:* • 2 databases • exact search terms • reference lists searched *Number of studies:* 24 (18 prevalence, 8 incidence)	*Data extraction:* • Guidelines given *Study quality:* • Inclusion criteria (studies with 450+, studies using operationalised diagnostic criteria) *Data excess*: Only included most recent & definitive results where multiple publications	Prevalence (one year & lifetime)	*Effect estimates:* median prevalence (95% CI) *Synthesis method:* Bayesian approach, using best estimate of effect calculation, using Jeffrey's prior & hierarchical model. *Heterogeneity:* • Fleiss' method chi squared tests. • Significant • Grouping the proportions according to methodological variables that may be contributing to differences among them – used random effects *Confounding:* No mention *Bias:* • attribute differences in lifetime prevalence to recall bias *Publication bias:* No mention
Grigsby et al, 2002(77)	Clinically relevant anxiety disorders – panic disorder,	Prevalence studies of adults aged 18+ with	*Search strategy:* • 2 databases • exact search	*Data extraction:* • 2 reviewers	% female mean age (SD) % white	*Effect estimates:* current & lifetime prevalence *Synthesis method:* weighted

	OCD, PTSD, GAD, agoraphobia (structured or semi structures diagnostic interviews e.g. DIS, SADS, plus self report measures e.g. HADs, Zung self-rating anxiety questionnaire)	diabetes (including case-control studies) *1 community study, others persons seeking health care *Location:* No mention	terms • reference list search *Number of studies:* 18	*Study quality:* • Inclusion criteria (sample size 25+) *Data excess*: 9 papers excluded as reported on same studies	point prevalence lifetime prevalence scale scores	mean *Heterogeneity:* • discuss variability in methods used to identify cases *Confounding:* • unable to control for potential confounders *Bias:* • discuss use of clinical samples *Publication bias:* no mention
Friedl et al, 2000(64)	Dissociative disorders using clinical diagnostic interview (DDIS, SCID-D)	Prevalence studies of adult psychiatric inpatients *Location:* Europe & N. America	*Search strategy:* • 1 database *Number of studies:* 9	*Data extraction:* No mention *Study quality* • Rated quality (whether blind assessment) *Data excess*: None	Sample size prevalence (number) of dissociative & dissociative identity disorders	*Effect estimates:* Prevalence (95%C) *Synthesis method:* Weighted mean *Heterogeneity:* • Discuss heterogeneity seen in results *Confounding:* No mention *Bias:* • Discuss blinding, choice of instrument, few studies looked at non-response *Publication bias:* No mention
Abrams et al, 1999(41)	Personality disorders using DSM-III, DSM-III-R, DSM-IV	Studies of adults aged 50+ *Location:* No mention	*Search strategy:* • 2 databases • letters to researchers *Number of studies:* 16	*Data extraction:* • Guidelines given • 2 independent coders *Study quality:* • Inclusion criteria (studies of 10+, no case series,	Prevalence (N)	*Effect estimates:* Prevalence *Synthesis method:* Weighted mean *Heterogeneity:* • Discussed variability. *Confounding:* No mention *Bias:* • Analysed: effect of sample type, assessment type

				must use diagnostic criteria) *Data excess*: Excluded studies covering same area		*Publication bias:* No mention
Somers et al, 2006 (21)	Anxiety disorders (F4) *Diagnostic criteria:* CIDIS/DSM-III-R CIDI/DSM-IV CIDI/ICD10 SADS/DSM-IV SADS/DSM-III-R SADS-L/DSM-III DIS/DSM-III DIS-CM/DSM-III SCAN/ICD10 DIA-X/M-CIDI/DSM-IV Clinical interview Clinical diagnosis Telephone survey Lay interviewers Questionnaire Census	Community surveys reporting prevalence and incidence of anxiety disorders. *Location:* Worldwide, 17 countries in total: Iran, Mexico, Korea, N. Ireland, USA, Italy, France, Taiwan, Australia, Switzerland, Puerto Rico, Hong Kong, Canada, Germany, Russia, Netherlands, New Zealand. *Population:* Adults.	*Search strategy:* • 2 databases. • Exact search terms given. • Reference lists searched. *Number of studies:* 41 prevalence and 5 incidence studies.	*Data extraction:* • Guidelines given. *Study quality:* mentioned briefly.	All individual study results were presented.	*Effect estimates:* Prevalence and incidence at 1-year and lifetime, for all main F4 diagnoses. 95% CIs are also given. *Synthesis method:* Bayesian. *Heterogeneity:* Assessed formally using chi-squared test. Significant heterogeneity was found. *Confounding:* Mentioned briefly. *Bias:* No mention. *Publication bias:* No mention.

Saha et al, 2008 (15)	Incidence and Prevalence of Schizophrenia *Diagnostic criteria:* Not stated.	This paper discusses the pros and cons of using MA methods to summarise data. Two previous reviews (16, 17) are taken, and a subset of the data is re-analysed using MA, which is then compared with the original analysis. *Location:* Studies were selected worldwide, and included the UK, the rest of Europe, Asia, Africa, USA, South America, and New Zealand. *Population:* Not mentioned. The reader is directed to the original articles.	The reader is directed to the original articles.	The reader is directed to the original articles.	All individual study results were presented.	*Effect estimates:* Median incidence and prevalence rates are given for all studies (original analysis), and are compared with the subset of re-analysed studies via a similar method plus the MA method. *Synthesis method:* Random effects MA model. *Heterogeneity:* Assesed via the Q-statistic and was significant. However, they did not further investigate the sources. *Confounding:* *Bias:* *Publication bias:* These three factors were not mentioned in the paper, as they were deemed not relevant to the analysis. The reader is directed to the original articles for information on how they were addressed in the original analyses.

Singer, 2006 (14)	Depression in mothers with and w/o children with developmental disabilities. *Diagnostic criteria:* PSI-D, BDI, CES-D, BSI, Epidemiology Depression Scale, Langer Symptom Checklist, Brief Symptom Inventory, Symptom Checklist 90 Revised, Parent Stress Index Depression Subscale. Only published standardized self-report measures with well established psychometric properties.	Comparative studies of depression in mothers of children with and without developmental disabilities. *Location:* USA and Canada. *Population:* Women only.	*Search strategy:* • 4 databases. • Exact search terms given. • Reference lists searched. • Searched unpublished data. • Contacted authors of primary papers. *Number of studies:* 18	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Formally rated and assessed. • Inclusion criteria included factors related to quality.	All individual study results were presented.	*Effect estimates:* Mean effect size (d) was calculated via weighted and un-weighted method. 95% CIs also given. *Synthesis method:* Fixed effects MA model. *Heterogeneity:* Formally assessed using the Q-statistic. Not significant. *Confounding:* Adjusted for: date of publication, child's age and disability category. *Bias:* Analysis to explore bias. Inclusion and exclusion criteria for studies were chosen to avoid bias. *Publication bias:* Formally assessed using the Fail safe method.

Kleintjes et al, 2006 (63)	Schizophrenia, Major depressive disorder, bipolar, panic, OCD, simple and social phobia, GAD, Agoraphobia. (The major F2, F3 and F4 diagnoses). *Diagnostic criteria:* DSM-IV	Types of study included in the analysis is unclear. *Location:* Unclear, however the Western Cape, Gauteng and Zimbabwe are mentioned. *Population:* Adults, adolescents and children.	*Search strategy:* • 2 databases. Other methods for identifying primary papers were not mentioned.	*Data extraction:* • No mention. *Study quality:* • No mention.	No individual study results were given.	*Effect estimates:* Prevalence for individual mental disorders, plus combined estimate for adults and children and adults only. *Synthesis method:* Weighted averages, but exact method not given. *Heterogeneity:* No mention. *Confounding:* No mention. *Bias:* No mention.
Costello et al, 2006 (37)	Depression. *Diagnostic criteria:* Formal psychiatric diagnoses of depressive disorders using an established taxonomy and a structured or semi-structured psychiatric interview of adequate reliability.	Epidemiologic studies of children born between 1965 and 1996. *Location:* Worldwide. *Population:* Children.	*Search strategy:* • 2 databases. • Info on search terms not given. • Contacted authors of primary papers. *Number of studies:* 15 (N=59,703)	*Data extraction:* • No mention. *Study quality:* • No mention.	All individual study results for prevalence of depression were reported.	*Effect estimates:* Overall prevalence estimates and SEs for under 13s, and 13-18 year olds, with separate results for boys and girls. *Synthesis method:* Fixed effects MA model. *Heterogeneity:* Formally assessed via chi-squared statistic. Not significant. *Confounding:* Adjusted for: age range, sex, time frame of psychiatric interview, diagnostic system, number of informants.

						Bias: No mention. *Publication bias:* No mention.
Ali et al, 2006 (34)	Depression in adults with type 2 diabetes. *Diagnostic criteria:* Various depression scales.	Population studies and primary care settings. *Location:* USA, Netherlands, Finland, Italy, Iraq. *Population:* Adults over 18 with type 2 diabetes.	*Search strategy:* • 3 databases. • Exact search terms given. • Reference lists searched. *Number of studies:* 10 studies (N=51,331)	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Mentioned briefly. Inclusion criteria included factors related to quality.	All individual results for the 10 studies were included.	*Effect estimates:* Prevalence of depression in diabetic and non-diabetic subjects, OR and 95% CIs. *Synthesis method:* Random effects MA model using the inverse-variance weighted method. *Heterogeneity:* Formally assessed via sub group I^2 value. Found to be significant, and outliers were removed to allow for it. *Confounding:* Mentioned briefly. *Bias:* No mention. *Publication bias:* Formally assessed via funnel plot, Egger test and Begg-Mazumdar.
Fazel et al, 2008 (78)	Psychotic illness, major depression, personality disorder, alcohol dependence, and substance	Surveys of the prevalence of major mental disorders among homeless people.	*Search strategy:* • 3 databases. • Exact search terms given. • Reference lists searched. • Contacted	*Data extraction:* • No mention. *Study quality:* • No mention.	All individual study results for prevalence were reported, including 95% CIs.	*Effect estimates:* Pooled prevalence for major mental disorders, with 95% CIs. *Synthesis method:* Random effects MA model.

	dependence. *Diagnostic criteria:* SCID, DIS, CIS-R, PSE, CIDI, CES-D, SCAN, Clinical Interview -> ICD or DSM.	Samples were drawn from hostels, day and night centres, soup kitchens, mission and sheltered accommodation. *Location:* 7 countries. *Population:* Homeless.	lead researchers. • Hand searched journals. *Number of studies:* 29 (N=5684)			*Heterogeneity:* Formally assessed via the Q-statistic. Found to be significant. Investigated sources and controlled for moderator variables. *Confounding:* Controlled for: instrument, interviewer, period, study size, sex, geographical region, participation rate. *Bias:* No mention. *Publication bias:* No mention.
Fazel et al, 2008 (55)	Psychotic disorder, major depression, ADHD and conduct disorder in adolescents in juvenile detention and correctional facilities. *Diagnostic criteria:* Clinical examination and/or a clinical interview using structured diagnostic instruments.	Surveys of psychiatric morbidity based on interviews of unselected populations of detained children and adolescents. *Location:* USA, UK, Australia, Russia, Holland, Denmark, Canada, Spain. (8 countries in total) *Population:* Adolescent boys and girls, aged	*Search strategy:* • 4 databases. • Exact search terms given. • Reference lists searched. • Contacted authors of primary papers. • Hand searched journals. *Number of studies:* 25 (N=16,750)	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* No mention.	All individual study results for prevalence were reported, including by gender, and including 95% CIs.	*Effect estimates:* Pooled prevalence of major mental disorders, with 95% CIS, by gender. *Synthesis method:* Random effects MA model. *Heterogeneity:* Formally assessed via the Q-statistic. Found to be significant. *Confounding:* Controlled for: sex, study size, study origin, instrument, interviewer, sampling scheme, mean subject age. *Bias:* Explored bias by looking at factors. *Publication bias:* No mention.

	Includes ICD and DSM.	10-19, in detention and correctional facilities.				
Gavin et al, 2005 (40)	Prevalence and incidence of perinatal depression. *Diagnostic criteria:* EPDS, BDI, GHQ or clinical interview. SADS, SCID, SPI, CICI-A, MINI-V4.4, PSE, MADRS, DSM-III-R, DSM-IV, ICD-9.	Cross-sectional, cohort, and case-control studies from developed countries that assessed women for depression during pregnancy or the first year postpartum with a structured clinical interview. *Location:* 11 countries. *Population:* Pregnant and postpartum women.	*Search strategy:* • 4 databases. • Exact search terms given. • Reference lists searched. • Contacted lead researchers. • Hand searched journals. *Number of studies:* 28	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Formally assessed and rated.	Some individual study results, such as point prevalence and odds ratio with 95% CIs were included.	*Effect estimates:* Various point/period prevalence with 95% CIs. Some incidence estimates. *Synthesis method:* Random effects MA model. *Heterogeneity:* Formally assessed via the Q-statistic. Found to be significant. Removed outliers. *Confounding:* Controlled for: quality rating score, socio-economic status, interview type, publication year and other factors. *Bias:* No mention. *Publication bias:* No mention.
DiMaggio and Galea, 2006 (42)	Prevalence of PTSD in populations after terrorist incidents.	Quantitative epidemiologic studies. *Location:*	*Search strategy:* • 5+ databases. • Exact search terms given. • Reference	*Data extraction:* • No mention. *Study quality:* • No mention.	Prevalence estimates and 95% CIs were given for individual studies.	*Effect estimates:* Prevalence estimates for 2 months, 6 months and 1-year after incident. *Synthesis method:* Random

	Diagnostic criteria: PTSD, depression -> DSM-IV.	Unknown. *Population:* Mostly inner-city and urban populations.	lists searched. *Number of studies:* 61			effects MA model. *Heterogeneity:* Formally assessed via the Q-statistic. Found to be significant. *Confounding:* Controlled for: geographic location, type of incident, magnitude of incident, impact level. *Bias:* No mention. *Publication bias:* No mention.
PREVALENCE – NO META ANALYSIS						
Hermens et al, 2004(79)	Minor depression diagnosed by a categorical instrument, studies using only dimensional scales excluded (CES-D, DIS)	Prospective cohort studies of general populations *Location:* Netherlands, US	*Search strategy:* • 3 databases • exact search terms *Number of studies:* 5	*Data extraction* • Guidelines given • 3 independent reviewers *Study quality* • Inclusion criteria • Rated quality (based on study population, response, length of FU, use of standardized assessments, data presentation)	Prevalence sample size	*Effect estimates:* Range of %'s *Synthesis method:* None *Heterogeneity:* • Discussed with regards to definition of minor depression, outcome measures, length of FU. *Confounding:* No mention *Bias:* No mention *Publication bias:* • Discuss- state unlikely that results of large comprehensive cohort studies in general population remain unpublished.

				Data excess: 5 papers covering 3 cohorts		
Hotopf et al, 2002(80)	Depression (HADs, psychiatric interviews, single item questions)	Patients with advanced cancer in mixed hospice populations *Location:* No mention	*Search strategy:* • 8 databases • exact search terms • hand journal search *Number of studies:* 46	*Data extraction:* • Guidelines given *Study quality:* • Discuss (Small studies, large number non responders, rarely gave CI's, inadequate information on participants, failure to present data on severity of disease and survival) *Data excess*: No studies included twice	graphical prevalence (95% CI)	*Effect estimates:* median prevalence, IQR's *Synthesis method:* None *Heterogeneity:* • Discuss differences (patients studies, assessments made, definitions of depression used) *Confounding:* no mention *Bias:* No mention *Publication bias:* No mention
Hunter et al, 2004(81)	depersonalization & derealisation (Dissociative experiences scale, dissociative disorders interview schedule, DSM-IV, SCAN, PSE)	1. Questionnaire & interview studies of selected student & non-clinical samples, 2. population based community samples, 3. clinical surveys of inpatients	*Search strategy:* • 3 databases • exact search terms • contacted researchers *Number of studies:* 45	*Data extraction:* No mention *Study quality:* • Discuss (lack of high quality research) *Data excess*: None	sample size mean/median age (SD) prevalence	*Effect estimates:* None *Synthesis method:* None, *Heterogeneity:* • Discuss inconsistent methods and populations *Confounding:* No mention *Bias:* • Discuss reporting bias, lack of criteria for severity selection and ascertainment bias *Publication bias:* No mention

		with psychiatric disorders *Location:* Europe, US, Canada, India				
Payne, 1998(82)	Depression (HADs, GHQ-20, DSM-III-R, Concerns checklist, semi-structured interviews, hostility in scale, GDS, mood evaluation scale)	Cross-sectional studies of adult palliative care patients in hospice, palliative care and terminal care settings *Location:* US, Europe, Australia, Japan, Canada, India	*Search strategy:* • 1 database • exact search terms *Number of studies:* 12	*Data extraction:* • Guidelines given *Study quality:* • Discuss (sample size, cross-sectional, use of different measures) *Data excess*: No evidence	Sample size, prevalence or mean scores	*Effect estimates:* None *Synthesis method:* None *Heterogeneity:* • Discuss different study methods *Confounding:* No mention *Bias:* ▪ Discuss interviewer bias *Publication bias:* no mention
Goodman et al, 2008 (83)	Child mental health outcomes, including: referral or admission to a child mental health service, psychiatric diagnosis made by a mental health specialist, emotional, behavioural and hyperactivity disorders, and less common	Population based studies of prevalence and clinic-based studies of ethnic minority groups. *Location:* Britain. *Population:* Children aged 0-19.	*Search strategy:* • More than 5 databases. • Details (but not exact) search terms given. • Reference lists searched. • Contacted authors of primary studies. • Contacted lead	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Mentioned but not assessed formally.	No individual study results were given.	*Effect estimates:* Comparison of ethnicity group prevalences. *Synthesis method:* None. *Heterogeneity:* Mentioned briefly. *Confounding:* No mention. *Bias:* No mention. *Publication bias:* Mentioned briefly.

	disorders including psychosis, autism and eating disorders. *Diagnostic criteria:* Validated clinical interviews or questionnaires.		researchers in subject area. *Number of studies:* 31 population based and 18 clinic based studies (49 total).			
Craig et al, 2009 (84)	Psychological morbidity and spinal cord injury. Minor and major depressive disorder, anxiety, PTSD and Dysthymia. *Diagnostic criteria:* SCL-90, Clinical diagnostic assessment, DSM-III diagnostic interview, BDI, HDRS, SADS, CES-D, Hamilton depression scale, OAHMQ, QD, POMS, MACS helplessness	Prevalence of negative psychological states in individuals with spinal cord injury (SCI). Persons with SCI during the inpatient rehabilitation phase and those when living in the community. *Location:* unknown. *Population:* unknown.	*Search strategy:* • 2 databases. • Exact search terms given. • Searched Google Scholar. *Number of studies:* 18	*Data extraction:* • Mentioned but guidelines not given. *Study quality:* No mention.	All individual study results were given.	*Effect estimates:* Median prevalence and a range of prevalence only. *Synthesis method:* None. *Heterogeneity:* No mention. *Confounding:* No mention. *Bias:* No mention. *Publication bias:* No mention.

	subscale.					
Mills et al, 2005 (85)	Prevalence of mental disorders (PTSD, anxiety and depression) and torture among Tibetan refugees. *Diagnostic criteria:* PTSD -> PTI, Harvard Trauma Questionnaire, Hopkins Symptom Checklist. DSM-IV. Anxiety and depression -> HSCL-25, DSM-IV.	Three cross-sectional, one case-control and one retrospective cohort. *Location:* India only. *Population:* mainly adults, although one study population was children only.	*Search strategy:* • 10 databases. • Exact search terms given. • Reference lists searched. • Contacted authors of primary papers. • Searched unpublished data. • Contacted the Tibetan Government in Exile. *Number of studies:* 5	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Mentioned briefly.	All individual study results were given.	*Effect estimates:* A range for prevalence was given only. *Synthesis method:* None. *Heterogeneity:* Mentioned but not formally assessed. *Confounding:* No mention. *Bias:* Mentioned briefly. *Publication bias:* Mentioned but not formally assessed. They did state that they could have unknowingly excluded unpublished NGO results, which may bias their findings.
Saha et al, 2006 (12)	Schizophrenia *Diagnostic criteria:* Not stated.	Not stated. Relies on reading the two original (16, 17) articles from which the data is taken. Here they took	*Search strategy:* • 4 databases. • Exact search terms given. • Reference lists searched. • Contacted authors of primary	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Not mentioned, but was possibly	No individual study results given.	*Effect estimates:* Median prevalence given only. *Synthesis method:* None. *Heterogeneity:* No mention. *Confounding:* No mention.

		data from many studies and divided them into 3 latitude bands, then analysed the incidence and prevalence of schizophrenia across the bands.	papers. • Contacted lead researchers in subject area. • Hand searched journals. • Searched unpublished data. *Number of studies:* Incidence: 68 Prevalence: 94	mentioned in the original articles.		*Bias:* No mention. *Publication bias:* No mention. The reader is directed to the original articles, however the above factors were dealt with differently by the two papers.
Saha et al, 2006 (13)	Schizophrenia (Incidence of) *Diagnostic criteria:* Not stated.	Not stated. Relies on reading the original (16) article from which the data is taken. Here they divided the incidence rates for schizophrenia from many sources into three economic bands, and compared them.	*Search strategy:* • 4 databases. • Exact search terms given. • Reference lists searched. • Contacted authors of primary papers. • Contacted lead researchers in subject area. • Hand searched journals. • Searched	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Not mentioned, but was possibly mentioned in the original articles.	No individual study results given.	*Effect estimates:* Median incidence rates given only. *Synthesis method:* None. *Heterogeneity:* No mention. *Confounding:* No mention. *Bias:* No mention. *Publication bias:* No mention. The reader is directed to the original article for the above information.

			unpublished data. *Number of studies:* 52 studies (167 discrete incidence rates)			
McGrath et al, (18) 2008	Schizophrenia (incidence, prevalence and mortality). *Diagnostic criteria:* Not stated.	Not stated. Relies on reading the original articles (16, 17) from which the data is taken. This paper is essentially a review of reviews.	*Search strategy:* Details can be found in the original articles. *Number of studies:* Incidence: 158 Prevalence: 188	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Refer to the original articles.	No individual study results are given in this review, however the three original articles that are referred to all presented complete data for all individual studies.	*Effect estimates:* Median and mean only. *Synthesis method:* None. *Heterogeneity:* Mentioned only briefly. *Confounding:* No mention. *Bias:* Mentioned briefly. *Publication bias:* No mention. The reader is referred to the three original articles for this information. Two of the three articles are included in the present paper.
PREVALENCE AND ASSOCIATION – META ANALYSIS						
Anderson 2001(86)	Clinically relevant depression (incl. Major depressive	Studies of adults (18+) with type 1 or	*Search strategy:* • 2 databases • exact search	*Data extraction:* • Guidelines given	% female mean age (SD) % white	*Effect estimates:* OR's calculated for studies with control groups, prevalence % (n) depression in

	disorder, plus minor & subsyndromal depression). Studies used semi & structured diagnostic interviews (eg DIS, DSM-III-R) and self report (eg. BDI, CESDI)	type 2 diabetes (incl. High proportion of clinical studies) *Location:* no mention	terms • reference list search *Number of studies:* 42	• 2 independent reviewers *Study quality:* No mention *Data excess:* No mention	% depressed overall & by sex mean depression scale scores (SD)	non-diabetics and diabetics *Synthesis method:* Weighted mean *Heterogeneity:* • Breslow day test • Not significant • discussed type of diabetes sex, source of subjects or depression assessment method *Confounding:* • Could not adjust prevalence estimate for potential confounders, because none of the studies fully considered this. • Adjustment for some confounders in model for odds ratios *Bias:* • Discuss sample bias (although don't mention explicitly) *Publication bias:* • Discuss the probability of effecting results is low, due to depression not being the principal focus of many of the studies
Beekman et al, 1999(87)	Major and minor depression. Only studies using standardized diagnostic criteria and instruments (Psychiatrist,	Community based studies of prevalence in later life (55+) *Location:* No restrictions (US, Europe, Asia)	*Search strategy:* • 1 database • reference list search *Number of studies:* 34	*Data extraction:* No mention *Study quality:* • Inclusion criteria (>200 subjects, sufficient	Sample size prevalence	*Effect estimates:* prevalence (no CI's) *Synthesis method*: Weighted averages *Heterogeneity:* • Discussed variability in definitions used, sampling,

	DSM-III, short-care, ICD, RDC, GMS-AGECAT, DIS, CIE, CARE, CES-D, CARS, SAD, BDI).			sampling info, standardized diagnostic criteria) *Data excess:* No mention		response rates, age range, residential status, weighting procedures & screening design *Bias:* No mention *Confounding:* • No adjustment made for important confounding factors. *Publication bias:* No mention
Chen et al, 1999(88)	Depression – depressive illness, depressive mood (GDS, CES-D, DSM-III-R, HAMD)	Cross-sectional studies of older people *Location:* China	*Search strategy:* • 1 database • exact search terms • reference list searches *Number of studies:* 10	*Data extraction:* No mention *Study quality:* No mention *Data excess*: 23 samples from 10 studies	sample size Prevalence	*Effect estimates:* Prevalence (95% CI) *Synthesis method:* Weighted fixed or random effects models *Heterogeneity:* • Q statistic • some significant • random effects • discuss sources of variability: investigation year, study location, varied source of subjects, instruments, different criteria *Confounding:* No mention *Bias:* • Discuss validity of Western instruments in Chinese population *Publication bias:* No mention
O'Hara, 1996(89)	Postpartum depression	Longitudinal studies *Location:* No mention	*Search strategy:* No mention *Number of studies:* 59	*Data extraction:* • No mention *Study quality:* • Inclusion criteria (only studies with established cut off, randomly	None	*Effect estimates:* prevalence (95% CI), Cohen's d *Synthesis method:* Fixed effects model (Hedges technique) *Heterogeneity:* • Chi-squared • Significant • Modelled study differences

				sampled studies, depression assessed after 2 weeks, risk factors measured pre delivery, use of standardized validated measure) *Data excess*: No evidence		(whether assessment self report, length of postpartum period evaluated, time since delivery of assessment) *Confounding:* • Analysed effects of confounders (country of study, whether assessment was self report) • inclusion criteria *Bias:* no mention *Publication bias:* no mention
PREVALENCE AND ASSOCIATION – NO META ANALYSIS						
Cuijpers 2004(90)	Subthreshold depression (sD): DSM-IV, ICD-10 or research diagnostic criteria for mD, reported mood problems, scoring below cut off on self rating depression inventory MDD: diagnostic interview (CIDI, SCAN, or DIS)	Community studies, studies of general medical patients, studies of high risk groups *Location:* no mention	*Search strategy:* • 2 databases • search terms (not exact) • reference list search *Number of studies:* 20	*Data extraction:* No mention *Study quality:* No mention *Data excess:* no duplicates	number subjects with SD number in control group, initial response rate % lost to FU incidence density rates in cases and controls incidence rate ratios (95% CI)	*Effect estimates:* None *Synthesis method:* None used, as huge heterogeneity between studies *Heterogeneity:* • Discuss differences in definition of SD, recency (period during which SD present before 1st measurement), in- or exclusion of lifetime MD *Confounding:* • excl. studies of patient groups treated for mental health problems. *Bias:* No mention *Publication bias:* no mention
Creed 2004(91)	Somatization disorder and	Population based samples	*Search strategy:* • 2 databases	*Data extraction:* • Guidelines given	Sample size response rate	*Pooled Effect estimates:* none *Synthesis method:* No meta-

	hypochondriasis – studies using standardized definitions only	or primary care settings *Location:* No mention, English articles	• exact search terms • reference list searches *Number of studies:* 47	• Consulted 2nd author where doubts existed *Study quality:* • Discusses (states poor for some studies) *Data excess:* 57 papers using 47 studies	prevalence	analysis undertaken due to differences in definitions of disease, methods of analysis, instruments used *Heterogeneity:* • Discuss differences in definition of disease, methods of analysis, instruments used *Confounding:* No mention *Bias:* No mention *Publication bias:* No mention
McGrath et al, 2004(16)	Schizophrenia (ICD, CATEGO derived, DSM, RDC)	Studies drawn from general population sample of subgroup of population *Location*: No mention	*Search strategy:* • 4 databases • exact search terms • reference list searches • letters to authors *Number of studies:* 158	*Data extraction:* • Guidelines given • 2 reviewers *Study quality:* • Rated quality (coverage, use & quality of diagnostic criteria, thoroughness of reporting) *Data excess:* Most informative version of multiple publications included, others excluded.	None	*Effect estimates:* Median, mean ,5, 10, 75, & 90th %iles of incidence rates, SD. *Synthesis method:* None *Heterogeneity:* • Discuss - state that ability to assess this is compromised, as not able to calculate SE's for all studies. • Results did no differ by quality of study, different diagnostic methods, presence of age standardization, different age ranges. Newer studies had lower rates *Confounding:* No mention *Bias:* • Discuss possibility of systematic bias within individual studies (eg. excluding older ages) *Publication bias:* • Discuss - state that number of

						new studies with negative findings need to "wash out" findings would be substantial
Mirza et al, 2004(92)	Anxiety disorder, depression, depressive disorder	Cross-sectional and case-control surveys *Location:* Pakistan	*Search strategy:* • 9 databases • exact search terms • reference list searches *Number of studies:* 20 (17 prevalence, 22 risk factors)	*Data extraction:* • Guidelines given *Study quality:* • Rated quality (hierarchies of evidence and critical appraisal check lists) *Data excess*: Some authors have more than one study included but different time points	sample size prevalence (95% CI)	*Effect estimates:* mean prevalence *Synthesis method:* narrative *Heterogeneity:* no mention *Confounding*: • Discuss (only one study adjusted prevalence) *Bias:* • Discuss - state difficult to comment because lack of detail on methods. Questionable how representative samples were *Publication bias:* • Discuss - state may be subject to bias, but not assessed
Saha et al, 2005(17)	Schizophrenia	Prevalence studies *Location:* S. America, Australasia, Europe, Asia, Northern America	*Search strategy:* • 4 databases • exact search terms • reference list search • letters to researchers *Number of studies:* 132	*Data extraction:* • Guidelines given • Multiple reviewers *Study quality:* • Rated quality (optimal research design & quality of reporting) *Data excess:* Included most	None	*Effect estimates:* median, IQR, 10^{th} & 90^{th} centiles, mean, SD, harmonic mean *Synthesis method:* None – because unable to assess heterogeneity, and MA less appropriate for prevalence studies *Heterogeneity:* • Not able to assess as SE's not available for many studies. • Look at effect of urbanicity, economic status, methodological features,

				informative version where more than one paper		migrant status *Bias:* No mention *Confounding:* No mention *Publication bias:* No mention
Van Ede et al, 1999(93)	Depression (no more information)	Case-control and uncontrolled studies of patients with chronic obstructive pulmonary disease *Location:* includes Europe	*Search strategy:* • 3 databases • exact search terms • reference list searches *Number of studies:* 10	*Data extraction:* No mention *Study quality:* • Inclusion criteria (assessment of COPD, method used to detect depression) • Rated quality (random selection of patients, control group matched for age & sex, response rate >80%, prevalence of depressive disorder detectable, exclusion of other important disease (not COPD) • STUDIES WERE POOR QUALITY *Data excess*: Appear to be	Number of cases, controls % male mean age mean FEV_1 % FEV_1	*Effect estimates:* range of prevalence *Synthesis method:* None *Heterogeneity:* • Discuss - differences appear to be caused by depression instrument and cutpoint of score used to measure depression *Confounding:* • Discuss whether education/social class are confounders in discussion. Discuss artifact of depression measurement due to overlap between symptoms and somatic illness *Bias:* No mention *Publication bias:* No mention

				independent studies		
Woodward et al, 1999(94)	Mentally disordered offending, defined as criminality combined with psychiatric illness (DSM-III, Psychiatric Epidemiology research interview)	Cross-sectional & longitudinal studies *Location*: Europe, US	*Search strategy:* • 14 databases • exact search terms *Number of studies:* 12 (7 cohort)	*Data extraction:* No mention *Study quality:* • Discuss (lack of systematic epidemiological studies, lack of statistical input to studies, study limitations of each study) *Data excess*: None	Prevalence OR (95%CI) RR – not consistent across studies	*Effect estimates:* None *Synthesis method:* None, narrative review of each study, including description of methods & table of results *Heterogeneity:* No mention *Confounding:* • Discuss - state that not considered in individual studies *Bias:* • Discuss bias introduced by only including hospitalized - only records major disorders. *Publication bias:* No mention
Mills et al, 2008 (95)	Mental disorders (PTSD, Anxiety, Depression) in tortured and non-tortured Bhutanese refugees. *Diagnostic criteria:* PTSD -> DSM Anxiety & Depression -> Bradford Inventory Symptom Checklist -90	Studies comparing prevalence of mental illness in Bhutanese refugees residing in Nepal. Included studies had to report on prevalence in both tortured and non-tortured refugees. *Location:* Bhutanese	*Search strategy:* • 9 databases • Details but not exact search terms given. • Contacted lead researchers. • Searched unpublished data. *Number of studies: 6* (N=4712)	*Data extraction:* • Guidelines given • Two or more independent reviewers *Study quality:* Mentioned but not formally assessed. Inclusion criteria included factors related to quality.	A combination of point estimates, plus odds ratios (OR) and relative risks (RR) with 95% CIs are given where they could generate them.	*Effect estimates:* A range of prevalence are given only. *Synthesis method:* None. *Heterogeneity:* Mentioned but not assessed formally. Seemed to assume that differences between the studies would prevent a formal MA. *Confounding:* No mention. *Bias:* Mentioned briefly. Steps taken to avoid bias via inclusion and exclusion criteria. *Publication bias:* Mentioned briefly.

		refugees residing in Nepal only. With a mean age of early 40s.				
Thombs et al, 2006 (96)	Depression in survivors of burn injury. *Diagnostic criteria:* BDI, HADS-D, ZDS, SCID-III-R, DICA-C (children), SCID-IV, CES-D.	A mixture of prospective cohort and cross-sectional studies, looking at prevalence of depression during hospitalization, post discharge, and on risk factors for depression in patients with burn injury. *Location:* USA, Greece, UK, Canada, Japan, Germany, Sweden (7 total). *Population:* all were adult studies apart from one for children.	*Search strategy:* • 3 databases. • Exact search terms given. • Reference lists searched. • Hand searched journals. *Number of studies: 18*	*Data extraction:* • Guidelines given • Two or more independent reviewers *Study quality:* Mentioned but not formally assessed.	All individual study results were reported.	*Effect estimates:* None. Point estimates from all studies plus a narrative review only. *Synthesis method:* None. *Heterogeneity:* Mentioned briefly but not assessed formally. *Confounding:* Mentioned briefly. *Bias:* Mentioned briefly. *Publication bias:* Mentioned briefly.
Onrust et al,	Prevalence and	Cross-sectional	*Search strategy:*	*Data extraction:*	All individual study	*Effect estimates:* None generated.

2006 (97)	incidence of mood and anxiety disorders after the loss of a partner *Diagnostic criteria:* PTSD -> SCID, DSM-III-R, DSM-III MDD -> SCID, DSM-III, DIS, CIDI GAD/PANIC -> SCID	and prospective controlled studies looking at the effects of widowhood on mood and anxiety disorders. *Location:* USA, Australia, Netherlands. *Population:* Adults who are married, widowed and never married.	• 2 databases. • Exact search terms given. • Reference lists searched. • Included dissertation abstracts to minimize possible publication bias. *Number of studies: 11 (N=8166)*	• No mention. *Study quality:* Mentioned but not assessed formally.	results were reported.	Only individual study results were given, with a narrative review. *Synthesis method:* None. *Heterogeneity:* Mentioned briefly but not assessed formally. *Confounding:* No mention. *Bias:* Mentioned briefly. *Publication bias:* Mentioned briefly.
Bendall et al, 2008 (98)	Evaluating the evidence for an association between childhood trauma (CT) and psychotic disorder. *Diagnostic criteria:* Psychosis (including delusional disorder,	Inpatients and outpatients with and without psychotic features. Taken from cross-sectional and retrospective studies. *Location:* unclear. *Population:*	*Search strategy:* • 3 databases. • Exact search terms given. • Reference lists searched. • Contacted authors of primary papers. *Number of studies:* 46 studies in total, but only 6 with	*Data extraction:* • Mentioned but no guidelines given. *Study quality:* Mentioned but not assessed formally.	All individual study results were reported.	*Effect estimates:* None generated. Only individual study results were given, with a narrative review. *Synthesis method:* None. *Heterogeneity:* Mentioned briefly but not assessed formally. *Confounding:* No mention. *Bias:* Mentioned briefly. *Publication bias:* No mention.

	schizophrenia, bipolar or depression with psychotic features) -> DIS, CIDI, SCID, Patient file audit. Trauma (including child physical abuse, child sexual abuse, and childhood neglect) -> CEQ, CAQ, CIDI, CTQ, Patient file audit, LEQ, DDIS, Author's questionnaire, CSTQ, CTES, TLEQ, THQ-R, CTQ-SF, THQ, SCID, DICA-R.	children and adults from any study investigating CT and psychotic disorder.	control groups.			
Thombs et al, 2007 (99)	Depression in patients with systemic sclerosis (SSc). *Diagnostic criteria:* BDI, MADRS, CES-D, HADS-D, DSSI/SAD	All studies in any language reporting depression in patients with SSc. *Location:* US, Japan, Italy, France, UK, Greece (6 total)	*Search strategy:* • 3 databases. • Exact search terms given. • Hand searched journals. *Number of studies:* 8	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Study quality formally assessed and quality of	All individual study results were reported.	*Effect estimates:* None generated. Only individual study results were given, with a narrative review. *Synthesis method:* None. *Heterogeneity:* No mention. *Confounding:* Mentioned briefly. *Bias:* Mentioned briefly.

		Population: Patients (mainly female) with SSc. Ages ranged from late 30s to early 70s.		primary studies discussed.		*Publication bias:* No mention.
Davydow et al, 2008 (100)	Depression, PTSD and Anxiety in survivors of Acute Lung Injury (ALI) and Acute Respiratory Distress Syndrome (ARDS). *Diagnostic criteria:* Depression: BDI, CES-D, ZDRS, SCL90r, SCID MDD, MADRS. PTSD: PTSS-10, SCID PTSD, IES. Anxiety: BAI, STAS-S, SCL90r.	A mixture of cross-sectional, retrospective cohort and prospective cohort studies looking at patients with ALI/ARDS. Risk factors for mental health that were examined included QOL, ICU length of stay, duration of sedation and mechanical ventilation. *Location:* US and Germany. *Population:* Adult male and female patients	*Search strategy:* • 5 databases. • Exact search terms given. *Number of studies:* 10 articles reporting on 6 unique patient cohorts.	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* No mention.	All individual study results were reported.	*Effect estimates:* None generated. Only individual study results were given, with median prevalence a narrative review. *Synthesis method:* None. *Heterogeneity:* No mention. *Confounding:* No mention. *Bias:* No mention. *Publication bias:* No mention.

		older than 16 years, with a mean age varying from late 30s to mid 40s.				

ASSOCIATION - META-ANALYSIS

Study	Disease definition	Risk factors studied	Setting	Number of studies	Data extraction & Study quality	Individual study results	Methodology
Aleman 1999(101)	Schizophrenia (no other details)	recall & recognition memory performance	Studies comparing patients with schizophrenia with healthy normal comparison subjects (no other info, but mentions one twin study included)	*Search strategy:* • 2 databases • exact search terms • reference list search • hand searching journals *Number of*	*Data extraction:* • Guidelines given *Study quality:* No mention *Data excess:* Only included unique studies	None	*Effect estimates:* Mean weighted effect size, d (95% CI's), sample size *Synthesis method:* Pooled inverse variance weighted random effects *Heterogeneity:* • Q statistic • significant • used random effects *Confounding:* • Analysis - examine effect of

			Location: no mention	*studies:* 70			age, patient status, medication status, severity of psychopathology, influence of +ve & -ve symptoms plus study characteristics (year of publication, groups size, whether groups matched on age & education) *Bias:* no mention *Publication bias:* • Use procedure by Orwin to calculate the number of null results that are necessary to reduce the average effect size to negligible level plus funnel plot. • Little evidence of bias.
Aleman, 2003(52)	Schizophrenia – studies using standardised diagnostic criteria (DSM-III< DSM-III-R, DSM IV, ICD-9, CATEGO)	sex differences	Population based incidence studies (incl. register studies, prospective 1st contract studies & cohort studies) *Location:* not mention, but compared developed (e.g. Europe) with developing	*Search strategy:* • 2 databases • search terms (not exact) • reference list searches *Number of studies:* 38	*Data extraction:* • Guidelines given • 2 independent reviewers *Study quality:* • Rated quality (analysis conducted on subset of studies that met specific methodological criteria) *Data excess:* only 1 study included where complete overlap	None	*Effect estimates:* variance weighted mean log-RR *Synthesis method:* Log risk ratio meta-analysis using random effects *Heterogeneity:* • Q_w statistic • significant in studies after 1980 • used random effects *Confounding:* • discuss whether men/women more likely to seek help, possibility of drug use or estrogen dosage effecting results *Bias:*

			(e.g. Asia & S. America)				• Analysis - compares studies that minimized sex-related sampling bias with those that didn't. Controlled for criterion bias & hospital bias *Publication bias:* No mention
Cannon M, 2002(102)	Schizophrenia: No restriction on identification (ICD-8,9,10, present state examination, DSM-III-R)	obstetric complications	Prospective population based studies *Location:* Europe	*Search strategy:* • 1 database • reference list searches • contacting researchers *Number of studies:* 8	*Data extraction:* No mention *Study quality:* • Inclusion criteria (use of standardized prospectively collected obstetric info from birth records or registers, inclusion of comparison subjects drawn from general population with info on obstetric complications collected from same source) *Data excess:*2 studies reported on same data set, but with different sampling frames	number schizophrenic number comparison subjects % females	*Effect estimates*: OR (95% CI), number schizophrenic & comparison subjects, numbers exposed to complication in each group *Synthesis method:* Woolf's method, fixed & random effects models *Heterogeneity:* • Q statistic • Some significant • Used random effects. • Discuss possibility of population shift in birth weights, plus different measures used (state not enough power to formally evaluate sources of heterogeneity) *Confounding*: • Analysis - OR's adjusted for sex, hospital of birth, social class. • Discuss - mentions other sources of confounding: geography, age at illness onset, cohort & period effects *Bias:*

							• Discuss - states studies relatively free of bias (but no evidence) *Publication bias:* • Funnel plot • No evidence
Cantor-Graae, 2005(24)	Schizophrenia – 5 studies used semi-structured diagnostic interviews, 6 used non-standardized diagnostic criteria, 7 used ICD 9, 10	Migration	8 1st contact incidence studies incl. Inpatients & outpatients, 10 hospital based admission studies *Location:* Europe & Australia	*Search strategy:* • 2 databases • exact search terms • reference list searches *Number of studies:* 18	*Data extraction:* • Guidelines given • 2 independent reviewers *Study quality:* No mention *Data excess* Excludes studies with complete overlap between region & time frame of study. Two studies incl. with small overlap	number patients in migrant & comparison groups RR	*Effect estimates:* RR's & 95% CI's *Synthesis method:* Mixed effects Poisson regression analysis, adj. for age & sex *Heterogeneity:* • Q_w statistic • significant • modelled differences between studies • mixed effects *Confounding:* • Analysis - Age & sex included in models, examine difference in associations by diagnostic criteria used, economic development of region of birth, skin color *Bias:* • Discuss diagnostic bias *Publication bias:* • Funnel plot • No evidence
Davies et al, 2003(103)	Schizophrenia (ICD, DSM-II, DSM-III-R)	season of birth	case control studies (?) *Location:* Northern	*Search strategy:* • 4 databases • exact search	*Data extraction:* • Guidelines given *Study quality:*	sample sizes, graphical OR (95% CI)	*Effect estimates:* OR (95% CI) *Synthesis method:* Mantel Haenszel fixed effects model *Heterogeneity:* no mention

			hemisphere only (Singapore, US, Europe)	terms • reference list searches • letters to authors *Number of studies:* 8	• Inclusion criteria (diagnostic criteria stated, counts of schizophrenia & general population, matching of year of birth, patient groups and general population drawn from same catchment area) *Data excess*: Some studies included twice as different areas included (i.e. for different sampling frames)		*Confounding:* • look at how latitude effects association *Bias:* • discuss birth cohort effects *Publication bias:* no mention
Dragovic et al, 2005(50)	Schizophrenia – using various diagnostic criteria	handedness	Studies of prevalence of handedness in schizophrenia populations (in-patient and out-patients) *Location:* No mention	*Search strategy:* • 4 databases • exact search terms • reference list search from 2 reviews • unpublished data *Number of studies:* 42	*Data extraction:* No mention *Study quality:* • Discuss (most studies used small convenience samples for controls, and reliability of diagnosis) *Data excess*: None	Sample size, number left handed, mixed handed in patients and controls, OR (95% CI)	*Effect estimates:* OR (95% CI) *Synthesis method*: Pooled inverse variance weighted fixed or random effects models *Heterogeneity* • Woolf Q-non combinality. • Some significant • Examined whether assessment of handedness could explain • Used random effects *Confounding:* No mention *Bias:* No mention *Publication bias:* • Funnel plots, plus Egger's test of asymmetry. • Possible bias for mixed handedness

Geddes et al, 1999(25)	Schizophrenia (ICD-9, DSM-III-R, Research diagnostic criteria)	Complications of pregnancy and labor.	individual patient data from case-control studies using Lewis-Murray scale for complications *Location:* Europe	*Search strategy:* • 1 database • Exact search terms • searched reference lists • letters to researchers *Number of studies:* 12	*Data extraction:* No mention *Study quality:* No mention *Data excess*: All independent studies	number cases & controls frequency of abnormalities of pregnancy & labour for cases & controls	*Effect estimates:* Pooled weighted OR *Synthesis method:* Unconditional logistic regression, pooled weighted OR calculated by fitting variable with 12 categories representing each study in the model *Heterogeneity:* • tested for interaction by study design • not significant, except pre-eclampsia *Confounding:* • adjusted for confounders including birth order and sex *Bias:* • Discuss - unable to control for matching, so likely to underestimate study specific OR, discuss recall bias *Publication bias:* • Funnel plot • Absence of small studies finding negative/small association. • State pooled estimate would be overestimate of true effect
McGrath et al, 1999(104)	Schizophrenia (diagnosed by any criterion)	Association: season of birth	Case-control studies *Location:* Southern hemisphere	*Search strategy:* • 4 databases • exact search terms • reference list searches	*Data extraction:* • Guidelines given • 2 reviewers *Study quality:* • Rated quality (patients & controls drawn from	Numbers observed, graphical OR (95% CI)	*Effect estimates:* graphical OR (95% CI) *Synthesis method:* Mantel Haenszel fixed effects *Heterogeneity:* • Q statistic • not significant

				• letters to authors • contacting researchers *Number of studies:* 8	birth cohorts covering same time period & same geographically defined catchment area, diagnosis according to specified diagnostic criteria, sample size) *Data excess*: None		*Confounding:* No mention *Bias:* No mention *Publication bias:* • Discuss - state that unlikely that including small negative/inconclusive studies would substantially alter results
Messias, 2004(105)	Deficit/non-deficit schizophrenia (Schedule for the deficit syndrome, proxy for the deficit syndrome, consensus medical review syndrome)	month of birth	Population based studies, and samples of convenience *Location:* Restricted to Northern Hemisphere (UK, Spain, US, France)	*Search strategy:* No mention *Number of studies:* 9	*Data extraction:* No mention *Study quality:* No mention *Data excess*: Some overlap between 2 studies, but probably small	OR (95% CI) of June/July birth	*Effect estimates:* OR (SE), birth distribution by month *Synthesis method:* fixed effects model *Heterogeneity:* • Chi-squared test • not significant *Confounding:* no mention *Bias:* • discuss possibility of mis-classification, survival bias – but suggests doesn't have big effect *Publication bias:* • Tried to minimize by including unpublished studies
Mojtabai, 1999(26)	Schizophrenia: restricted to the scale of assessment of negative symptoms	Duration of illness, structure of symptoms	studies presenting correlations of SANS and SAPS global symptoms scores	*Search strategy:* • 2 databases • reference list searches • hand searching journals	*Data extraction:* • Guidelines given *Study quality:* No mention *Data excess*: 22 non-overlapping studies	None	*Effect estimates:* average mean and range, average SD and range, correlations *Synthesis method:* weighted least squares regression analysis with sample size as weights, SE's derived using method by Hodges

	(SANS) and positive symptoms (SAPS)		*Location*: No mention	*Number of studies:* 22			*Heterogeneity:* • Q statistic • some significant • adjusted for duration of illness where not homogeneous *Confounding:* • Analysis - Look at course & diagnostic flux, state had little effect on results *Bias:* No mention *Publication bias:* No mention
M.A. Roy et al, 2001 (22)	Deficit schizophrenia (Schedule for deficit syndrome, proxy deficit syndrome, extensive data from research interviews or medical records)	male gender	Studies reporting gender ratio in deficit vs. non-deficit schizophrenia subgroups *Location*: No mention	*Search strategy:* • 1 database • reference list searches • contacted researchers *Number of studies:* 23	*Data extraction:* • Guidelines given *Study quality:* No mention *Data excess*: Several publications included by Kirkpatrick	sample size % males % deficit OR (95% CI)	*Pooled effect estimates:* OR (95% CI) *Synthesis method:* Pooled OR computed using Mantel-Haenszel test, considering each study as a stratum *Heterogeneity:* • Breslow day test • not significant. • Examined impact of sampling method, method used to assess syndrome, breadth of diagnoses included, mean duration illness *Confounding:* No mention *Bias:* No mention *Publication bias:* • Discuss - state very unlikely as question being asked was never the main research question
Beck, 2001(106)	Postpartum depression, DSM-IV	prenatal depression, self esteem,	Longitudinal & cross sectional studies of	*Search strategy:* • 9 databases	*Data extraction:* • Guidelines given • Random sample	None	*Effect estimates:* Cohen's r, number of studies, sample size, 95% CI

	defined (Edinburgh postnatal depression scale, BDI< CES-D, Zung Self rating depression scale, Hamilton rating scale, Schedule for affective disorders & schizophrenia)	childcare stress, prenatal anxiety, life stress, social support, marital relationship, history of previous depression, infant temperament, maternity blues, marital status, socioeconomic status, unplanned pregnancy	women *Location:* US, Canada, NZ, Australia, Europe, Japan, S. Africa, United Arab Emirates, Israel, Brazil, China, Nigeria	• search terms (not exact) • contacting researchers *Number of studies:* 84	coded by 2 reviewers *Study quality:* • Rated quality (author expertise, funding, sampling, sample size, reliability & validity of instrument, research design) *Data excess*: If multiple measures obtained from single study, findings collapsed into single global hypothesis		*Synthesis method:* Unweighted, weighted by sample size, and weighted by quality score. *Heterogeneity:* • chi squared test • significant • removed outliers to achieve homogeneous sample *Confounding:* no mention *Bias:* no mention *Publication bias:* Fail safe N calculated, reasonable tolerance achieved
Ciesla 2001(107)	Depression – diagnostic interviews only (DSM-III-R used in all studies, except DSM-III in one, & DSM-IV in another)	HIV infection	Not a lot of info, studies must include an HIV-positive and HIV-negative group, studies with subjects recruited through the mental health system excluded *Location:* Not stated	*Search strategy:* • 3 databases • reference list search *Number of studies:* 10	*Data extraction:* • Guidelines given *Study quality:* • Inclusion criteria (only studies with diagnostic interviews) *Data excess*: None	Number HIV positive & negative % major depressive disorder (OR) % with dysthymic disorder (OR)	*Effect estimates:* OR's & 95% CI's *Synthesis method:* 3 methods: 1. Vote-counting method, 2. inverse variance weighted average effect size 3. uses inverse normal method *Heterogeneity:* No mention *Confounding:* • analysis - examine whether association different by sexual orientation, course of HIV *Bias:* no mention

							Publication bias: • Calculate the number of null results that are necessary to reduce the average effect size to negligible level (Orwin). • State is unlikely that 17 such studies exist.
Cole, 2003(28)	Depression – incl. studies that used recognised diagnostic criteria or cut off on depression rating scale	Risk factors	Prospective studies of elderly community subjects aged 50+ *Location*: No mention	*Search strategy:* • 2 databases • exact search terms • reference list search *Number of studies:* 20	*Data extraction:* • Guidelines given *Study quality:* • Inclusion criteria • Rated quality (4 criteria described by Evidence based medicine working group) *Data excess:* No mention	None	*Effect estimates:* Pooled OR: posterior median, 95% credible interval *Synthesis method:* Bayesian hierarchical random effects model, assuming no prior info available *Heterogeneity:* • Discuss - greater heterogeneity among studies evaluating certain risk factors *Confounding:* • Inclusion criteria – studies that had similar comparison groups with respect to confounders, or controlled for confounders in analysis *Bias:* • Discuss - most studies had loss to FU *Publication bias:* • Discuss - state unlikely to influence risk factor studies.
Dickens et al, 2002(32)	Depression using standardized method of assessmen	rheumatoid arthritis	case control studies *Location:* No mention	*Search strategy:* • 4 databases • exact search terms	*Data extraction:* • Guidelines given • Sample reviewed by 2 reviewers	None	*Effect estimates:* r (95% CI) *Synthesis method:* Inverse variance weighted mean *Heterogeneity:* • Tested whether any effect

	t (HADs, GDS, PDI, IDD, POMS, CES-D, AIMS)			• reference list searches • letters to authors *Number of studies:* 27	*Study quality:* No mention *Data excess*: Averaged results of highly related samples		sizes differed significantly • significant • recalculated removing outliers. • Examined whether methodological factors could account for differences (age, sex, duration of symptoms, source of recruitment, sample size, diagnostic criteria, year of publication) • *Confounding:* • Discussed age, sex, education, work status, social support, severity & duration of symptoms, disability. • Analysis - to look at age, sex, disability *Bias:* • Analysis - effect of measurement instrument *Publication bias:* • Fail safe N, compared with file drawer N • findings remain robust
Fryers, 2004(66)	Major depressive disorder (only GHQ or CIDI included in meta-analysis)	Depression (CIDI, Past year only); Common mental disorder (GHQ-12 only)	Cross-sectional or case-controlled studies *Location*: EU regional and national samples	*Study selection:* • 4 databases • search terms (not exact) • contacted researchers *Number of*	*Data extraction:* No mention *Study quality:* • Inclusion criteria (nationally representative studies, sample of 1000+, use of well validated	sample size OR (95% CI) for 7 studies included in M-A	*Effect estimates:* Odds ratio (95% CI) *Synthesis method:* Inverse variance weighted fixed and random effects models *Heterogeneity:* • meta command in stata • significant (GHQ-12 only) • examine effect of excluding

				studies: 19	standardized instruments) *Data excess*: Data from 3 Belgian samples part of same study, but analysed separately		Catalonia (GHQ-12) study – becomes non-significant, discuss and dismiss possible reasons for this • random effects *Confounding:* No mention *Bias:* No mention *Publication bias:* No mention
Henningsen et al, 2003(108)	Anxiety & depression (diagnostic interviews, 4 most widely used standardized instruments : symptom checklist, state trait anxiety inventory, Beck depression inventory, HADs)	medically unexplained physical symptoms (IBS, nonulcer dyspepsia, fibromyalgia, chronic fatigue syndromes)	Observational studies *Location*: No mention	*Search strategy:* • 3 databases • search terms (not exact, but available on request) • reference list searches • contacting researchers *Number of studies:* 244 (only 20 epidemiological population studies)	*Data extraction:* • Guidelines given *Study quality:* • Inclusion criteria (Exclude studies based on 8 criteria) *Data excess*: Excluded 31 redundant data sets	None	*Effect estimates:* Weighted mean effect sizes (95% CI), total sample size *Synthesis method:* fixed or random effects models *Heterogeneity:* • Q statistic • Some significant • random effects • ANCOVA used to further explore heterogeneity *Confounding:* • Controlled for some confounders *Bias:* No mention *Publication bias:* • Orwin's fail safe N
Lorant et al, 2003(51)	Depression : definition not limited (incl. GHQ, CES-D, CIDI, PSE< DIS< Langner,	socioeconomic inequalities	Community studies (incidence, prevalence & persistence) of adults (16+) *Location:* Not limited, studies	*Search strategy:* • 6 databases • exact search terms • reference list searches • searched for	*Data extraction:* • Guidelines given *Study quality:* • Inclusion criteria (community samples only to avoid help-seeker or referral bias),	sample size mean age % with disorder OR for lowest vs. highest SES group graphical 95%	*Effect estimates:* odds ratios (95% CI) *Synthesis method:* inverse variance weighted random effects model *Heterogeneity:* • Investigated heterogeneity by extracting contextual and methodological data from

	HOS, CIS-CV, SADS, CPIS, DPAX)		published in English, German or Spanish. Predominately studies from Europe & N. America but incl. Studies from Asia, Africa, Australasia, S. America	unpublished studies *Number of studies:* 59	sensitivity analysis removing studies of low quality (quality score covering 10 aspects calculated) *Data excess:* some studies included twice, e.g. where reported on incidence and prevalence	CI's	individual studies • Used random effects *Confounding:* • quality score included whether age and sex were adjusted for • discuss possibility of physical disease as confounder (very few studies adjusted for this) and exclude studies with older people to try and minimize this *Bias:* • Excluded studies with primary care or hospitalized patients to avoid bias *Publication bias:* • Funnel plot, plus correlation between variance and log OR. • Lack of studies from Africa and Asia
Pinquart et al, 2003(53)	Depression (Hamilton depression rating scale, CES-D, BDI, clinical interviews & other scales)	care giving	Sample of informal care givers of older adults compared with non caregivers *Location:* no mention	*Search strategy:* • 3 databases • exact search terms • hand searching journals • reference list searches *Number of studies:* 84	*Data extraction:* • Guidelines given *Study quality:* • Rated quality (representiveness of sample, sociodemographic equivalence of care givers and non care givers, quality of source) *Data excess*: Studies included in analysis twice	None	*Effect estimates:* Number care givers and non care givers, mean difference (SD units), 95% CI *Synthesis method:* Random effects model *Heterogeneity* • Homogeneity statistic Q • significant • random effects *Confounding:* • Analysis - explore care giver characteristics (nature of illness, relationship to care giver, care givers age and gender) and sample

					if more than one outcome reported		characteristics (representativeness of sample) *Bias:* • Adjusted for biases due to overestimation of population effect sizes based on method by Hedges *Publication bias:* • Differences larger in studies published in peer-reviewed journals, could suggest publication bias
E Robertson 2004(29)	Postpartum depression: cases of nonpsychotic depression with onset <1 year after childbirth: using standardized operational criteria	antenatal factors	Prospective studies (not much info) *Location:* No mention	*Search strategy:* • 19 databases *Number of studies:* ? 2 meta analyses plus other studies	*Data extraction:* No mention *Study quality:* • Inclusion criteria (prospective studies, risk factors explicitly defined & measured, *Data excess:*?	None	*Effect estimates:* Cohen's d *Synthesis method:* ?Unclear whether meta analysis actually carried out *Heterogeneity:* • Report on heterogeneity in previous M-A's *Confounding:* No mention *Bias:* • only include prospective studies *Publication bias:* No mention
Stimpson et al, 2003(109)	Post traumatic stress disorder (using recognized	Gulf war	Studies of military personnel deployed to Gulf war compared with	*Search strategy:* • 12 databases • exact search terms	*Data extraction* • Guidelines given • 2 independent reviewers *Study quality:*	OR (95% CI)	*Effect estimates:* Odds ratios (95% CI) *Synthesis method:* Inverse variance weighted random effects model *Heterogeneity:*

	standardized instruments), common mental health disorder (depression or anxiety measure using recognized standardized assessment or self reported symptoms checklist), problems relating to alcohol misuse		non-Gulf war veterans (mainly cross-sectional) *Location*: US, Canada, UK, Denmark	• reference list searches • contacted researchers • websites *Number of studies:* 20	• Rated quality (response rate, potential for selection bias & bias in measurement of outcomes, availability of data on confounders) *Data excess*: States excluded 5 studies that used repeated data, but table does include 2 papers from same study		• Chi-squared test • significant • random effects *Confounding:* • Discuss confounding in detail *Bias:* • Discuss effects of response rates being higher in GW veterans, selection bias, possibility of "healthy warrior effect", observer bias, reporting bias *Publication bias:* • Funnel plot suggests fewer non-significant findings that would be expected. • Authors state would not have much influence on findings given the presence of a number of large studies
Brewin, 2000(110)	Post traumatic stress disorder (defined consistent with DSM-III, DSM-III-R, DSM-IV)	Risk factors (14)	Not much info, incl. civilian & military samples *Location:* No mention	*Search strategy:* • 2 databases • exact search terms • hand search journals, review articles, book chapters	*Data extraction:* No mention *Study quality:* No mention *Data excess:* Different articles reporting estimates from same data were included if they provided estimates for different risk factors and checked to ensure no duplication of data	sample size age range	*Effect estimates:* average effect size, range, population size *Synthesis method:* Inverse variance weighted average effect size *Heterogeneity:* • Chi squared test. • Majority significant • explored effect of different study characteristics *Confounding:* • analysis - explored effect of

				Number of studies: 77			different sample and study characteristics on effect sizes. *Bias:* No mention *Publication bias:* • Rosenthal method used to calculate number of unpublished studies with null results that would be needed to reduce effect size to level where it was statistically marginal. • Some bias for age at trauma
Skeem et al, 2004(43)	Psychopathy defined using the total & factor scores of the PCL, PCL-R, PCL-SV	ethnicity	Primary studies of adult, black & white individuals from correctional, substance abuse & psychiatric samples *Location:* No mention	*Search strategy:* • 1 database • search terms (not exact) • reference list searches • contacting researchers *Number of studies:* 21	*Data extraction:* No mention *Study quality:* No mention *Data excess*: Only non-overlapping studies	Sample size % white % male total score difference total score d (95% CI)	*Effect estimates:* Cohen's d (SD) *Synthesis method:* Inverse variance weighted random effects models *Heterogeneity:* • Q statistic • significant • random effects • investigated outliers & effect of moderator variables. Sensitivity analyses. • Discuss heterogeneity, possible explanations given (poor generalisability of concept, or measurement) *Confounding:* • Analysis - investigated effect of age, gender & population type *Bias:* • Discuss selection bias in using clinical samples *Publication bias:* • Did not assess, as state

							inapplicable to study as: identified large sample from both published & unpublished work, argue that it's unlikely that significant effects more likely to be reported in this sort of work
Yirmiya et al, 2004(111)	Psychiatric disorder -1. clinical diagnoses, 2. self report (Cornall medical index, Leyton obsessional inventory, MOCI, BDI, STAI, MMPI, MPI, RISC) 3. experimental tasks (OSI, GRID, TAT) 3. structured clinical interviews (SADS-L, PAS)	psychiatric disorders in parents of children with autism	Studies with comparison group *Location:* No mention	*Search strategy:* • 5 databases • exact search terms *Number of studies:* 17	*Data extraction:* • Guidelines given *Study quality:* No mention *Data excess*: Studies included more than one outcome/control group. Data set was coded to ensure independence of data	number in autism group, control group effect size (d) 95% CI	*Effect estimates:* mean weighted effect size (95% CI) *Synthesis method:* mean weighted effect size *Heterogeneity:* • Q_w calculated • Some significant • examined systematic differences *Confounding:* • analysis - examined study group variables (type of comparison group, parent's gender, parent's psychiatric outcome, level of functioning among children with autism) methodological characteristics (method for diagnosing autism, method for assessing parent's psychiatric outcomes, year of publication) *Bias:* No mention *Publication bias:* No mention
Ghaemi et	Insight	Is insight in	Longitudinal	*Search*	*Data extraction:* No	Sample size	*Effect estimates:* Weighted mean

al, 2004(112)	using standardized validated insight rating scales (ITAQ, SUMD, AMDP)	mania state dependent	studies of patients with acute mania (hospitalized & outpatients) *Location:* No mention	*strategy:* • 1 database • exact search terms • hand searches of journals • reference list searches *Number of studies:* 7	mention *Study quality:* No mention *Data excess*: 1 study appears twice in tables	initial & final mean (SD) insight rating	difference (95% CI) *Synthesis method:* Random effects model using Der Simionian & Laird methods *Heterogeneity:* • Statistically significant heterogeneity observed, based on differing sample sizes, variability of data distribution, different insight scales used • random effects *Confounding:* No mention *Bias:* No mention *Publication bias*: No mention
Pinquart, 2003(113)	Depression (CES-D, BDI, Zung, Hamilton depression rating scale, GDS + others)	Care giving (impairment of care receiver, care giver impairment)	Studies focusing on type of care received impairment & level of care giver involvement *Location:* no mention	*Search strategy:* • 3 databases • exact search terms *Number of studies:* 228	*Data extraction:* No mention *Study quality:* • Discussed (mostly convenience samples) *Data excess:* Checked papers from same authors used different data sets	None	*Effect estimates:* Mean age, sample size, r, 95% CI, Fisher's z *Synthesis method:* Weighted mean (Rosenthal) *Heterogeneity:* • chi-squared statistic • significant • examined whether due to various variables *Confounding:* • Analysis - examine effect of sample procedure, type of illness, relationship of care giver *Bias:* no mention *Publication bias:* No mention
Lustman,, 1999(114)	Depression - structured or semi-	Glycemic control (Type I/II	Cross-sectional & RCT's of Type 1/Type 2	*Search strategy:* • 2 databases	*Data extraction:* • Guidelines given	Sample size, sex, p-values, Z, r, Fishers Z	*Effect estimates:* Average Z, weighted & unweighted ES, 95% CI

	structured clinical interviews, or self report instruments (MADRS, SCL-9OR-D, BDI, CES-D, POMS, Zung, HDRS, SADS, RDC)	diabetes)	diabetic patients *Location:* no mention	• reference list searches *Number of studies: 30*	*Study quality:* • Inclusion criteria (sample size) *Data excess:* One study treated as 2 independent studies in meta-analysis		*Synthesis method:* Inverse variance weighted and unweighted averages *Heterogeneity:* • chi-squared statistic • individual effect sizes statistically checked against summary measure • not significant (cross-sectional studies) *Confounding:* No mention *Bias:* no mention *Publication bias:* • Fail safe N • Possibility of some bias cannot be excluded
Haggarty et al, 2001(115)	Subsyndromal / seasonal affective disorder, based on DSM (SPAQ)	geographic location	Prevalence studies *Location:* North American studies only	*Search strategy:* No mention *Number of studies:* 7	*Data extraction:* No mention *Study quality:* • Discuss (low response rate in several studies) *Data excess*: 2 based on same sample, using different criteria	None	*Effect estimates:* Correlation *Synthesis method:* weighted (sample size) and unweighted average *Heterogeneity:* • Discuss heterogeneity in methodologies used *Confounding:* No mention *Bias:* No mention *Publication bias:* No mention
King et al, 2008 (33)	Depression and anxiety (also suicide, self harm and alcohol and drug dependenc	Sexual orientation.	Cohort, case-control and cross-sectional studies. *Location:* 7 countries including North	*Search strategy:* • 11 databases. • Details but no exact search terms given.	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Formally assessed. • Rated quality of primary studies.	All individual study results were reported.	*Effect estimates:* Relative Risk for 12 months and lifetime depression and anxiety, with 95% CIs, for all subjects and by gender. *Synthesis method:* Random effects MA model.

	e) in lesbian, gay and bisexual (LGB) people. *Diagnostic criteria:* BDI. Psychiatric disorders according to the ICD or DSM. Or scores and thresholds on standardized scales.		America, Europe and Australia. *Population:* Heterosexual and non-heterosexual people aged 12 and over, including samples from schools and colleges.	• Reference lists searched. • Contacted authors of primary papers. • Searched Google Scholar. *Number of studies:* 25 studies (28 articles).			*Heterogeneity:* Formally assessed via I^2. Found to be significant. *Confounding:* No mention. *Bias:* No mention. *Publication bias:* Mentioned briefly.
Breh & Seidler, 2007 (56)	PTSD and peri-traumatic dissociation *Diagnostic criteria:* Diagnosis of PTSD in	Peri-traumatic dissociation.	20 quasi-prospective and 16 retrospective data sets. *Location:* Unknown. *Population:* Adults 18+	*Search strategy:* • 4 databases. • Exact search terms given. • Reference lists searched.	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* No mention.	All individual effect sizes with CIs were presented.	*Effect estimates:* Overall effect size with 95% CI. *Synthesis method:* Random effects MA model, weighted averages. *Heterogeneity:* Formally assessed via the Q-statistic. Not significant.

	line with the ICD or DSM criteria or on patients displaying the full PTSD symptomatology.		confronted with one or more traumatic event.	*Number of studies:* 35 studies (36 datasets). N=6853.			*Confounding:* No mention. *Bias:* Explored bias by looking at factors. *Publication bias:* Assessed via Fail-safe method.
Cheng et al, 2008 (116)	Schizophrenia *Diagnostic criteria:* Where schizophrenia was assessed by a validated instrument.	Climate temperature.	Case-control studies conducted in the Northern hemisphere. *Location:* 5 countries. *Population:* population based studies.	*Search strategy:* • 5+ databases. • Exact search terms given. • Reference lists searched. • Contacted authors of primary papers.. *Number of studies:* 9	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Formally assessed. • Inclusion criteria included factors related to quality.	No individual study results were presented, just a summary.	*Effect estimates: separate* regression coefficients for cohort and case-control studies, with 95% CIs. *Synthesis method:* Random effects MA model (inverse variance method). *Heterogeneity:* Formally assessed via chi-squared statistic. Found to be significant. *Confounding:* Controlled for: annual mean daily temp, latitude of study site. *Bias:* No mention. *Publication bias:* No mention.
Gilbody et al, 2007 (35)	Depression *Diagnostic*	Low folate level.	Case-control, cross-sectional and cohort	*Search strategy:* • 5+	*Data extraction:* • Guidelines given. • Multiple reviewers.	ORs and 95% CIs for all studies.	*Effect estimates:* OR and 95% CI.

	criteria: Unknown.		studies. *Location:* Unknown, but includes US and Finland. *Population:* various, but includes psychiatric inpatients and men and women from population surveys.	databases. • Details given but not exact search terms given. • Reference lists searched. • Contacted authors of primary papers. *Number of studies:* 11 studies (N=15,315)	*Study quality:* No mention.		*Synthesis method:* Random effects MA model. *Heterogeneity:* Assessed formally via I^2 statistic. Found to be significant. Controlled for moderator variables. *Confounding:* Adjusted for confounders. *Bias:* Mentioned briefly. *Publication bias:* Formally assessed via the Egger test. Not detected.
Lensvelt-Mulders et al, 2008 (117)	Posttraumatic stress. *Diagnostic criteria:* Unknown.	Peri-traumatic dissociation. (looked at different types of trauma also)	Includes 17 longitudinal studies. *Location:* 16 countries. *Population:* unknown.	*Search strategy:* • 5+ databases. • Details but not exact search terms given. • Reference lists searched. • Contacted lead researchers. *Number of*	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Formally assessed.	Mean standardized effect size and CIs given for all studies.	*Effect estimates:* *Synthesis method:* random effects MA model. *Heterogeneity:* Assessed formally via the Q-statistic. *Confounding:* Controlled for: age, PD instrument, PTSD instrument, first responder samples, victim perception, time, design, sample type, study size, childhood abuse. *Bias:* No mention.

				studies: 59 (N=16,547)			*Publication bias:* Formally assessed via funnel plot and fail safe. Not detected.
Starr & Davila, 2008 (57)	Depression (and Interpersonal rejection) and Excessive Reassurance seeking. *Diagnostic criteria:* Depression CES-D, BDI, Children's Depression Inventory -> DSM-IV Rejection: no formal diagnostic criteria.	Excessive reassurance seeking.	The meta-analysis includes data from cross-sectional studies, however they also present a qualitative review of some prospective studies. *Location:* unclear. *Population:* No exclusions with regard to factors such as age and ethnicity, and samples could be inpatients, general population or mixed/unknown	*Search strategy:* • 2 databases. • Exact search terms given. • Reference lists searched. • Contacted lead researchers. • Searched unpublished data. *Number of studies:* Depression: 38 Rejection: 16	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Mentioned briefly.	All individual study results were presented.	*Effect estimates:* Weighted mean effect size (r) for ERS and Depression, and for ERS and interpersonal rejection. *Synthesis method:* Random effects MA model. *Heterogeneity:* Formally assessed via Q-statistic. Found to be significant. Controlled for moderator variables. *Confounding:* Controlled for: mean age, gender, relationship type, method of depression assessment, research group. *Bias:* Explored bias by looking at factors. *Publication bias:* Assessed via the fail safe method. Not detected.
Mendelson et al, 2008	Major depressive	Ethnicity/ race	Community based data.	*Search strategy:*	*Data extraction:* • Guidelines given.	All individual study results	*Effect estimates:* Pooled odds ratio, with 95% CIs, for major

(45)	disorder and depressive symptoms. *Diagnostic criteria:* Major depression: CIDI/DSM-II-R/DSM-IV CIDI-SF /DSM-III-R DIS/DSM-III/DSM-III-R AUDADIS-IV Depressive symptoms: CES-D, BDI, HSC, 18-item dep. Scale, 5-item scale from HRS	(Latino).	Non-clinical populations. *Location:* USA (with country of origin for the respondents including Mexico and Cuba, but mostly unknown). *Population:* Adults 15+	• 4 databases. • Exact search terms given. • Reference lists searched. *Number of studies:* 8 for lifetime depressive disorder prevalence. 23 for current depressive symptom prevalence. 31 studies in total.	• Multiple reviewers. *Study quality:* Mentioned briefly.	were presented.	depression and depressive symptoms. *Synthesis method:* Random effects MA model, Mantel Haenszel. *Heterogeneity:* Assessed via the Q-statistic. Found to be significant. *Confounding:* Mentioned briefly. *Bias:* Mentioned briefly. *Publication bias:* Assessed via funnel plot and fail safe. Not detected.

	survey.						
Swinnen & Selten, 2007 (58)	Bipolar affective (and other mood disorders) amongst migrants. *Diagnostic criteria:* ICD-9 and ICD-10	Migration.	Population based incidence studies. *Location:* UK, Netherlands, Israel, Australia, Denmark, Sweden. (6 countries in total) *Population:* Population/ census based.	*Search strategy:* • 1 database. • Details but not exact search terms given. • Reference lists searched. *Number of studies:* 14 in total (5-bipolar, 9-unspecified mood disorders)	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Mentioned briefly.	All individual study results (RRs plus 95% CIs) were given.	*Effect estimates:* Mean Relative Risk (RR), with 95% CIs, for bipolar, unspecified polarity, and any mood disorder. *Synthesis method:* Weighted averages. *Heterogeneity:* Assessed via Q-statistic. Not significant for primary analysis, but was for secondary analyses. *Confounding:* No mention. *Bias:* Explored bias by looking at factors. Inclusion and exclusion criteria included factors related to bias. *Publication bias:* Assessed via fail safe method. Not detected.
Maag & Reid, 2006 (47)	Depression in students with learning disabilities (LD). *Diagnostic*	Learning disabilities (LD)	Mostly small convenience samples. *Location:* unclear. *Population:* School children	*Search strategy:* • 1 database. • Exact search terms given. • Reference lists searched.	*Data extraction:* • Mentioned briefly. *Study quality:* • Mentioned briefly.	All individual study results were reported.	*Effect estimates:* Overall weighted mean effect size, with range and 95% CI given. *Synthesis method:* Weighted averages. *Heterogeneity:* Assessed via Q-statistic. Found to be significant.

	criteria: RADS, BDI-S, CDI.		and community based samples of students.	*Number of studies:* 14 studies, with 21 effect sizes.			*Confounding:* No mention. *Bias:* No mention. *Publication bias:* Assessed via the fail safe method. PB detected.
Stroud et al, 2008 (118)	Depression *Diagnostic criteria:* A validated assessment of depression.	Stressful life events.	Prospective and retrospective studies. *Location:* Unclear. *Population:* No restrictions – all age ranges.	*Search strategy:* • 2 databases. • Exact search terms given. • Reference lists searched. *Number of studies:* 13	*Data extraction:* • Mentioned briefly. *Study quality:* • Mentioned briefly.	All individual study results were reported.	*Effect estimates:* Mean aggregate inverse-weighted effect size (ES). *Synthesis method:* Random effects model. *Heterogeneity:* Assessed via Q-statistic. Not significant. *Confounding:* Controlled for: age, gender, and patient status. *Bias:* Mentioned briefly. *Publication bias:* No mention.
Ng & Bornstein, 2005 (119)	Anxiety disorders (AD), Including GAD, PD, OCD and others.	Dependent personality disorder (DPD). DPD measures:	Unclear, but all published studies assessing the relationship between DPD and one or more Ads.	*Search strategy:* • 2 databases. • Exact search terms given. • Reference lists	*Data extraction:* • No mention. *Study quality:* • No mention.	All individual study results were given.	*Effect estimates:* Mean effect size (r) for all anxiety and for individual ADs. *Synthesis method:* Weighted averages. *Heterogeneity:* Not mentioned.

	Diagnostic criteria: DSM-III, DSM-III-R, DSM-IV or ICD. AD measures: CAPS, YBOCS, SADS SCID	SIDP, MCMI, PDQ, ADIS, IPDE, SCID	*Location:* unknown. *Population:* Inpatients and outpatients with DPD.	searched. *Number of studies:* 53 studies with 89 effect sizes.			*Confounding:* No mention. *Bias:* No mention. *Publication bias:* Assessed via the fail safe method. Not detected.
Scott et al, 2006 (23)	Bipolar disorder (BP) *Diagnostic criteria:* BP: ICD9 OC: Lewis scale, Parnas scale, Mirdal scale, McNeil-Sjostrom scale.	Exposure to obstetric complication (OC)	Mostly small studies comparing individuals with bipolar with either healthy controls or individuals with another mental disorder. Also birth cohort and prospective longitudinal studies of incidence were discussed. *Location:*	*Search strategy:* • 5+ databases. • Details but not exact search terms given. • Reference lists searched. *Number of studies:* 22.	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Quality of primary studies was assessed. • Sensitivity analysis. • Rated quality of primary studies. • Inclusion criteria included factors related to quality.	All individual ORs and 95% CIs from the included studies were reported.	*Effect estimates:* Pooled ORs and 95% CIs for development of BP compared to healthy controls, and individuals with other mental disorders such as Schizophrenia were given. *Synthesis method:* Mantel Haenszel pooled odds ratio. *Heterogeneity:* Assessed via q-statistic. Found to be significant. Removed outliers. *Confounding:* Controlled for: age, gender of baby, maternal age, socio-economic status. *Bias:* Mentioned briefly.

			Unknown, but the UK, Netherlands and New Zealand are mentioned. *Population:* It is unclear what the age range and samples were for this analysis.				*Publication bias:* Assessed via funnel plot. PB detected.
McLeod et al, 2007 (27)	Childhood depression. *Diagnostic criteria:* Not given, merely states whether self-report or other reporting method.	Parenting style.	Mainly small cross-sectional studies with less than 300 children, although 7 studies had larger samples. *Location:* Unclear. USA and others. *Population:* Children with a mean age below 19 (aged 5-19).	*Search strategy:* • 1 database. • Exact search terms given. • Reference lists searched. • Hand searched journals. *Number of studies:* 43 articles, with data on 45 studies. (N=9746)	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Mentioned briefly.	All individual study characteristics including sample sizes and study effect sizes were given.	*Effect estimates:* Mean effect size for parenting-childhood depression. CIs not given, merely stated to not include zero. *Synthesis method:* Weighted least squares regression. *Heterogeneity:* Assessed via Q-statistic. Found to be significant. Controlled for moderator variables. *Confounding:* Adjusted for confounders. *Bias:* Explored bias by looking at factors. *Publication bias:* No mention.

Orth & Wieland, 2006 (59)	PTSD in trauma exposed adults. *Diagnostic criteria:* PTSD: Impact of event scale, Mississippi scale for combat related PTSD, PTSD symptom scale, DSM-IV.	Anger and hostility *Diagnostic criteria:* BDHI, STAXI, MAI, SCL-90.	Studies reporting on military war experience, criminal victimization, civilian war experience, technological disasters and others. *Location:* USA, Europe, Israel, Australia, Canada, South Africa, Sri Lanka. *Population:* Trauma exposed adults, 16+	*Search strategy:* • 3 databases. • Exact search terms given. *Number of studies:* 38 articles providing 39 samples.	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Mentioned briefly.	No individual study results were reported.	*Effect estimates:* Weighted mean effect size and 95% CIs for anger, hostility, and for both combined. *Synthesis method:* Random effects MA model. *Heterogeneity:* Assessed via Q-statistic. Found to be significant. *Confounding:* Controlled for: mean age, proportion of female participants, type of event, mean time since event. *Bias:* Explored bias by looking at factors. *Publication bias:* Assessed via funnel plot and fail safe method. PB not detected.
Durdle et al, 2008 (120)	Obsessive-compulsive disorder (OCD), plus OCD traits and OC personality disorder. *Diagnostic criteria:*	Pathalogical gambling.	Studies with a sample of pathological gamblers or people with OCD, that also included a comparison group of matched or unmatched controls.	*Search strategy:* • 3 databases. • Exact search terms given. • Reference lists searched. *Number of*	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • No mention.	All individual study effect sizes were given.	*Effect estimates:* Weighted effect size (Cohen's d) for pathological gambling and OCD comorbidity, OCD in first-degree relatives, OC personality disorder, and OC traits. *Synthesis method:* Weighted averages. *Heterogeneity:* Assessed via Q-Statistic. Not significant.

	DSM		*Location:* unclear. *Population:* Pathalogical gamblers and people with OCD.	*studies:* 18			*Confounding:* No mention. *Bias:* No mention. *Publication bias:* Assessed via fail safe method. PB not detected.
Woodberry et al, 2008 (60)	Schizophrenia, schizoaffective disorder and schizophreniform disorder. *Diagnostic criteria:* ICD10, DSM III, IV Plus a few studies used older versions of DSM and ICD.	Premorbid IQ level in individuals who develop schizophrenia.	Studies of people with schizophrenia that also included a comparison group. *Location:* unknown. *Population:* Children and adults who went on to develop schizophrenia.	*Search strategy:* • 1 database. • Exact search terms given. • Reference lists searched. *Number of studies:* 18	*Data extraction:* • No mention. *Study quality:* • No mention.	All individual study results were given.	*Effect estimates:* Mean weighted and unweighted effect size (Cohen's d). *Synthesis method:* Weighted averages via inverse variance weight. *Heterogeneity:* Assessed via Q-Statistic. Found to be significant. Removed outliers. *Confounding:* Controlled for: diagnostic method for schizophrenia, age at testing, type of IQ test. *Bias:* Explored bias by looking at factors. Attempted to avoid bias via inclusion and exclusion criteria. *Publication bias:* No mention.

Porter & Haslam, 2005 (61)	Mental health in general. Includes all mental health outcomes including PTSD, quality of life, depression and others. *Diagnostic criteria:* Includes STAI, HTQ, HSCL-25, quality of life scale, clinical interview and others.	Predisplacement and postdisplacement conditions for refugees. e.g. accommodation, cultural access, economic opportunity etc.	Studies of adult and child refugees from around the world that also included a non-refugee comparison group. *Location:* 20 countries. *Population:* Child and adult refugees.	*Search strategy:* 2 databases. • Exact search terms given. • Reference lists searched. • Contacted authors of primary papers. *Number of studies:* 56 reports, giving 59 independent comparisons. N=67,294. (22,221 refugees, and 45,073 non-refugees)	*Data extraction:* • Mentioned briefly. *Study quality:* • Mentioned briefly.	All individual study effect sizes with 95% CIs were given.	*Effect estimates:* Weighted mean effect size, with 95% CI. *Synthesis method:* Weighted averages. *Heterogeneity:* Assessed via Q-Statistic. Found to be significant. Controlled for moderators. *Confounding:* Mentioned briefly. *Bias:* Explored bias by looking at factors. *Publication bias:* Assessed via funnel plot and Begg-Mazumdar. PB not detected.
Chida et al, 2008 (49)	Psychosocial factors including anxiety, depression, life events, negative	Atopic disorders (such as asthma, food allergy and allergic rhinitis).	Prospective cohort studies investigating the influence of psychosocial factors on atopic	*Search strategy:* • 4 databases. • Exact search terms given. • Reference	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* • Formally assessed. • Sensitivity analysis.	All individual effect sizes (r) for the included studies were given.	*Effect estimates:* Combined effect size (r) for all psychosocial factors on atopic disorders, plus sub-group analyses for individual factors such as depression and anxiety. 95% CIs also given.

	support, daily stress and many more. *Diagnostic criteria:* GWB, DSM-IV, CES-D, DSM-III, DSM-III-R, plus many more.		disorders and the effect of atopic disorders on mental health. (Bi-directional relationship) *Location:* UK, USA, Australia, Finland, Switzerland, Sweden, New Zealand. (7 countries) *Population:* Adults, children and infants.	lists searched. • Contacted authors of primary papers. *Number of studies:* 22 articles giving 43 individual study estimates.	• Rated quality of primary studies. • Discussed quality.		*Synthesis method:* Random effects MA model (Laird method). *Heterogeneity:* Assessed via Q-Statistic. Found to be significant for the main analysis only – not for sub-group analyses. *Confounding:* Mentioned briefly. *Bias:* Explored bias by looking at factors. Inclusion/exclusion criteria were partly chosen to reduce bias. *Publication bias:* Assessed via Begg-Mazumdar. PB detected for some of the sub-group analyses. Effects on findings discussed.
Wohl & Gorwood, 2007 (30)	Schizophrenia in the offspring of older fathers. *Diagnostic criteria:* ICD 8, 9 and 10. DSM-III-R.	Paternal age (below or above 35 years).	Birth cohort and case-control studies. *Location:* unclear, but includes Australia and Sweden. *Population:* All age ranges.	*Search strategy:* • 1 database. • Details but not exact search terms given. • Reference lists searched. *Number of studies:* 8	*Data extraction:* • No mention. *Study quality:* • No mention.	Raw data and log odds ratios for all individual studies were given.	*Effect estimates:* Mean effect size (log odds ratio) with min and max values, for different age ranges were given. *Synthesis method:* Not given. *Heterogeneity:* Assessed via chi-squared. Found to be significant. Removed outliers. *Confounding:* No mention. *Bias:* No mention.

							Publication bias: No mention.
ASSOCIATION - NO META ANALYSIS							
Cuijpers, 2005(121)	Major depressive disorder using standardized psychiatric diagnostic interviews (DISC, CIDI, SCAN)	Prevalence & incidence	Studies of caregivers of dementia patients (1 community sample, selective & unrepresentative samples) *Location:* UK, USA	*Search strategy:* • 2 databases • search terms (not exact) • grey literature searched *Number of studies:* 10	*Data extraction:* No mention *Study quality:* • Inclusion criteria (only studies using standardized diagnostic interview). • Discuss (use of selective/non-representative samples, small sample sizes, only 2 studies included information on non-response) *Data excess*: 4 studies by same research group, some overlap of populations	Prevalence (95% CI) incidence rates (95% CI) relative risks % male	*Effect estimates:* None *Synthesis method:* None *Heterogeneity:* • diversity in definition of care giver, research methods used, measurement instruments, definition of depressive disorder made meta-analysis not possible *Confounding:* • matched control groups used *Bias:* • most studies used selective & non-representative samples *Publication bias:* No mention
Jorm, 2000(122)	Anxiety and Depression (CIDI, ICD-8,10, DIS, DSM-III, PSE, Clinical psychiatric interview, mini international neuropsychia	Old age	General population samples, population age range 30's to 65 and over *Location*: No mention	*Search strategy:* • 2 databases • reference list searches *Number of studies:* 28	*Data extraction:* No mention *Study quality:* No mention *Data excess:* Some studies included more than once	Age range, narrative summary of results	*Effect estimates:* None *Synthesis method:* None *Heterogeneity:* • observed *Confounding:* • Include only general population samples to avoid confounding by help-seeking or differential access to services. • Discuss marital status,

	tric interview, Hopkins symptom checklist, GHQ, SADSm RDC, Zung self rating, MMPI, Goldberg & DSSI depression scales, Beckl depression inventory, depression adjective checklist, Gurmin depression index						education, income, employment status, sex – studies that adjusted for these had more consistent results *Bias:* • discuss age bias, sample bias (exclusion of people in institutions, selective mortality of people with depressive disorders) *Publication bias:* No mention
Kuehner, 2003(123)	Major depression, dysthymia, depressive episode (DSM-III-R, ICD-10, DSM-IV)	gender	Community of primary care samples *Location:* USE, worldwide, Europe, Australia	*Search strategy:* • 2 databases • reference list searches *Number of studies:* 16	*Data extraction:* No mention *Study quality:* • Inclusion criteria (n=1000+, use of standardized diagnostic criteria, structured diagnostic interviews) *Data excess*: None	Approx sample size prevalence in men & women separately gender ratio	*Effect estimates:* none *Synthesis method:* none *Heterogeneity:* no mention *Confounding:* no mention *Bias:* • discuss recall bias, differential help seeking *Publication bias:* no mention
Van Weel-Baumga	Depression based on diagnostic	Recurrence, association with treatment	Long term follow up studies in	*Search strategy:* • 4 databases	*Data extraction:* • Guidelines given	mean age % men % recurrence	*Effect estimates:* gives range of mortality rates *Synthesis method:* Qualitative

rten et al, 2000(124)	criteria (ICHPPC-2, DSM-III, III R, IV, RDC, ICD-9, 10)		community & primary care populations, follow up at least 5 years *Location:* US, Singapore, Europe	• exact search terms • contacted researchers *Number of studies:* 8 (6 community, 2 PC)	*Study quality:* • Inclusion criteria (at least 25 patients) • Discuss (small numbers in studies, possible unrepresentativeness in 1 community study) *Data excess:* No overlapping studies	number patients at follow up	evaluation only *Heterogeneity:* • wide variety of study designs *Confounding:* no mention *Bias:* • discuss - use of screening instruments in community studies, missing data on recurrence between intervals, recall bias, FP studies: missing undetected patients, completeness of physicians notes *Publication bias:* No mention
Fryers et al, 2003(125)	Common mental disorders – anxiety & depression (GHQ-12, GHQ-30, CIS, CIDI, DIS)	Association with social position (education, income, material circumstances, employment & social class)	general population based studies of working age adults *Location:* UK, US, Netherlands, Australia	*Search strategy:* • 2 databases • reference list searches • contacting researchers *Number of studies:* 9	*Data extraction:* No mention *Study quality:* • Inclusion criteria (sample size 3000+, use of validated instruments for CMD, social position identified by explicit standard markers) *Data excess*: Includes follow up of one study	Sample size OR (95% CI)	*Effect estimates:* None *Synthesis method:* None *Heterogeneity:* • huge diversity of populations, instruments, analytic methods, presentation of results *Confounding:* • Discuss potential confounders, do not address in review *Bias:* • Discuss possibility of response bias (low response rates) *Publication bias:* No mention
Tsuchiya et al, 2003(126)	1st onset bipolar disorder (incl. bipolar	demographic factors, factors related to	Prospective studies comparing 1st onset of BPD	*Search strategy:* • 3 databases • search	*Data extraction:* No mention *Study quality:*	Sample size	*Effect estimates:* None *Synthesis method:* Qualitative narrative of studies, lack of studies made quantitative

	illness, manic depression, manic depressive illness, bipolar depression mania, manic episode & hypomania)	birth, personal, social & family backgrounds, history of medical conditions	with non-psychotic non-affective reference population *Location:* No mention	terms (not exact) • reference list searches *Number of studies:* 95	No mention *Data excess*: None		assessment difficult *Heterogeneity:* • Discuss reasons for conflicting results *Confounding:* • Discuss migration & cultural factors effecting assoc. with ethnicity *Bias:* • Discuss misdiagnosis, selection & referral bias, small sample sizes *Publication bias:* No mention
Bonde, 2008 (127)	Depression and psychosocial factors in the workplace *Diagnostic criteria:* Clinical criteria in 7 studies, symptom scales in another 7 studies. (DSM-III, DSM-V or ICD-8)	Perceived psychosocial stressors in the workplace including: mental load, monotonous work, threats, violence, social support, job overload, bullying, decision latitude, job security and others.	16 follow-up studies. *Location:* Not stated. *Population:* company and population-based studies. In total 63000 employees.	*Search strategy:* • 1 database. • Exact search terms given. • Reference lists searched. *Number of studies:* 16	*Data extraction:* • Mentioned briefly. *Study quality:* Mentioned, and inclusion/exclusion criteria included factors related to quality.	Individual ORs and CIs.	*Effect estimates:* Range and weighted averages given. *Synthesis method:* Weighted averages. *Heterogeneity:* Mentioned briefly. *Confounding:* Mentioned briefly. *Bias:* No mention. *Publication bias:* No mention.
Kim, 2008	Depression and	Key neighborhood	28 studies with varying designs	*Search strategy:*	*Data extraction:* • No mention.	All individual study results	*Effect estimates:* Narrative and qualitative summary only.

(54)	neighborhood etiologic factors. *Diagnostic criteria:* Most common the 20-item Center for Epidemiologic Studies Depression Scale. 7, 8 and 11 item versions also used. CIDI.	characteristic such as: socioeconomic status, amenities, traffic, environmental hazards, crime, illicit drug access.	including: multilevel cross-sectional analysis, multivariable prospective analysis, RCT, cross-sectional path analysis. *Location:* unknown. *Population:* Adults (18+). Population based samples.	• 2 databases. • Exact search terms given. • Reference lists searched. *Number of studies:* 28	*Study quality:* • No mention.	were shown.	*Synthesis method:* None. *Heterogeneity:* No mention. *Confounding:* Mentioned briefly. *Bias:* Explored bias by looking at factors. *Publication bias:* No mention.
Atlantis & Baker, 2008 (128)	Depression in the obese. *Diagnostic criteria:* PRIME-MD checklist -> DSM-12D Hopkins Symptom Checklist	Obesity: Mostly measured via various cutoffs on the BMI. A few studies also used waist circumference and height to weight ratio.	24 studies. 4 were prospective cohort studies. The remaining 20 were cross-sectional studies (10 from the USA). *Location:* USA, UK, Germany,	*Search strategy:* • 5+ databases. • Exact search terms given. • Reference lists searched. • Contacted lead researchers	*Data extraction:* • Guidelines given. • Multiple reviewers. *Study quality:* Formally assessed and discussed.	All individual study results were shown.	*Effect estimates:* None. Narrative review and summary only. *Synthesis method:* None. *Heterogeneity:* Mentioned briefly. *Confounding:* Mentioned briefly. *Bias:* Used rating of study quality to assess possible sources of bias. *Publication bias:* Mentioned

	Middlesex Hospital Questionnaire -> CES-D Goldberg anxiety & depression scales Geriatric Depression Scale (GDS30) 18-item BDI		Sweden, NZ, South Korea, Japan, Canada, Finland, Australia (10 countries in total) *Population:* Some studies used samples consisting of men or women only, some with mixed samples, and follow-up in one prospective study was as long as 17 years. Studies with children were excluded.	in subject area. • Hand searched journals. *Number of studies:* 24.			briefly.
Gillies & O'Brien, 2006 (129)	Severe mental illness, particularly schizophrenia. *Diagnostic criteria:*	Mental illness and interpersonal violence.	3 types of study: i) Prevalence or incidence of violent behavior in psychiatric studies.	*Search strategy:* • 4 databases. • Exact search terms given. *Number of*	*Data extraction:* • Mentioned briefly. *Study quality:* No mention.	All individual study results were shown.	*Effect estimates:* Narrative review only. *Synthesis method:* None. *Heterogeneity:* Mentioned briefly. *Confounding:* No mention.

	Unknown.		ii) Epidemiological Surveys comparing rates of violence in mentally ill and the 'well' population. iii) Offenders. *Location:* UK, Ireland, Denmark, Germany, USA, Finland, Israel, Italy, New Zealand, Australia, Canada, Sweden, Switzerland. 13 countries in total. *Population:* Mental health patients and offenders.	*studies:* 226 articles.			*Bias:* Mentioned briefly. *Publication bias:* No mention.
Vink et al, 2008 (130)	Depression and anxiety in older age.	Biological, social and psychological risk factors.	Cross-sectional and longitudinal studies on risk factors in the elderly from	*Search strategy:* • 3 databases. • Details but	*Data extraction:* • Guidelines given. • Multiple reviewers.	All individual study results were shown, but only the direction of	*Effect estimates:* Narrative review only. *Synthesis method:* None.

	Diagnostic criteria: DSM, ICD, CES-D.		community or primary care settings. *Location:* USA, Australia and Europe. (Western countries only) *Population:* Elderly people only (50 yrs and over).	not exact search terms given. • Reference lists searched. *Number of studies:* 80 in total. 8 anxiety, 63 depression, and 9 both.	*Study quality:* No mention.	each effect, not the effect sizes themselves.	*Heterogeneity:* Mentioned briefly. *Confounding:* No mention. *Bias:* No mention. *Publication bias:* No mention.

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