Supplementary file

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Supplementary Table 1. Full search strategy in electronic databases

Medline/ Ovid
((life expectancy or lifespan or years of potential life lost or years of life lost or life years or life years lost or YPLL or LYL or YLL) and (mental disorder or mental illness or schizophrenia or psychotic or mood disorder or affective disorder or bipolar or manic or depressive or dysthymia or anxiety or phobia or panic or post-traumatic stress disorder or obsessive compulsive or OCD or eating disorder or anorexia nervosa or bulimia nervosa or binge eating or personality disorder or attention-deficit hyperactivity disorders or ADHD or tic disorder or autism or Asperger or dementia or Alzheimer's disease or substance or drug or alcohol)) AND cohort study.mp. or *Cohort Studies/ [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] limit to (full text and human) 168
EMBASE
((life expectancy or lifespan or years of potential life lost or years of life lost or life years or life years lost or YPLL or LYL or YLL) and (mental disorder or mental illness or schizophrenia or psychotic or mood disorder or affective disorder or bipolar or manic or depressive or dysthymia or anxiety or phobia or panic or post-traumatic stress disorder or obsessive compulsive or OCD or eating disorder or anorexia nervosa or bulimia nervosa or binge eating or personality disorder or attention-deficit hyperactivity disorders or ADHD or tic disorder or autism or Asperger or dementia or Alzheimer's disease or substance or drug or alcohol)) AND cohort study.mp. or *Cohort Studies/ limit to (full text and human) 423
PsychINFO
(life expectancy OR lifespan OR years of potential life lost OR years of life lost OR life years OR life years lost OR YPLL OR LYL OR YLL) AND (mental disorder OR mental illness OR schizophrenia OR psychotic OR mood disorder OR affective disorder OR bipolar OR manic OR depressive OR dysthymia OR anxiety OR phobia OR panic OR post-traumatic stress disorder OR obsessive compulsive OR OCD OR eating disorder OR anorexia nervosa OR bulimia nervosa OR binge eating OR personality disorder OR attention-deficit hyperactivity disorders OR ADHD OR tic disorder OR autism OR Asperger or dementia or Alzheimer's disease OR substance OR drug OR alcohol) AND (cohort study) Filter/ limit Journal, Journal article, peer reviewed journal, follow-up study, longitudinal study, prospective study, retrospective study 3051 3504
Web of Science
((life expectancy OR lifespan OR years of potential life lost OR years of life lost OR life years OR life years lost OR YPLL OR LYL OR YLL)) AND ((mental disorder OR mental illness) OR (schizophrenia OR psychotic OR mood disorder OR affective disorder OR bipolar OR manic OR depressive OR dysthymia OR anxiety OR phobia OR panic OR post-traumatic stress disorder OR obsessive compulsive OR OCD OR eating disorder OR anorexia nervosa OR bulimia nervosa OR binge eating OR personality disorder OR attention-deficit hyperactivity disorders OR ADHD OR tic disorder OR autism OR Asperger OR dementia OR Alzheimer's disease OR substance OR drug OR alcohol)) AND (cohort study OR follow up) Apply filter (articles) 28195
Cochran database
((life expectancy OR lifespan OR years of potential life lost OR years of life lost OR life years OR life years lost OR YPLL OR LYL OR YLL)) AND ((mental disorder OR mental illness) OR (schizophrenia OR psychotic OR mood disorder OR affective disorder OR bipolar OR manic OR depressive OR dysthymia OR anxiety OR phobia OR panic OR post-traumatic stress disorder OR obsessive compulsive OR OCD OR eating disorder OR anorexia nervosa OR bulimia nervosa OR binge eating OR personality disorder OR attention-deficit hyperactivity disorders OR ADHD OR tic disorder OR autism OR Asperger OR dementia OR Alzheimer's disease OR substance OR drug OR alcohol)) AND (cohort study OR follow up) 3532

Supplementary Table 2. List of studies excluded after full text screening in alphabetical order by first author's last name

Authors	Reasons for exclusion
Akechi [1]	Survival not measured in life expectancy or YPLL
Aldridge [2]	Review/ meta-analysis
Almeida [3]	Survival not measured in life expectancy or YPLL
Almeida [4]	Survival not measured in life expectancy or YPLL
Alonso [5]	Survival not measured in life expectancy or YPLL
An [6]	Survival not measured in life expectancy or YPLL
Andersch [7]	Survival not measured in life expectancy or YPLL
Angst [8]	Survival not measured in life expectancy or YPLL
Archer [9]	Survival not measured in life expectancy or YPLL
Atlantis [10]	Survival not measured in life expectancy or YPLL
Auger [11]	No mental disorder
Baandrup [12]	Survival not measured in life expectancy or YPLL
Bahji [13]	Review/ meta-analysis
Barkley [14]	Survival not measured in life expectancy or YPLL
Baxter [15]	No relevant outcomes
Beijer [16]	Subpopulation
Beil [17]	No relevant outcomes
Bennett [18]	No mental disorder
Benraad [19]	Survival not measured in life expectancy or YPLL
Berardi [20]	Survival not measured in life expectancy or YPLL
Biederman [21]	No relevant outcomes
Boden [22]	Survival not measured in life expectancy or YPLL
Borjesson-Hanson [23]	Survival not measured in life expectancy or YPLL
Boulware [24]	No relevant outcomes
Bowersox [25]	Survival not measured in life expectancy or YPLL
Britton [26]	Survival not measured in life expectancy or YPLL
Brodaty [27]	Review/ meta-analysis
Brück [28]	Survival not measured in life expectancy or YPLL
Butler [29]	Survival not measured in life expectancy or YPLL
Byers [30]	Survival not measured in life expectancy or YPLL
Cabello [31]	Survival not measured in life expectancy or YPLL
Calabrese [32]	No relevant outcomes
Callahan [33]	Survival not measured in life expectancy or YPLL
Capasso [34]	Survival not measured in life expectancy or YPLL
Carpiniello [35]	No relevant outcomes

Castillo-Carniglia [36]	No mental disorder
Catalá-López [37]	Review/ meta-analysis
Chan [38]	Review/ meta-analysis
Chan [39]	Survival not measured in life expectancy or YPLL
Chang [40]	Survival not measured in life expectancy or YPLL
Charlson [41]	Secondary analysis
Chen [42]	Survival not measured in life expectancy or YPLL
Cheng [43]	Survival not measured in life expectancy or YPLL
China Kadoorie Biobank Collaborative Group [44]	No mental disorder
Coleman [45]	Subpopulation
Collins [46]	Survival not measured in life expectancy or YPLL
Conner [47]	Subpopulation
Copeland [48]	Survival not measured in life expectancy or YPLL
Correll [49]	No relevant outcomes
Cui [50]	Survival not measured in life expectancy or YPLL
Davstad [51]	Survival not measured in life expectancy or YPLL
de la Camara [52]	No relevant outcomes
de Mooij [53]	Survival not measured in life expectancy or YPLL
Degenhardt [54]	Survival not measured in life expectancy or YPLL
DeLorenze [55]	Subpopulation
Diallo [56]	Survival not measured in life expectancy or YPLL
Díaz-Venegas [57]	No mental disorder
Diniz [58]	Survival not measured in life expectancy or YPLL
Djernes [59]	Survival not measured in life expectancy or YPLL
Doll [60]	No mental disorder
Drageset [61]	Subpopulation
Eaton [62]	Survival not measured in life expectancy or YPLL
Fantin [63]	No mental disorder
Farchi [64]	No mental disorder
Finney [65]	No relevant outcomes
Flint [66]	No relevant outcomes
Fok [67]	No relevant outcomes
Foreman [68]	No mental disorder
Fortes [69]	No mental disorder
Fredman [70]	Survival not measured in life expectancy or YPLL
Fridell [71]	Survival not measured in life expectancy or YPLL
Fridell [72]	Survival not measured in life expectancy or YPLL
Frojdh [73]	Survival not measured in life expectancy or YPLL
Furiak [74]	No relevant outcomes

Gale [75]	Survival not measured in life expectancy or YPLL
Gallo [76]	Survival not measured in life expectancy or YPLL
Ganguli [77]	Survival not measured in life expectancy or YPLL
Geerlings [78]	Survival not measured in life expectancy or YPLL
Georgakis [79]	Survival not measured in life expectancy or YPLL
Girardi [80]	Survival not measured in life expectancy or YPLL
Goorden [81]	No relevant outcomes
Goorden [82]	No relevant outcomes
Greenfield [83]	No relevant outcomes
Grisales-Romero [84]	No relevant outcomes
Gual [85]	No relevant outcomes
Hagen [86]	No relevant outcomes
Halme [87]	Survival not measured in life expectancy or YPLL
Harris [88]	Survival not measured in life expectancy or YPLL
Harrison-Felix [89]	No mental disorder
Helzner [90]	Survival not measured in life expectancy or YPLL
Ho [91]	Survival not measured in life expectancy or YPLL
Holahan [92]	No mental disorder
Holwerda [93]	Survival not measured in life expectancy or YPLL
Hser [94]	Survival not measured in life expectancy or YPLL
Hughes [95]	Survival not measured in life expectancy or YPLL
Hulse [96]	Survival not measured in life expectancy or YPLL
Iulita [97]	Subpopulation
John [98]	Survival not measured in life expectancy or YPLL
John [99]	Survival not measured in life expectancy or YPLL
Johnson [100]	Survival not measured in life expectancy or YPLL
Johnson [101]	No mental disorder
Jun [102]	Survival not measured in life expectancy or YPLL
Kåberg [103]	Survival not measured in life expectancy or YPLL
Katz [104]	Review/ meta-analysis
Keller [105]	No relevant outcomes
Kendler [106]	Survival not measured in life expectancy or YPLL
Kendler [107]	Survival not measured in life expectancy or YPLL
Keshaviah [108]	Review/ meta-analysis
Kivela [109]	No relevant outcomes
Kiviniemi [110]	Survival not measured in life expectancy or YPLL
Kohler [111]	Survival not measured in life expectancy or YPLL
Kouppis [112]	Survival not measured in life expectancy or YPLL
Kugathasan [113]	Survival not measured in life expectancy or YPLL

Kugathasan [114]	Survival not measured in life expectancy or YPLL
Ladwig [115]	Subpopulation
Lahti [116]	Survival not measured in life expectancy or YPLL
Larney [117]	Review/ meta-analysis
Laursen [118]	Survival not measured in life expectancy or YPLL
Lawes [119]	Survival not measured in life expectancy or YPLL
Lee [120]	No mental disorder
Lee [121]	Conference abstract
Lee [122]	Review/ meta-analysis
Levola [123]	Survival not measured in life expectancy or YPLL
Li [124]	Survival not measured in life expectancy or YPLL
Lin [125]	No relevant outcomes
Liu [126]	No mental disorder
Lomholt [127]	Survival not measured in life expectancy or YPLL
London [128]	Survival not measured in life expectancy or YPLL
Lu [129]	No mental disorder
Lurie [130]	Survival not measured in life expectancy or YPLL
Manderbacka [131]	No mental disorder
Maniecka-Bryla [132]	No mental disorder
Markkula [133]	Survival not measured in life expectancy or YPLL
Martikainen [134]	No mental disorder
Maughan [135]	No mental disorder
Meesters [136]	Survival not measured in life expectancy or YPLL
Meguro [137]	No relevant outcomes
Meier [138]	Survival not measured in life expectancy or YPLL
Meier [139]	No relevant outcomes
MollerMadsen [140]	Survival not measured in life expectancy or YPLL
Moreno [141]	No mental disorder
Morris [142]	Survival not measured in life expectancy or YPLL
Musgrove [143]	Survival not measured in life expectancy or YPLL
Nakaya [144]	No mental disorder
Nielsen [145]	Survival not measured in life expectancy or YPLL
Nielsen [146]	Subpopulation
Nordentoft [147]	Review/ meta-analysis
Nyberg [148]	No mental disorder
Oh [149]	Survival not measured in life expectancy or YPLL
Ojansuu [150]	Survival not measured in life expectancy or YPLL
Oud [151]	Survival not measured in life expectancy or YPLL
Palsson [152]	Survival not measured in life expectancy or YPLL

Parmelee [153]	Subpopulation
Pedram [154]	Survival not measured in life expectancy or YPLL
Penninx [155]	Survival not measured in life expectancy or YPLL
Penninx [156]	Survival not measured in life expectancy or YPLL
Peritogiannis [157]	Review/ meta-analysis
Pitkanen [158]	Survival not measured in life expectancy or YPLL
Plana-Ripoll [159]	Survival not measured in life expectancy or YPLL
Ploubidis [160]	Survival not measured in life expectancy or YPLL
Pulska [161]	Survival not measured in life expectancy or YPLL
Qian [162]	Subpopulation
Ramadas [163]	No mental disorder
Ramsey [164]	Survival not measured in life expectancy or YPLL
Ran [165]	Survival not measured in life expectancy or YPLL
Rehm [166]	Review/ meta-analysis
Rehm [167]	No mental disorder
Rehm [168]	Review/ meta-analysis
Reynolds [169]	No mental disorder
Ribe [170]	Survival not measured in life expectancy or YPLL
Richmond-Rakerd [171]	Survival not measured in life expectancy or YPLL
Rorsman [172]	Survival not measured in life expectancy or YPLL
Rossow [173]	Survival not measured in life expectancy or YPLL
Rundberg [174]	No mental disorder
Sauvaget [175]	Full text not available
Schiavone [176]	Survival not measured in life expectancy or YPLL
Schoevers [177]	Survival not measured in life expectancy or YPLL
Schulz [178]	Survival not measured in life expectancy or YPLL
Schuurmans [179]	No relevant outcomes
Scragg [180]	No mental disorder
Sharma [181]	No relevant outcomes
Sherrington [182]	No relevant outcomes
Shim [183]	Survival not measured in life expectancy or YPLL
Siskind [184]	No relevant outcomes
Smith DaWalt [185]	No relevant outcomes
Smoller [186]	Subpopulation
Sommer [187]	Survival not measured in life expectancy or YPLL
Starace [188]	Survival not measured in life expectancy or YPLL
Staudt Hansen [189]	Survival not measured in life expectancy or YPLL
Steingrimsson [190]	Survival not measured in life expectancy or YPLL
Steingrimsson [191]	No relevant outcomes

Stewart [192]	Survival not measured in life expectancy or YPLL
Stockwell [193]	Review/ meta-analysis
Strömberg [194]	Survival not measured in life expectancy or YPLL
Sun [195]	No mental disorder
Surtees [196]	Survival not measured in life expectancy or YPLL
Suzuki [197]	Subpopulation
Tamakoshi [198]	No mental disorder
Tanskanen [199]	Survival not measured in life expectancy or YPLL
Thanh [200]	No mental disorder
Thomas [201]	No mental disorder
Tomkins [202]	No mental disorder
Tournier [203]	Subpopulation
Trivedi [204]	Survival not measured in life expectancy or YPLL
Tuot [205]	Survival not measured in life expectancy or YPLL
Van Baelen [206]	Survival not measured in life expectancy or YPLL
van den Berg [207]	Survival not measured in life expectancy or YPLL
Van Weel-Baumgarten [208]	No relevant outcomes
Vázquez-Reyes [209]	Survival not measured in life expectancy or YPLL
Vilalta-Franch [210]	Survival not measured in life expectancy or YPLL
Vinkers [211]	Survival not measured in life expectancy or YPLL
Vos [212]	No relevant outcomes
Voshaar [213]	Survival not measured in life expectancy or YPLL
Walker [214]	Review/ meta-analysis
Wang [215]	No mental disorder
Warshaw [216]	No relevant outcomes
Wattmo [217]	No relevant outcomes
Wei [218]	Survival not measured in life expectancy or YPLL
Wewalka [219]	Subpopulation
Whiteford [220]	Secondary analysis
Whooley [221]	Survival not measured in life expectancy or YPLL
Woodward [222]	No relevant outcomes
Woolf [223]	No mental disorder
Wu [224]	Survival not measured in life expectancy or YPLL
Xie [225]	No mental disorder
Zabransky [226]	Survival not measured in life expectancy or YPLL
Zhang [227]	Survival not measured in life expectancy or YPLL
Zivin [228]	Survival not measured in life expectancy or YPLL
Zubenko [229]	Survival not measured in life expectancy or YPLL
Zwas [230]	Survival not measured in life expectancy or YPLL

References for Supplementary Table 2 (excluded studies)

1. Akechi T, Iwasaki M, Uchitomi Y, Tsugane S. Alcohol consumption and suicide among middle-aged men in Japan. *Br J Psychiatry* 2006; 188: 231–6.
2. Aldridge RW, Story A, Hwang SW, et al. Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis. *Lancet* 2018; 391: 241–50.
3. Almeida OP, Alfonso H, Hankey GJ, Flicker L. Depression, antidepressant use and mortality in later life: the Health In Men Study. *PLoS One* 2010; 5: e11266.
4. Almeida OP, Hankey GJ, Yeap BB, Golledge J, Norman PE, Flicker L. Depression, frailty, and all-cause mortality: a cohort study of men older than 75 years. *J Am Med Dir Assoc* 2015; 16: 296–300.
5. Alonso P, Segalàs C, Real E, et al. Suicide in patients treated for obsessive-compulsive disorder: a prospective follow-up study. *J Affect Disord* 2010; 124: 300–8.
6. An H, Yang HW, Oh DJ, et al. Mood disorders increase mortality mainly through dementia: A community-based prospective cohort study. *Aust N Z J Psychiatry*. 2022; 56(8): 1017–24.
7. Andersch S, Hanson L, Hallstrom T. Panic disorder: a five-year follow-up study in 52 patients. *Eur J Psychiatry* 1997; 11: 145–55.
8. Angst J, Hengartner MP, Gamma A, von Zerssen D, Angst F. Mortality of 403 patients with mood disorders 48 to 52 years after their psychiatric hospitalisation. *Eur Arch Psychiatry Clin Neurosci* 2013; 263: 425–34.
9. Archer G, Kuh D, Hotopf M, Stafford M, Richards M. Association Between Lifetime Affective Symptoms and Premature Mortality. *JAMA Psychiatry* 2020; 77(8): 806–13.
10. Atlantis E, Grayson DA, Browning C, Sims J, Kendig H. Cardiovascular disease and death associated with depression and antidepressants in the Melbourne Longitudinal Studies on Healthy Ageing (MELSHA). *Int J Geriatr Psychiatry* 2011; 26: 341–50.
11. Auger N, Feuillet P, Martel S, Lo E, Barry AD, Harper S. Mortality inequality in populations with equal life expectancy: Arriaga's decomposition method in SAS, Stata, and Excel. *Ann Epidemiol* 2014; 24: 575–80.e1.
12. Baandrup L, Gasse C, Jensen VD, et al. Antipsychotic polypharmacy and risk of death from natural causes in patients with schizophrenia: a population-based nested case-control study. *J Clin Psychiatry* 2010; 71: 103–8.
13. Bahji A, Cheng B, Gray S, Stuart H. Mortality among people with opioid use disorder: a systematic review and meta-analysis. *J Addict Med* 2020; 14: e118–32.
14. Barkley RA, Smith KM, Fischer M. ADHD risk genes involved in dopamine signaling and metabolism are associated with reduced estimated life expectancy at young adult follow-up in hyperactive and control children. *Am J Med Genet B Neuropsychiatr Genet* 2019; 180: 175–85.
15. Baxter D, Appleby L. Case register study of suicide risk in mental disorders. *Br J Psychiatry* 1999; 175: 322–26.
16. Beijer U, Andréasson A, Agren G, Fugelstad A. Mortality, mental disorders and addiction: a 5-year follow-up of 82 homeless men in Stockholm. *Nord J Psychiatry* 2007; 61: 363–8.
17. Beil H, Beeber LS, Schwartz TA, Lewis G. Cost-effectiveness of alternative treatments for depression in low-income women. *J Ment Health Policy Econ* 2013; 16: 55–65.
18. Bennett JE, Pearson-Stuttard J, Kontis V, Capewell S, Wolfe I, Ezzati M. Contributions of diseases and injuries to widening life expectancy inequalities in England from 2001 to 2016: a population-based analysis of vital registration data. *Lancet Public Health*. 2018; 3: e586–97.
19. Benraad CEM, Haaksma ML, Karlietis MHJ, et al. Frailty as a predictor of mortality in older adults within 5 years of psychiatric admission. *Int J Geriatr Psychiatry* 2020; 35(6): 617–25.
20. Berardi D, Stivanello E, Chierzi F, et al. Mortality in mental health patients of the Emilia-Romagna region of Italy: A registry-based study. *Psychiatry Res* 2021; 296: 113702.
21. Biederman J. Attention-deficit/hyperactivity disorder: a life-span perspective. *J Clin Psychiatry* 1998; 59: 4-16.
22. Boden JM, Fergusson DM, Horwood LJ. Anxiety disorders and suicidal behaviours in adolescence and young adulthood: findings from a longitudinal study. *Psychol Med* 2007; 37: 431–40.
23. Börjesson-Hanson A, Gustafson D, Skoog I. Five-year mortality in relation to dementia and cognitive function in 95-year-olds. *Neurology* 2007; 69: 2069–75.
24. Boulware LE, Liu Y, Fink NE, et al. Temporal relation among depression symptoms, cardiovascular disease events, and mortality in end-stage renal disease: contribution of reverse causality. *Clin J Am Soc Nephrol* 2006; 1: 496–504.

25. Bowersox NW, Kilbourne AM, Abraham KM, et al. Cause-specific mortality among Veterans with serious mental illness lost to follow-up. *Gen Hosp Psychiatry* 2012; 34: 651–53.
26. Britton A, McPherson K. Mortality in England and Wales attributable to current alcohol consumption. *J Epidemiol Community Health* 2001; 55: 383–8.
27. Brodaty H, Seeher K, Gibson L. Dementia time to death: a systematic literature review on survival time and years of life lost in people with dementia. *Int Psychogeriatr* 2012; 24: 1034–45.
28. Brück CC, Wolters FJ, Ikram MA, de Kok IMCM. Projections of costs and quality adjusted life years lost due to dementia from 2020 to 2050: a population-based microsimulation study. *Alzheimers Dement*. 2023; 10.1002/alz.13019.
29. Butler R, Orrell M, Ukoumunne OC, Bebbington P. Life events and survival in dementia: a 5-year follow-up study. *Aust N Z J Psychiatry* 2004; 38: 702–5.
30. Byers AL, Covinsky KE, Barnes DE, Yaffe K. Dysthymia and depression increase risk of dementia and mortality among older veterans. *Am J Geriatr Psychiatry* 2012; 20: 664–72.
31. Cabello M, Borges G, Lara E, et al. The relationship between all-cause mortality and depression in different gender and age groups of the Spanish population. *J Affect Disord* 2020; 266: 424–8.
32. Calabrese JR, Prescott M, Tamburrino M, et al. PTSD comorbidity and suicidal ideation associated with PTSD within the Ohio Army National Guard. *J Clin Psychiatry* 2011; 72: 1072–8.
33. Callahan CM, Wolinsky FD, Stump TE, Nienaber NA, Hui SL, Tierney WM. Mortality, symptoms, and functional impairment in late-life depression. *J Gen Intern Med* 1998; 13: 746–52.
34. Capasso RM, Lineberry TW, Bostwick JM, Decker PA, St Sauver J. Mortality in schizophrenia and schizoaffective disorder: an Olmsted County, Minnesota cohort: 1950-2005. *Schizophr Res* 2008; 98: 287–94.
35. Carpiniello B, Baita A, Carta MG, et al. Clinical and psychosocial outcome of patients affected by panic disorder with or without agoraphobia: results from a naturalistic follow-up study. *Eur Psychiatry* 2002; 17: 394–8.
36. Castillo-Carniglia A, Kaufman JS, Pino P. Alcohol-attributable mortality and years of potential life lost in Chile in 2009. *Alcohol Alcohol* 2013; 48: 729–36.
37. Catalá-López F, Hutton B, Page MJ, et al. Mortality in persons with autism spectrum disorder or attention-deficit/hyperactivity disorder: a systematic review and meta-analysis. *JAMA Pediatr* 2022; 176: e216401.
38. Chan JKN, Tong CHY, Wong CSM, Chen EYH, Chang WC. Life expectancy and years of potential life lost in bipolar disorder: systematic review and meta-analysis. *Br J Psychiatry* 2022; 221: 567–76.
39. Chan JKN, Wong CSM, Or PCF, Chen EYH, Chang WC. Diabetes complication burden and patterns and risk of mortality in people with schizophrenia and diabetes: A population-based cohort study with 16-year follow-up. *Eur Neuropsychopharmacol* 2021; 53: 79–88.
40. Chang HJ, Lin HC, Lee HC, Lin CC, Pfeiffer S. Risk of mortality among depressed younger patients: a five-year follow-up study. *J Affect Disord* 2009; 113: 255–62.
41. Charlson FJ, Baxter AJ, Dua T, Degenhardt L, Whiteford HA, Vos T. Excess mortality from mental, neurological, and substance use disorders in the Global Burden of Disease Study 2010. In: Patel V, Chisholm D, Dua T, Laxminarayan R, Medina-Mora ME, eds. Mental, Neurological, and Substance Use Disorders: Disease Control Priorities, Third Edition (Volume 4). Washington (DC): The International Bank for Reconstruction and Development / The World Bank; March 14, 2016.
42. Chen PH, Tsai SY, Pan CH, et al. Incidence and risk factors of sudden cardiac death in bipolar disorder across the lifespan. *J Affect Disord* 2020; 274: 210–17.
43. Cheng HT, Ho MC, Hung KY. Affective and cognitive rather than somatic symptoms of depression predict 3-year mortality in patients on chronic hemodialysis. *Sci Rep* 2018; 8: 5868.
44. China Kadoorie Biobank Collaborative Group. Healthy lifestyle and life expectancy free of major chronic diseases at age 40 in China. *Nat Hum Behav*. 2023; 10.1038/s41562-023-01624-7.
45. Coleman SM, Katon W, Lin E, Von Korff M. Depression and death in diabetes; 10-year follow-up of all-cause and cause-specific mortality in a diabetic cohort. *Psychosomatics* 2013; 54: 428–36.
46. Collins AL, Glei DA, Goldman N. The role of life satisfaction and depressive symptoms in all-cause mortality. *Psychol Aging* 2009; 24: 696–702.
47. Conner KR, McCarthy MD, Bajorska A, Caine ED, Tu XM, Knox KL. Mood, anxiety, and substance-use disorders and suicide risk in a military population cohort. *Suicide Life Threat Behav* 2012; 42: 699–708.
48. Copeland L, Robertson J, McKenzie J, et al. Premature mortality in Scottish injecting drug users: a life-history approach. *Scott Med J* 2012; 57: 38–42.

49. Correll CU, Bitter I, Hoti F, et al. Factors and their weight in reducing life expectancy in schizophrenia. *Schizophr Res*. 2022; 250: 67-75.
50. Cui Y, Zheng W, Steinwandel M, et al. Associations of depressive symptoms with all-cause and cause-specific mortality by race in a population of low socioeconomic status: a report from the Southern Community Cohort Study. *Am J Epidemiol* 2021; 190: 562–75.
51. Davstad I, Allebeck P, Leifman A, Stenbacka M, Romelsjö A. Self-reported drug use and mortality among a nationwide sample of Swedish conscripts - a 35-year follow-up. *Drug Alcohol Depend* 2011; 118: 383–90.
52. de la Camara C, Saz P, Lopez-Anton R, Ventura T, Dia JL, Lobo A. Depression in the elder community: II. Outcome in a 4.5 years follow-up. *Eur J Psychiat* 2008; 22: 141–50.
53. de Mooij LD, Kikkert M, Theunissen J, et al. Dying too soon: excess mortality in severe mental illness. *Front Psychiatry* 2019; 10: 855.
54. Degenhardt L, Larney S, Randall D, Burns L, Hall W. Causes of death in a cohort treated for opioid dependence between 1985 and 2005. *Addiction* 2014; 109: 90–9.
55. DeLorenze GN, Satre DD, Quesenberry CP, Tsai AL, Weisner CM. Mortality after diagnosis of psychiatric disorders and co-occurring substance use disorders among HIV-infected patients. *AIDS Patient Care STDS* 2010; 24: 705–12.
56. Diallo FB, Pelletier É, Vasiliadis HM, et al. Morbidities and mortality of diagnosed attention deficit hyperactivity disorder (ADHD) over the youth lifespan: a population-based retrospective cohort study. *Int J Methods Psychiatr Res*. 2022; 31: e1903.
57. Díaz-Venegas C, Schneider DC, Myrskylä M, Mehta NK. Life expectancy with and without cognitive impairment by diabetes status among older Americans. *PLoS One* 2017; 12: e0190488.
58. Diniz BS, Reynolds CF 3rd, Butters MA, et al. The effect of gender, age, and symptom severity in late-life depression on the risk of all-cause mortality: the Bambuí Cohort Study of Aging. *Depress Anxiety* 2014; 31: 787–95.
59. Djernes JK, Gulmann NC, Foldager L, Olesen F, Munk-Jørgensen P. 13 year follow up of morbidity, mortality and use of health services among elderly depressed patients and general elderly populations. *Aust N Z J Psychiatry* 2011; 45: 654–62.
60. Doll R, Peto R, Hall E, Wheatley K, Gray R. Mortality in relation to consumption of alcohol: 13 years' observations on male British doctors. *BMJ* 1994; 309: 911–8.
61. Drageset J, Eide GE, Ranhoff AH. Anxiety and depression and mortality among cognitively intact nursing home residents with and without a cancer diagnosis: a 5-year follow-up study. *Cancer Nurs* 2013; 36: E68–74.
62. Eaton WW, Roth KB, Bruce M, et al. The relationship of mental and behavioral disorders to all-cause mortality in a 27-year follow-up of 4 epidemiologic catchment area samples. *Am J Epidemiol* 2013; 178: 1366–77.
63. Fantin R, Delpierre C, Barboza-Solís C. Health inequalities in cause-specific mortality in Costa Rica: a population-based cohort study. *Rev Saude Publica*. 2023; 57: 3.
64. Farchi G, Fidanza F, Giampaoli S, Mariotti S, Menotti A. Alcohol and survival in the Italian rural cohorts of the Seven Countries Study. *Int J Epidemiol* 2000; 29: 667–71.
65. Finney JW, Moos RH. The long-term course of treated alcoholism: II. Predictors and correlates of 10-year functioning and mortality. *J Stud Alcohol* 1992; 53: 142–53.
66. Flint AJ. Epidemiology and comorbidity of anxiety disorders in later life: implications for treatment. *Clin Neurosci* 1997; 4: 31–6.
67. Fok ML, Stewart R, Hayes RD, Moran P. Predictors of natural and unnatural mortality among patients with personality disorder: evidence from a large UK case register. *PLoS One* 2014; 9: e100979.
68. Foreman KJ, Marquez N, Dolgert A, et al. Forecasting life expectancy, years of life lost, and all-cause and cause-specific mortality for 250 causes of death: reference and alternative scenarios for 2016-40 for 195 countries and territories. *Lancet* 2018; 392: 2052–90.
69. Fortes C, Mastroeni S, Alessandra S, et al. The combination of depressive symptoms and smoking shorten life expectancy among the aged. *Int Psychogeriatr* 2012; 24: 624–30.
70. Fredman L, Magaziner J, Hebel JR, Hawkes W, Zimmerman SI. Depressive symptoms and 6-year mortality among elderly community-dwelling women. *Epidemiology* 1999; 10: 54–9.
71. Fridell M, Bäckström M, Hesse M, Krantz P, Perrin S, Nyhlén A. Prediction of psychiatric comorbidity on premature death in a cohort of patients with substance use disorders: a 42-year follow-up. *BMC Psychiatry* 2019; 19: 150.

72. Fridell M, Hesse M. Psychiatric severity and mortality in substance abusers: a 15-year follow-up of drug users. *Addict Behav* 2006; 31: 559–65.
73. Fröjdh K, Håkansson A, Karlsson I, Molarius A. Deceased, disabled or depressed--a population-based 6-year follow-up study of elderly people with depression. *Soc Psychiatry Psychiatr Epidemiol* 2003; 38: 557–62.
74. Furiak NM, Ascher-Svanum H, Klein RW, et al. Cost-effectiveness of olanzapine long-acting injection in the treatment of patients with schizophrenia in the United States: a micro-simulation economic decision model. *Curr Med Res Opin* 2011; 27: 713–30.
75. Gale CR, Batty GD, Osborn DP, Tynelius P, Whitley E, Rasmussen F. Association of mental disorders in early adulthood and later psychiatric hospital admissions and mortality in a cohort study of more than 1 million men. *Arch Gen Psychiatry* 2012; 69: 823–31.
76. Gallo JJ, Bogner HR, Morales KH, Post EP, Ten Have T, Bruce ML. Depression, cardiovascular disease, diabetes, and two-year mortality among older, primary-care patients. *Am J Geriatr Psychiatry* 2005; 13: 748–55.
77. Ganguli M, Dodge HH, Shen C, Pandav RS, DeKosky ST. Alzheimer disease and mortality: a 15-year epidemiological study. *Arch Neurol* 2005; 62: 779–84.
78. Geerlings SW, Beekman AT, Deeg DJ, Twisk JW, Van Tilburg W. Duration and severity of depression predict mortality in older adults in the community. *Psychol Med* 2002; 32: 609–18.
79. Georgakis MK, Papadopoulos FC, Protogerou AD, et al. Comorbidity of cognitive impairment and late-life depression increase mortality: results from a cohort of community-dwelling elderly individuals in rural Greece. *J Geriatr Psychiatry Neurol* 2016; 29: 195–204.
80. Girardi P, Schievano E, Fedeli U, Braggion M, Nuti M, Amaddeo F. Causes of mortality in a large population-based cohort of psychiatric patients in Southern Europe. *J Psychiatr Res* 2021; 136: 167–72.
81. Goorden M, Muntingh A, van Marwijk H, et al. Cost utility analysis of a collaborative stepped care intervention for panic and generalized anxiety disorders in primary care. *J Psychosom Res* 2014; 77: 57–63.
82. Goorden M, Vlasveld MC, Anema JR, et al. Cost-utility analysis of a collaborative care intervention for major depressive disorder in an occupational healthcare setting. *J Occup Rehabil* 2014; 24: 555–62.
83. Greenfield TK, Rehm J, Rogers JD. Effects of depression and social integration on the relationship between alcohol consumption and all-cause mortality. *Addiction* 2002; 97: 29–38.
84. Grisales-Romero H, González D, Porras S. Disability-adjusted life years due to mental disorders and diseases of the nervous system in the population of Medellin, 2006-2012. Años de vida saludable perdidos a causa de trastornos mentales y enfermedades del sistema nervioso de la población de Medellín, 2006-2012. *Rev Colomb Psiquiatr (Engl Ed)*. 2020; 49: 29–38.
85. Gual A, Lligoña A, Colom J. Five-year outcome in alcohol dependence. A naturalistic study of 850 patients in Catalonia. *Alcohol Alcohol* 1999; 34: 183–92.
86. Hagen JM, Sutterland AL, Liefers T, et al. Skin autofluorescence of advanced glycation end products and mortality in affective disorders in the lifelines cohort study: A mediation analysis. *J Affect Disord* 2021; 282: 1082–89.
87. Halme JT, Seppä K, Alho H, Poikolainen K, Pirkola S, Aalto M. Alcohol consumption and all-cause mortality among elderly in Finland. Drug Alcohol Depend 2010; 106: 212–8.
88. Harris RA, Mandell DS. Fatal drug overdose among middle-aged Black men: A life table analysis. *Addict Behav.* 2023; 144: 107743.
89. Harrison-Felix C, Kreider SE, Arango-Lasprilla JC, et al. Life expectancy following rehabilitation: a NIDRR Traumatic Brain Injury Model Systems study. *J Head Trauma Rehabil* 2012; 27: E69–80.
90. Helzner EP, Scarmeas N, Cosentino S, Tang MX, Schupf N, Stern Y. Survival in Alzheimer disease: a multiethnic, population-based study of incident cases. *Neurology* 2008; 71: 1489–95.
91. Ho CSh, Jin A, Nyunt MS, Feng L, Ng TP. Mortality rates in major and subthreshold depression: 10-year follow-up of a Singaporean population cohort of older adults. *Postgrad Med* 2016; 128: 642–7.
92. Holahan CJ, Schutte KK, Brennan PL, Holahan CK, Moos BS, Moos RH. Late-life alcohol consumption and 20-year mortality. *Alcohol Clin Exp Res* 2010; 34: 1961–71.
93. Holwerda TJ, Schoevers RA, Dekker J, Deeg DJ, Jonker C, Beekman AT. The relationship between generalized anxiety disorder, depression and mortality in old age. *Int J Geriatr Psychiatry* 2007; 22: 241–9.
94. Hser YI, Kagihara J, Huang D, Evans E, Messina N. Mortality among substance-using mothers in California: a 10-year prospective study. *Addiction* 2012; 107: 215–22.
95. Hughes MF, Patterson CC, Appleton KM, et al. The predictive value of depressive symptoms for all-cause mortality: findings from the PRIME Belfast study examining the role of inflammation and cardiovascular risk markers. *Psychosom Med* 2016; 78: 401–11.

96. Hulse GK, English DR, Milne E, Holman CD. The quantification of mortality resulting from the regular use of illicit opiates. *Addiction* 1999; 94: 221–9.
97. Iulita MF, Garzón Chavez D, Klitgaard Christensen M, et al. Association of Alzheimer disease with life expectancy in people with down syndrome. *JAMA Netw Open*. 2022; 5: e2212910.
98. John A, McGregor J, Jones I, et al. Premature mortality among people with severe mental illness - New evidence from linked primary care data. *Schizophr Res* 2018; 199: 154–62.
99. John U, Rumpf HJ, Hanke M, Meyer C. Mental disorders and total mortality after 20 years in an adult general population sample. *Eur Psychiatry* 2020; 63: e30.
100. Johnson DR, Fontana A, Lubin H, Corn B, Rosenheck R. Long-term course of treatment-seeking Vietnam veterans with posttraumatic stress disorder: mortality, clinical condition, and life satisfaction. *J Nerv Ment Dis* 2004; 192: 35–41.
101. Johnson ES, Ndetan H, Felini MJ, et al. Mortality in workers employed in pig abattoirs and processing plants. *Environ Res* 2011; 111: 871–6.
102. Jun ER, Kim SH, Cho YJ, Kim YA, Lee JY. The influence of negative mental health on the health behavior and the mortality risk: analysis of Korean longitudinal study of aging from 2006 to 2014. *Korean J Fam Med* 2019; 40: 297–306.
103. Kåberg M, Larsson S, Bergström J, Hammarberg A. Quality-adjusted life years among people who inject drugs in a needle syringe program in Sweden. *Qual Life Res*. 2023; 32: 197-207.
104. Katz RT. Life expectancy for children with cerebral palsy and mental retardation: implications for life care planning. *NeuroRehabilitation* 2003; 18: 261–70.
105. Keller MB. The long-term clinical course of generalized anxiety disorder. *J Clin Psychiatry* 2002; 63: 11–6.
106. Kendler KS, Ohlsson H, Sundquist J, Sundquist K. Alcohol use disorder and mortality across the lifespan: a longitudinal cohort and co-relative analysis. *JAMA Psychiatry* 2016; 73: 575–81.
107. Kendler KS, Ohlsson H, Sundquist K, Sundquist J. Drug abuse-associated mortality across the lifespan: a population-based longitudinal cohort and co-relative analysis. *Soc Psychiatry Psychiatr Epidemiol* 2017; 52: 877–86.
108. Keshaviah A, Edkins K, Hastings ER, et al. Re-examining premature mortality in anorexia nervosa: a meta-analysis redux. *Compr Psychiatry* 2014; 55: 1773–84.
109. Kivelä SL, Köngäs-Saviaro P, Kesti E, Pahkala K, Laippala P. Five-year prognosis for depression in old age. *Int Psychogeriatr* 1994; 6: 69–78.
110. Kiviniemi M, Suvisaari J, Koivumaa-Honkanen H, Häkkinen U, Isohanni M, Hakko H. Antipsychotics and mortality in first-onset schizophrenia: prospective Finnish register study with 5-year follow-up. *Schizophr Res* 2013; 150: 274–80.
111. Köhler S, Verhey F, Weyerer S, et al. Depression, non-fatal stroke and all-cause mortality in old age: a prospective cohort study of primary care patients. *J Affect Disord* 2013; 150: 63–9.
112. Kouppis E, Björkenstam C, Gerdin B, Ekselius L, Björkenstam E. Childbearing and mortality among women with personality disorders: nationwide registered-based cohort study. *BJPsych Open* 2020; 6: e95.
113. Kugathasan P, Laursen TM, Grøntved S, Jensen SE, Aagaard J, Nielsen RE. Increased long-term mortality after myocardial infarction in patients with schizophrenia. *Schizophr Res* 2018; 199: 103–8.
114. Kugathasan P, Stubbs B, Aagaard J, Jensen SE, Munk Laursen T, Nielsen RE. Increased mortality from somatic multimorbidity in patients with schizophrenia: a Danish nationwide cohort study. *Acta Psychiatr Scand* 2019; 140: 340–8.
115. Ladwig KH, Baumert J, Marten-Mittag B, Kolb C, Zrenner B, Schmitt C. Posttraumatic stress symptoms and predicted mortality in patients with implantable cardioverter-defibrillators: results from the prospective living with an implanted cardioverter-defibrillator study. *Arch Gen Psychiatry* 2008; 65: 1324–30.
116. Lahti M, Tiihonen J, Wildgust H, et al. Cardiovascular morbidity, mortality and pharmacotherapy in patients with schizophrenia. *Psychol Med* 2012; 42: 2275–85.
117. Larney S, Peacock A, Tran LT, et al. All-cause and overdose mortality risk among people prescribed opioids: a systematic review and meta-analysis. *Pain Med* 2020; 21: 3700–11.
118. Laursen TM, Munk-Olsen T, Gasse C. Chronic somatic comorbidity and excess mortality due to natural causes in persons with schizophrenia or bipolar affective disorder. *PLoS One* 2011; 6: e24597.
119. Lawes S, Demakakos P, Steptoe A, Lewis G, Carvalho LA. Combined influence of depressive symptoms and systemic inflammation on all-cause and cardiovascular mortality: evidence for differential effects by gender in the English Longitudinal Study of Ageing. *Psychol Med* 2019; 49: 1521–31.
120. Lee HE, Kim HR, Chung YK, Kang SK, Kim EA. Mortality rates by occupation in Korea: a nationwide, 13-year follow-up study. *Occup Environ Med* 2016; 73: 329–35.

121. Lee M, Chodosh J. Dementia and life expectancy: what do we know?. *J Am Med Dir Assoc* 2009; 10: 466–71.
122. Lee SM, Kung SM, Wu BJ, Chen HK, Laio HY, Chou KJ. The association of types of antipsychotics with life expectancy in patients with schizophrenia: results of a 5-year study. *Eur Neuropsychopharmacol* 2014; 24: S569.
123. Levola J, Laine R, Pitkänen T. In-patient psychiatric care and non-substance-related psychiatric diagnoses among individuals seeking treatment for alcohol and substance use disorders: associations with all-cause mortality and suicide. *Br J Psychiatry* 2022; 221: 386–393.
124. Li X, Aida J, Hikichi H, Kondo K, Kawachi I. Association of postdisaster depression and posttraumatic stress disorder with mortality among older disaster survivors of the 2011 great east Japan earthquake and tsunami. *JAMA Netw Open* 2019; 2: e1917550.
125. Lin HC, Lee HC, Kuo NW, Chu CH. Hospital characteristics associated with post-discharge suicide of severely depressed patients. *J Affect Disord* 2008; 110: 215–21.
126. Liu YT, Lee JH, Tsai MK, Wei JC, Wen CP. The effects of modest drinking on life expectancy and mortality risks: a population-based cohort study. *Sci Rep*. 2022; 12: 7476.
127. Lomholt LH, Andersen DV, Sejrsgaard-Jacobsen C, et al. Mortality rate trends in patients diagnosed with schizophrenia or bipolar disorder: a nationwide study with 20 years of follow-up. *Int J Bipolar Disord* 2019; 7: 6.
128. London AS, Landes SD. Attention deficit hyperactivity disorder and the age pattern of adult mortality. *Biodemography Soc Biol* 2022; 67: 28–39.
129. Lu Y, Murakami Y, Nishi D, Tsuji I. Association between psychological distress and disability-free life expectancy in the older Japanese adults. *J Affect Disord*. 2023; 337: 195-201.
130. Lurie I, Shoval G, Hoshen M, et al. The association of medical resource utilization with physical morbidity and premature mortality among patients with schizophrenia: An historical prospective population cohort study. *Schizophr Res* 2021; 237: 62–8.
131. Manderbacka K, Peltonen R, Lumme S, Keskimäki I, Tarkiainen L, Martikainen P. The contribution of health policy and care to income differences in life expectancy--a register based cohort study. *BMC Public Health* 2013; 13: 812.
132. Maniecka-Bryła I, Dziankowska-Zaborszczyk E, Bryła M, Drygas W. Determinants of premature mortality in a city population: an eight-year observational study concerning subjects aged 18-64. *Int J Occup Med Environ Health* 2013; 26: 724–41.
133. Markkula N, Härkänen T, Perälä J, et al. Mortality in people with depressive, anxiety and alcohol use disorders in Finland. *Br J Psychiatry* 2012; 200: 143-9.
134. Martikainen P, Mäkelä P, Peltonen R, Myrskylä M. Income differences in life expectancy: the changing contribution of harmful consumption of alcohol and smoking. *Epidemiology* 2014; 25: 182–90.
135. Maughan B, Stafford M, Shah I, Kuh D. Adolescent conduct problems and premature mortality: follow-up to age 65 years in a national birth cohort. *Psychol Med* 2014; 44: 1077–86.
136. Meesters PD, Comijs HC, Smit JH, et al. Mortality and its determinants in late-life schizophrenia: a 5-year prospective study in a Dutch catchment area. *Am J Geriatr Psychiatry* 2016; 24: 272–7.
137. Meguro K, Kasai M, Akanuma K, Meguro M, Ishii H, Yamaguchi S. Donepezil and life expectancy in Alzheimer's disease: a retrospective analysis in the Tajiri Project. *BMC Neurol* 2014; 14: 83.
138. Meier SM, Mattheisen M, Mors O, Schendel DE, Mortensen PB, Plessen KJ. Mortality among persons with obsessive-compulsive disorder in Denmark. *JAMA Psychiatry* 2016; 73: 268–74.
139. Meier SM, Petersen L, Pedersen MG, et al. Obsessive-compulsive disorder as a risk factor for schizophrenia: a nationwide study. *JAMA Psychiatry* 2014; 71: 1215–21.
140. Møller-Madsen S, Nystrup J, Nielsen S. Mortality in anorexia nervosa in Denmark during the period 1970-1987. *Acta Psychiatr Scand* 1996; 94: 454–9.
141. Moreno X, Lera L, Moreno F, Albala C. Life expectancy with and without cognitive impairment among Chilean older adults: results of the National Survey of Health (2003, 2009 and 2016). *BMC Geriatr* 2019; 19: 374.
142. Morris PL, Robinson RG, Andrzejewski P, Samuels J, Price TR. Association of depression with 10-year poststroke mortality. *Am J Psychiatry* 1993; 150: 124–9.
143. Musgrove R, Carr MJ, Kapur N, et al. Suicide and death by other causes among patients with a severe mental illness: cohort study comparing risks among patients discharged from inpatient care v. those treated in the community. *Epidemiol Psychiatr Sci.* 2022; 31: e32.

144. Nakaya N, Kikuchi N, Shimazu T, et al. Alcohol consumption and suicide mortality among Japanese men: the Ohsaki Study. *Alcohol* 2007; 41: 503–10.
145. Nielsen S, Vilmar JW. What can we learn about eating disorder mortality from eating disorder diagnoses at initial assessment? A Danish nationwide register follow-up study using record linkage, encompassing 45 years (1970-2014). *Psychiatry Res* 2021; 303: 114091.
146. Nielsen SF, Hjorthøj CR, Erlangsen A, Nordentoft M. Psychiatric disorders and mortality among people in homeless shelters in Denmark: a nationwide register-based cohort study. *Lancet* 2011; 377: 2205–14.
147. Nordentoft M. Prevention of suicide and attempted suicide in Denmark. Epidemiological studies of suicide and intervention studies in selected risk groups. *Dan Med Bull* 2007; 54: 306–69.
148. Nyberg ST, Batty GD, Pentti J, et al. Association of alcohol use with years lived without major chronic diseases: A multicohort study from the IPD-Work consortium and UK Biobank. *Lancet Reg Health Eur*. 2022; 19: 100417.
149. Oh TK, Park HY, Song IA. Depression and mortality among survivors of acute respiratory distress syndrome in South Korea: A nationwide cohort study conducted from 2010 to 2018. *J Psychiatr Res* 2021; 145: 6–12.
150. Ojansuu I, Putkonen H, Lähteenvuo M, Tiihonen J. Substance Abuse and excessive mortality among forensic psychiatric patients: a Finnish nationwide cohort study. *Front Psychiatry* 2019; 10: 678.
151. Oud L, Garza J. Impact of history of mental disorders on short-term mortality among hospitalized patients with sepsis: a population-based cohort study. *PLoS One*. 2022; 17: e0265240.
152. Palsson SP, Jonsdottir G, Petursson H. The mortality risk of psychiatric emergency patients: a follow-up study. *Nord J Psychiatry* 1996; 50: 207–16.
153. Parmelee PA, Katz IR, Lawton MP. Depression and mortality among institutionalized aged. *J Gerontol* 1992; 47: P3–10.
154. Pedram P, Patten SB, Bulloch AGM, Williams JVA, Dimitropoulos G. Self-reported lifetime history of eating disorders and mortality in the general population: a Canadian population survey with record linkage. *Nutrients* 2021; 13: 3333.
155. Penninx BW, Beekman AT, Honig A, et al. Depression and cardiac mortality: results from a community-based longitudinal study. *Arch Gen Psychiatry* 2001; 58: 221–7.
156. Penninx BW, Geerlings SW, Deeg DJ, van Eijk JT, van Tilburg W, Beekman AT. Minor and major depression and the risk of death in older persons. *Arch Gen Psychiatry* 1999; 56: 889–95.
157. Peritogiannis V, Ninou A, Samakouri M. Mortality in schizophrenia-spectrum disorders: recent advances in understanding and management. *Healthcare (Basel)*. 2022; 10: 2366.
158. Pitkänen T, Kaskela T, Levola J. Mortality of treatment-seeking men and women with alcohol, opioid or other substance use disorders - a register-based follow-up study. *Addict Behav* 2020; 105: 106330.
159. Plana-Ripoll O, Weye N, Knudsen AK, et al. The association between mental disorders and subsequent years of working life: a Danish population-based cohort study. *Lancet Psychiatry*. 2023; 10: 30-9.
160. Ploubidis GB, Batty GD, Patalay P, Bann D, Goodman A. Association of early-life mental health with biomarkers in midlife and premature mortality: evidence from the 1958 British birth cohort. *JAMA Psychiatry* 2021; 78: 38–46.
161. Pulska T, Pahkala K, Laippala P, Kivelä SL. Depressive symptoms predicting six-year mortality in depressed elderly finns. *Int J Geriatr Psychiatry* 2000; 15: 940–6.
162. Qian J, Simoni-Wastila L, Rattinger GB, et al. Associations of depression diagnosis and antidepressant treatment with mortality among young and disabled Medicare beneficiaries with COPD. *Gen Hosp Psychiatry* 2013; 35: 612–8.
163. Ramadas K, Sauvaget C, Thomas G, Fayette JM, Thara S, Sankaranarayanan R. Effect of tobacco chewing, tobacco smoking and alcohol on all-cause and cancer mortality: a cohort study from Trivandrum, India. *Cancer Epidemiol* 2010; 34: 405–12.
164. Ramsey CM, Spira AP, Mojtabai R, Eaton WW, Roth K, Lee HB. Lifetime manic spectrum episodes and all-cause mortality: 26-year follow-up of the NIMH Epidemiologic Catchment Area Study. *J Affect Disord* 2013; 151: 337–42.
165. Ran MS, Chan CL, Chen EY, et al. Mortality of geriatric and younger patients with schizophrenia in the community. *Suicide Life Threat Behav* 2008; 38: 143–51.
166. Rehm J, Gmel G. Alcohol consumption and total mortality/morbidity-definitions and methodological implications. *Best Pract Res Clin Gastroenterol* 2003; 17: 497–505.
167. Rehm J, Probst C. Decreases of life expectancy despite decreases in non-communicable disease mortality: the role of substance use and socioeconomic status. *Eur Addict Res* 2018; 24: 53–9.

168. Rehm J, Shield KD. Global burden of disease and the impact of mental and addictive disorders. *Curr Psychiatry Rep* 2019; 21: 10.
169. Reynolds SL, Haley WE, Kozlenko N. The impact of depressive symptoms and chronic diseases on active life expectancy in older Americans. *Am J Geriatr Psychiatry* 2008; 16: 425–32.
170. Ribe AR, Laurberg T, Laursen TM, Charles M, Vedsted P, Vestergaard M. Ten-Year Mortality after a breast cancer diagnosis in women with severe mental illness: a Danish population-based cohort study. *PLoS One* 2016; 11: e0158013.
171. Richmond-Rakerd LS, D'Souza S, Milne BJ, Caspi A, Moffitt TE. Longitudinal associations of mental disorders with physical diseases and mortality among 2.3 million New Zealand citizens. *JAMA Netw Open* 2021; 4: e2033448.
172. Rorsman B, Hagnell O, Lanke J. Violent death and mental disorders in the Lundby Study. Accidents and suicides in a total population during a 25-year period. *Neuropsychobiology* 1982; 8: 233–40.
173. Rossow I, Amundsen A. Alcohol abuse and suicide: a 40-year prospective study of Norwegian conscripts. *Addiction* 1995; 90: 685–91.
174. Rundberg J, Nilsson PM, Samsioe G, Öjehagen A. Alcohol use and early mortality in Swedish middle-aged women: Nine-year follow-up of the Women's Health in Lund Area study. *Scand J Public Health* 2014; 42: 344–8.
175. Sauvaget C, Tsuji I, Minami Y, et al. Dementia-free life expectancy among elderly Japanese. *Gerontology* 1997; 43: 168–75.
176. Schiavone N, Virta M, Leppämäki S, et al. Mortality in individuals with childhood ADHD or subthreshold symptoms - a prospective perinatal risk cohort study over 40 years. *BMC Psychiatry*. 2022; 22: 325.
177. Schoevers RA, Geerlings MI, Deeg DJ, Holwerda TJ, Jonker C, Beekman AT. Depression and excess mortality: evidence for a dose response relation in community living elderly. *Int J Geriatr Psychiatry* 2009; 24: 169–76.
178. Schulz R, Beach SR, Ives DG, Martire LM, Ariyo AA, Kop WJ. Association between depression and mortality in older adults: the Cardiovascular Health Study. *Arch Intern Med* 2000; 160: 1761–8.
179. Schuurmans J, Comijs HC, Beekman AT, et al. The outcome of anxiety disorders in older people at 6-year follow-up: results from the Longitudinal Aging Study Amsterdam. *Acta Psychiatr Scand* 2005; 111: 420–8.
180. Scragg R. A quantification of alcohol-related mortality in New Zealand. *Aust N Z J Med* 1995; 25: 5–11.
181. Sharma VK, Copeland JR, Dewey ME, Lowe D, Davidson I. Outcome of the depressed elderly living in the community in Liverpool: a 5-year follow-up. *Psychol Med* 1998; 28: 1329–37.
182. Sherrington JM, Hawton K, Fagg J, Andrew B, Smith D. Outcome of women admitted to hospital for depressive illness: factors in the prognosis of severe depression. *Psychol Med* 2001; 31: 115–25.
183. Shim EJ, Lee JW, Cho J, et al. Association of depression and anxiety disorder with the risk of mortality in breast cancer: a National Health Insurance Service study in Korea. *Breast Cancer Res Treat* 2020; 179: 491–8.
184. Siskind D, Araya R, Kim J. Cost-effectiveness of improved primary care treatment of depression in women in Chile. *Br J Psychiatry* 2010; 197: 291–6.
185. Smith DaWalt L, Hong J, Greenberg JS, Mailick MR. Mortality in individuals with autism spectrum disorder: Predictors over a 20-year period. *Autism* 2019; 23: 1732–9.
186. Smoller JW, Allison M, Cochrane BB, et al. Antidepressant use and risk of incident cardiovascular morbidity and mortality among postmenopausal women in the Women's Health Initiative study. *Arch Intern Med* 2009; 169: 2128–39.
187. Sommer IE, Tiihonen J, van Mourik A, Tanskanen A, Taipale H. The clinical course of schizophrenia in women and men-a nation-wide cohort study. *NPJ Schizophr* 2020; 6: 12.
188. Starace F, Mungai F, Baccari F, Galeazzi GM. Excess mortality in people with mental illness: findings from a Northern Italy psychiatric case register. *Soc Psychiatry Psychiatr Epidemiol* 2018; 53: 249–57.
189. Staudt Hansen P, Frahm Laursen M, Grøntved S, Puggard Vogt Straszek S, Licht RW, Nielsen RE. Increasing mortality gap for patients diagnosed with bipolar disorder-A nationwide study with 20 years of follow-up. *Bipolar Disord* 2019; 21: 270–5.
190. Steingrimsson S, Sigurdsson MI, Gudmundsdottir H, Aspelund T, Magnusson A. A total population-based cohort study of female psychiatric inpatients who have served a prison sentence. *Crim Behav Ment Health* 2015; 25: 220–5.
191. Steingrimsson S, Sigurdsson MI, Gudmundsdottir H, Aspelund T, Magnusson A. Mental disorder, imprisonment and reduced life expectancy--A nationwide psychiatric inpatient cohort study. *Crim Behav Ment Health* 2016; 26: 6–17.

192. Stewart RA, North FM, West TM, et al. Depression and cardiovascular morbidity and mortality: cause or consequence?. *Eur Heart J* 2003; 24: 2027–37.
193. Stockwell T, Zhao J, Panwar S, Roemer A, Naimi T, Chikritzhs T. Do "moderate" drinkers have reduced mortality risk? a systematic review and meta-analysis of alcohol consumption and all-Cause mortality. *J Stud Alcohol Drugs* 2016; 77: 185–98.
194. Strömberg R, Backlund LG, Johansson SE, Löfvander M. Mortality in depressed and non-depressed primary care Swedish patients: a 12-year follow-up cohort study. *Fam Pract* 2013; 30: 514–9.
195. Sun Q, Yu D, Fan J, et al. Healthy lifestyle and life expectancy at age 30 years in the Chinese population: an observational study. *Lancet Public Health*. 2022; 7: e994-e1004.
196. Surtees PG, Wainwright NW, Luben RN, Wareham NJ, Bingham SA, Khaw KT. Depression and ischemic heart disease mortality: evidence from the EPIC-Norfolk United Kingdom prospective cohort study. *Am J Psychiatry* 2008; 165: 515–23.
197. Suzuki T, Shiga T, Kuwahara K, et al. Impact of clustered depression and anxiety on mortality and rehospitalization in patients with heart failure. *J Cardiol* 2014; 64: 456–62.
198. Tamakoshi A, Kawado M, Ozasa K, et al. Impact of smoking and other lifestyle factors on life expectancy among japanese: findings from the Japan Collaborative Cohort (JACC) Study. *J Epidemiol* 2010; 20: 370–6.
199. Tanskanen A, Tiihonen J, Taipale H. Mortality in schizophrenia: 30-year nationwide follow-up study. *Acta Psychiatr Scand* 2018; 138: 492–9.
200. Thanh NX, Jonsson E. Life expectancy of people with fetal alcohol syndrome. *J Popul Ther Clin Pharmacol* 2016; 23: e53–9.
201. Thomas C, Kelman HR, Kennedy GJ, Ahn C, Yang CY. Depressive symptoms and mortality in elderly persons. *J Gerontol* 1992; 47: S80–7.
202. Tomkins S, Collier T, Oralov A, et al. Hazardous alcohol consumption is a major factor in male premature mortality in a typical Russian city: prospective cohort study 2003-2009. *PLoS One* 2012; 7: e30274.
203. Tournier M, Moride Y, Ducruet T, Moshyk A, Rochon S. Depression and mortality in the visually-impaired, community-dwelling, elderly population of Quebec. *Acta Ophthalmol* 2008; 86: 196–201.
204. Trivedi RB, Post EP, Piegari R, et al. Mortality among veterans with major mental illnesses seen in primary care: results of a national study of veteran deaths. *J Gen Intern Med* 2020; 35: 112–8.
205. Tuot DS, Lin F, Norris K, Gassman J, Smogorzewski M, Ku E. Depressive symptoms associate with race and all-cause mortality in patients with CKD. *Kidney Int Rep* 2018; 4: 222–30.
206. Van Baelen L, Antoine J, De Ridder K, Plettinckx E, Gremeaux L. All-cause mortality rate of people in treatment for substance use disorders in Belgium: a register-based cohort study. *J Subst Use* 2019; 24: 481–6.
207. van den Berg KS, Wiersema C, Hegeman JM, et al. Clinical characteristics of late-life depression predicting mortality. *Aging Ment Health* 2021; 25: 476–83.
208. van Weel-Baumgarten E, van den Bosch W, van den Hoogen H, Zitman FG. Ten year follow-up of depression after diagnosis in general practice. *Br J Gen Pract* 1998; 48: 1643–6.
209. Vázquez-Reyes A, Martín-Rodríguez A, Pérez-San-Gregorio MÁ, Vázquez-Morejón AJ. Survival of patients with severe mental disorders: influence of social functioning. *Int J Soc Psychiatry*. 2023; 69: 1157-65.
210. Vilalta-Franch J, Planas-Pujol X, López-Pousa S, Llinàs-Reglà J, Merino-Aguado J, Garre-Olmo J. Depression subtypes and 5-years risk of mortality in aged 70 years: a population-based cohort study. *Int J Geriatr Psychiatry* 2012; 27: 67–75.
211. Vinkers DJ, Stek ML, Gussekloo J, Van Der Mast RC, Westendorp RG. Does depression in old age increase only cardiovascular mortality? The Leiden 85-plus Study. *Int J Geriatr Psychiatry* 2004; 19: 852–7.
212. Vos T, Haby MM, Barendregt JJ, Kruijshaar M, Corry J, Andrews G. The burden of major depression avoidable by longer-term treatment strategies. *Arch Gen Psychiatry* 2004; 61: 1097–103.
213. Voshaar RCO, Aprahamian I, Borges MK, et al. Excess mortality in depressive and anxiety disorders: The Lifelines Cohort Study. *Eur Psychiatry* 2021; 64: e54.
214. Walker ER, McGee RE, Druss BG. Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis. *JAMA Psychiatry* 2015; 72: 334–41.
215. Wang X, Ma H, Li X, et al. Association of cardiovascular health with life expectancy free of cardiovascular disease, diabetes, cancer, and dementia in UK adults. *JAMA Intern Med*. 2023; 183: 340-9.
216. Warshaw MG, Dolan RT, Keller MB. Suicidal behavior in patients with current or past panic disorder: five years of prospective data from the Harvard/Brown Anxiety Research Program. *Am J Psychiatry* 2000; 157: 1876–8.

217. Wattmo C, Londos E, Minthon L. Risk factors that affect life expectancy in Alzheimer's disease: a 15-year follow-up. *Dement Geriatr Cogn Disord* 2014; 38: 286–99.
218. Wei J, Lu Y, Li K, Goodman M, Xu H. The associations of late-life depression with all-cause and cardiovascular mortality: The NHANES 2005-2014. *J Affect Disord* 2022; 300: 189–94.
219. Wewalka M, Warszawska J, Strunz V, et al. Depression as an independent risk factor for mortality in critically ill patients. *Psychosom Med* 2015; 77: 106–13.
220. Whiteford HA, Degenhardt L, Rehm J, et al. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet* 2013; 382: 1575–86.
221. Whooley MA, Browner WS. Association between depressive symptoms and mortality in older women. Study of Osteoporotic Fractures Research Group. *Arch Intern Med* 1998; 158: 2129–35.
222. Woodward LJ, Fergusson DM. Life course outcomes of young people with anxiety disorders in adolescence. *J Am Acad Child Adolesc Psychiatry* 2001; 40: 1086–93.
223. Woolf SH, Schoomaker H. Life expectancy and mortality rates in the United States, 1959-2017. *JAMA* 2019; 322: 1996–2016.
224. Wu YT, Kralj C, Acosta D, et al. The association between, depression, anxiety, and mortality in older people across eight low- and middle-income countries: Results from the 10/66 cohort study. *Int J Geriatr Psychiatry* 2020; 35: 29–36.
225. Xie H, Li J, Zhu X, et al. Association between healthy lifestyle and the occurrence of cardiometabolic multimorbidity in hypertensive patients: a prospective cohort study of UK Biobank. *Cardiovasc Diabetol.* 2022; 21: 199.
226. Zábranský T, Csémy L, Grohmannová K, Janíková B, Brenza J. Mortality of cohort of very young injecting drug users in Prague, 1996-2010. *Cent Eur J Public Health* 2011; 19: 152–7.
227. Zhang JP, Kahana B, Kahana E, Hu B, Pozuelo L. Joint modeling of longitudinal changes in depressive symptoms and mortality in a sample of community-dwelling elderly people. *Psychosom Med* 2009; 71: 704–14.
228. Zivin K, Yosef M, Miller EM, et al. Associations between depression and all-cause and cause-specific risk of death: a retrospective cohort study in the Veterans Health Administration. *J Psychosom Res* 2015; 78: 324–31.
229. Zubenko GS, Mulsant BH, Sweet RA, Pasternak RE, Tu XM. Mortality of elderly patients with psychiatric disorders. *Am J Psychiatry* 1997; 154: 1360–8.
230. Zwas DR, Keren A, Amir O, Gotsman I. Treatment of heart failure patients with anxiolytics is associated with adverse outcomes, with and without depression. *J Clin Med* 2020; 9: 3967.

Supplementary Table 3. Summary of characteristics of the 109 included studies

Characteristics	N (%) of studies	
	Life expectancy (n=54)	YPLL (n=109)
Source of study samples		
Health system case register	35 (66.0)	75 (68.8)
Health insurance database	6 (11.3)	7 (6.4)
Hospital or health centre medical records	7 (13.2)	18 (16.5)
Community survey	5 (9.4)	7 (6.4)
Others [a]	1 (1.9)	2 (1.8)
Study period (calendar year)		
Before 2001	15 (27.8)	34 (31.2)
2001 – 2010	33 (61.1)	62 (56.9)
After 2010	11 (20.4)	18 (16.5)
Length of follow-up		
1 – 5 years	13 (24.1)	24 (22.0)
>5 – 10 years	20 (37.0)	31 (28.4)
>10 years	25 (46.3)	62 (56.7)
Geographic region		
Africa	1 (1.9)	1 (0.9)
Asia	12 (22.2)	18 (16.5)
Australia	3 (5.6)	6 (5.5)
Europe	27 (50.0)	56 (51.4)
North America	10 (18.5)	28 (25.7)
South America	1 (1.9)	1 (0.9)
Method to ascertain cases of mental disorders		
Diagnosis in case register, administrative data or medical records	38 (71.7)	76 (69.7)
Diagnostic interview	8 (15.1)	19 (17.4)
Service receipt	3 (5.7)	7 (6.4)
Medication prescription records	3 (5.7)	5 (4.9)
Self-report	3 (5.7)	4 (3.7)
Proxy assessment for diagnosis [b]	2 (3.8)	3 (2.8)
Diagnostic system		
Any diagnostic criteria (e.g., ICD, DSM)	46 (86.8)	95 (87.2)
No criteria	11 (20.8)	18 (16.5)
Reference population for YPLL estimation		
General population	-	83 (76.1)
Individuals without any/a specified mental disorder	-	20 (18.3)
Use of a specified fixed age	-	11 (10.1)
Approach to derive YPLL		
Mean age at death	-	42 (38.5)
Life expectancy	-	62 (56.9)
Both	-	5 (4.6)

DSM: Diagnostic and Statistical Manual of Mental Disorders; ICD: International Classification of Diseases; YPLL: years of potential life lost.

Number of studies in each category of the study characteristic may add up more than the total number of studies included for life expectancy and YPLL outcomes, as some studies contributed to more than one category.

[a] "Others" for source of study samples included combinations of health system case register and health insurance database, as well as self-referrals from agencies, schools and clinics, and media announcement.

[b] Proxy assessment for diagnosis included screening instruments for cognitive impairment and inspection of illicit drug injection sites

Supplementary Table 4. Characteristics of included studies for life expectancy outcome

Study	Country/ region	Source of study samples	Study period	Diagnoses	Method for mental-disorder case ascertainment	Diagnostic system	Patients sample size	Proportion of men and women	Life expectancy at specified set-age
Newman & Bland (1991) [1]	Canada	Health system case register	1976-1985	Schizophrenia	Diagnostic interview	ICD	3623	Women: 1501 Men: 2122	At Birth
Hannerz & Borga (2000) [2]	Sweden	Health system case register	1983 (1-year follow-up)	Functional psychosis	Diagnosis in care register, administrative data or medical records	ICD	17878	Women: 23256 Men: 17878	20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80 years
Hannerz et al. (2001) [3]	Sweden	Health system case register	1983 (1-year follow-up)	Schizophrenia, affective psychosis, other functional psychoses, organic psychoses, substance use disorder, neurotic disorders, personality disorder	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia (13823), affective psychosis (12288), other functional psychoses (15042), organic psychosis (6317), substance use disorder (53237), neurotic disorders (36489), personality disorder (3825)	Schizophrenia (Women: 6237; Men: 7586), affective psychosis (7810; 4478), other functional psychoses (9218; 5824), organic psychosis (4082; 2235), substance use disorder (8843; 44394), neurotic disorders (23978; 12511), personality disorder (1596; 2229)	30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80 years
Dodge et al. (2003) [4]	United States	Community survey	1987-1997	Dementia	Diagnostic interview	DSM	1201	Women: 745 Men: 456	Ages at even number since 70 years
Brugal et al. (2005) [5]	Spain	Hospital or health centre medical records	1992-1999	Heroin use disorder	Service receipt	No criteria	5049	Women: 1185 Men: 3864	At Birth
Smyth et al. (2006) [6]	United States	Hospital or health centre medical records	1964-1998	Narcotics use disorder	Service receipt	No criteria	581	Women: 0 Men: 581	Age at assessment (Mean age=25.4 years)
Miller et al. (2007) [7]	Canada	Hospital or health centre medical records	1996-2004	Substance use disorder	Injection site inspection	No criteria	572	Women: 268 Men: 304	15 years
Tiihonen et al. (2009) [8]	Finland	Health system case register	1996-2006	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	66881	Women: 36078 Men: 30803	20 years
Chang et al. (2011) [9]	United Kingdom	Health system case register	2007-2009	Schizophrenia, schizoaffective disorders, bipolar	Diagnosis in care register,	ICD	Schizophrenia (7018), schizoaffective disorders (1312),	Schizophrenia (Women: 2592; Men: 4426), schizoaffective disorders	At Birth

				disorder, substance use disorder, depressive disorders	administrative data or medical records		bipolar disorder (2699), substance use disorder (10922), depressive disorders (11681)	(660; 652), bipolar disorder (1573; 1126), substance use disorder (3268; 7654), depressive disorders (7417; 4264)	
Hayes et al. (2011) [10]	United Kingdom	Health system case register	2007-2009	Alcohol use disorder, opioid use disorder	Diagnosis in care register, administrative data or medical records	ICD	Alcohol use disorder (4961), opioid use disorder (4834)	NA	At Birth
Laursen (2011) [11]	Denmark	Health system case register	2000-2006	Schizophrenia, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia (31727), bipolar disorder (17037)	NA	Average age from 15 to 110 years
Wahlbeck et al. (2011) [12]	Denmark, Finland, Sweden	Health system case register	1987-2006	Any mental disorders	Diagnosis in care register, administrative data or medical records	ICD	Denmark (288407), Finland (456386), Sweden (340287)	Denmark (Women: 151275; Men: 137132), Finland (198043; 258343), Sweden (159021; 181266)	15 years
Fok et al. (2012) [13]	United Kingdom	Health system case register	2007-2010	Personality disorder	Diagnosis in care register, administrative data or medical records	ICD	1,836	Women: 1103 Men: 733	At Birth
Kodesh et al. (2012) [14]	Israel	Health insurance database	2003-2009	Schizophrenia-spectrum disorder, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia-spectrum disorder (5732), bipolar disorder (8848)	NA	20 years
Westman et al. (2012) [15]	Finland	Health system case register	1981-2003	Any mental disorders, substance use disorder, schizophrenia-spectrum disorder, mood disorder, neurotic disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (341630)	NA	15 years
Ientile et al. (2013) [16]	Italy	Health system case register	2008-2012	Dementia	Diagnosis in care register, administrative data or medical records	ICD/ DSM	290	Women: 179 Men: 111	Age at diagnosis (Mean age=80.3 years)
Laursen et al. (2013) [17]	Denmark, Finland, Sweden	Health system case register	2000-2007	Schizophrenia, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Demark: Schizophrenia (20430), Bipolar disorder (11101) Finland:	Demark: Schizophrenia (Women: 8424; Men: 12006), Bipolar disorder (6821; 4280) Finland:	15 years

							Schizophrenia (20835), Bipolar disorder (9919) Sweden: Schizophrenia (24823), Bipolar disorder (18355)	Schizophrenia (10466; 10369), Bipolar disorder (5430; 4489) Sweden: Schizophrenia (10516; 14307), Bipolar disorder (10988; 7367)	
Lawrence et al. (2013) [18]	Australia	Health system case register	1985-2005	Any mental disorder, Alcohol and substance use disorder, schizophrenia, affective psychosis, other non-affective psychoses, neurotic disorders, stress or adjustment disorders, depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (292585)	NA	At Birth
Nordentoft et al. (2013) [19]	Denmark, Finland, Sweden	Health system case register	2000-2006	Substance use disorder, schizophrenia-spectrum disorders, mood disorders, personality disorders	Diagnosis in care register, administrative data or medical records	ICD	Denmark: Substance use disorder (34420), schizophrenia-spectrum disorders (11147), mood disorders (24766), personality disorders (5681) Finland: Substance use disorder (31994), schizophrenia-spectrum disorders (17238), mood disorders (37008), personality disorders (2770) Sweden: Substance use disorder (53757), schizophrenia-spectrum disorders (12585), mood disorders (42268), personality disorders (4726)	Denmark: Substance use disorder (Women: 11422; Men: 22998), schizophrenia-spectrum disorders (5317; 5830), mood disorders (15324; 9442), personality disorders (3649; 2032) Finland: Substance use disorder (7590; 24404), schizophrenia-spectrum disorders (9285; 7953), mood disorders (23077; 13931), personality disorders (1368; 1402) Sweden: Substance use disorder (20381;33376), schizophrenia-spectrum disorders (6571; 6014), mood disorders (25503; 16765), personality disorders (3074; 1652)	15 years

Chang et al. (2015) [20]	Taiwan	Hospital or health centre medical records	2006-2008	Heroin use disorder	Diagnostic interview	DSM	1283	Women: 156 Men: 1127	Age at diagnosis (Mean age=37.5)
Fekadu et al. (2015) [21]	Ethiopia	Community survey	1998-2012	Any severe mental illness, schizophrenia, bipolar disorder, severe depression	Diagnostic interview	ICD	Any severe mental illness (919), schizophrenia, bipolar disorder, severe depression	Any severe mental illness (Women: 347; Men: 572), schizophrenia (62; 296), bipolar disorder (153; 193), severe depression (132; 83)	At Birth
Kessing et al. (2015) [22]	Denmark	Health system case register	2000-2012	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	22635	Women: 13548 Men: 9087	15, 25, 35, 45, 55, 65, 75 years
Kessing et al. (2015) [23]	Denmark	Health system case register	2000-2012	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	22725	Women: 13650 Men: 9102	15, 25, 35, 45, 55, 65, 75 years
Lesage et al. (2015) [24]	Canada	Health insurance database, health system case register	1999-2012	Any mental disorders, schizophrenia, mood and anxiety disorders	Diagnosis in care register, administrative data or medical records	ICD	NA	NA	1 year
Tom et al. (2015) [25]	United States	Hospital or health centre medical records	1994-2010	Dementia	Diagnostic interview	DSM	815	Women: 508 Men: 307	70, 75, 80, 85, 90 years
Laursen et al. (2016) [26]	Denmark	Health system case register	1995-2013	Depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	1650574	Women: 1095587 Men: 554987	15, 30, 45, 60, 75 years
Leng et al. (2016) [27]	Taiwan	Health insurance database	2000-2011	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	34658	Women: 15805 Men: 18853	20-29, 30-39, 40-49, 50-59, 60-64 years
Tam et al. (2016) [28]	United States	Community survey	1997-2009	Severe mental illness	Self-report	No criteria	11563	Women: 7803 Men: 3760	All ages since birth
Zhou et al. (2016) [29]	Germany	Health insurance database	2005-2010	Dementia	Diagnosis in care register, administrative data or medical records	ICD	2888	NA	75 years

Bitter et al. (2017) [30]	Hungary	Health insurance database	2005-2013	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	65169	Women: 37948 Men: 27221	20, 45 years
Cailhol et al. (2017) [31]	Canada	Health insurance database	2001-2012	Any mental disorders, personality disorders	Diagnosis in care register, administrative data or medical records	ICD	NA	NA	20 years
Chang et al. (2017) [32]	United States, Taiwan	Hospital or health centre medical records	United States (2006-2009), Taiwan (2006-2008)	Opioid use disorder	Service receipt (USA), diagnosis in care register, administrative data or medical records (Taiwan)	United States (no criteria), Taiwan (DSM)	United States (1267), Taiwan (983)	United States (Women: 408; Men: 859) Taiwan (115; 868)	Age at baseline assessment (Mean age=37.4 for United States cohort; mean age=37.8 for Taiwan cohort)
Jayatilleke et al. (2017) [33]	United Kingdom	Health system case register	2007-2012	Severe mental illness	Diagnosis in care register, administrative data or medical records	ICD	19106	Women: 8692 Men: 10414	At Birth
Castle & Chung (2018) [34]	Australia	Health system case register	2008-2015	Schizophrenia	Medication prescription records	No criteria	9533	Women: 4436 Men: 5097	At Birth
Strand et al. (2018) [35]	Norway	Health system case register	2009-2017	Dementia	Cognitive and physical function tests, blood taking, MRI/ CT of brain, diagnostic interview	No criteria, ICD	2684	Women: 1543 Men: 1141	70, 75 years
Barkley & Fischer (2019) [36]	United States	Hospital or health centre medical records	1979-2004	ADHD	Diagnosis in care register, administrative data or medical records	DSM	131	NA	Age at which the actuarial tables were available for subjects' age and sex in 2004
Garre-Olmo et al. (2019) [37]	Spain	Health system case register	2007-2015	Dementia	Diagnostic interview	DSM	5156	Women: 3284 Men: 1872	Age at diagnosis (Mean age=80.4), 60-69, 70-79, 80-89, ≥90
Strand et al. (2019) [38]	Norway	Health system case register	2009-2017	Dementia	Diagnosis in case register, administrative data or medical records	DSM	2911	Women: 1647 Men: 1264	60, 65, 70, 75, 80 years
Lewer et al. (2020) [39]	Australia	Health system case register	2001-2018	Opioid use disorder	Medication prescription records	No criteria	47197	Women: 15149 Men: 32048	18 years

Pan et al. (2020) [40]	Taiwan	Health insurance database	2005, 2010	Schizophrenia, bipolar disorder, depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	Cohort 2005: Schizophrenia (95632), bipolar disorder (45392), depressive disorders (395006) Cohort 2010: Schizophrenia (104561), bipolar disorder (58317), depressive disorders (435585)	Cohort 2005: Schizophrenia (Women: 44097; Men: 51535), bipolar disorder (25686; 19706), depressive disorders (247090; 147916) Cohort 2010: Schizophrenia (49608; 54953), bipolar disorder (34180; 24137), depressive disorders (276372; 159213)	At Birth
Chan et al. (2021) [41]	Hong Kong	Health system case register	2008-2018	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	12556	Women: 7628 Men: 4928	Ages since 15 years
Das-Munshi et al. (2021) [42]	United Kingdom	Health system case register	2007-2014	Any severe mental illness, schizophrenia-spectrum disorder, bipolar disorder, depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	Any severe mental illness (18335); schizophrenia-spectrum disorder (13266), bipolar disorder (5069), depressive disorders (20203)	Any severe mental illness (Women: 8640; Men: 9695); schizophrenia-spectrum disorder (5621; 7645), bipolar disorder (3019; 2050), depressive disorders (12569; 7634)	At Birth
Korhonen et al. (2021) [43]	Denmark, Finland, Sweden, Italy	Health system case register	1993-2007 (Denmark, Finland, Sweden), 2000-2007 (Italy)	Depressive disorders	Diagnosis in care register, administrative data or medical records (Denmark, Finland, Sweden), medication prescription records (Finland, Italy)	ICD (Denmark, Finland, Sweden), no criteria (Finland, Italy)	NA	NA	15 years
Madsen et al. (2021) [44]	Denmark	Health system case register	2005-2012	Depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	154513	Women: 90460 Men: 64053	40 years
Moreno-Kustner et al. (2021) [45]	Spain	Health system case register	2003-2016	Schizophrenia-spectrum disorders (schizophrenia & other non-affective psychoses)	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia-spectrum disorders (1418), schizophrenia (852), other non-affective psychoses (566)	Schizophrenia-spectrum disorders (Women: 511; Men: 907)	At Birth

Yasar & Yildiz (2021) [46]	Turkey	Health system case register	2008-2018	Schizophrenia, schizoaffective disorders	Diagnosis in care register, administrative data or medical records	DSM	Schizophrenia (441), schizoaffective disorders (65)	Overall (Women: 185; Men: 321)	At Birth
Yung et al. (2021) [47]	Hong Kong	Health system case register	2006-2016	Schizophrenia, other non-affective psychoses	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia (46896), other non-affective psychoses (20651)	Schizophrenia (Women: 24103; Men: 22793), other non-affective psychoses (12742; 7909)	Ages since 18 years
Hu et al. (2022) [48]	China	Community survey	2015-2017	Depressive disorders, anxiety disorders	Self-report	No criteria	Depressive disorders (312), anxiety disorders (204)	Depressive disorders (Women: 191; Men: 121), anxiety disorders (Women: 143; Men: 61)	60 years
Liu et al. (2022) [49]	China	Health system case register	2009-2017	Schizophrenia	Diagnostic interview	ICD	228572	Women: 119315 Men: 109257	At Birth
Matsuyama et al. (2022) [50]	Japan	Community survey	2006-2017	Depressive disorders	Self-report	No criteria	3342	NA	65 years
Tseng et al. (2022) [51]	Taiwan	Health system case register	2002-2013	Any mental disorders, organic mental disorders, substance use disorders, schizophrenia, affective psychoses, other mental disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (905), organic mental disorders (126), substance use disorders (83), schizophrenia (151), affective psychoses (139), other mental disorders (406)	Overall (Women: 331; Men: 574)	At birth
Chang et al. (2023) [52]	United Kingdom	Health system case register	2008-2017	Severe mental illnesses, schizophrenia, schizoaffective disorders, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Severe mental illnesses (18359), schizophrenia (11329), schizoaffective disorder (1092), bipolar disorder (5938)	Severe mental illnesses (Women: 8637; Men: 9722), schizophrenia (Women: 4424; Men: 6905), schizoaffective disorder (Women: 596; Men: 496), bipolar disorder (Women: 3617; Men: 2321)	At birth
da Roza et al. (2023) [53]	Brazil	Health system case register	2002-2016	Any mental disorders, alcohol use disorders, substance use disorders, schizophrenia-spectrum disorders, mood disorders, other mental disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (4019)	Any mental disorders (Women: 1818; Men: 2201)	At birth

Ren et al. (2023) [54]	China	Health system case register	2015-2019	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	99214	Women: 39589; Men: 40951	At birth

References for Supplementary Table 4 (included studies for meta-analysis on life expectancy)

1. Newman SC, Bland RC. Mortality in a cohort of patients with schizophrenia: a record linkage study. *Can J Psychiatry* 1991; 36: 239–45.
2. Hannerz H, Borgå P. Mortality among persons with a history as psychiatric inpatients with functional psychosis. *Soc Psychiatry Psychiatr Epidemiol* 2000; 35: 380–7.
3. Hannerz H, Borgå P, Borritz M. Life expectancies for individuals with psychiatric diagnoses. *Public Health* 2001; 115: 328–37.
4. Dodge HH, Shen C, Pandav R, DeKosky ST, Ganguli M. Functional transitions and active life expectancy associated with Alzheimer disease. *Arch Neurol* 2003; 60: 253–9.
5. Brugal MT, Domingo-Salvany A, Puig R, Barrio G, García de Olalla P, de la Fuente L. Evaluating the impact of methadone maintenance programmes on mortality due to overdose and aids in a cohort of heroin users in Spain. *Addiction* 2005; 100: 981–9.
6. Smyth B, Fan J, Hser YI. Life expectancy and productivity loss among narcotics addicts thirty-three years after index treatment. *J Addict Dis* 2006; 25: 37–47.
7. Miller CL, Kerr T, Strathdee SA, Li K, Wood E. Factors associated with premature mortality among young injection drug users in Vancouver. *Harm Reduct J* 2007; 4: 1.
8. Tiihonen J, Lönnqvist J, Wahlbeck K, et al. 11-year follow-up of mortality in patients with schizophrenia: a population-based cohort study (FIN11 study). *Lancet* 2009; 374: 620–7.
9. Chang CK, Hayes RD, Perera G, et al. Life expectancy at birth for people with serious mental illness and other major disorders from a secondary mental health care case register in London. *PLoS One* 2011; 6: e19590.
10. Hayes RD, Chang CK, Fernandes A, et al. Associations between substance use disorder sub-groups, life expectancy and all-cause mortality in a large British specialist mental healthcare service. *Drug Alcohol Depend* 2011; 118: 56–61.
11. Laursen TM. Life expectancy among persons with schizophrenia or bipolar affective disorder. *Schizophr Res* 2011; 131: 101–4.
12. Wahlbeck K, Westman J, Nordentoft M, Gissler M, Laursen TM. Outcomes of Nordic mental health systems: life expectancy of patients with mental disorders. *Br J Psychiatry* 2011; 199: 453–8.

13. Fok ML, Hayes RD, Chang CK, Stewart R, Callard FJ, Moran P. Life expectancy at birth and all-cause mortality among people with personality disorder. *J Psychosom Res* 2012; 73: 104–7.
14. Kodesh A, Goldshtein I, Gelkopf M, Goren I, Chodick G, Shalev V. Epidemiology and comorbidity of severe mental illnesses in the community: findings from a computerized mental health registry in a large Israeli health organization. *Soc Psychiatry Psychiatr Epidemiol* 2012; 47: 1775–82.
15. Westman J, Gissler M, Wahlbeck K. Successful deinstitutionalization of mental health care: increased life expectancy among people with mental disorders in Finland. *Eur J Public Health* 2012; 22: 604–6.
16. Ientile L, De Pasquale R, Monacelli F, et al. Survival rate in patients affected by dementia followed by memory clinics (UVA) in Italy. *J Alzheimers Dis* 2013; 36: 303–9.
17. Laursen TM, Wahlbeck K, Hällgren J, et al. Life expectancy and death by diseases of the circulatory system in patients with bipolar disorder or schizophrenia in the Nordic countries. *PLoS One* 2013; 8: e67133.
18. Lawrence D, Hancock KJ, Kisely S. The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers. *BMJ* 2013; 346: f2539.
19. Nordentoft M, Wahlbeck K, Hällgren J, et al. Excess mortality, causes of death and life expectancy in 270,770 patients with recent onset of mental disorders in Denmark, Finland and Sweden. *PLoS One* 2013; 8: e55176.
20. Chang KC, Lu TH, Lee KY, Hwang JS, Cheng CM, Wang JD. Estimation of life expectancy and the expected years of life lost among heroin users in the era of opioid substitution treatment (OST) in Taiwan. *Drug Alcohol Depend* 2015; 153: 152–8.
21. Fekadu A, Medhin G, Kebede D, et al. Excess mortality in severe mental illness: 10-year population-based cohort study in rural Ethiopia. *Br J Psychiatry* 2015; 206: 289–96.
22. Kessing LV, Vradi E, McIntyre RS, Andersen PK. Causes of decreased life expectancy over the life span in bipolar disorder. *J Affect Disord* 2015; 180: 142–7.
23. Kessing LV, Vradi E, Andersen PK. Life expectancy in bipolar disorder. *Bipolar Disord* 2015; 17: 543–8.
24. Lesage A, Rochette L, Émond V, et al. A surveillance system to monitor excess mortality of people with mental illness in Canada. *Can J Psychiatry* 2015; 60: 571–9.
25. Tom SE, Hubbard RA, Crane PK, et al. Characterization of dementia and Alzheimer's disease in an older population: updated incidence and life expectancy with and without dementia. *Am J Public Health* 2015; 105: 408–13.
26. Laursen TM, Musliner KL, Benros ME, Vestergaard M, Munk-Olsen T. Mortality and life expectancy in persons with severe unipolar depression. *J Affect Disord* 2016; 193: 203–7.
27. Lêng CH, Chou MH, Lin SH, Yang YK, Wang JD. Estimation of life expectancy, loss-of-life expectancy, and lifetime healthcare expenditures for schizophrenia in Taiwan. *Schizophr Res* 2016; 171: 97–102.
28. Tam J, Warner KE, Meza R. Smoking and the reduced life expectancy of individuals with serious mental illness. *Am J Prev Med* 2016; 51: 958–66.

29. Zhou Y, Putter H, Doblhammer G. Years of life lost due to lower extremity injury in association with dementia, and care need: a 6-year follow-up population-based study using a multi-state approach among German elderly. *BMC Geriatr* 2016; 16: 9.
30. Bitter I, Czobor P, Borsi A, et al. Mortality and the relationship of somatic comorbidities to mortality in schizophrenia. A nationwide matched-cohort study. *Eur Psychiatry* 2017; 45: 97–103.
31. Cailhol L, Pelletier É, Rochette L, et al. Prevalence, mortality, and health care use among patients with cluster B personality disorders clinically diagnosed in Quebec: a provincial cohort study, 2001-2012. *Can J Psychiatry* 2017; 62: 336–42.
32. Chang KC, Wang JD, Saxon A, Matthews AG, Woody G, Hser YI. Causes of death and expected years of life lost among treated opioid-dependent individuals in the United States and Taiwan. *Int J Drug Policy* 2017; 43: 1–6.
33. Jayatilleke N, Hayes RD, Dutta R, et al. Contributions of specific causes of death to lost life expectancy in severe mental illness. *Eur Psychiatry* 2017; 43: 109–15.
34. Castle DJ, Chung E. Cardiometabolic comorbidities and life expectancy in people on medication for schizophrenia in Australia. *Curr Med Res Opin* 2018; 34: 613–8.
35. Strand BH, Knapskog AB, Persson K, et al. Survival and years of life lost in various aetiologies of dementia, mild cognitive impairment (MCI) and subjective cognitive decline (SCD) in Norway. *PLoS One* 2018; 13: e0204436.
36. Barkley RA, Fischer M. Hyperactive child syndrome and estimated life expectancy at young adult follow-up: the role of ADHD persistence and other potential predictors. *J Atten Disord* 2019; 23: 907–23.
37. Garre-Olmo J, Ponjoan A, Inoriza JM, et al. Survival, effect measures, and impact numbers after dementia diagnosis: a matched cohort study. *Clin Epidemiol* 2019; 11: 525–52.
38. Strand BH, Knapskog AB, Persson K, et al. The loss in expectation of life due to early-onset mild cognitive impairment and early-onset dementia in Norway. *Dement Geriatr Cogn Disord* 2019; 47: 355–65.
39. Lewer D, Jones NR, Hickman M, Nielsen S, Degenhardt L. Life expectancy of people who are dependent on opioids: A cohort study in New South Wales, Australia. *J Psychiatr Res* 2020; 130: 435–40.
40. Pan YJ, Yeh LL, Chan HY, Chang CK. Excess mortality and shortened life expectancy in people with major mental illnesses in Taiwan. *Epidemiol Psychiatr Sci* 2020; 29: e156.
41. Chan JKN, Wong CSM, Yung NCL, Chen EYH, Chang WC. Excess mortality and life-years lost in people with bipolar disorder: an 11-year population-based cohort study. *Epidemiol Psychiatr Sci* 2021; 30: e39.
42. Das-Munshi J, Chang CK, Dregan A, et al. How do ethnicity and deprivation impact on life expectancy at birth in people with serious mental illness? Observational study in the UK. *Psychol Med* 2021; 51: 2581–9.
43. Korhonen K, Moustgaard H, Tarkiainen L, et al. Contributions of specific causes of death by age to the shorter life expectancy in depression: a register-based observational study from Denmark, Finland, Sweden and Italy. *J Affect Disord* 2021; 295: 831–8.
44. Madsen KB, Plana-Ripoll O, Musliner KL, Debost JP, Petersen LV, Munk-Olsen T. Cause-specific life years lost in individuals with treatment-resistant depression: A Danish nationwide register-based cohort study. *J Affect Disord* 2021; 280: 250–7.

45. Moreno-Küstner B, Guzman-Parra J, Pardo Y, Sanchidrián Y, Díaz-Ruiz S, Mayoral-Cleries F. Excess mortality in patients with schizophrenia spectrum disorders in Malaga (Spain): A cohort study. *Epidemiol Psychiatr Sci* 2021; 30: e11.
46. Yaşar H, Yildiz M. Assessment of mortality rate in 10 years and the associated risk factors in schizophrenia. Şizofrenide 10 yıllık olüm oranı ve risk etmenlerinin değerlendirmesi. *Turk Psikiyatri Derg* 2021; 32: 151–9.
47. Yung NCL, Wong CSM, Chan JKN, Chen EYH, Chang WC. Excess mortality and life-years lost in people with schizophrenia and other non-affective psychoses: an 11-year population-based cohort study. *Schizophr Bull* 2021; 47: 474–84.
48. Hu Z, Liu X, Jiang F, Ma L, Yang J, Chen Y, Zhu L, Mao Z, Hou J, Wang C. Multidimensional evaluation of healthy life expectancy indicators based on mental health among the rural older population: A large-scale cross-sectional study. *J Affect Disord* 2022; 319: 318–24.
49. Liu X, Wang D, Fan R, et al. Life expectancy and potential years of life lost for schizophrenia in western China. *Psychiatry Res* 2022; 308: 114330.
50. Matsuyama S, Murakami Y, Lu Y, Sone T, Sugawara Y, Tsuji I. Association between social participation and disability-free life expectancy in Japanese older people: the Ohsaki cohort 2006 study. *J Epidemiol* 2022; 32: 456–63.
51. Tseng PY, Xie XY, Hsu CC, Chien SH, Chen JD, Wang JY. Investigating medical cost and mortality among psychiatric patients involuntary admissions: a nationwide propensity score-matched study. *Psychiatry Investig* 2022; 19: 527–37.
52. Chang CK, Chesney E, Teng WN, Hollandt S, Pritchard M, Shetty H, Stewart R, McGuire P, Patel R. Life expectancy, mortality risks and cause of death in patients with serious mental illness in South East London: a comparison between 2008-2012 and 2013-2017. *Psychol Med* 2023; 53: 887–896.
53. da Roza DL, de Rezende MG, Barros REM, de Azevedo-Marques JM, Santos JLF, Morais LCC, Ferreira CEC, Waldvogel BC, Menezes PR, Del-Ben CM. Excess mortality in a cohort of Brazilian patients with a median follow-up of 11 years after the first psychiatric hospital admission. *Soc Psychiatry Psychiatr Epidemiol* 2023; 58: 319–30.
54. Ren J, Duan Y, Wang J, et al. Mortality and excess life-years lost in patients with schizophrenia under community care: a 5-year follow-up cohort study. *Braz J Psychiatry*. 2023; 45: 216-25.

Supplementary Table 5. Characteristics of included studies for years of potential life lost outcome

Study	Country/ region	Source of study samples	Study period	Diagnoses	Method for mental-disorder case ascertainment	Diagnostic system	Patients sample size	Proportion of men and women	Reference population for comparison	Sample size of reference population [a]	Method to estimate YPLL	Causes of death
Shinozaki (1976) [1]	Japan	Health system case register	1968-1970	Any mental disorders	Diagnosis in care register, administrative data or medical records	ICD	30725	NA	General population	4337730	Age at death	All causes
Newman & Bland (1991) [2]	Canada	Health system case register	1976-1985	Schizophrenia	Diagnostic interview	ICD	3623	Women: 1501 Men: 2122	General population	2827000	Life expectancy (at birth)	All causes
Poser et al. (1992) [3]	Germany	Hospital or health centre medical records	1974-1991	Substance use disorder (alone or in combination with alcohol use disorder); alcohol use disorder	Diagnostic interview	DSM	Substance use disorder (1414); alcohol use disorder (712)	Substance use disorder (Women: 674; Men: 740), alcohol use disorder (142; 570)	General population	78330000	Age at death	All causes
Marshall et al. (1994) [4]	United Kingdom	Health system case register	1968-1988	Alcohol use disorder	Diagnostic interview	ICD	99	Women: 0 Men: 99	General population	56200000	Age at death	Circulatory diseases, digestive diseases, injury and poisoning, neoplasms, others
Dembling et al. (1999) [5]	United States	Health system case register	1989-1994	Any mental disorders	Diagnosis in care register, administrative data or medical records	ICD/ DSM	43274	Women: 18564 Men: 24710	General population	4700000	Age at death	All causes, natural causes, infectious diseases, neoplasms, endocrine diseases, blood diseases, mental illness, nervous system, circulatory diseases, respiratory diseases, digestive diseases, genitourinary

												diseases, skin, musculoskeletal diseases, congenital diseases, external causes, accident, suicide, homicide, events of undetermined intent
Hannerz & Borga (2000) [6]	Sweden	Health system case register	1983 (1-year follow-up)	Functional psychosis	Diagnosis in care register, administrative data or medical records	ICD	17878	Women: 23256 Men: 17878	General population	8329000	Life expectancy (at age 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80 years)	All causes
Hannerz et al. (2001) [7]	Sweden	Health system case register	1983 (1-year follow-up)	Schizophrenia, affective psychosis, other functional psychoses, organic psychoses, substance use disorder, neurotic disorders, personality disorder	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia (13823), affective psychosis (12288), other functional psychoses (15042), organic psychosis (6317), substance use disorder (53237), neurotic disorders (36489), personality disorder (3825)	Schizophrenia (Women: 6237; Men: 7586), affective psychosis (7810; 4478), other functional psychoses (9218; 5824), organic psychosis (4082; 2235), substance use disorder (8843; 44394), neurotic disorders (23978; 12511), personality disorder (1596; 2229)	General population	8329000	Life expectancy (at age 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80 years)	All causes
Dodge et al. (2003) [8]	United States	Community survey	1987-1997	Dementia	Diagnostic interview	DSM	1201	Women: 745 Men: 456	General population	279000000	Life expectancy of patients (ages at even number since 70)	All causes

Dickey et al. (2004) [9]	United States	Health system case register	1997-1998	Severe mental illness (schizophrenia-spectrum disorders & bipolar disorder), other mental illness (anxiety, dysthymia, somatoform disorders, dissociative disorders, adjustment disorders, depressive disorders, impulse control disorders), substance use disorder	Diagnosis in care register, administrative data or medical records	ICD	Severe mental illness (11048), other mental illness (21438), substance use disorder (6113)	Severe mental illness (Women: 1185; Men: 3864), other mental illness (6739; 4309), substance use disorder (2629; 3484)	General population	250100000	Age at death	All causes
Brugal et al. (2005) [10]	Spain	Hospital or health centre medical records	1992-1999	Heroin use disorder	Service receipt	No criteria	5049	Women: 1185 Men: 3864	General population	26720000	Life expectancy at birth	All causes
Colton & Manderscheid (2006) [11]	United States	Health system case register	1997-2000	Any mental disorders	Diagnosis in care register, administrative data or medical records	DSM	NA	NA	General population	276100000	Age at death	All causes
Miller et al. (2006) [12]	United States	Health system case register	1998-2002	Serious mental illness (schizophrenia, schizoaffective disorders, bipolar disorder, depressive disorders, substance use disorder)	Diagnosis in care register, administrative data or medical records	ICD	20018	NA	General population	282200000	Age at death	All causes, diabetes, pneumonia and influenza, heart diseases, cerebrovascular disease, neoplasms, chronic lower respiratory diseases, suicide, accidents, homicide

Smyth et al. (2006) [13]	United States	Hospital or health centre medical records	1964-1998	Narcotics use disorder	Service receipt	No criteria	581	Women: 0 Men: 581	General population	229500000	Life expectancy at age of assessment	All causes
Miller et al. (2007) [14]	Canada	Hospital or health centre medical records	1996-2004	Substance use disorder	Injection site inspection	No criteria	572	Women: 268 Men: 304	General population	30690000	Life expectancy at age 15 years	All causes
Smyth et al. (2007) [15]	United States	Hospital or health centre medical records	1962-1997	Heroin use disorder	Service receipt	No criteria	581	Women: 0 Men: 581	Before age 65 years	NA	Age at death	All causes, heroin overdose, chronic liver disease, cardiovascular diseases, stroke, neoplasm, respiratory diseases, endocrine diseases, infectious diseases, suicide, accidents, homicide, poisoning or injury, overdose of causes other than heroin, drug disorder, alcohol use, others
Haver et al. (2008) [16]	Sweden	Hospital or health centre medical records	1981-2007	Alcohol use disorder	Diagnostic interview	DSM	420	Women: 420 Men: 0	General population of women	2037	Age at death	All causes
Hiroeh et al. (2008) [17]	Denmark	Health system case register	1973-1993	Any mental disorders, schizophrenia, affective psychoses, non-affective psychoses, neurosis, personality disorders, alcohol use disorders, drug use disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (69841), schizophrenia (2415), affective psychoses (12860), non-affective psychoses (5370), neurosis (5402),	Any mental disorders (Women: 37129; Men: 32712), schizophrenia (1207; 1208), affective psychoses (8079; 4781), non-affective psychoses (3414; 1956), neurosis	Before age 75 years	NA	Age at death	All natural causes, neoplasm, circulatory diseases, respiratory diseases, gastrointestinal diseases, genitourinary diseases, endocrine/ metabolic diseases,

							personality disorders (3934), alcohol use disorders (7410), drug use disorders (1282)	(3935; 1467), personality disorders (2116; 1818), alcohol use disorders (1475; 5935), drug use disorders (779; 503)				nervous system diseases, infectious diseases, all other natural causes
Tiihonen et al. (2009) [18]	Finland	Health system case register	1996-2006	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	66881	Women: 36078 Men: 30803	General population	5200000	Life expectancy at age 20, 40 years	All causes
Kiviniemi et al. (2010) [19]	Finland	Health system case register	1995-2001	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	7591	Women: 3188 Men: 4403	General population	5153000	Age at death	All causes, natural causes, neoplasms, endocrine, nutritional and metabolic diseases, nervous system, circulatory diseases, respiratory diseases, digestive diseases, alcohol-related diseases, unnatural causes, suicide, homicide, accidents, events of undetermined intent
Piatt et al. (2010) [20]	United States	Health system case register	1998-2004	Schizophrenia, schizoaffective disorders, mood disorders, anxiety disorder and personality disorders	Diagnosis in care register, administrative data or medical records	ICD	Overall (649)	Women: 402 Men: 247	General population; People without mental disorders	22828	Age at death	All causes, heart diseases, neoplasms, cerebrovascular diseases, chronic lower respiratory diseases, influenza or pneumonia, liver disease or cirrhosis,

												diabetes, dementia, septicemia, nephritis, suicide
Chang et al. (2011) [21]	United Kingdom	Health system case register	2007-2009	Schizophrenia, schizoaffective disorders, bipolar disorder, substance use disorder, depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia (7018), schizoaffective disorders (1312), bipolar disorder (2699), substance use disorder (10922), depressive disorders (11681)	Schizophrenia (Women: 2592; Men: 4426), schizoaffective disorders (660; 652), bipolar disorder (1573; 1126), substance use disorder (3268; 7654), depressive disorders (7417; 4264)	General population	61810000	Life expectancy at birth	All causes
Druss et al. (2011) [22]	United States	Community survey	1989-2006	Any mental disorders	Self-report	No criteria	1725	Women: 953 Men: 772	People without mental disorders	79125	Age at death	All causes
Hayes et al. (2011) [23]	United Kingdom	Health system case register	2007-2009	Alcohol use disorder, opioid use disorder	Diagnosis in care register, administrative data or medical records	ICD	Alcohol use disorder (4961), opioid use disorder (4834)	NA	General population	61320000	Life expectancy at birth	All causes
Laursen (2011) [24]	Denmark	Health system case register	2000-2006	Schizophrenia, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia (31727), bipolar disorder (17037)	NA	General population	5036662	Life expectancy at age 15 years	All causes, circulatory diseases, other natural causes, unnatural causes
Wahlbeck et al. (2011) [25]	Denmark, Finland, Sweden	Health system case register	1987-2006	Any mental disorders	Diagnosis in care register, administrative data or medical records	ICD	Denmark (288407), Finland (456386), Sweden (340287)	Denmark (Women: 151275; Men: 137132), Finland (198043; 258343), Sweden (159021; 181266)	General population	Denmark (5263000), Finland (5125000), Sweden (8841000)	Life expectancy at age 15 years	All causes

Fok et al. (2012) [26]	United Kingdom	Health system case register	2007-2010	Personality disorder	Diagnosis in care register, administrative data or medical records	ICD	1836	Women: 1103 Men: 733	General population	54454700	Life expectancy at birth	All causes
Healy et al. (2012) [27]	United Kingdom	Health system case register	1900-1910 (historical cohort); 1994-2010 (contemporary cohort)	Schizophrenia-spectrum disorders, schizophrenia, other non-affective psychoses	Diagnosis in care register, administrative data or medical records	ICD	Historical cohort: Schizophrenia-spectrum disorders (1074), schizophrenia (605), other non-affective psychoses (469); Contemporary cohort: Schizophrenia-spectrum disorders (355), schizophrenia (227), other non-affective psychoses (128)	NA	General population	Historical cohort (58020000), contemporary cohort (59370000)	Historical cohort (life expectancy at birth); contemporary cohort (age at birth)	All causes
Kodesh et al. (2012) [28]	Israel	Health insurance database	2003-2009	Schizophrenia-spectrum disorder, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia-spectrum disorder (5732), bipolar disorder (8848)	NA	General population	7054000	Life expectancy at age 20 years	All causes
Morden et al. (2012) [29]	United States	Health system case register	2000-2007	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	65362	Women: 7859 Men: 57503	People without severe mental illness	65362	Age at death	All causes
Nome & Holsten (2012) [30]	Norway	Hospital or health centre medical records	1985-2003	Any mental disorders	Service receipt	No criteria	4474	Women: 2120 Men: 2354	General population	4337000	Age at death	All causes

Rizzuto et al. (2012) [31]	Sweden	Health system case register	1987-1998	Dementia	Diagnostic interview	DSM	371	Women: 304 Men: 67	General population	8668000	Age at death	All causes
Westman et al. (2012) [32]	Finland	Health system case register	1981-2003	Any mental disorders, substance use disorder, schizophrenia -spectrum disorder, mood disorder, neurotic disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (341630)	NA	General population	5042000	Life expectancy at age 15 years	All causes
Zivin et al. (2012) [33]	United States	Health system case register	2007 (1-year follow-up)	Depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	701659	Women: 71655 Men: 630004	General population; People without depression	General population (4946852), people without depression (4245193)	Age at death	All causes, cerebrovascular diseases, diabetes, heart diseases, influenza and pneumonia, liver disease, neoplasms, nephritis, respiratory diseases, septicemia, suicide, accidents, homicide, all others
Ajetunmobi et al. (2013) [34]	United Kingdom	Health system case register	1986-2010	Schizophrenia -spectrum disorders, bipolar disorder, depression, anxiety disorders & OCD, eating disorders, personality disorders	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia-spectrum disorders (15965), bipolar disorder (3876), depression (33161), anxiety disorders & OCD (3075), eating disorders (635), personality	Schizophrenia-spectrum disorders (Women: 6999; Men: 8966), bipolar disorder (2196; 1680), depression (20383; 12778), anxiety disorders & OCD (1946; 1129), eating disorders (586; 49), personality	General population	58490000	Age at death	All causes, natural causes, unnatural causes, other causes

							disorders (2316)	disorders (1095; 1221)				
Crump et al. (2013) [35]	Sweden	Health system case register	2003-2009	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	8277	Women: 3490 Men: 4787	People without schizophrenia	6089557	Age at death	All causes, natural causes, ischemic heart disease
Crump et al. (2013) [36]	Sweden	Health system case register	2003-2009	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	6618	Women: 3918 Men: 2700	People without bipolar disorder	6580418	Age at death	All causes, natural causes,
Degenhardt et al. (2013) [37]	Australia	Hospital or health centre medical records	1985-2005	Opioid use disorder	Service receipt	No criteria	43789	Women: 14860 Men: 28939	General population; before age 65 years	19514000	Age at death	All causes, cardiovascular diseases, neoplasm, liver diseases, HIV, opioid-related accidents, other-drug related accidents, motor vehicle accident, suicide, violence, any other causes
Ientile et al. (2013) [38]	Italy	Health system case register	2008-2012	Dementia	Diagnosis in care register, administrative data or medical records	ICD/ DSM	290	Women: 179 Men: 111	General population	59280000	Life expectancy at diagnosis	All causes
Laursen et al. (2013) [39]	Denmark, Finland, Sweden	Health system case register	2000-2007	Schizophrenia, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Demark: Schizophrenia (20430), Bipolar disorder (11101) Finland: Schizophrenia (20835), Bipolar disorder (9919) Sweden:	Demark: Schizophrenia (Women: 8424; Men: 12006), Bipolar disorder (6821; 4280) Finland: Schizophrenia (10466; 10369), Bipolar disorder (5430; 4489) Sweden:	General population	Denmark (5405000), Finland (5228000), Sweden (8994000)	Life expectancy at age 15 years	All causes

							Schizophrenia (24823), Bipolar disorder (18355)	Schizophrenia (10516; 14307), Bipolar disorder (10988; 7367)				
Lawrence et al. (2013) [40]	Australia	Health system case register	1985-2005	Any mental disorder, Alcohol and substance use disorder, schizophrenia, affective psychosis, other non-affective psychoses, neurotic disorders, stress or adjustment disorders, depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (292585)	NA	General population	18000000	Life expectancy at birth	All causes
Nordentoft et al. (2013) [41]	Denmark, Finland, Sweden	Health system case register	2000-2006	Substance use disorder, schizophrenia-spectrum disorders, mood disorders, personality disorders	Diagnosis in care register, administrative data or medical records	ICD	Denmark: Substance use disorder (34420), schizophrenia-spectrum disorders (11147), mood disorders (24766), personality disorders (5681) Finland: Substance use disorder (31994), schizophrenia-spectrum disorders (17238), mood disorders (37008),	Denmark: Substance use disorder (Women: 11422; Men: 22998), schizophrenia-spectrum disorders (5317; 5830), mood disorders (15324; 9442), personality disorders (3649; 2032) Finland: Substance use disorder (7590; 24404), schizophrenia-spectrum disorders (9285; 7953), mood	General population	Denmark (5391000), Finland (5213000), Sweden (8958000)	Life expectancy at age 15 years	All causes

							personality disorders (2770) Sweden: Substance use disorder (53757), schizophrenia-spectrum disorders (12585), mood disorders (42268), personality disorders (4726)	disorders (23077; 13931), personality disorders (1368; 1402) Sweden: Substance use disorder (20381;33376), schizophrenia-spectrum disorders (6571; 6014), mood disorders (25503; 16765), personality disorders (3074; 1652)				
Almeida et al. (2014) [42]	Australia	Health system case register	1996-2010	Schizophrenia-spectrum disorders, bipolar disorder, depressive disorders, alcohol use disorder	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia-spectrum disorders (444), bipolar disorder (101), depressive disorders (958), alcohol use disorder (698)	Schizophrenia-spectrum disorders (Women:0; Men: 444), bipolar disorder (0; 101), depressive disorders (0; 958), alcohol use disorder (0; 698)	General population	19720000	Life expectancy at ages of assessment (65-85 years)	All causes
Veldhuizen & Callaghan (2014) [43]	United States	Health system case register	1990-2005	Opioid use disorder	Diagnosis in care register, administrative data or medical records	ICD	68066	Women: 33926 Men: 34140	Before age 75 years	NA	Age at death	All causes
Chang et al. (2015) [44]	Taiwan	Hospital or health centre medical records	2006-2008	Heroin use disorder	Diagnostic interview	DSM	1283	Women: 156 Men: 1127	General population	22942308	Life expectancy at diagnosis (Mean age=37.5)	All causes
Charrel et al. (2015) [45]	France	Health system case register	2004-2007	Any mental disorders	Diagnosis in care register,	ICD	4417	Women: 2016 Men: 2401	General population	63630000	Age at death	All causes

					administrative data or medical records							
Fekadu et al. (2015) [46]	Ethiopia	Community survey	1998-2012	Any severe mental illness, schizophrenia, bipolar disorder, severe depression	Diagnostic interview	ICD	Any severe mental illness (919), schizophrenia, bipolar disorder, severe depression	Any severe mental illness (Women: 347; Men: 572), schizophrenia (62; 296), bipolar disorder (153; 193), severe depression (132; 83)	General population	82000000	Age at death	All causes
Kessing et al. (2015) [47]	Denmark	Health system case register	2000-2012	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Bipolar disorder	Women: 13548 Men: 9087	General population	5400000	Life expectancy at ages 15, 25, 35, 45, 55, 65, 75 years	All causes, natural causes, suicide, accidents
Kessing et al. (2015) [48]	Denmark	Health system case register	2000-2012	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	22725	Women: 13650 Men: 9102	General population	5400000	Life expectancy at ages 15, 25, 35, 45, 55, 65, 75 years	All causes
Lesage et al. (2015) [49]	Canada	Health insurance database, health system case register	1999-2012	Any mental disorders, schizophrenia, mood and anxiety disorders	Diagnosis in care register, administrative data or medical records	ICD	NA	NA	General population	7581000	Life expectancy at age 1 year	All causes
Olfson et al. (2015) [50]	United States	Health system case register	2001-2007	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	1138853	Women: 528097 Men: 610711	General population	292800000	Age at death	All causes, natural causes, cardiovascular diseases, ischemic heart diseases, nonischemic heart diseases, cerebrovascular diseases, other circulatory diseases, neoplasm, lung cancer, colon cancer, breast cancer, liver

												cancer, pancreas cancer, hematologic cancer, other cancers, diabetes, renal failure, pneumonia and influenza, sepsis, chronic obstructive pulmonary disease, liver diseases, other natural causes, unnatural causes, accidents, accidents (poisoning), accidents (non-poisoning), homicide, suicide, events of undetermined intents
Roehr et al. (2015) [51]	Germany	Hospital or health centre medical records	2003-2012	Dementia	Diagnostic interview	ICD/ DSM	523	Women: 362 Men: 161	General population	82270000	Age at death	All causes
Tom et al. (2015) [52]	United States	Hospital or health centre medical records	1994-2010	Dementia	Physical and neurological examinations, neuropsychological test, and laboratory and neuroimaging examination; diagnostic interview	DSM	815	Women: 508 Men: 307	People without dementia	2790	Life expectancy at age 70, 75, 80, 85, 90 years	All causes
Banerjee et al. (2016) [53]	India	Community survey	2003-2008	Dementia	Diagnostic interview	DSM	103	Women: 48 Men: 55	General population	1155000000	Age at death	All causes
Dickerson et al. (2016) [54]	United States	Hospital or health centre medical records	1999-2012	Schizophrenia or schizoaffective disorder, bipolar disorder	Diagnostic interview	DSM	Schizophrenia/ schizoaffective disorder (710), bipolar	Schizophrenia / schizoaffective disorder (Women: 271; Men: 439), bipolar	Before age 75 years	NA	Age at death	All causes

							disorder (406)	disorder (287; 119)				
Laursen et al. (2016) [55]	Denmark	Health system case register	1995-2013	Depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	1650574	Women: 1095587 Men: 554987	General population	5103699	Life expectancy at age 15, 30, 45, 60, 75 years	All causes
Leng et al. (2016) [56]	Taiwan	Health insurance database	2000-2011	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	34658	Women: 15805 Men: 18853	General population	22796306	Life expectancy at age 20-29, 30-39, 40-49, 50-59, 60-64 years	All causes
Tam et al. (2016) [57]	United States	Community survey	1997-2009	Severe mental illness	Self-report	No criteria	11563	Women: 7803 Men: 3760	People without severe mental illness	311551	Life expectancy since birth	All causes
Zhou et al. (2016) [58]	Germany	Health insurance database	2005-2010	Dementia	Diagnosis in care register, administrative data or medical records	ICD	2888	NA	People without dementia	45758	Life expectancy at age 75 years	All causes
Bitter et al. (2017) [59]	Hungary	Health insurance database	2005-2013	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	65169	Women: 37948 Men: 27221	People without schizophrenia	325435	Life expectancy at age 20, 45 years	All causes
Cailhol et al. (2017) [60]	Canada	Health insurance database	2001-2012	Any mental disorders, personality disorders	Diagnosis in care register, administrative data or medical records	ICD	NA	NA	General population	7632000	Life expectancy at age 20 years	All causes
Chang et al. (2017) [61]	United States, Taiwan	Hospital or health centre medical records	United States (2006-2009), Taiwan (2006-2008)	Opioid use disorder	Service receipt (USA), diagnosis in care register, administrative data or medical records (Taiwan)	United States (no criteria), Taiwan (DSM)	United States (1267), Taiwan (983)	United States (Women: 408; Men: 859) Taiwan (115; 868)	General population	United States (301200000), Taiwan (22942308)	Life expectancy at age of baseline assessment (Mean age=37.4 for United States cohort; mean age=37.8 for Taiwan cohort)	All causes

Erlangsen et al. (2017) [62]	Denmark	Health system case register	1995-2014	Any mental disorders	Diagnosis in care register, administrative data or medical records	ICD	589327	Women: 327322 Men: 262005	People without mental disorder	6107234	Life expectancy at diagnosis	All causes, infectious diseases, neoplasm, diabetes, heart diseases, respiratory diseases, digestive diseases, alcohol misuse, accident, suicide, any other causes
Jayatilleke et al. (2017) [63]	United Kingdom	Health system case register	2007-2012	Severe mental illness	Diagnosis in care register, administrative data or medical records	ICD	19106	Women: 8692 Men: 10414	General population	55692500	Life expectancy at birth	All causes, circulatory diseases, neoplasm, respiratory diseases, digestive diseases, suicide, other unnatural cases, any other causes
Castle & Chung (2018) [64]	Australia	Health system case register	2008-2015	Schizophrenia	Medication prescription records	No criteria	9533	Women: 4436 Men: 5097	People without schizophrenia	9533	Life expectancy at birth	All causes
Dickerson et al. (2018) [65]	United States	Hospital or health centre medical records	1999-2015	Severe mental illness (schizophrenia, schizoaffective disorder, bipolar disorder)	Diagnostic interview	DSM	Severe mental illness (1287), schizophrenia or schizoaffective disorder (789), bipolar disorder (498)	Severe mental illness (Women: 643; Men: 644), schizophrenia or schizoaffective disorder (297; 492), bipolar disorder (345; 153)	Before age 75 years	NA	Age at death	Natural causes
Ko et al. (2018) [66]	Taiwan	Health system case register	1998-2010	Schizophrenia	Diagnosis in care register, administrative data or medical records	DSM	4298	Women: 2001 Men: 2297	General population	22703099	Age at death	All causes, cardiovascular diseases, cerebrovascular diseases, diabetes, pneumonia,

												neoplasm, hepatitis and liver cirrhosis, nephritis and renal failure, suicide, homicide
Laursen et al. (2018) [67]	Denmark	Health system case register	1995-2015	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	47554	Women: 20257 Men: 27297	General population	6641608	Life expectancy at age of diagnosis	All causes, infectious diseases, neoplasm, diabetes, circulatory diseases, respiratory diseases, digestive diseases, alcohol misuse, accident, suicide, any other causes
Lichtenstein et al. (2018) [68]	Canada	Hospital or health centre medical records	1997-2015	Dementia	Diagnostic interview	DSM	168	Women: 98 Men: 70	General population	4242000	Life expectancy at assessment (mean age=79.4)	All causes
Strand et al. (2018) [69]	Norway	Health system case register	2009-2017	Dementia	Cognitive and physical function tests; blood taking; MRI/ CT of brain; diagnostic interview	No criteria, ICD	2684	Women: 1543 Men: 1141	General population	5080000	Life expectancy at age 70, 75 years	All causes
Barkley & Fischer (2019) [70]	United States	Hospital or health centre medical records	1979-2004	ADHD	Diagnosis in care register, administrative data or medical records	DSM	131	NA	People without ADHD	71	Life expectancy at age during which the actuarial tables were available for subjects' age and sex in 2004	All causes

Smith DaWalt et al. (2019) [71]	United States	Referrals from agencies, schools, clinics, media announcement	1998-2018	Autism spectrum disorder	Diagnostic interview	ICD/ DSM	406	Women: 153 Men: 253	General population	304100000	Age at death	All causes
Doyle et al. (2019) [72]	Ireland	Health system case register	1995-2015	Schizophrenia -spectrum disorders	Diagnosis in care register, administrative data or medical records	ICD/ DSM	171	Women: 72 Men: 99	General population	4160000	Age at death	All causes
Garre-Olmo et al. (2019) [73]	Spain	Health system case register	2007-2015	Dementia	Diagnostic interview	DSM	5156	Women: 3284 Men: 1872	People without dementia	15468	Life expectancy at age 60-69, 70-79, 80-89, ≥90 years	All causes
Gerritsen et al. (2019) [74]	Netherlands	Health system case register	2007-2013	Dementia	Diagnosis in care register, administrative data or medical records	ICD/ DSM	198	Women: 93 Men: 105	General population	173000	Age at death	All causes
Plana-Ripoll et al. (2019) [75]	Denmark	Health system case register	1995-2015	Any mental disorders, organic disorders, substance use disorders, schizophrenia -spectrum disorders, mood disorders, neurotic disorders, eating disorders, personality disorders, developmental disorders, behavioral disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (762419), organic disorders (123695), substance use disorders (154335), schizophrenia-spectrum disorders (103848), mood disorders (252235), neurotic disorders (321285), eating disorders (23196), personality disorders (141174), developmental	Any mental disorders (Women: 414447 Men: 347972), organic disorders (72295; 51400), substance use disorders (56915; 97420), schizophrenia -spectrum disorders (52809; 51039), mood disorders (158771; 93464), neurotic disorders (194321; 126964), eating disorders	General population	7369926	Life expectancy at age of diagnosis	All causes, natural causes, infectious diseases, neoplasm, diabetes, circulatory diseases, digestive diseases, alcohol misuse, other natural causes, unnatural causes, accident, suicide, homicide

							disorders (31251), behavioral disorders (83626)	(21788; 1408), personality disorders (87229; 53945); developmental disorders (7857; 23394); behavioral disorders (29335; 54291)				
Strand et al. (2019) [76]	Norway	Health system case register	2009-2017	Dementia	Diagnosis in care register, administrative data or medical records	DSM	2911	Women: 1647 Men: 1264	General population	5080000	Life expectancy at age 60, 65, 70, 75, 80 years	All causes
Iwajomo et al. (2020) [77]	Canada	Health system case register	1990-2013	Eating disorder	Diagnosis in care register, administrative data or medical records	ICD	19041	Women: 17108 Men: 1933	Before age 75 years	NA	Age at death	All causes
Lewer et al. (2020) [78]	Australia	Health system case register	2001-2018	Opioid use disorder	Medication prescription records	No criteria	47197	Women: 15149 Men: 32048	General population; before age 75 years	7130000	Life expectancy at age 18 years; age at death	All causes, infectious diseases, non-communicable diseases, accident, drug-related, mental health and suicide, any other causes
Pan et al. (2020) [79]	Taiwan	Health insurance database	2005, 2010	Schizophrenia, bipolar disorder, depression	Diagnosis in care register, administrative data or medical records	ICD	Cohort 2005: Schizophrenia (95632), bipolar disorder (45392), depression (395006) Cohort 2010: Schizophrenia	Cohort 2005: Schizophrenia (Women: 44097; Men: 51535), bipolar disorder (25686; 19706), depression (247090; 147916) Cohort 2010:	General population	2005 (22796306), 2010 (23162000)	Life expectancy at birth	All causes

							(104561), bipolar disorder (58317), depression (435585)	Schizophrenia (49608; 54953), bipolar disorder (34180; 24137), depression (276372; 159213)				
Plana-Ripoll et al. (2020) [80]	Denmark	Health system case register	1995-2016	Any mental disorders, organic disorders, substance use disorders, schizophrenia-spectrum disorders, mood disorders, neurotic disorders, eating disorders, personality disorders, developmental disorders, behavioral disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (546090), organic disorders (111575), substance use disorders (109264), schizophrenia-spectrum disorders (73131), mood disorders (199701), neurotic disorders (237277), eating disorders (17613), personality disorders (80160), developmental disorders (11004), behavioral disorders (37337)	NA	General population	7505576	Life expectancy at age of diagnosis	All causes
Wang et al. (2020) [81]	Taiwan	Health insurance database	2003-2013	Substance use disorder, schizophrenia-spectrum disorders, mood disorders, anxiety	Diagnosis in care register, administrative data or medical records	ICD	Substance use disorders (22830), schizophrenia-spectrum disorders (1662),	NA	General population	285125	Age at death	All causes

				disorders, any other mental disorders			mood disorders (17608), anxiety disorders (136642), any other mental disorders (106383)					
Weye et al. (2020) [82]	Denmark	Health system case register	2000-2015	Alcohol use disorder, drug use disorders, opioid use disorder, cannabis use disorder, cocaine use disorder, amphetamine use disorder, other drug use disorders, schizophrenia-spectrum disorders, bipolar disorder, depressive disorders, anxiety disorders, eating disorders, personality disorders, autism spectrum disorder, ADHD, conduct disorders	Diagnosis in care register, administrative data or medical records	ICD	Alcohol use disorder (54910), drug use disorders (26771), opioid use disorder (5764), cannabis use disorder (15749), cocaine use disorder (1813), amphetamine use disorder (2415), other drug use disorders (7312), schizophrenia-spectrum disorders (39258), bipolar disorder (28512), depressive disorders (189475), anxiety disorders (111980), eating disorders (14556), personality disorders	NA	General population	6989627	Life expectancy at age of diagnosis	All causes, infectious diseases, neoplasms, diabetes, circulatory diseases, respiratory diseases, digestive diseases, accidents, homicide, suicide, any other causes (alcohol, substance-related causes?)

							(83747), autism spectrum disorder (30616), ADHD (46623), conduct disorders (2209)					
Chan et al. (2021) [83]	Hong Kong	Health system case register	2008-2018	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	12556	Women: 7628 Men: 4928	General population	7179000	Life expectancy at age of diagnosis	All causes
Das-Munshi et al. (2020) [84]	United Kingdom	Health system case register	2007-2014	Any severe mental illness, schizophrenia-spectrum disorder, bipolar disorder, depression	Diagnosis in care register, administrative data or medical records	ICD	Any severe mental illness (18335); schizophrenia-spectrum disorder (13266), bipolar disorder (5069), depression (20203)	Any severe mental illness (Women: 8640; Men: 9695); schizophrenia-spectrum disorder (5621; 7645), bipolar disorder (3019; 2050), depression (12569; 7634)	General population	62770000	Life expectancy at birth	All causes
Dickerson et al. (2021) [85]	United States	Hospital or health centre medical records	1999-2018	Any severe mental illness (schizophrenia-spectrum disorders, bipolar disorder, depression)	Diagnostic interview	DSM	Any severe mental illness (1491)	Any severe mental illness (Women: 746; Men: 748)	Before age 75 years	NA	Age at death	All causes
Iturralde et al. (2021) [86]	United States	Health system case register	2010-2017	Any severe mental illness, schizophrenia-spectrum disorders, bipolar disorder, depressive/ anxiety disorder,	Diagnosis in care register, administrative data or medical records	ICD	Any severe mental illness (255559), schizophrenia-spectrum disorders (5717), bipolar disorder (19250),	Any severe mental illness (Women: 170493; Men: 85066), schizophrenia-spectrum disorders (2901; 2816), bipolar disorder	General population	309300000	Age at death	All causes

				substance use disorders			depressive/ anxiety disorder (230582), substance use disorders (50184)	(12427; 6833), depressive/ anxiety (155165; 75417), substance use disorders (18925; 31259)				
John et al. (2021) [87]	United Kingdom	Health system case register	2003-2016	Eating disorder	Diagnosis in care register, administrative data or medical records	ICD	5786	NA	General population	2504108	Age at death	All causes, natural causes, unnatural causes, suicide
Kessing et al. (2021) [88]	Denmark	Health system case register	1995-2017	Bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	19955	Women:11574 Men: 8381	General population	5437000	Life expectancy at age of diagnosis	All causes
Korhonen et al. (2021) [89]	Denmark, Finland, Sweden, Italy	Health system case register	1993-2007 (Denmark, Finland, Sweden), 2000-2007 (Italy)	Depression	Diagnosis in care register, administrative data or medical records (Denmark, Finland, Sweden), medication prescription records (Finland, Italy)	ICD (Denmark, Finland, Sweden), no criteria (Finland, Italy)	NA	NA	People without depression	Denmark (5340000), Finland (5176000), Sweden (8872000), Italy (57310000)	Life expectancy at age 15 years	All causes, lung cancers, other cancers, circulatory diseases, respiratory diseases, alcohol misuse, suicide, other natural causes, other unnatural causes
Madsen et al. (2021) [90]	Denmark	Health system case register	2005-2012	Depressive disorders	Medication prescription records	No criteria	154513	Women: 90460 Men: 64053	Before age 80 years	NA	Life expectancy at age of diagnosis	All causes, natural causes, neoplasms, circulatory diseases, respiratory diseases, digestive diseases, unnatural causes, alcohol misuse, accidents, suicide, all other causes

Moreno-Kustner et al. (2021) [91]	Spain	Health system case register	2003-2016	Schizophrenia-spectrum disorders (schizophrenia & other non-affective psychoses)	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia-spectrum disorders (1418), schizophrenia (852), other non-affective psychoses (566)	Schizophrenia-spectrum disorders (Women: 511; Men: 907)	General population	46360000	Life expectancy at birth; age at death	All causes
Tisdale et al. (2021) [92]	Australia	Hospital or health centre medical records	2014-2016	Substance use disorders	Service receipt	No criteria	1056	Women: 695 Men: 361	General population; before age 65 years	4706193	Age at death	All causes
Yasar & Yildiz (2021) [93]	Turkey	Health system case register	2008-2018	Schizophrenia, schizoaffective disorders	Diagnosis in care register, administrative data or medical records	DSM	Schizophrenia (441), schizoaffective disorders (65)	Overall (Women: 185; Men: 321)	General population	76580000	Life expectancy at birth	All causes
Yung et al. (2021) [94]	Hong Kong	Health system case register	2006-2016	Schizophrenia, other non-affective psychoses	Diagnosis in care register, administrative data or medical records	ICD	Schizophrenia (46896), other non-affective psychoses (20651)	Schizophrenia (Women: 24103; Men: 22793), other non-affective psychoses (12742; 7909)	General population	7072000	Life expectancy at age of diagnosis	All causes
Formanek et al. (2022) [95]	Czech Republic	Health system case register	1994-2017	Substance use disorders	Diagnosis in care register, administrative data or medical records	ICD	121153	NA	People without substance use disorders	6742134	Life expectancy at age of diagnosis	All causes
Girardi et al. (2022) [96]	Italy	Health system case register	2008-2018	Substance use disorders, schizophrenia-spectrum disorders, bipolar disorder, depressive disorders, neurotic, disorders, personality disorders,	Diagnosis in care register, administrative data or medical records	ICD	Substance use disorders (1160), schizophrenia-spectrum disorders (12996), bipolar disorder (1950), depressive disorders (16434),	Overall (Women: 31583; Men: 22767)	General population	11440000	Age at death	All causes, suicide

				other mental disorders			neurotic, stress-related and somatoform disorders (9689), personality disorders (4968), other mental disorders (7153)					
Hu et al. (2022) [97]	China	Community survey	2015-2017	Depressive disorders, anxiety disorders	Self-report	No criteria	Depressive disorders (312), anxiety disorders (204)	Depressive disorders (Women: 191; Men: 121), anxiety disorders (Women: 143; Men: 61)	People without depressive disorders (for comparison for depressive disorders), people without anxiety disorders (for comparison for anxiety disorders)	People without depressive disorders (12539), people without anxiety disorders (12647)	Life expectancy at age 60 years	All causes
Liu et al. (2022) [98]	China	Health system case register	2009-2017	Schizophrenia	Diagnostic interview	ICD	228572	Women: 119315 Men: 109257	General population	1363000000	Life expectancy at birth; age at death	All causes, natural causes, accidents, suicide, homicide, other causes
Matsuyama et al. (2022) [99]	Japan	Community survey	2006-2017	Depressive disorders	Self-report	No criteria	3342	NA	People without depressive disorders	8640	Life expectancy at age 65 years	All causes
Momen et al. (2022) [100]	Denmark	Health system case register	2000-2015	Organic disorders, substance use disorders, schizophrenia-spectrum disorders, mood disorders, neurotic disorders,	Diagnosis in care register, administrative data or medical records	ICD	Organic disorders (108,821), substance use disorders (137,031), schizophrenia-spectrum disorders (87,596),	NA	General population	6989627	Life expectancy at age of diagnosis	All causes

				eating disorders, personality disorders, developmental disorders, behavioral disorders			mood disorders, (227,466) neurotic disorders (294,506), eating disorders (23,570), personality disorders (128,691), developmental disorders (33,651), behavioral disorders (86,994)					
Moustgaard et al. (2022) [101]	Denmark, Finland, Sweden, Italy	Health system case register	1993-2007	Depressive disorders	Diagnosis in care register, administrative data or medical records (Denmark, Finland, Sweden), medication prescription records (Finland, Italy)	ICD (Denmark, Finland, Sweden), no criteria (Finland, Italy)	NA	NA	People without depression	Denmark (5340000), Finland (5176000), Sweden (8872000), Italy (57310000)	Life expectancy at age 25 years	All causes, alcohol-related causes
Plana-Ripoll et al. (2022) [102]	Denmark	Health system case register	2000-2018	Any mental disorders	Diagnosis in care register, administrative data or medical records	ICD	NA	NA	General population	5523000	Life expectancy at age of diagnosis	All causes
Tseng et al. (2022) [103]	Taiwan	Health system case register	2002-2013	Any mental disorders, organic mental disorders, substance use disorders, schizophrenia, affective psychoses, other mental disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (905), organic mental disorders (126), substance use disorders (83), schizophrenia (151), affective	Overall (Women: 331; Men: 574)	General population	22942308	Life expectancy at birth	All causes

							psychoses (139), other mental disorders (406)					
Yin et al. (2022) [104]	United Kingdom	Health system case register	2006-NA (median follow-up period=12.3 years)	Bipolar disorder, depressive disorders	Diagnosis in care register, administrative data or medical records	ICD	Bipolar disorder (1251), depressive disorders (15815)	Bipolar disorder (Women: 614; Men: 637), depressive disorders (Women: 9633; Men: 6182)	People without mood disorders	78285	Life expectancy at age 45 and 60 years	All causes
Chang et al. (2023) [105]	United Kingdom	Health system case register	2008-2017	Severe mental illnesses, schizophrenia, schizoaffective disorders, bipolar disorder	Diagnosis in care register, administrative data or medical records	ICD	Severe mental illnesses (18359), schizophrenia (11329), schizoaffective disorder (1092), bipolar disorder (5938)	Severe mental illnesses (Women: 8637; Men: 9722), schizophrenia (Women: 4424; Men: 6905), schizoaffective disorder (Women: 596; Men: 496), bipolar disorder (Women: 3617; Men: 2321)	General population	1010000	Life expectancy at birth	All causes
da Roza et al. (2023) [106]	Brazil	Health system case register	2002-2016	Any mental disorders, alcohol use disorders, substance use disorders, schizophrenia-spectrum disorders, mood disorders, other mental disorders	Diagnosis in care register, administrative data or medical records	ICD	Any mental disorders (4019)	Any mental disorders (Women: 1818; Men: 2201)	General population	194500000	Life expectancy at birth; mean age at death	All causes

Fond et al. (2023) [107]	France	Health system case register	2012-2017	Schizophrenia -spectrum disorders	Diagnosis in care register, administrative data or medical records	ICD	456003	Women: 211019; Men: 244984	General population	66310000	Median age at death	All causes
Ren et al. (2023) [108]	China	Health system case register	2015-2019	Schizophrenia	Diagnosis in care register, administrative data or medical records	ICD	99214	Women: 39589; Men: 40951	General population	13960000000	Life expectancy at age of diagnosis	All causes
Wu et al. (2023) [109]	China	Health system case register	2009-2019	Alcohol use disorders, substance use disorders, schizophrenia -spectrum disorders, bipolar disorder, depressive disorders, post-traumatic stress disorder, obsessive compulsive disorder, panic disorder, sleep disorder, mental developmental disorders due to lead exposure	Diagnosis in care register, administrative data or medical records	ICD	NA	NA	General population	13720000000	Mean age at death	All causes

[a] For studies using general population as a comparison group (i.e., reference population), the sample size was calculated using nationwide data the census-based population for the median year of the study period. Please refer to **Supplementary Table 7** for the reference list of the 109 studies included in this meta-analysis on YPLL.

Supplementary Table 6. Newcastle-Ottawa Scale for risk-of-bias assessment of included studies [a]

Studies	Representativeness of the exposed cohort	Selection of the non-exposed cohort	Ascertainment of outcome	Demonstration that outcome of interest was not present at start of study	Control for Sex (Comparability)	Control for other factors	Assessment of outcome	Was follow-up long enough for outcome	Adequacy of follow-up of cohorts	Score
Shinozaki (1976) [1]	1	1	1	1	1	1	1	0	0	7
Newman & Bland (1991) [2]	1	1	1	1	0	1	1	1	1	8
Poser et al. (1992) [3]	1	1	1	1	0	1	1	1	1	8
Marshall et al. (1994) [4]	1	0	1	1	0	1	1	1	1	7
Dembling et al. (1999) [5]	1	1	1	1	1	1	1	1	1	9
Hannerz & Borga (2000) [6]	1	1	1	1	1	1	1	0	0	7
Hannerz et al. (2001) [7]	1	1	1	1	1	1	1	1	1	9
Dodge et al. (2003) [8]	1	0	1	1	1	1	1	1	1	8
Dickey et al. (2004) [9]	1	1	1	1	1	1	1	1	1	9
Brugal et al. (2005) [10]	1	1	1	1	0	1	1	1	1	8
Colton & Manderscheid (2006) [11]	1	1	1	1	0	1	1	1	1	8
Miller et al. (2006) [12]	1	1	1	1	1	1	1	1	1	9
Smyth et al. (2006) [13]	1	1	1	1	0	1	1	1	1	8
Miller et al. (2007) [14]	1	1	1	1	0	1	1	1	1	8
Smyth et al. (2007) [15]	1	1	1	1	1	1	1	1	1	9
Haver et al. (2008) [16]	1	1	1	1	0	1	1	1	1	8
Hiroeh et al. (2008) [17]	1	1	1	1	1	1	1	1	1	9
Tiihonen et al. (2009) [18]	1	1	1	1	1	1	1	1	1	9
Kiviniemi et al. (2010) [19]	1	1	1	1	1	1	1	1	1	9
Piatt et al. (2010) [20]	1	1	1	1	0	1	1	0	0	6
Chang et al. (2011) [21]	1	1	1	1	1	1	1	1	1	9
Druss et al. (2011) [22]	1	1	1	1	1	1	1	1	1	9
Hayes et al. (2011) [23]	1	1	1	1	1	1	1	1	1	9
Laursen (2011) [24]	1	1	1	1	1	1	1	1	1	9
Wahlbeck et al. (2011) [25]	1	1	1	1	1	1	1	1	1	9
Fok et al. (2012) [26]	1	1	1	1	1	1	1	1	1	9
Healy et al. (2012) [27]	1	1	1	1	1	1	1	1	1	9
Kodesh et al. (2012) [28]	1	1	1	1	1	1	1	1	1	9
Morden et al. (2012) [29]	1	1	1	1	0	1	1	1	1	8
Nome & Holsten (2012) [30]	1	1	1	1	1	1	1	1	1	9

Rizzuto et al. (2012) [31]	1	1	1	1	0	1	1	1	1	8
Westman et al. (2012) [32]	1	1	1	1	1	1	1	1	1	9
Zivin et al. (2012) [33]	1	0	1	1	0	1	1	1	1	7
Ajetunmobi et al. (2013) [34]	1	1	1	1	0	1	1	1	1	8
Crump et al. (2013) [35]	1	1	1	1	1	1	1	1	1	9
Crump et al. (2013) [36]	1	1	1	1	1	1	1	1	1	9
Degenhardt et al. (2013) [37]	1	0	1	1	1	1	1	1	1	9
Ientile et al. (2013) [38]	1	1	1	1	1	1	1	1	1	9
Laursen et al. (2013) [39]	1	1	1	1	1	1	1	1	1	9
Lawrence et al. (2013) [40]	1	1	1	1	1	1	1	1	1	9
Nordentoft et al. (2013) [41]	1	1	1	1	1	1	1	1	1	9
Almeida et al. (2014) [42]	1	0	1	1	0	1	1	1	1	7
Veldhuizen & Callaghan (2014) [43]	1	1	1	1	1	1	1	1	1	9
Chang et al. (2015) [44]	1	1	1	1	1	1	1	1	1	9
Charrel et al. (2015) [45]	1	1	1	1	1	1	1	1	1	9
Fekadu et al. (2015) [46]	1	1	1	1	1	1	1	1	1	9
Kessing et al. (2015) [47]	1	1	1	1	0	1	1	1	1	8
Kessing et al. (2015) [48]	1	1	1	1	1	1	1	1	1	9
Lesage et al. (2015) [49]	1	1	1	1	1	1	1	1	1	9
Olfson et al. (2015) [50]	1	1	1	1	1	1	1	1	1	9
Roehr et al. (2015) [51]	1	1	1	1	0	1	1	1	1	8
Tom et al. (2015) [52]	1	0	1	1	1	1	1	1	1	8
Banerjee et al. (2016) [53]	1	1	1	1	1	1	1	1	1	9
Dickerson et al. (2016) [54]	1	1	1	1	0	1	1	1	1	8
Laursen et al. (2016) [55]	1	1	1	1	1	1	1	1	1	9
Leng et al. (2016) [56]	1	1	1	1	1	1	1	1	1	9
Tam et al. (2016) [57]	1	0	1	1	1	1	1	1	1	8
Zhou et al. (2016) [58]	1	1	1	1	1	1	1	1	1	9
Bitter et al. (2017) [59]	1	1	1	1	1	1	1	1	1	9
Cailhol et al. (2017) [60]	1	1	1	1	1	1	1	1	1	9
Chang et al. (2017) [61]	1	0	1	1	1	1	1	1	1	8
Erlangsen et al. (2017) [62]	1	1	1	1	1	1	1	1	1	9
Jayatilleke et al. (2017) [63]	1	0	1	1	1	1	1	1	1	8

Castle & Chung (2018) [64]	1	1	1	1	1	1	1	1	1	9
Dickerson et al. (2018) [65]	1	1	1	1	0	1	1	1	1	8
Ko et al. (2018) [66]	1	1	1	1	1	1	1	1	1	9
Laursen et al. (2018) [67]	1	1	1	1	1	1	1	1	1	9
Lichtenstein et al. (2018) [68]	1	1	1	1	0	1	1	1	1	8
Strand et al. (2018) [69]	1	1	1	1	1	1	1	1	1	9
Barkley & Fischer (2019) [70]	1	1	1	1	1	1	1	1	1	9
Smith DaWalt et al. (2019) [71]	1	1	1	1	1	1	1	1	1	9
Doyle et al. (2019) [72]	1	1	1	1	1	1	1	1	1	9
Garre-Olmo et al. (2019) [73]	1	1	1	1	1	1	1	1	1	9
Gerritsen et al. (2019) [74]	1	1	1	1	1	1	1	1	1	9
Plana-Ripoll et al. (2019) [75]	1	1	1	1	1	1	1	1	1	9
Strand et al. (2019) [76]	1	1	1	1	1	1	1	1	1	9
Iwajomo et al. (2020) [77]	1	1	1	1	1	1	1	1	1	9
Lewer et al. (2020) [78]	1	1	1	1	1	1	1	1	1	9
Pan et al. (2020) [79]	1	1	1	1	1	1	1	1	1	9
Plana-Ripoll et al. (2020) [80]	1	1	1	1	1	1	1	1	1	9
Wang et al. (2020) [81]	1	1	1	1	0	1	1	1	1	8
Weye et al. (2020) [82]	1	1	1	1	1	1	1	1	1	9
Chan et al. (2021) [83]	1	1	1	1	1	1	1	1	1	9
Das-Munshi et al. (2020) [84]	1	1	1	1	1	1	1	1	1	9
Dickerson et al. (2021) [85]	1	1	1	1	1	1	1	1	1	9
Iturralde et al. (2021) [86]	1	1	1	1	0	1	1	1	1	8
John et al. (2021) [87]	1	1	1	1	1	1	1	1	1	9
Kessing et al. (2021) [88]	1	1	1	1	1	1	1	1	1	9
Korhonen et al. (2021) [89]	1	0	1	1	1	1	1	1	1	8
Madsen et al. (2021) [90]	1	1	1	1	1	1	1	1	1	9
Moreno-Kustner et al. (2021) [91]	1	1	1	1	1	1	1	1	1	9
Tisdale et al. (2021) [92]	1	1	1	1	1	1	1	1	1	9
Yasar & Yildiz (2021) [93]	1	1	1	1	1	1	1	1	1	9
Yung et al. (2021) [94]	1	1	1	1	1	1	1	1	1	9
Formanek et al. (2022) [95]	1	1	1	1	1	1	1	1	1	9
Girardi et al. (2022) [96]	1	1	1	1	0	1	1	1	1	8

Hu et al. (2022) [97]	1	1	1	1	1	1	1	1	1	9
Liu et al. (2022) [98]	1	1	1	1	1	1	1	1	1	9
Matsuyama et al. (2022) [99]	1	1	1	1	1	1	1	1	1	9
Mormen et al. (2022) [100]	1	1	1	1	0	1	1	1	1	8
Moustgaard et al. (2022) [101]	1	1	1	1	1	1	1	1	1	9
Plana-Ripoll et al. (2022) [102]	1	1	1	1	0	1	1	1	1	8
Tseng et al. (2022) [103]	1	1	1	1	0	1	1	1	1	8
Yin et al. (2022) [104]	1	1	1	1	0	1	1	1	1	8
Chang et al. (2023) [105]	1	1	1	1	1	1	1	1	1	9
da Roza et al. (2023) [106]	1	1	1	1	0	1	1	1	1	8
Fond et al. (2023) [107]	1	1	1	1	1	1	1	1	1	9
Ren et al. (2023) [108]	1	1	1	1	1	1	1	1	1	9
Wu et al. (2023) [109]	1	1	1	1	0	1	1	1	1	8

[a] Quality of studies was evaluated based on the domains of selection of study groups, comparability of groups and outcome ascertainment. In the comparability domain, only "control for sex" item was assessed, while "control for other covariates" item is not applicable in the current evaluation (as no additional covariates are controlled for in life expectancy and YPLL estimation) (Hjorthøj et al., 2017) and is counted as "1" for all included studies. Following the method of previous meta-analyses (e.g., Solmi et al., 2020), studies with NOS score ≥7 are regarded as of high quality.

References for the footnote:

Hjorthøj C, Stürup AE, McGrath JJ, Nordentoft M. Years of potential life lost and life expectancy in schizophrenia: a systematic review and meta-analysis. *Lancet Psychiatry.* 2017;4: 295–301.

Solmi M, Firth J, Miola A, et al. Disparities in cancer screening in people with mental illness across the world versus the general population: prevalence and comparative meta-analysis including 4 717 839 people. *Lancet Psychiatry.* 2020;7 :52–63.

References for Supplementary Tables 5 & 6 (included studies for the meta-analysis on YPLL)

1. Shinozaki H. An epidemiologic study of deaths of psychiatric inpatients. *Compr Psychiatry* 1976; 17: 425–36.
2. Newman SC, Bland RC. Mortality in a cohort of patients with schizophrenia: a record linkage study. *Can J Psychiatry* 1991; 36: 239–45.
3. Poser W, Poser S, Eva-Condemarin P. Mortality in patients with dependence on prescription drugs. *Drug Alcohol Depend* 1992; 30: 49–57.
4. Marshall EJ, Edwards G, Taylor C. Mortality in men with drinking problems: a 20-year follow-up. *Addiction* 1994; 89: 1293–8.
5. Dembling BP, Chen DT, Vachon L. Life expectancy and causes of death in a population treated for serious mental illness. *Psychiatr Serv* 1999; 50: 1036–42.

6. Hannerz H, Borgå P. Mortality among persons with a history as psychiatric inpatients with functional psychosis. *Soc Psychiatry Psychiatr Epidemiol* 2000; 35: 380–7.
7. Hannerz H, Borgå P, Borritz M. Life expectancies for individuals with psychiatric diagnoses. *Public Health* 2001; 115: 328–37.
8. Dodge HH, Shen C, Pandav R, DeKosky ST, Ganguli M. Functional transitions and active life expectancy associated with Alzheimer disease. *Arch Neurol* 2003; 60: 253–9.
9. Dickey B, Dembling B, Azeni H, Normand SL. Externally caused deaths for adults with substance use and mental disorders. *J Behav Health Serv Res* 2004; 31: 75–85.
10. Brugal MT, Domingo-Salvany A, Puig R, Barrio G, García de Olalla P, de la Fuente L. Evaluating the impact of methadone maintenance programmes on mortality due to overdose and aids in a cohort of heroin users in Spain. *Addiction* 2005; 100: 981–9.
11. Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Prev Chronic Dis* 2006; 3: A42.
12. Miller BJ, Paschall CB 3rd, Svendsen DP. Mortality and medical comorbidity among patients with serious mental illness. *Psychiatr Serv* 2006; 57: 1482–7.
13. Smyth B, Fan J, Hser YI. Life expectancy and productivity loss among narcotics addicts thirty-three years after index treatment. *J Addict Dis* 2006; 25: 37–47.
14. Miller CL, Kerr T, Strathdee SA, Li K, Wood E. Factors associated with premature mortality among young injection drug users in Vancouver. *Harm Reduct J* 2007; 4: 1.
15. Smyth B, Hoffman V, Fan J, Hser YI. Years of potential life lost among heroin addicts 33 years after treatment. *Prev Med* 2007; 44: 369–74.
16. Haver B, Gjestad R, Lindberg S, Franck J. Mortality risk up to 25 years after initiation of treatment among 420 Swedish women with alcohol addiction. *Addiction* 2009; 104: 413–9.
17. Hiroeh U, Kapur N, Webb R, Dunn G, Mortensen PB, Appleby L. Deaths from natural causes in people with mental illness: a cohort study. *J Psychosom Res* 2008; 64: 275–83.
18. Tiihonen J, Lönnqvist J, Wahlbeck K, et al. 11-year follow-up of mortality in patients with schizophrenia: a population-based cohort study (FIN11 study). *Lancet* 2009; 374: 620–7.
19. Kiviniemi M, Suvisaari J, Pirkola S, Häkkinen U, Isohanni M, Hakko H. Regional differences in five-year mortality after a first episode of schizophrenia in Finland. *Psychiatr Serv* 2010; 61: 272–9.
20. Piatt EE, Munetz MR, Ritter C. An examination of premature mortality among decedents with serious mental illness and those in the general population. *Psychiatr Serv* 2010; 61: 663–8.
21. Chang CK, Hayes RD, Perera G, et al. Life expectancy at birth for people with serious mental illness and other major disorders from a secondary mental health care case register in London. *PLoS One* 2011; 6: e19590.

22. Druss BG, Zhao L, Von Esenwein S, Morrato EH, Marcus SC. Understanding excess mortality in persons with mental illness: 17-year follow up of a nationally representative US survey. *Med Care* 2011; 49: 599–604.
23. Hayes RD, Chang CK, Fernandes A, et al. Associations between substance use disorder sub-groups, life expectancy and all-cause mortality in a large British specialist mental healthcare service. *Drug Alcohol Depend* 2011; 118: 56–61.
24. Laursen TM. Life expectancy among persons with schizophrenia or bipolar affective disorder. *Schizophr Res* 2011; 131: 101–4.
25. Wahlbeck K, Westman J, Nordentoft M, Gissler M, Laursen TM. Outcomes of Nordic mental health systems: life expectancy of patients with mental disorders. *Br J Psychiatry* 2011; 199: 453–8.
26. Fok ML, Hayes RD, Chang CK, Stewart R, Callard FJ, Moran P. Life expectancy at birth and all-cause mortality among people with personality disorder. *J Psychosom Res* 2012; 73: 104–7.
27. Healy D, Le Noury J, Harris M, et al. Mortality in schizophrenia and related psychoses: data from two cohorts, 1875-1924 and 1994-2010. *BMJ Open* 2012; 2: e001810.
28. Kodesh A, Goldshtein I, Gelkopf M, Goren I, Chodick G, Shalev V. Epidemiology and comorbidity of severe mental illnesses in the community: findings from a computerized mental health registry in a large Israeli health organization. *Soc Psychiatry Psychiatr Epidemiol* 2012; 47: 1775–82.
29. Morden NE, Lai Z, Goodrich DE, et al. Eight-year trends of cardiometabolic morbidity and mortality in patients with schizophrenia. *Gen Hosp Psychiatry* 2012; 34: 368–79.
30. Nome S, Holsten F. Changes in mortality after first psychiatric admission: a 20-year prospective longitudinal clinical study. *Nord J Psychiatry* 2012; 66: 97–106.
31. Rizzuto D, Bellocco R, Kivipelto M, Clerici F, Wimo A, Fratiglioni L. Dementia after age 75: survival in different severity stages and years of life lost. *Curr Alzheimer Res* 2012; 9: 795–800.
32. Westman J, Gissler M, Wahlbeck K. Successful deinstitutionalization of mental health care: increased life expectancy among people with mental disorders in Finland. *Eur J Public Health* 2012; 22: 604–6.
33. Zivin K, Ilgen MA, Pfeiffer PN, et al. Early mortality and years of potential life lost among Veterans Affairs patients with depression. *Psychiatr Serv* 2012; 63: 823–6.
34. Ajetunmobi O, Taylor M, Stockton D, Wood R. Early death in those previously hospitalised for mental healthcare in Scotland: a nationwide cohort study, 1986-2010. *BMJ Open* 2013; 3: e002768.
35. Crump C, Winkleby MA, Sundquist K, Sundquist J. Comorbidities and mortality in persons with schizophrenia: a Swedish national cohort study. *Am J Psychiatry* 2013; 170: 324–33.
36. Crump C, Sundquist K, Winkleby MA, Sundquist J. Comorbidities and mortality in bipolar disorder: a Swedish national cohort study. *JAMA Psychiatry* 2013; 70: 931–9.
37. Degenhardt L, Larney S, Randall D, Burns L, Hall W. Causes of death in a cohort treated for opioid dependence between 1985 and 2005. *Addiction* 2014; 109: 90–9.

38. Ientile L, De Pasquale R, Monacelli F, et al. Survival rate in patients affected by dementia followed by memory clinics (UVA) in Italy. *J Alzheimers Dis* 2013; 36: 303–9.
39. Laursen TM, Wahlbeck K, Hällgren J, et al. Life expectancy and death by diseases of the circulatory system in patients with bipolar disorder or schizophrenia in the Nordic countries. *PLoS One* 2013; 8: e67133.
40. Lawrence D, Hancock KJ, Kisely S. The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers. *BMJ* 2013; 346: f2539.
41. Nordentoft M, Wahlbeck K, Hällgren J, et al. Excess mortality, causes of death and life expectancy in 270,770 patients with recent onset of mental disorders in Denmark, Finland and Sweden. *PLoS One* 2013; 8: e55176.
42. Almeida OP, Hankey GJ, Yeap BB, Golledge J, Norman PE, Flicker L. Mortality among people with severe mental disorders who reach old age: a longitudinal study of a community-representative sample of 37,892 men. *PLoS One* 2014; 9: e111882.
43. Veldhuizen S, Callaghan RC. Cause-specific mortality among people previously hospitalized with opioid-related conditions: a retrospective cohort study. *Ann Epidemiol* 2014; 24: 620–4.
44. Chang KC, Lu TH, Lee KY, Hwang JS, Cheng CM, Wang JD. Estimation of life expectancy and the expected years of life lost among heroin users in the era of opioid substitution treatment (OST) in Taiwan. *Drug Alcohol Depend* 2015; 153: 152–8.
45. Charrel CL, Plancke L, Genin M, et al. Mortality of people suffering from mental illness: a study of a cohort of patients hospitalised in psychiatry in the north of France. *Soc Psychiatry Psychiatr Epidemiol* 2015; 50: 269–77.
46. Fekadu A, Medhin G, Kebede D, et al. Excess mortality in severe mental illness: 10-year population-based cohort study in rural Ethiopia. *Br J Psychiatry* 2015; 206: 289–96.
47. Kessing LV, Vradi E, McIntyre RS, Andersen PK. Causes of decreased life expectancy over the life span in bipolar disorder. *J Affect Disord* 2015; 180: 142–7.
48. Kessing LV, Vradi E, Andersen PK. Life expectancy in bipolar disorder. *Bipolar Disord* 2015; 17: 543–8.
49. Lesage A, Rochette L, Émond V, et al. A surveillance system to monitor excess mortality of people with mental illness in Canada. *Can J Psychiatry* 2015; 60: 571–9.
50. Olfson M, Gerhard T, Huang C, Crystal S, Stroup TS. Premature mortality among adults with schizophrenia in the United States. *JAMA Psychiatry* 2015; 72: 1172–81.
51. Roehr S, Luck T, Bickel H, et al. Mortality in incident dementia - results from the German Study on Aging, Cognition, and Dementia in Primary Care Patients. *Acta Psychiatr Scand* 2015; 132: 257–69.
52. Tom SE, Hubbard RA, Crane PK, et al. Characterization of dementia and Alzheimer's disease in an older population: updated incidence and life expectancy with and without dementia. *Am J Public Health* 2015; 105: 408–13.
53. Banerjee TK, Dutta S, Das S, et al. Epidemiology of dementia and its burden in the city of Kolkata, India. *Int J Geriatr Psychiatry* 2017; 32: 605–14.
54. Dickerson F, Origoni A, Schroeder J, et al. Mortality in schizophrenia and bipolar disorder: Clinical and serological predictors. *Schizophr Res* 2016; 170: 177–83.

55. Laursen TM, Musliner KL, Benros ME, Vestergaard M, Munk-Olsen T. Mortality and life expectancy in persons with severe unipolar depression. *J Affect Disord* 2016; 193: 203–7.
56. Lêng CH, Chou MH, Lin SH, Yang YK, Wang JD. Estimation of life expectancy, loss-of-life expectancy, and lifetime healthcare expenditures for schizophrenia in Taiwan. *Schizophr Res* 2016; 171: 97–102.
57. Tam J, Warner KE, Meza R. Smoking and the reduced life expectancy of individuals with serious mental illness. *Am J Prev Med* 2016; 51: 958–66.
58. Zhou Y, Putter H, Doblhammer G. Years of life lost due to lower extremity injury in association with dementia, and care need: a 6-year follow-up population-based study using a multi-state approach among German elderly. *BMC Geriatr* 2016; 16: 9.
59. Bitter I, Czobor P, Borsi A, et al. Mortality and the relationship of somatic comorbidities to mortality in schizophrenia. A nationwide matched-cohort study. *Eur Psychiatry* 2017; 45: 97–103.
60. Cailhol L, Pelletier É, Rochette L, et al. Prevalence, mortality, and health care use among patients with cluster B personality disorders clinically diagnosed in Quebec: a provincial cohort study, 2001-2012. *Can J Psychiatry* 2017; 62: 336–42.
61. Chang KC, Wang JD, Saxon A, Matthews AG, Woody G, Hser YI. Causes of death and expected years of life lost among treated opioid-dependent individuals in the United States and Taiwan. *Int J Drug Policy* 2017; 43: 1–6.
62. Erlangsen A, Andersen PK, Toender A, Laursen TM, Nordentoft M, Canudas-Romo V. Cause-specific life-years lost in people with mental disorders: a nationwide, register-based cohort study. *Lancet Psychiatry* 2017; 4: 937–45.
63. Jayatilleke N, Hayes RD, Dutta R, et al. Contributions of specific causes of death to lost life expectancy in severe mental illness. *Eur Psychiatry* 2017; 43: 109–15.
64. Castle DJ, Chung E. Cardiometabolic comorbidities and life expectancy in people on medication for schizophrenia in Australia. *Curr Med Res Opin* 2018; 34: 613–8.
65. Dickerson F, Origoni A, Schroeder J, et al. Natural cause mortality in persons with serious mental illness. *Acta Psychiatr Scand* 2018; 137: 371–9.
66. Ko YS, Tsai HC, Chi MH, et al. Higher mortality and years of potential life lost of suicide in patients with schizophrenia. *Psychiatry Res* 2018; 270: 531–7.
67. Laursen TM, Plana-Ripoll O, Andersen PK, et al. Cause-specific life years lost among persons diagnosed with schizophrenia: Is it getting better or worse?. *Schizophr Res* 2019; 206: 284–90.
68. Lichtenstein ML, Fallah N, Mudge B, et al. 16-Year survival of the Canadian collaborative cohort of related dementias. *Can J Neurol Sci* 2018; 45: 367–74.
69. Strand BH, Knapskog AB, Persson K, et al. Survival and years of life lost in various aetiologies of dementia, mild cognitive impairment (MCI) and subjective cognitive decline (SCD) in Norway. *PLoS One* 2018; 13: e0204436.
70. Barkley RA, Fischer M. Hyperactive child syndrome and estimated life expectancy at young adult follow-up: the role of ADHD persistence and other potential predictors. *J Atten Disord* 2019; 23: 907–23.

71. Smith DaWalt L, Hong J, Greenberg JS, Mailick MR. Mortality in individuals with autism spectrum disorder: Predictors over a 20-year period. *Autism* 2019; 23: 1732–9.
72. Doyle R, O'Keeffe D, Hannigan A, et al. The iHOPE-20 study: mortality in first episode psychosis-a 20-year follow-up of the Dublin first episode cohort. *Soc Psychiatry Psychiatr Epidemiol* 2019; 54: 1337–42.
73. Garre-Olmo J, Ponjoan A, Inoriza JM, et al. Survival, effect measures, and impact numbers after dementia diagnosis: a matched cohort study. *Clin Epidemiol* 2019; 11: 525–42.
74. Gerritsen AAJ, Bakker C, Verhey FRJ, et al. Survival and life-expectancy in a young-onset dementia cohort with six years of follow-up: the NeedYD-study. *Int Psychogeriatr* 2019; 31: 1781–9.
75. Plana-Ripoll O, Pedersen CB, Agerbo E, et al. A comprehensive analysis of mortality-related health metrics associated with mental disorders: a nationwide, register-based cohort study. *Lancet* 2019; 394: 1827–35.
76. Strand BH, Knapskog AB, Persson K, et al. The loss in expectation of life due to early-onset mild cognitive impairment and early-onset dementia in Norway. *Dement Geriatr Cogn Disord* 2019; 47: 355–65.
77. Iwajomo T, Bondy SJ, de Oliveira C, Colton P, Trottier K, Kurdyak P. Excess mortality associated with eating disorders: population-based cohort study. *Br J Psychiatry* 2021; 219: 487–93.
78. Lewer D, Jones NR, Hickman M, Nielsen S, Degenhardt L. Life expectancy of people who are dependent on opioids: a cohort study in New South Wales, Australia. *J Psychiatr Res* 2020; 130: 435–40.
79. Pan YJ, Yeh LL, Chan HY, Chang CK. Excess mortality and shortened life expectancy in people with major mental illnesses in Taiwan. *Epidemiol Psychiatr Sci* 2020; 29: e156.
80. Plana-Ripoll O, Musliner KL, Dalsgaard S, et al. Nature and prevalence of combinations of mental disorders and their association with excess mortality in a population-based cohort study. *World Psychiatry* 2020; 19: 339–49.
81. Wang JY, Chang CC, Lee MC, Li YJ. Identification of psychiatric patients with high mortality and low medical utilization: a population-based propensity score-matched analysis. *BMC Health Serv Res* 2020; 20: 230.
82. Weye N, Momen NC, Christensen MK, et al. Association of specific mental disorders with premature mortality in the Danish population using alternative measurement methods. *JAMA Netw Open* 2020; 3: e206646.
83. Chan JKN, Wong CSM, Yung NCL, Chen EYH, Chang WC. Excess mortality and life-years lost in people with bipolar disorder: an 11-year population-based cohort study. *Epidemiol Psychiatr Sci* 2021; 30: e39.
84. Das-Munshi J, Chang CK, Dregan A, et al. How do ethnicity and deprivation impact on life expectancy at birth in people with serious mental illness? Observational study in the UK. *Psychol Med* 2021; 51: 2581–9.
85. Dickerson F, Origoni A, Rowe K, et al. Risk factors for natural cause mortality in a cohort of 1494 persons with serious mental illness. *Psychiatry Res* 2021; 298: 113755.
86. Iturralde E, Slama N, Kline-Simon AH, Young-Wolff KC, Mordecai D, Sterling SA. Premature mortality associated with severe mental illness or substance use disorder in an integrated health care system. *Gen Hosp Psychiatry* 2021; 68: 1–6.

87. John A, Marchant A, Demmler J, Tan J, DelPozo-Banos M. Clinical management and mortality risk in those with eating disorders and self-harm: e-cohort study using the SAIL databank. *BJPsych Open* 2021; 7: e67.
88. Kessing LV, Ziersen SC, Andersen PK, Vinberg M. A nation-wide population-based longitudinal study on life expectancy and cause specific mortality in patients with bipolar disorder and their siblings. *J Affect Disord* 2021; 294: 472–6.
89. Korhonen K, Moustgaard H, Tarkiainen L, et al. Contributions of specific causes of death by age to the shorter life expectancy in depression: a register-based observational study from Denmark, Finland, Sweden and Italy. *J Affect Disord* 2021; 295: 831–8.
90. Madsen KB, Plana-Ripoll O, Musliner KL, Debost JP, Petersen LV, Munk-Olsen T. Cause-specific life years lost in individuals with treatment-resistant depression: A Danish nationwide register-based cohort study. *J Affect Disord* 2021; 280: 250–7.
91. Moreno-Küstner B, Guzman-Parra J, Pardo Y, Sanchidrián Y, Díaz-Ruiz S, Mayoral-Cleries F. Excess mortality in patients with schizophrenia spectrum disorders in Malaga (Spain): A cohort study. *Epidemiol Psychiatr Sci* 2021; 30: e11.
92. Tisdale C, de Andrade D, Leung J, Chiu V, Hides L. Utilising data linkage to describe and explore mortality among a retrospective cohort of individuals admitted to residential substance use treatment. *Drug Alcohol Rev* 2021; 40: 1202–6.
93. Yaşar H, Yildiz M. Assessment of mortality rate in 10 years and the associated risk factors in schizophrenia. Şizofrenide 10 yıllık olüm oranı ve risk etmenlerinin değerlendirmesi. *Turk Psikiyatri Derg* 2021; 32: 151–9.
94. Yung NCL, Wong CSM, Chan JKN, Chen EYH, Chang WC. Excess mortality and life-years lost in people with schizophrenia and other non-affective psychoses: an 11-year population-based cohort study. *Schizophr Bull* 2021; 47: 474–84.
95. Formánek T, Krupchanka D, Mladá K, Winkler P, Jones PB. Mortality and life-years lost following subsequent physical comorbidity in people with pre-existing substance use disorders: a national registry-based retrospective cohort study of hospitalised individuals in Czechia. *Lancet Psychiatry*. 2022; 9: 957-68.
96. Girardi P, Boldrini T, Braggion M, Schievano E, Amaddeo F, Fedeli U. Suicide mortality among psychiatric patients in Northeast Italy: a 10-year cohort study. *Epidemiol Psychiatr Sci*. 2022; 31: e17.
97. Hu Z, Liu X, Jiang F, et al. Multidimensional evaluation of healthy life expectancy indicators based on mental health among the rural older population: a large-scale cross-sectional study. *J Affect Disord*. 2022; 319: 318-24.
98. Liu X, Wang D, Fan R, et al. Life expectancy and potential years of life lost for schizophrenia in western China. *Psychiatry Res* 2022; 308: 114330.
99. Matsuyama S, Murakami Y, Lu Y, Sone T, Sugawara Y, Tsuji I. Association between social participation and disability-free life expectancy in Japanese older people: the Ohsaki cohort 2006 study. *J Epidemiol*. 2022; 32: 456-63.
100. Momen NC, Plana-Ripoll O, Agerbo E, et al. Mortality associated with mental disorders and comorbid general medical conditions. *JAMA Psychiatry*. 2022; 79: 444-53.
101. Moustgaard H, Tarkiainen L, Östergren O, et al. The contribution of alcohol-related deaths to the life-expectancy gap between people with and without depression - a cross-country comparison. *Drug Alcohol Depend*. 2022; 238: 109547.

102. Plana-Ripoll O, Dreier JW, Momen NC, et al. Analysis of mortality metrics associated with a comprehensive range of disorders in Denmark, 2000 to 2018: a population-based cohort study. *PLoS Med*. 2022; 19: e1004023.
103. Tseng PY, Xie XY, Hsu CC, Chien SH, Chen JD, Wang JY. Investigating medical cost and mortality among psychiatric patients involuntary admissions: a nationwide propensity score-matched study. *Psychiatry Investig*. 2022; 19: 527-37.
104. Yin J, Ma T, Li J, Zhang G, Cheng X, Bai Y. Association of mood disorder with cardiometabolic multimorbidity trajectory and life expectancy, a prospective cohort study. *J Affect Disord*. 2022; 312: 1-8.
105. Chang CK, Chesney E, Teng WN, et al. Life expectancy, mortality risks and cause of death in patients with serious mental illness in South East London: a comparison between 2008-2012 and 2013-2017. *Psychol Med*. 2023; 53: 887-96.
106. da Roza DL, de Rezende MG, Barros REM, et al. Excess mortality in a cohort of Brazilian patients with a median follow-up of 11 years after the first psychiatric hospital admission. *Soc Psychiatry Psychiatr Epidemiol*. 2023; 58: 319-30.
107. Fond G, Falissard B, Nuss P, et al. How can we improve the care of patients with schizophrenia in the real-world? A population-based cohort study of 456,003 patients. *Mol Psychiatry*. 2023; 10.1038/s41380-023-02154-4.
108. Ren J, Duan Y, Wang J, et al. Mortality and excess life-years lost in patients with schizophrenia under community care: a 5-year follow-up cohort study. *Braz J Psychiatry*. 2023; 45: 216-225.
109. Wu J, Wang Y, Wang L, Wu H, Li J, Zhang L. Trends and burden in mental disorder death in China from 2009 to 2019: a nationwide longitudinal study. *Front Psychiatry*. 2023; 14: 1169502.

Supplementary Table 7. Life expectancy of people with mental disorders

	N of studies	Estimate (95% CI)		I^2	Cochran's Q test (p value)	Egger's test (p value)	Estimate after trim & fill procedure
Any mental disorders							
Overall life expectancy (Average)	54	63.85 (62.63 - 65.06)		100	<0.0001	0.44	-
Overall life expectancy (Female)	45	68.24 (66.83 - 69.65)		100	<0.0001	0.41	-
Overall life expectancy (Male)	46	60.98 (59.34 - 62.62)		100	<0.0001	0.59	-
Dementia							
Overall life expectancy (Average)	7	75.40 (72.49 - 78.31)		100	<0.0001	0.38	-
Overall life expectancy (Female)	7	76.53 (72.46 - 80.61)		100	<0.0001	0.50	-
Overall life expectancy (Male)	7	74.96 (70.92 - 78.99)		100	<0.0001	0.33	-
Remaining life expectancy							
Since age 70 years	4	6.05 (4.22 - 7.87)		100	<0.0001	0.067	6.05 (4.22 - 7.87)
Since age 75 years	5	4.31 (3.34 - 5.28)		99.95	<0.0001	0.77	-
Since age 80 years	4	4.15 (3.11 - 5.18)		99.96	<0.0001	0.96	-
Since age 85 years	2	1.59 (1.44 - 1.73)		0	0.53	NA	-
Since age 90 years	2	2.14 (1.32 - 2.95)		99.95	<0.0001	<0.0001	2.14 (1.32 - 2.95)
Substance use disorders							
Overall life expectancy (Average)	14	57.07 (54.47 - 59.67)		100	<0.0001	0.016	54.26 (51.52 - 57.01)
Overall life expectancy (Female)	8	59.56 (55.72 - 63.40)		100	<0.0001	0.19	-
Overall life expectancy (Male)	9	53.70 (49.93 - 57.46)		100	<0.0001	0.0068	53.70 (49.93 - 57.46)
Remaining life expectancy							
Since birth	5	56.82 (51.50 - 62.14)		100	<0.0001	0.031	54.85 (49.48 - 60.22)
Since age 15 years	3	41.28 (39.15 – 43.42)		100	<0.0001	NA	-
Heroin use disorder	2	51.11 (27.38 - 74.84)		100	<0.0001	NA	-
Opioid use disorder	4	64.13 (57.17 - 71.09)		100	<0.0001	0.50	-
Severe mental illness							
Overall life expectancy (Average)	30	65.10 (63.79 - 66.42)		100	<0.0001	0.37	-
Overall life expectancy (Female)	28	69.07 (67.54 - 70.59)		100	<0.0001	0.33	-
Overall life expectancy (Male)	28	61.84 (60.19 - 63.49)		100	<0.0001	0.42	-
Remaining life expectancy							
Since birth	16	64.52 (62.48 - 66.56)		100	<0.0001	0.27	-
Since age 15 years	5	48.40 (46.62 - 50.18)		100	<0.0001	0.48	-
Since age 20 years	4	45.18 (40.18 – 50.18)		100	<0.0001	NA	-
Since age 25 years	4	42.05 (39.11 - 44.99)		100	<0.0001	0.99	-
Since age 30 years	2	37.67 (34.44 - 40.91)		100	<0.0001	NA	-
Since age 35 years	5	34.48 (32.35 - 36.61)		100	<0.0001	0.94	-
Since age 40 years	2	29.97 (26.88 - 33.07)		100	<0.0001	NA	-
Since age 45 years	6	25.73 (23.80 - 27.66)		100	<0.0001	0.85	-
Since age 50 years	2	22.67 (19.80 - 25.55)		100	<0.0001	NA	-
Since age 55 years	4	19.18 (17.34 - 21.03)		100	<0.0001	0.83	-
Since age 60 years	2	16.16 (13.75 - 18.57)		100	<0.0001	NA	-

Since age 65 years	4	13.13 (11.71 - 14.55)		100	<0.0001	0.71	-
Since age 70 years	2	10.74 (9.06 - 12.41)		100	<0.0001	NA	-
Since age 75 years	4	8.23 (7.31 - 9.14)		99.99	<0.0001	0.37	-
Since age 80 years	2	6.59 (5.70 - 7.48)		99.99	<0.0001	NA	-
Schizophrenia-spectrum disorders							
Overall life expectancy (Average)	25	63.70 (62.13 - 65.27)		100	<0.0001	0.40	63.70 (62.13 - 65.27)
Overall life expectancy (Female)	22	68.15 (66.31 - 69.99)		100	<0.0001	0.72	69.95 (67.97 - 71.93)
Overall life expectancy (Male)	22	60.92 (59.02 - 62.82)		100	<0.0001	0.78	60.92 (59.02 - 62.82)
Remaining life expectancy							
Since birth	14	62.96 (60.55 - 65.37)		100	<0.0001	0.75	-
Since age 15 years	3	47.35 (45.21 - 49.5)		100	<0.0001	NA	-
Since age 20 years	4	47.85 (43.08 - 52.62)		100	<0.0001	NA	-
Since age 25 years	2	41.58 (36.11 - 47.04)		100	<0.0001	0.77	-
Since age 30 years	2	37.02 (33.28 - 40.76)		100	<0.0001	NA	-
Since age 35 years	3	34.33 (31.06 - 37.6)		100	<0.0001	0.14	-
Since age 40 years	2	29.28 (25.71 - 32.86)		100	<0.0001	NA	-
Since age 45 years	4	25.07 (22.37 - 27.78)		100	<0.0001	0.24	-
Since age 50 years	2	22.02 (18.75 - 25.29)		100	<0.0001	NA	-
Since age 55 years	3	18.99 (16.68 - 21.31)		100	<0.0001	0.57	-
Since age 60 years	2	15.63 (12.97 - 18.3)		100	<0.0001	NA	-
Since age 65 years	2	12.87 (10.66 - 15.08)		100	<0.0001	NA	-
Since age 70 years	2	10.38 (8.61 - 12.15)		100	<0.0001	NA	-
Since age 75 years	2	8.25 (6.96 - 9.54)		100	<0.0001	NA	-
Since age 80 years	2	6.38 (5.5 - 7.26)		99.99	<0.0001	NA	-
Schizophrenia							
Overall life expectancy (Average)	19	63.66 (61.48 - 65.84)		100	<0.0001	0.95	63.66 (61.48 - 65.84)
Overall life expectancy (Female)	15	69.22 (66.81 - 71.64)		100	<0.0001	0.60	69.22 (66.81 - 71.64)
Overall life expectancy (Male)	15	61.69 (59.32 - 64.06)		100	<0.0001	0.60	61.69 (59.32 - 64.06)
Remaining life expectancy							
Since birth	12	63.73 (60.75 - 66.72)		100	<0.0001	0.97	-
Since age 20 years	2	37.40 (33.07 – 41.73)		100	<0.0001	NA	-
Since age 35 years	2	36.51 (33.06 - 39.95)		100	<0.0001	0.31	-
Since age 45 years	3	25.32 (21.72 - 28.93)		100	<0.0001	0.24	-
Since age 55 years	2	19.98 (17.38 - 22.59)		100	<0.0001	0.87	-
Mood disorders							
Overall life expectancy (Average)	22	64.03 (61.99 - 66.07)		100	<0.0001	0.60	-
Overall life expectancy (Female)	20	68.99 (66.71 - 71.27)		100	<0.0001	0.15	-
Overall life expectancy (Male)	20	61.12 (58.59 - 63.65)		100	<0.0001	0.48	-
Remaining life expectancy							
Since birth	8	64.57 (61.49 - 67.65)		100	<0.0001	0.89	-
Since age 15 years	7	45.92 (43.05 - 48.79)		100	<0.0001	<0.0001	45.92 (43.05 - 48.79)
Since age 25 years	2	42.53 (39.39 - 45.66)		100	<0.0001	0.82	-

Since age 30 years	2	38.20 (33.64 - 42.76)		100	<0.0001	NA	-
Since age 35 years	3	34.68 (31.94 - 37.42)		100	<0.0001	0.70	-
Since age 40 years	2	31.73 (28.28 - 35.18)		100	<0.0001	NA	-
Since age 45 years	4	26.24 (24.04 - 28.44)		100	<0.0001	0.85	-
Since age 55 years	3	19.66 (17.33 - 22.00)		100	<0.0001	0.60	-
Since age 60 years	3	13.00 (6.33 - 19.67)		100	<0.0001	NA	-
Since age 65 years	4	14.78 (11.60 - 17.96)		100	<0.0001	0.12	-
Since age 75 years	4	7.83 (6.60 - 9.06)		99.99	<0.0001	0.62	-
Bipolar disorder							
Overall life expectancy (Average)	11	67.30 (65.29 - 69.31)		100	<0.0001	0.30	-
Overall life expectancy (Female)	10	70.57 (68.75 - 72.39)		100	<0.0001	0.81	-
Overall life expectancy (Male)	10	64.80 (62.17 - 67.44)		100	<0.0001	0.81	-
Remaining life expectancy							
Since birth	5	66.07 (63.61 - 68.54)		95.19	<0.0001	0.040	66.07 (63.61 - 68.54)
Since age 15 years	3	50.70 (47.84 - 53.57)		100	<0.0001	0.92	-
Depressive disorders							
Overall life expectancy (Average)	10	61.94 (57.88 - 66.00)		100	<0.0001	0.19	-
Overall life expectancy (Female)	9	67.34 (61.98 - 72.72)		100	<0.0001	0.11	-
Overall life expectancy (Male)	9	58.95 (53.24 - 64.65)		100	<0.0001	0.81	-
Remaining life expectancy							
Since birth	5	66.70 (63.24 - 70.17)		98.63	<0.0001	<0.0001	66.70 (63.24 - 70.17)
Since age 15 years	2	37.58 (32.21 - 42.96)		100	<0.0001	<0.0001	37.58 (32.21 - 42.96)
Neurotic disorders							
Overall life expectancy (Average)	4	69.51 (67.26 - 71.76)		100	<0.0001	0.10	-
Overall life expectancy (Female)	4	73.56 (70.80 - 76.31)		100	<0.0001	0.081	71.81 (69.15 - 74.47)
Overall life expectancy (Male)	4	64.70 (63.29 - 66.11)		100	<0.0001	0.14	-
Personality disorders							-
Overall life expectancy (Average)	4	63.51 (60.47 - 66.55)		100	<0.0001	0.51	-
Overall life expectancy (Female)	4	66.90 (63.20 - 70.60)		100	<0.0001	0.36	-
Overall life expectancy (Male)	4	60.12 (57.05 - 63.19)		100	<0.0001	0.92	-

Supplementary Table 8. Subgroup analyses stratified by source of study sample, length of follow-up, method and diagnostic system to ascertain mental disorders, and nature of the reference population

	Study outcomes			
	Life expectancy		YPLL	
Characteristics	Estimate (95% CI)	I^2	Estimate (95% CI)	I^2
Source of study samples				
Health system case register	63.40 (62.11 – 64.70)	100.0	14.89 (14.08 – 15.71)	100.0
Health insurance database	58.98 (50.56 – 67.40)	100.0	17.84 (12.66 – 23.01)	100.0
Hospital or health center medical records	68.27 (65.53 – 71.02)	100.0	12.11 (10.34 – 13.88)	100.0
Others [a]	69.60 (62.33 – 76.86)	100.0	13.69 (8.41 – 18.97)	100.0
Length of follow-up				
1 – 5 years	63.13 (61.50 – 64.76)	100.0	17.03 (15.00 – 19.06)	100.0
>5 – 10 years	64.52 (62.92 – 66.13)	100.0	14.62 (13.45 – 15.79)	100.0
>10 years	65.02 (61.15 – 68.88)	100.0	14.04 (12.95 – 15.13)	100.0
Method to ascertain cases of mental disorders				
Diagnosis in case register, administrative data or medical records	63.95 (62.73 – 65.18)	100.0	14.66 (13.86 – 15.45)	100.0
Diagnostic interview	65.46 (59.66 – 71.25)	100.0	15.52 (12.77 – 18.27)	100.0
Others [b]	64.89 (58.22 – 71.56)	100.0	15.41 (10.95 – 19.86)	100.0
Diagnostic system				
Any diagnostic systems (e.g., ICD, DSM)	64.07 (62.87 – 65.27)	100.0	14.63 (13.88 – 15.39)	100.0
No criteria	64.87 (57.74 – 72.00)	100.0	16.56 (12.13 – 20.99)	100.0
Reference population for YPLL estimation				
General population	-	-	15.38 (14.52 – 16.24)	100.0
Individuals without any/ a specified mental disorder	-	-	10.81 (9.12 – 12.51)	100.0
Use of a specified fixed age	-	-	13.17 (9.92 – 16.41)	100.0
Approach to derive YPLL				
Mean age at death [c]	-	-	19.09 (17.05 – 21.14)	100.0
Life expectancy [d]	-	-	13.27 (12.58 – 13.96)	100.0

[a] "Others" for sources of sample included community survey and combinations of other sources.

[b] "Others" for methods to ascertain cases of mental disorders included service receipt, medication prescription records, self-report and proxy assessment for diagnoses.

[c] In the mean-age-at-death approach, YPLL is calculated by subtracting the mean age at the observed death of people with mental disorders from the life expectancy of the general population. The mean age at death was computed by averaging the age at death of people with mental disorders who died during the study period.

[d] In the life-expectancy approach, YPLL is quantified by subtracting the estimated life expectancy of people with mental disorders from that of the general population. To calculate the life expectancy of people with mental disorders, age-specific mortality rates are used to generate the total number of person-years contributed by people with mental disorders during the study period, which is then weighted by the total number of people with mental disorders in the study cohort.

Supplementary 9. Subgroup analyses stratified by continent and study period on overall life expectancy of people with mental disorders.

	N of studies	Estimate (95% CI)	I^2	Cochran's Q test (p value)
Any mental disorders				
Continents				
Africa	1	49.25 (44.55 - 53.95)	0	1.00
Asia	12	67.73 (64.57 - 70.89)	100	<0.0001
Australia	3	67.70 (63.51 - 71.90)	99.6	<0.0001
Europe	27	62.46 (61.16 - 63.76)	100	<0.0001
North America	10	67.84 (62.00 - 73.69)	100	<0.0001
South America	1	47.27 (47.25 - 47.29)	0	1.00
Study period				
Before 2001	15	59.86 (57.70 - 62.03)	100	<0.0001
2001 – 2010	33	64.71 (63.37 - 66.05)	100	<0.0001
After 2010	11	72.46 (68.88 - 76.04)	100	<0.0001
Dementia				
Continents				
Europe	5	75.06 (71.38 – 78.74)	100	<0.0001
North America	2	76.39 (71.70 – 81.09)	100	<0.0001
Study period				
Before 2001	1	78.55 (75.12 - 81.98)	100	<0.0001
2001 – 2010	3	78.08 (73.43 - 82.73)	99.72	<0.0001
After 2010	3	72.46 (68.58 - 76.33)	100	<0.0001
Substance use disorders				
Continents				
Asia	3	54.19 (41.86 - 66.52)	100	<0.0001
Australia	2	58.85 (54.79 - 62.91)	95.98	<0.0001
Europe	6	58.38 (55.68 - 61.07)	100	<0.0001
North America	3	56.31 (39.51 - 73.12)	100	<0.0001
South America	1	40.29 (31.27 - 49.31)	100	<0.0001
Study period				
Before 2001	6	54.06 (51.18 - 56.94)	100	<0.0001
2001 – 2010	10	59.14 (55.39 - 62.88)	100	<0.0001
Severe mental illness				
Continents				
Africa	1	49.25 (44.55 - 53.95)	0	1.00
Asia	8	67.75 (64.09 - 71.42)	100	<0.0001
Australia	2	65.12 (61.99 - 68.25)	97.92	<0.0001
Europe	15	64.21 (62.88 - 65.54)	100	<0.0001
North America	3	68.28 (62.47 - 74.09)	100	<0.0001
South America	1	48.97 (48.95 - 48.99)	0	1.00
Study period				
Before 2001	8	63.97 (62.00 - 65.93)	100	<0.0001
2001 – 2010	20	64.34 (62.71 - 65.96)	100	<0.0001
After 2010	6	73.20 (68.61 - 77.80)	100	<0.0001
Schizophrenia-spectrum disorders				
Continents				
Africa	1	46.27 (41.92 - 50.62)	0	1.00
Asia	7	66.46 (61.61 - 71.31)	100	<0.0001
Australia	2	63.32 (59.34 - 67.30)	97.74	<0.0001
Europe	12	63.36 (61.84 - 64.88)	100	<0.0001

North America	2	65.10 (58.49 - 71.71)	100	<0.0001
South America	1	48.97 (48.95 - 48.99)	0	1.00
Study period				
Before 2001	6	62.27 (60.01 - 64.52)	100	<0.0001
2001 – 2010	18	62.82 (60.90 - 64.74)	100	<0.0001
After 2010	5	72.13 (66.72 - 77.55)	100	<0.0001
Schizophrenia				
Continents				
Africa	1	46.27 (41.92 - 50.62)	0	1.00
Asia	6	63.70 (58.21 - 69.19)	100	<0.0001
Australia	2	66.95 (61.43 - 72.47)	98.58	<0.0001
Europe	8	63.00 (60.70 - 65.31)	100	<0.0001
North America	2	65.10 (58.49 - 71.71)	100	<0.0001
Study period				
Before 2001	4	63.07 (58.84 - 67.31)	100	<0.0001
2001 – 2010	13	62.19 (59.72 - 64.66)	100	<0.0001
After 2010	5	70.47 (64.18 - 76.76)	100	<0.0001
Mood disorders				
Continents				
Africa	1	50.50 (42.89 - 58.11)	71.72	0.060
Asia	6	66.08 (59.02 - 73.15)	100	<0.0001
Australia	1	67.78 (65.05 - 70.50)	96.66	<0.0001
Europe	13	63.35 (61.14 - 65.55)	100	<0.0001
South America	1	50.25 (50.23 - 50.27)	0	1.00
Study period				
Before 2001	6	60.97 (57.46 - 64.47)	100	<0.0001
2001 – 2010	16	64.77 (62.32 - 67.23)	100	<0.0001
After 2010	4	73.12 (64.97 - 81.26)	99.85	<0.0001
Bipolar disorder				
Continents				
Africa	1	54.12 (49.14 - 59.10)	0	1.00
Asia	3	70.36 (65.33 - 75.39)	100	<0.0001
Europe	7	66.60 (64.93 - 68.27)	100	<0.0001
Study period				
Before 2001	2	66.99 (63.23 - 70.76)	100	<0.0001
2001 – 2010	8	66.38 (64.13 - 68.63)	100	<0.0001
After 2010	2	72.54 (66.09 - 79.00)	97.57	<0.0001
Depressive disorders				
Continents				
Africa	1	46.34 (39.94 - 52.74)	0	1.00
Asia	3	70.71 (62.28 - 79.15)	99.87	<0.0001
Australia	1	66.62 (62.56 - 70.68)	96.9	<0.0001
Europe	5	58.28 (52.98 - 63.58)	100	<0.0001
Study period				
Before 2001	2	54.22 (48.01 - 60.43)	99.8	<0.0001
2001 – 2010	8	66.04 (62.44 - 69.64)	100	<0.0001
After 2010	2	74.35 (47.4 - 101.29)	99.99	<0.0001
Neurotic disorders				
Continents				
Australia	1	70.80 (67.60 – 74.00)	96.1	<0.0001

Europe	2	69.06 (65.95 – 72.17)	100	<0.0001
Study period				
Before 2001	3	69.58 (66.85 – 72.31)	100	<0.0001
2001 – 2010	2	70.89 (67.31 – 74.48)	100	<0.0001
Personality disorders				
Continents				
Europe	3	62.11 (59.49 – 64.72)	100	<0.0001
North America	1	70.50 (61.68 – 79.32)	100	<0.0001
Study period				
Before 2001	1	64.40 (57.54 – 71.26)	100	<0.0001
2001 – 2010	3	63.33 (59.80 – 66.86)	100	<0.0001

Supplementary Table 10. Subgroup analyses stratified by study countries/regions on overall life expectancy of people with mental disorders

	N of studies	Estimate (95% CI)	I^2	Cochran's Q test (p value)
Dementia				
Germany	1	78.40 (77.98 - 78.82)	0	0.66
Italy	1	83.60 (83.50 - 83.70)	0	1.00
Norway	2	71.27 (66.02 - 76.53)	100	<0.0001
Spain	1	74.99 (70.99 - 79.00)	65.32	0.089
USA	2	76.39 (71.70 - 81.09)	100	<0.0001
Substance use disorders				
Australia	2	58.85 (54.79 - 62.91)	95.98	<0.0001
Brazil	1	40.29 (31.27 - 49.31)	100	<0.0001
Canada	1	51.80 (51.78 - 51.82)	0	1.00
Denmark	1	54.90 (49.41 - 60.39)	100	<0.0001
Finland	2	56.11 (53.66 - 58.56)	100	<0.0001
Spain	1	39.00 (38.98 - 39.02)	0	1.00
Sweden	2	60.80 (57.40 - 64.20)	100	<0.0001
Taiwan	3	54.19 (41.86 - 66.52)	100	<0.0001
UK	2	65.79 (62.83 - 68.75)	96.37	<0.0001
USA	2	58.57 (30.48 - 86.66)	100	<0.0001
Severe mental illness				
Australia	2	65.12 (61.99 - 68.25)	97.92	<0.0001
Brazil	1	48.97 (48.95 - 48.99)	0	1.00
Canada	2	65.10 (58.49 - 71.71)	100	<0.0001
China	1	55.70 (55.40 - 56.00)	0	1.00
Denmark	5	63.78 (61.20 - 66.35)	100	<0.0001
Ethiopia	1	49.25 (44.55 - 53.95)	0	1.00
Finland	4	61.99 (59.28 - 64.70)	100	<0.0001
Hong Kong	2	77.01 (73.85 - 80.16)	100	<0.0001
Hungary	1	59.85 (53.28 - 66.42)	100	<0.0001
Israel	1	73.00 (70.88 - 75.12)	100	<0.0001
Spain	1	67.11 (62.24 - 71.97)	0	1.00
Sweden	4	65.68 (63.21 - 68.15)	100	<0.0001
Taiwan	3	61.87 (57.62 - 66.12)	100	<0.0001
Turkey	1	73.40 (73.25 - 73.55)	0	1.00
UK	4	67.46 (65.62 - 69.30)	95.86	<0.0001
USA	1	74.63 (71.27 - 78.00)	100	<0.0001
Schizophrenia-spectrum disorders				
Australia	2	63.32 (59.34 - 67.30)	97.74	<0.0001
Brazil	1	48.97 (48.95 - 48.99)	0	1.00
Canada	2	65.10 (58.49 - 71.71)	100	<0.0001
China	1	55.70 (55.40 - 56.00)	0	1.00
Denmark	3	60.32 (56.79 - 63.84)	100	<0.0001
Ethiopia	1	46.27 (41.92 - 50.62)	0	1.00
Finland	4	62.10 (59.19 - 65.01)	100	<0.0001
Hong Kong	1	76.71 (72.25 - 81.16)	100	<0.0001
Hungary	1	59.85 (53.28 - 66.42)	100	<0.0001
Israel	1	71.50 (70.52 - 72.48)	99.97	<0.001
Spain	1	67.11 (62.24 - 71.97)	0	1.00
Sweden	4	64.47 (61.61 - 67.33)	100	<0.0001
Taiwan	3	60.52 (54.71 - 66.34)	100	<0.0001
Turkey	1	73.40 (73.25 - 73.55)	0	1.00
UK	3	66.63 (64.48 - 68.78)	94.62	<0.0001
Schizophrenia				

Australia	2	66.95 (61.43 - 72.47)	98.58	<0.0001
Canada	2	65.10 (58.49 - 71.71)	100	<0.0001
China	1	55.70 (55.40 - 56.00)	0	1.00
Denmark	2	60.47 (56.16 - 64.78)	100	<0.0001
Ethiopia	1	46.27 (41.92 - 50.62)	0	1.00
Finland	2	58.85 (52.99 - 64.71)	100	<0.0001
Hong Kong	1	75.49 (68.64 - 82.34)	100	<0.0001
Hungary	1	59.85 (53.28 - 66.42)	100	<0.0001
Spain	1	66.20 (57.85 - 74.55)	0	1.00
Sweden	2	65.82 (60.99 - 70.66)	100	<0.0001
Taiwan	3	60.52 (54.71 - 66.34)	100	<0.0001
Turkey	1	73.40 (73.25 - 73.55)	0	1.00
UK	2	66.41 (63.27 - 69.55)	96.01	<0.0001
Mood disorders				
Australia	1	67.78 (65.05 - 70.50)	96.66	<0.0001
Brazil	1	50.25 (50.23 - 50.27)	0	1.00
China	1	60.60 (60.58 - 60.62)	0	1.00
Denmark	8	63.47 (58.93 - 68.01)	100	<0.0001
Ethiopia	1	50.50 (42.89 - 58.11)	71.72	0.060
Finland	4	60.60 (56.35 - 64.86)	100	<0.0001
Hong Kong	1	77.62 (72.46 - 82.78)	95.31	<0.0001
Israel	1	74.50 (71.56 - 77.44)	100	<0.0001
Italy	1	56.97 (45.70 - 68.24)	99.37	<0.0001
Japan	1	88.10 (87.51 - 88.68)	0	1.00
Sweden	4	63.56 (57.72 - 69.39)	100	<0.0001
Taiwan	2	60.42 (51.53 - 69.32)	100	<0.0001
UK	3	68.38 (66.72 - 70.03)	92.15	<0.0001
Bipolar disorder				
Denmark	4	66.38 (63.89 - 68.88)	100	<0.0001
Ethiopia	1	54.12 (49.14 - 59.10)	0	1.00
Finland	1	61.10 (50.91 - 71.29)	100	<0.0001
Hong Kong	1	77.62 (72.46 - 82.78)	95.31	<0.0001
Israel	1	74.50 (71.56 - 77.44)	100	<0.0001
Sweden	1	67.75 (63.34 - 72.16)	100	<0.0001
Taiwan	1	64.59 (59.57 - 69.61)	96.56	<0.0001
UK	3	68.20 (66.85 - 69.55)	72.07	<0.0001
Depressive disorders				
Australia	1	66.62 (62.56 - 70.68)	96.9	<0.0001
China	1	60.60 (60.58 - 60.62)	0	1.00
Denmark	3	59.72 (48.36 - 71.07)	100	<0.0001
Ethiopia	1	46.34 (39.94 - 52.74)	0	1.00
Finland	1	49.47 (41.09 - 57.84)	99.74	<0.0001
Italy	1	56.97 (45.70 - 68.24)	99.37	<0.0001
Japan	1	88.10 (87.51 - 88.68)	0	1.00
Sweden	1	51.86 (43.72 - 59.99)	99.59	<0.0001
Taiwan	1	68.88 (62.30 - 75.46)	98.59	<0.0001
UK	2	68.86 (64.54 - 73.17)	97.74	<0.0001
Neurotic disorders				
Australia	1	70.80 (67.60 - 74.00)	96.06	<0.0001
Finland	1	69.05 (65.47 - 72.63)	100	<0.0001
Sweden	1	69.10 (61.26 - 76.94)	100	<0.0001
Personality disorders				
Canada	1	70.50 (61.68 - 79.32)	100	<0.0001

Denmark	1	60.30 (51.48 - 69.12)	100	<0.0001
Finland	1	65.05 (59.07 - 71.03)	100	<0.0001
Sweden	2	61.93 (57.23 - 66.62)	100	<0.0001
UK	1	61.35 (58.22 - 64.49)	86.78	0.0052

Supplementary Table 11. Years of potential life lost (YPLL) of people with mental disorders

	N of studies	Estimate (95% CI)		I^2	Cochran's Q test (p value)	Egger's test (p-value)	Estimate after trim & fill procedure
Any mental disorders							
YPLL (Average)	109	14.66 (13.88 - 15.45)		100	<0.0001	0.66	-
YPLL (Female)	64	12.83 (11.85 - 13.82)		100	<0.0001	0.15	-
YPLL (Male)	68	14.73 (13.64 - 15.82)		100	<0.0001	0.73	-
Method of estimation							
Age at death	47	18.90 (16.78 - 21.01)		100	<0.0001	0.18	-
Life expectancy gap	66	13.28 (12.59 - 13.98)		100	<0.0001	0.33	-
Dementia							
YPLL (Average)	12	8.58 (6.32 - 10.84)		100	<0.0001	0.33	-
YPLL (Female)	9	9.88 (6.10 - 13.67)		100	<0.0001	0.56	-
YPLL (Male)	9	8.86 (5.50 - 12.23)		100	<0.0001	0.54	-
Method of estimation							
Age at death	4	8.15 (3.48 - 12.81)		100	<0.0001	NA	-
Life expectancy gap	8	9.11 (6.32 - 11.91)		100	<0.0001	0.39	-
Estimated at 70 years	4	8.81 (6.78 - 10.85)		100	<0.0001	0.27	-
Estimated at 75 years	4	6.74 (5.63 - 7.84)		100	<0.0001	<0.0001	6.21 (5.06 - 7.35)
Estimated at 80 years	3	4.20 (3.11 - 5.28)		100	<0.0001	0.0010	3.86 (2.66 - 5.06)
Estimated at 90 years	2	1.90 (1.13 - 2.67)		100	<0.0001	0.24	-
Substance use disorders							
YPLL (Average)	33	20.38 (18.65 - 22.11)		100	<0.0001	0.86	-
YPLL (Female)	13	18.37 (16.20 - 20.54)		100	<0.0001	0.0031	18.37 (16.20 - 20.54)
YPLL (Male)	16	18.62 (16.54 - 20.69)		100	<0.0001	0.19	-
Method of estimation							
Age at death	15	24.10 (20.72 - 27.48)		100	<0.0001	0.0009	24.10 (20.72 - 27.48)
Life expectancy gap	19	18.34 (16.66 - 20.03)		100	<0.0001	0.30	-
Estimated at birth	5	21.74 (17.05 - 26.43)		100	<0.0001	0.088	25.28 (20.41 - 30.15)
Estimated at 15 years	3	21.77 (20.52 - 23.02)		100	<0.0001	NA	-
Estimated since diagnosis	4	15.41 (14.16 - 16.65)		99.85	<0.0001	0.60	-
Alcohol use disorders	9	18.32 (15.50 - 21.14)		100	<0.0001	0.40	-
Opioid use disorder	10	18.95 (14.12 - 23.78)		100	<0.0001	0.39	-
Heroin use disorders	3	22.91 (7.74 - 38.08)		100	<0.0001	0.76	-
Severe mental illness							
YPLL (Average)	56	14.22 (13.23 - 15.21)		100	<0.0001	0.20	-
YPLL (Female)	38	12.83 (11.54 - 14.12)		100	<0.0001	0.0057	12.83 (11.54 - 14.12)
YPLL (Male)	39	14.43 (12.92 - 15.95)		100	<0.0001	0.15	-
Method of estimation							

Age at death	22	17.10 (14.08 - 20.12)		100	<0.0001	0.078	17.10 (14.08 - 20.12)
Life expectancy gap	37	13.32 (12.47 - 14.16)		100	<0.0001	0.31	-
Estimated at birth	16	14.18 (12.73 - 15.63)		100	<0.0001	0.33	-
Estimated at 15 years	7	14.56 (13.44 - 15.68)		100	<0.0001	0.21	-
Estimated at 20 years	5	12.65 (9.37 - 15.92)		100	<0.0001	NA	-
Estimated at 25 years	5	10.14 (8.44 - 11.85)		100	<0.0001	0.84	-
Estimated at 30 years	3	9.31 (7.41 - 11.22)		100	<0.0001	NA	-
Estimated at 35 years	6	8.53 (7.37 - 9.70)		100	<0.0001	0.91	-
Estimated at 40 years	4	9.4 (6.83 - 11.97)		100	<0.0001	NA	-
Estimated at 45 years	7	7.44 (6.58 - 8.30)		100	<0.0001	0.97	-
Estimated at 50 years	3	6.09 (4.84 - 7.33)		100	<0.0001	NA	-
Estimated at 55 years	6	6.64 (4.58 - 8.70)		100	<0.0001	0.78	-
Estimated at 60 years	3	4.32 (3.44 - 5.20)		100	<0.0001	NA	-
Estimated at 65 years	5	3.60 (3.03 - 4.17)		100	<0.0001	0.96	-
Estimated at 70 years	3	2.50 (1.87 - 3.13)		100	<0.0001	NA	-
Estimated at 75 years	5	1.76 (1.29 - 2.23)		100	<0.0001	0.85	-
Estimated at 80 years	3	0.92 (0.39 - 1.45)		100	<0.0001	NA	-
Estimated since diagnosis	7	9.08 (7.99 - 10.17)		99.81	<0.0001	0.032	9.70 (8.57 - 10.84)
Schizophrenia-spectrum disorders							
YPLL (Average)	46	15.37 (14.18 - 16.55)		100	<0.0001	0.15	-
YPLL (Female)	31	13.87 (12.38 - 15.36)		100	<0.0001	0.080	13.87 (12.38 - 15.36)
YPLL (Male)	32	15.84 (14.01 - 17.67)		100	<0.0001	0.63	-
Method of estimation							
Age at death	18	18.45 (14.57 - 22.34)		100	<0.0001	0.12	-
Life expectancy gap	31	14.48 (13.49 - 15.48)		100	<0.0001	0.23	-
Estimated at birth	14	15.53 (13.85 - 17.21)		100	<0.0001	0.51	-
Estimated at 15 years	4	16.05 (15.05 - 17.06)		100	<0.0001	0.340	-
Estimated at 20 years	4	15.20 (11.46 - 18.94)		100	<0.0001	NA	-
Estimated at 25 years	2	11.57 (9.02 - 14.13)		100	<0.0001	0.47	-
Estimated at 30 years	2	10.85 (8.56 - 13.14)		100	<0.0001	NA	-
Estimated at 35 years	3	9.15 (7.27 - 11.02)		100	<0.0001	0.097	9.57 (7.72 - 11.42)
Estimated at 40 years	3	11.21 (8.06 - 14.36)		100	<0.0001	NA	-
Estimated at 45 years	4	8.15 (7.05 - 9.25)		100	<0.0001	0.55	-
Estimated at 50 years	2	7.10 (5.56 - 8.64)		100	<0.0001	NA	-
Estimated at 55 years	3	8.23 (4.43 - 12.04)		100	<0.0001	0.78	-
Estimated at 60 years	2	4.92 (3.88 - 5.96)		100	<0.0001	NA	-
Estimated at 65 years	2	3.73 (2.97 - 4.50)		100	<0.0001	NA	-
Estimated at 70 years	2	2.67 (2.06 - 3.27)		100	<0.0001	NA	-
Estimated at 75 years	2	1.60 (1.14 - 2.06)		100	<0.0001	NA	-
Estimated at 80 years	2	0.82 (0.45 - 1.18)		100	<0.0001	NA	-
Estimated since diagnosis	5	9.73 (8.28 - 11.19)		99.88	<0.0001	0.23	-
Schizophrenia							
YPLL (Average)	31	15.22 (13.8 - 16.65)		100	<0.0001	0.55	-

YPLL (Female)	22	13.11 (11.29 - 14.93)		100	<0.0001	0.11	-
YPLL (Male)	22	14.96 (13.33 - 16.59)		100	<0.0001	0.22	-
Method of estimation							
Age at death	12	16.81 (12.36 - 21.25)		100	<0.0001	0.043	16.81 (12.36 - 21.25)
Life expectancy gap	22	14.81 (13.44 - 16.18)		100	<0.0001	0.51	-
Estimated at birth	13	14.92 (12.98 - 16.85)		100	<0.0001	0.57	-
Estimated at 15 years	2	17.50 (16.44 - 18.56)		100	<0.0001	1.00	-
Estimated at 20 years	2	18.17 (11.73 - 24.62)		100	<0.0001	NA	-
Estimated at 35 years	2	7.34 (6.42 - 8.27)		100	<0.0001	0.041	7.34 (6.42 - 8.27)
Estimated at 40 years	2	12.45 (6.42 - 18.48)		100	<0.0001	NA	-
Estimated at 45 years	3	7.57 (6.53 - 8.61)		100	<0.0001	0.89	-
Estimated at 55 years	2	5.96 (4.40 - 7.52)		100	<0.0001	0.004	5.96 (4.40 - 7.52)
Estimated since diagnosis	3	17.45 (8.84 - 26.07)		100	<0.0001	<0.0001	17.45 (8.84 - 26.07)
Mood disorders							
YPLL (Average)	39	12.79 (11.58 - 14.00)		100	<0.0001	0.11	-
YPLL (Female)	24	10.63 (9.52 - 11.74)		100	<0.0001	0.14	-
YPLL (Male)	25	12.77 (11.52 - 14.03)		100	<0.0001	0.074	11.06 (9.68 - 12.44)
Method of estimation							
Age at death	12	17.19 (13.87 - 20.51)		100	<0.0001	0.0082	16.67 (13.32 - 20.02)
Life expectancy gap	27	11.89 (10.66 - 13.13)		100	<0.0001	0.81	-
Estimated at birth	6	13.57 (10.76 - 16.39)		100	<0.0001	0.0029	16.64 (14.22 - 19.07)
Estimated at 15 years	8	13.58 (12.51 - 14.66)		100	<0.0001	0.25	-
Estimated at 25 years	3	12.17 (9.55 - 14.78)		100	<0.0001	0.73	-
Estimated at 30 years	2	9.57 (7.45 - 11.70)		100	<0.0001	NA	-
Estimated at 35 years	3	8.72 (7.47 - 9.97)		100	<0.0001	0.84	-
Estimated at 40 years	2	7.22 (5.28 - 9.16)		100	<0.0001	NA	-
Estimated at 45 years	5	6.35 (4.56 - 8.13)		100	<0.0001	0.16	-
Estimated at 55 years	3	5.29 (4.06 - 6.53)		100	<0.0001	0.75	-
Estimated at 60 years	2	4.37 (2.38 - 6.37)		100	<0.0001	NA	-
Estimated at 65 years	5	3.16 (2.30 - 4.02)		100	<0.0001	0.58	-
Estimated at 75 years	4	2.04 (1.18 - 2.89)		100	<0.0001	0.63	-
Estimated since diagnosis	7	12.93 (5.21 - 20.65)		100	<0.0001	0.16	-
Bipolar disorder							
YPLL (Average)	21	12.47 (10.93 - 14.01)		100	<0.0001	0.094	12.47 (10.93 - 14.01)
YPLL (Female)	12	11.29 (10.10 - 12.48)		100	<0.0001	0.67	-
YPLL (Male)	13	11.63 (9.66 - 13.60)		100	<0.0001	0.95	-
Method of estimation							
Age at death	7	16.67 (12.08 - 21.26)		100	<0.0001	0.060	16.67 (12.08 - 21.26)
Life expectancy gap	14	11.24 (9.95 - 12.52)		100	<0.0001	0.75	-
Estimated at birth	4	12.94 (12.12 - 13.77)		100	<0.0001	0.92	-
Estimated at 15 years	4	12.99 (11.4 - 14.58)		100	<0.0001	0.26	-
Estimated since diagnosis	3	7.82 (7.18 - 8.45)		89.59	<0.0001	0.043	8.01 (7.34 - 8.68)

Depressive disorders							
YPLL (Average)	17	12.80 (11.12 - 14.48)		100	<0.0001	0.053	12.80 (11.12 - 14.48)
YPLL (Female)	11	10.68 (8.49 - 12.88)		100	<0.0001	0.87	-
YPLL (Male)	12	13.45 (11.33 - 15.57)		100	<0.0001	0.15	-
Method of estimation							
Age at death	5	19.66 (15.40 - 23.91)		100	<0.0001	0.10	-
Life expectancy gap	13	11.30 (9.67 - 12.92)		100	<0.0001	0.070	11.30 (9.67 - 12.92)
Estimated at birth	4	11.18 (9.69 - 12.66)		92.49	<0.0001	0.27	-
Estimated at 15 years	2	13.87 (11.33 - 16.42)		100	<0.0001	0.018	13.87 (11.33 - 16.42)
Neurotic disorders							
YPLL (Average)	11	8.83 (7.55 - 10.11)		100	<0.0001	0.086	10.06 (8.79 - 11.33)
YPLL (Female)	7	7.88 (5.22 - 10.54)		100	<0.0001	0.072	9.90 (7.46 - 12.33)
YPLL (Male)	7	10.26 (8.51 - 12.02)		100	<0.0001	0.56	-
Eating disorders							
YPLL (Average)	6	16.64 (7.45 - 25.82)		100	<0.0001	0.70	-
Personality disorders							
YPLL (Average)	11	15.35 (12.80 - 17.89)		100	<0.0001	<0.0001	15.35 (12.80 - 17.89)
YPLL (Female)	7	13.30 (10.47 - 16.13)		100	<0.0001	0.38	-
YPLL (Male)	7	15.52 (12.79 - 18.25)		100	<0.0001	0.93	-
Developmental disorders							
YPLL (Average)	5	12.72 (4.50 - 20.94)		99.51	<0.0001	<0.0001	12.72 (4.50 - 20.94)
Behavioural disorders							
YPLL (Average)	4	8.54 (7.73 - 9.34)		83.55	<0.0001	0.65	-

Supplementary Table 12. Subgroup analyses stratified by continent and study period on years of potential life lost (YPLL) of people with mental disorders

	N of studies	Estimate (95% CI)	I^2	Cochran's Q test (p value)
Any mental disorders				
Continents				
Africa	1	28.40 (23.70 - 33.10)	0	1
Asia	18	15.97 (13.85 - 18.10)	100	<0.0001
Australia	6	14.37 (8.24 - 20.51)	100	<0.0001
Europe	56	14.00 (13.21 - 14.80)	100	<0.0001
North America	28	16.21 (13.17 - 19.25)	100	<0.0001
South America	1	27.64 (26.76 - 28.52)	0	1
Study period				
Before 2001	34	17.08 (15.45 - 18.71)	100	<0.0001
2001 – 2010	64	13.36 (12.51 - 14.21)	100	<0.0001
After 2010	18	15.74 (12.87 - 18.60)	100	<0.0001
Dementia				
Continents				
Asia	1	13.98 (13.98 - 13.98)	0	1
Europe	8	8.64 (5.85 - 11.43)	100	<0.0001
North America	3	5.77 (4.99 - 6.56)	100	<0.0001
Study period				
Before 2001	1	3.41 (3.41 - 3.41)	0	1
2001 – 2010	7	7.52 (4.81 - 10.22)	100	<0.0001
After 2010	3	13.08 (9.14 - 17.02)	98.39	<0.0001
Substance use disorders				
Continents				
Asia	5	26.16 (20.84 - 31.49)	100	<0.0001
Australia	5	21.89 (15.19 - 28.59)	100	<0.0001
Europe	16	18.04 (16.58 - 19.50)	100	<0.0001
North America	6	22.69 (16.88 - 28.49)	100	<0.0001
South America	1	34.46 (25.45 - 43.48)	95.88	<0.0001
Study period				
Before 2001	14	21.92 (19.60 - 24.24)	100	<0.0001
2001 – 2010	18	18.20 (15.86 - 20.53)	100	<0.0001
After 2010	4	27.65 (20.35 - 34.94)	100	<0.0001
Severe mental illnesses				
Continents				
Africa	1	28.40 (23.70 - 33.10)	0	1
Asia	12	15.41 (12.96 - 17.86)	100	<0.0001
Australia	3	12.91 (10.33 - 15.50)	98.52	<0.0001
Europe	31	13.44 (12.25 - 14.62)	100	<0.0001
North America	10	15.58 (11.87 - 19.30)	100	<0.0001
South America	1	25.94 (24.02 - 27.86)	0	1
Study period				
Before 2001	15	13.93 (11.74 - 16.12)	100	<0.0001
2001 – 2010	37	14.35 (13.19 - 15.50)	100	<0.0001
After 2010	12	13.68 (11.09 - 16.27)	100	<0.0001
Schizophrenia-spectrum disorders				
Continents				

Africa	1	27.70 (23.35 - 32.05)	0	1
Asia	11	16.66 (13.57 - 19.75)	100	<0.0001
Australia	3	15.18 (12.15 - 18.20)	97.76	<0.0001
Europe	25	14.49 (13.07 - 15.92)	100	<0.0001
North America	6	16.02 (12.15 - 19.88)	100	<0.0001
South America	1	25.94 (24.02 - 27.86)	0	1
Study period				
Before 2001	12	15.22 (12.60 - 17.84)	100	<0.0001
2001 – 2010	31	15.72 (14.30 - 17.14)	100	<0.0001
After 2010	10	14.03 (11.46 - 16.61)	100	<0.0001
Schizophrenia				
Continents				
Africa	1	27.70 (23.35 - 32.05)	0	1
Asia	9	17.06 (13.36 - 20.76)	100	<0.0001
Australia	2	13.53 (12.01 - 15.05)	79.35	<0.0001
Europe	14	14.17 (12.53 - 15.82)	100	<0.0001
North America	5	15.80 (11.37 - 20.24)	100	<0.0001
Study period				
Before 2001	8	13.36 (10.17 - 16.54)	100	<0.0001
2001 – 2010	21	16.39 (14.58 - 18.19)	100	<0.0001
After 2010	6	13.10 (10.37 - 15.82)	100	<0.0001
Mood disorders				
Continents				
Africa	1	29.15 (25.22 - 33.08)	0	1
Asia	8	15.91 (11.43 - 20.39)	100	<0.0001
Australia	2	9.58 (7.42 - 11.74)	97.92	<0.0001
Europe	23	11.98 (11.05 - 12.90)	100	<0.0001
North America	3	16.57 (11.50 - 21.64)	99.99	<0.0001
South America	1	24.66 (22.78 - 26.54)	0	1
Study period				
Before 2001	8	13.61 (12.05 - 15.16)	100	<0.0001
2001 – 2010	27	12.45 (10.81 - 14.10)	100	<0.0001
After 2010	8	13.58 (9.36 - 17.80)	100	<0.0001
Bipolar disorder				
Continents				
Africa	1	29.00 (24.02 - 33.98)	0	1
Asia	4	12.77 (9.11 - 16.42)	100	<0.0001
Australia	1	1.10 (0.35 - 1.85)	0	1
Europe	13	11.87 (10.6 - 13.15)	100	<0.0001
North America	2	18.16 (11.21 - 25.1)	99.98	<0.0001
Study period				
Before 2001	4	14.59 (9.15 - 20.02)	100	<0.0001
2001 – 2010	13	11.47 (10.12 - 12.81)	100	<0.0001
After 2010	6	14.27 (9.18 - 19.36)	100	<0.0001
Depressive disorders				
Continents				
Africa	1	29.40 (23.00 - 35.80)	0	1
Asia	4	13.55 (8.24 - 18.87)	100	<0.0001
Australia	2	10.69 (7.56 - 13.82)	97.5	<0.0001
Europe	10	12.12 (10.31 - 13.93)	100	<0.0001

North America	1	13.40 (13.29 - 13.51)	0	1
Study period				
Before 2001	4	14.88 (12.30 - 17.46)	99.63	<0.0001
2001 – 2010	12	11.19 (9.37 - 13.01)	100	<0.0001
After 2010	5	12.69 (5.17 - 20.21)	100	<0.0001
Neurotic disorders				
Continents				
Asia	2	17.99 (7.79 - 28.20)	100	<0.0001
Australia	1	8.07 (6.05 - 10.10)	89.76	<0.0001
Europe	8	8.37 (7.31 - 9.43)	100	<0.0001
Study period				
Before 2001	4	8.06 (6.94 - 9.18)	100	<0.0001
2001 – 2010	7	8.52 (7.10 - 9.93)	100	<0.0001
After 2010	2	19.31 (11.66 - 26.95)	99.81	<0.0001
Eating disorders				
Continents				
Europe	5	16.94 (6.09 - 27.79)	100	<0.0001
North America	1	14.82 (14.82 - 14.82)	0	1
Study period				
Before 2001	1	39.00 (39.00 - 39.00)	0	1
2001 – 2010	5	12.86 (6.35 - 19.37)	100	<0.0001
Personality disorders				
Continents				
Europe	10	15.77 (13.05 - 18.48)	100	<0.0001
North America	1	11.00 (7.08 - 14.92)	100	<0.0001
Study period				
Before 2001	3	16.30 (12.44 - 20.16)	100	<0.0001
2001 – 2010	7	13.53 (11.13 - 15.93)	100	<0.0001
After 2010	1	28.37 (15.93 - 40.81)	96.82	<0.0001
Developmental disorders				
Continents				
Europe	4	8.42 (6.71 - 10.14)	87.75	<0.0001
North America	1	38.50 (33.23 - 43.77)	0	1
Study period				
2001 – 2010	5	12.72 (4.50 - 20.94)	99.51	<0.0001
Behavioural disorders				
Continents				
Europe	3	8.55 (7.64 - 9.45)	88.44	<0.0001
North America	1	8.50 (6.29 - 10.71)	0	1
Study period				
Before 2001	1	8.50 (6.29 - 10.71)	0	1
2001 – 2010	3	8.55 (7.64 - 9.45)	88.44	<0.0001

Supplementary Table 13. Subgroup analyses stratified by study countries/regions on years of potential life lost (YPLL) of people with mental disorders

	N of studies	Estimate (95% CI)	I^2	Cochran's Q test (p value)
Dementia				
Canada	1	7.17 (5.31 - 9.02)	0	1
Denmark	1	13.00 (9.08 - 16.92)	100	<0.0001
Germany	2	3.87 (2.51 - 5.24)	100	<0.0001
India	1	13.98 (13.98 - 13.98)	0	1
Italy	1	5.60 (4.19 - 7.00)	99.38	<0.0001
Norway	2	14.06 (9.72 - 18.41)	98.71	<0.0001
Spain	1	8.80 (5.96 - 11.64)	0	1
Sweden	1	3.41 (3.41 - 3.41)	0	1
United States	2	5.56 (4.88 - 6.25)	100	<0.0001
Substance use disorders				
Australia	5	21.89 (15.19 - 28.59)	100	<0.0001
Brazil	1	34.46 (25.45 - 43.48)	95.88	<0.0001
Canada	1	28.00 (28.00 - 28.00)	0	1
China	1	26.94 (21.13 - 32.76)	100	<0.0001
Czech Republic	1	5.47 (3.73 - 7.21)	100	<0.0001
Denmark	6	16.57 (15.04 - 18.10)	100	<0.0001
Finland	2	21.42 (20.22 - 22.62)	100	<0.0001
Germany	1	17.32 (17.32 - 17.32)	0	1
Italy	1	22.50 (21.10 - 23.90)	0	1
Spain	1	38.00 (38.00 - 38.00)	0	1
Sweden	3	19.22 (16.70 - 21.73)	100	<0.0001
Taiwan	4	25.23 (15.06 - 35.40)	100	<0.0001
United Kingdom	3	16.67 (13.59 - 19.74)	100	<0.0001
United States	5	21.62 (14.98 - 28.26)	100	<0.0001
Severe mental illnesses				
Australia	3	12.91 (10.33 - 15.50)	98.52	<0.0001
Brazil	1	25.94 (24.02 - 27.86)	0	1
Canada	2	12.80 (10.53 - 15.07)	100	<0.0001
China	3	19.21 (15.48 - 22.95)	100	<0.0001
Denmark	12	11.38 (9.80 - 12.95)	100	<0.0001
Ethiopia	1	28.40 (23.70 - 33.10)	0	1
Finland	5	15.53 (13.70 - 17.36)	100	<0.0001
France	1	12.50 (3.68 - 21.32)	100	<0.0001
Hong Kong	2	7.58 (6.45 - 8.70)	95.92	<0.0001
Hungary	1	12.60 (10.44 - 14.76)	100	<0.0001
Ireland	1	37.35 (17.06 - 57.64)	100	<0.0001
Israel	1	10.50 (8.62 - 12.38)	100	<0.0001
Italy	1	17.36 (15.80 - 18.92)	88.88	<0.0001
Spain	1	17.49 (10.35 - 24.63)	88.57	<0.0001
Sweden	6	12.76 (10.97 - 14.54)	100	<0.0001
Taiwan	5	18.22 (14.33 - 22.12)	100	<0.0001
Turkey	1	8.70 (8.55 - 8.85)	0	1
United Kingdom	7	11.89 (9.87 - 13.91)	100	<0.0001
United States	8	16.70 (11.66 - 21.73)	100	<0.0001
Schizophrenia-spectrum disorders				
Australia	3	15.18 (12.15 - 18.20)	97.76	<0.0001
Brazil	1	25.94 (24.02 - 27.86)	0	1
Canada	2	12.80 (10.53 - 15.07)	100	<0.0001
China	3	20.05 (17.65 - 22.45)	100	<0.0001

Denmark	9	12.58 (10.35 - 14.80)	100	<0.0001
Ethiopia	1	27.70 (23.35 - 32.05)	0	1
Finland	5	15.24 (13.26 - 17.22)	100	<0.0001
France	1	12.50 (3.68 - 21.32)	100	<0.0001
Hong Kong	1	7.81 (6.14 - 9.49)	97.8	<0.0001
Hungary	1	12.60 (10.44 - 14.76)	100	<0.0001
Ireland	1	37.35 (17.06 - 57.64)	100	<0.0001
Israel	1	12.00 (10.04 - 13.96)	100	<0.0001
Italy	1	18.10 (17.69 - 18.51)	0	1
Spain	1	17.49 (10.35 - 24.63)	88.57	<0.0001
Sweden	5	14.20 (12.09 - 16.31)	100	<0.0001
Taiwan	5	19.92 (14.83 - 25.01)	100	<0.0001
Turkey	1	8.70 (8.55 - 8.85)	0	1
United Kingdom	5	12.78 (10.79 - 14.77)	100	<0.0001
United States	4	19.23 (13.06 - 25.40)	100	<0.0001
Schizophrenia				
Australia	2	13.53 (12.01 - 15.05)	79.35	<0.001
Canada	2	12.80 (10.53 - 15.07)	100	<0.001
China	2	18.13 (14.49 - 21.77)	99.87	<0.001
Denmark	5	13.96 (11.38 - 16.54)	100	<0.001
Ethiopia	1	27.70 (23.35 - 32.05)	0	1
Finland	3	17.39 (11.17 - 23.60)	100	<0.0001
Hong Kong	1	8.80 (7.37 - 10.23)	96.18	<0.0001
Hungary	1	12.60 (10.44 - 14.76)	100	<0.0001
Spain	1	19.62 (11.56 - 27.68)	74.87	<0.0001
Sweden	3	13.37 (9.93 - 16.81)	100	<0.0001
Taiwan	5	19.92 (14.83 - 25.01)	100	<0.0001
Turkey	1	9.50 (6.56 - 12.44)	100	<0.0001
United Kingdom	3	12.33 (9.62 - 15.04)	100	<0.0001
United States	3	19.81 (11.24 - 28.39)	100	<0.0001
Mood disorders				
Australia	2	9.58 (7.42 - 11.74)	97.92	<0.0001
Brazil	1	24.66 (22.78 - 26.54)	0	1
China	2	20.53 (15.73 - 25.34)	100	<0.0001
Denmark	14	11.02 (9.39 - 12.64)	100	<0.0001
Ethiopia	1	29.15 (25.22 - 33.08)	0	1
Finland	5	14.19 (12.52 - 15.86)	100	<0.0001
Hong Kong	1	7.16 (6.62 - 7.69)	0	<0.0001
Israel	1	9.00 (9.00 - 9.00)	0	1
Italy	3	11.15 (7.14 - 15.16)	99.62	<0.0001
Japan	1	2.86 (2.76 - 2.96)	100	<0.0001
Sweden	6	11.92 (10.04 - 13.8)	100	<0.0001
Taiwan	3	18.20 (10.20 - 26.20)	100	<0.0001
United Kingdom	5	11.19 (9.06 - 13.32)	100	<0.0001
United States	3	16.57 (11.5 - 21.64)	99.99	<0.0001
Bipolar disorder				
Australia	1	1.10 (0.35 - 1.85)	0	1
China	1	17.54 (6.11 - 28.96)	100	<0.0001
Denmark	6	10.82 (9.53 - 12.12)	100	<0.0001
Ethiopia	1	29.00 (24.02 - 33.98)	0	1
Finland	1	18.00 (14.47 - 21.53)	100	<0.0001
Hong Kong	1	7.16 (6.62 - 7.69)	0	<0.0001
Israel	1	9.00 (9.00 - 9.00)	0	1
Italy	1	16.50 (15.54 - 17.46)	0	1

Sweden	2	10.70 (8.48 - 12.92)	100	<0.0001
Taiwan	1	13.94 (12.55 - 15.34)	55.22	<0.0001
United Kingdom	5	11.81 (9.40 - 14.21)	100	<0.0001
United States	2	18.16 (11.21 - 25.10)	99.98	<0.0001
Depressive disorders				
Australia	2	10.69 (7.56 - 13.82)	97.5	<0.001
China	2	22.78 (22.22 - 23.34)	100	<0.001
Denmark	5	12.50 (8.88 - 16.12)	100	<0.001
Ethiopia	1	29.40 (23.00 - 35.80)	0	1
Finland	2	14.67 (10.89 - 18.45)	99.54	<0.0001
Italy	3	9.81 (5.90 - 13.73)	99.59	<0.0001
Japan	1	2.86 (2.76 - 2.96)	100	<0.0001
Sweden	2	13.68 (11.47 - 15.88)	97.93	<0.0001
Taiwan	1	9.66 (6.74 - 12.58)	92.82	<0.0001
United Kingdom	4	10.17 (5.95 - 14.38)	99.67	<0.0001
United States	1	13.40 (13.29 - 13.51)	0	1
Neurotic disorders				
Australia	1	8.07 (6.05 - 10.10)	89.76	<0.0001
China	1	23.20 (23.20 - 23.20)	0	1
Denmark	5	7.65 (6.24 - 9.07)	100	<0.0001
Finland	1	8.17 (6.89 - 9.45)	100	<0.0001
Italy	1	15.4 (14.73 - 16.07)	0	1
Sweden	1	8.75 (6.50 - 11.00)	100	<0.0001
Taiwan	1	12.79 (12.79 - 12.79)	0	1
Eating disorders				
Canada	1	14.82 (14.82 - 14.82)	0	1
Denmark	3	7.82 (6.43 - 9.22)	75.63	<0.0001
United Kingdom	2	33.72 (23.24 - 44.21)	98.63	<0.0001
Personality disorders				
Canada	1	11.00 (7.08 - 14.92)	100	<0.0001
Denmark	6	12.07 (9.23 - 14.91)	100	<0.0001
Finland	1	13.75 (12.28 - 15.22)	100	<0.0001
Italy	1	28.37 (15.93 - 40.81)	96.82	<0.0001
Sweden	2	17.20 (12.86 - 21.54)	100	<0.0001
United Kingdom	2	19.83 (16.71 - 22.96)	95.77	<0.0001
Developmental disorders				
Denmark	4	8.42 (6.71 - 10.14)	87.75	<0.0001
United States	1	38.5 (33.23 - 43.77)	0	1
Behavioural disorders				
Denmark	3	8.55 (7.64 - 9.45)	88.44	<0.0001
United States	1	8.50 (6.29 - 10.71)	0	1

Supplementary Table 14. Years of potential life lost (YPLL) due to specific death causes in people with mental disorders

	N of studies	Estimate (95% CI)		I^2	Cochran's Q test (p value)	Egger's test (p-value)	Estimate after trim & fill procedure
Compared to the general population with the same death cause							
Unnatural causes	4	8.11 (6.10 – 10.13)		100	<0.0001	0.85	-
Accidents	4	6.91 (3.22 – 10.6)		100	<0.0001	0.98	-
Suicide	4	8.31 (6.43 – 10.19)		100	<0.0001	0.64	-
Homicide	3	5.64 (0.30 – 10.97)		100	<0.0001	0.64	-
Natural causes	4	4.38 (3.15 – 5.61)		100	<0.0001	<0.0001	4.38 (3.15 – 5.61)
Infectious diseases	3	6.35 (3.36 – 9.34)		100	<0.0001	0.061	6.35 (3.36 – 9.34)
Neoplasms	4	5.02 (2.13 – 7.91)		100	<0.0001	0.019	5.02 (2.13 – 7.91)
Endocrine and metabolic diseases	4	7.31 (2.91 – 11.71)		100	<0.0001	0.15	-
Circulatory system diseases	4	4.73 (2.38 – 7.09)		100	<0.0001	0.27	-
Respiratory diseases	4	3.96 (1.77 – 6.15)		100	<0.0001	0.036	3.44 (0.90 – 5.98)
Digestive diseases	4	6.41 (3.63 – 9.19)		100	<0.0001	0.62	-
Genitourinary diseases	4	3.25 (1.96 – 4.55)		100	<0.0001	0.0077	3.25 (1.96 – 4.55)
Compared to the general population							
Total population							
Unnatural causes	14	29.12 (25.66 – 32.58)		100	<0.0001	0.039	29.12 (25.66 – 32.58)
Accidents	9	31.64 (24.23 – 39.04)		100	<0.0001	0.73	-
Suicide	11	29.78 (23.25 – 36.32)		100	<0.0001	0.55	-
Homicide	7	34.29 (26.76 – 41.81)		100	<0.0001	0.15	-
Natural causes	16	16.97 (14.97 – 18.98)		100	<0.0001	<0.0001	16.97 (14.97 – 18.98)
Infectious diseases	6	19.70 (10.53 – 28.87)		100	<0.0001	0.59	-
Neoplasms	10	17.96 (12.24 – 23.69)		100	<0.0001	0.22	-
Endocrine and metabolic diseases	8	16.28 (10.62 – 21.95)		100	<0.0001	0.010	16.28 (10.62 – 21.95)
Circulatory system diseases	12	15.89 (12.04 – 19.75)		100	<0.0001	0.17	-
Respiratory diseases	8	15.15 (9.82 – 20.48)		100	<0.0001	0.029	15.15 (9.82 – 20.48)
Digestive diseases	9	21.75 (17.25 – 26.25)		100	<0.0001	0.72	-
Genitourinary diseases	5	13.32 (4.88 – 21.75)		100	<0.0001	0.12	-
Females							
Unnatural causes	4	31.26 (20.45 – 42.08)		100	<0.0001	0.015	31.26 (20.45 – 42.08)
Accidents	3	34.24 (17.37 – 51.11)		98.42	<0.0001	0.14	-
Suicide	3	32.18 (10.73 – 53.63)		99.56	<0.0001	<0.0001	32.18 (10.73 – 53.63)
Homicide	2	39.17 (29.43 – 48.92)		63.04	0.10	-	-
Natural causes	7	17.85 (14.27 – 21.44)		100	<0.0001	<0.0001	16.26 (12.45 – 20.07)
Infectious diseases	1	10.60 (10.59 – 10.61)		0	1.000	-	-
Neoplasms	4	16.38 (6.70 – 26.06)		100	<0.0001	<0.0001	16.38 (6.7 – 26.06)
Endocrine and metabolic diseases	3	22.43 (4.36 – 40.51)		97.34	<0.0001	<0.0001	22.43 (4.36 – 40.51)
Circulatory system diseases	6	14.76 (8.20 – 21.32)		100	<0.0001	0.0059	14.76 (8.2 – 21.32)
Respiratory diseases	4	18.06 (9.11 – 27.00)		100	<0.0001	0.43	-
Digestive diseases	2	14.46 (9.08 – 19.85)		96.83	<0.0001	-	-
Genitourinary diseases	2	16.28 (-11.21 – 43.78)		86.81	0.0058	-	-

Males							
Unnatural causes	6	24.70 (19.48 – 29.93)		100	<0.0001	<0.0001	24.7 (19.48 – 29.93)
Accidents	4	24.63 (13.69 – 35.57)		100	<0.0001	0.040	24.63 (13.69 – 35.57)
Suicide	4	25.88 (11.13 – 40.63)		100	<0.0001	0.035	25.88 (11.13 – 40.63)
Homicide	3	27.56 (13.15 – 41.96)		100	<0.0001	0.0008	27.56 (13.15 – 41.96)
Natural causes	7	17.70 (14.69 – 20.72)		100	<0.0001	<0.0001	15.41 (12.19 – 18.63)
Infectious diseases	2	15.80 (-1.45 – 33.05)		100	<0.0001	-	-
Neoplasms	6	14.94 (7.16 – 22.73)		100	<0.0001	<0.0001	14.94 (7.16 – 22.73)
Endocrine and metabolic diseases	5	15.85 (8.82 – 22.89)		100	<0.0001	0.0010	15.85 (8.82 – 22.89)
Circulatory system diseases	8	16.14 (11.21 – 21.06)		100	<0.0001	0.15	-
Respiratory diseases	5	17.28 (8.43 – 26.12)		100	<0.0001	<0.0001	17.28 (8.43 – 26.12)
Digestive diseases	5	23.25 (17.44 – 29.06)		100	<0.0001	0.39	-
Genitourinary diseases	2	13.95 (-7.71 – 35.61)		100	<0.0001	-	-