

Title: Supplementary material for a systematic review and meta-analysis on the prevalence of childhood maltreatment among people with opioid use disorder

Authors: Thomas Santo, Jr.^a, Gabrielle Campbell^{a,b}, Natasa Gisev^a, Lucy Tran^a, Samantha Colledge^a, Gian Luca Di Tanna^{c,d}, Louisa Degenhardt^a

Affiliations:

^a National Drug and Alcohol Research Centre, UNSW Sydney, 22-32 King Street, Randwick NSW 2031, Australia

^b School of Health and Sports Sciences, University of the Sunshine Coast, Sunshine Coast QLD 4556, Australia

^c The George Institute for Global Health, UNSW Sydney, 1 King Street, Newtown NSW 2042, Australia

^d Faculty of Medicine, UNSW Sydney, Wallace Wurth Building, 18 High Street, Kensington NSW 2052, Australia

Disclaimer: This material supplements, but does not replace, the peer-reviewed paper in Drug and Alcohol Dependence

Corresponding author:

Thomas Santo, Jr.
National Drug and Alcohol Research Centre
UNSW Sydney
22-32 King Street
Randwick NSW 2031
Australia
E: t.santojr@unsw.edu.au
T: +61 2 9385 03

Table of Contents

| | |
|--|-----|
| eAppendix 1: PRISMA Reporting Checklist | 3 |
| eTable 1.1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Checklist..... | 3 |
| eAppendix 2: Search Strategy..... | 4 |
| eMethods 2.1: Search strings for electronic literature searches..... | 4 |
| eTable 2.1: Search strategy for opioid-related terms in MEDLINE, Embase, and PsycINFO databases..... | 5 |
| eTable 2.2: Search strategy for OUD-related terms in MEDLINE, Embase, and PsycINFO databases | 6 |
| eTable 2.3: Search strategy for CM-related terms in MEDLINE, Embase, and PsycINFO databases..... | 7 |
| eTable 2.4: Totals from each database and duplicates..... | 8 |
| eAppendix 3: Study screening protocol..... | 9 |
| eMethods 3.1: Inclusion and exclusion criteria | 9 |
| eTable 3.1: Full-text exclusion reasons by name of study..... | 10 |
| eAppendix 4: Data extraction | 32 |
| eTable 4.1: Variables for data extraction..... | 32 |
| eAppendix 5: Study descriptions of eligible studies | 33 |
| eTable 5.1: Studies of people with opioid use disorder with continuous or aggregate childhood maltreatment (CM) data only. | 33 |
| eAppendix 6: Risk of bias..... | 34 |
| eMethods 6.1: Inclusion or exclusion criteria risk..... | 34 |
| eMethods 6.2: Evaluation of OUD | 35 |
| eMethods 6.3: Evaluation of CM history | 35 |
| eTable 6.1: Summary of risk of bias and quality of prevalence estimate | 36 |
| eAppendix 7: Results from analyses and figures excluded from the main text | 39 |
| eTable 7.1: Meta-regressions of each type of childhood maltreatment among samples of people with opioid use disorder | 39 |
| eTable 7.2: Pooled prevalence estimates for each type of childhood maltreatment in people with opioid use disorder stratified by other sample characteristics..... | 40 |
| eTable 7.3: Pooled prevalence estimates for each type of childhood maltreatment in people with opioid use disorder stratified by other study-level characteristics | 41 |
| eAppendix 7.1: Childhood sexual abuse among women with opioid use disorder..... | 42 |
| eAppendix 7.2: Childhood sexual abuse among men with opioid use disorder | 50 |
| eAppendix 7.3: Childhood physical abuse among people with opioid use disorder..... | 58 |
| eAppendix 7.4: Childhood emotional abuse among people with opioid use disorder..... | 69 |
| eAppendix 7.5: Childhood physical neglect among people with opioid use disorder | 80 |
| eAppendix 7.6: Childhood emotional neglect among people with opioid use disorder..... | 91 |
| eAppendix 8: Sensitivity Analyses | 102 |
| Summary | 102 |
| eTable 8.1: Sensitivity analyses of childhood maltreatment prevalence estimates among people with opioid use disorder..... | 102 |
| eReferences..... | 103 |

eAppendix 1: PRISMA Reporting Checklist

eTable 1.1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Checklist

| Section/topic | # | Checklist item | Pg. # | e # |
|------------------------------------|----|---|-------|-----|
| TITLE | | | | |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | 1 | - |
| ABSTRACT | | | | |
| Structured summary | 2 | Provide structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal/synthesis methods; results; limitations; conclusions/implications of key findings; registration number. | 2 | - |
| INTRODUCTION | | | | |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | 3 | - |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | 3-4 | - |
| METHODS | | | | |
| Protocol and registration | 5 | Indicate if a review protocol exists, where it can be accessed, and, if available, provide registration information including registration number. | 5 | - |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | 5 | - |
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in search and date last searched. | 5 | - |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | 5 | e2 |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | 6 | e3 |
| Data collection process | 10 | Describe method of data extraction (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | 6 | e4 |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | 6 | e4 |
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | 7 | e5 |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | 6-7 | - |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis. | 6-7 | - |
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | 7 | e5 |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | 7 | - |
| RESULTS | | | | |
| Study selection | 17 | Give no. studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | 8, F1 | e5 |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | 8, T1 | - |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | - | e6 |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals | T2 | - |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | T2, 8 | - |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | T3, 9 | - |
| Additional analysis | 23 | Give results of additional analyses | - | e7 |
| DISCUSSION | | | | |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups | 11-15 | - |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | 14 | - |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | 12-15 | - |
| FUNDING | | | | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | * | - |

Table Notes: *Uploaded separately and will be presented; Checklist identified through PRISMA guidelines (Moher, 2009)

eAppendix 2: Search Strategy

eMethods 2.1: Search strings for electronic literature searches

We searched MEDLINE, Embase, and PsycINFO databases using the OVID interface. There were three search term domains that were combined through the “AND” function: opioid-related terms, terms related to OUD and substance use disorder, and terms related to childhood maltreatment (CM). Terms within each domain were combined using the “OR” function. Title/abstract (ti,ab.), multipurpose (.mp), and Boolean/explode terms are displayed in eTable 2.1-2.3 below. Search terms were formulated through investigator opinion (LD, GC, and NG) and consult with a UNSW Sydney librarian.

For opioid-related terms (Domain 1), we included title/abstract terms related to both illicit and pharmaceutical opioids. Both chemical names and commonly used names were utilised (e.g. diacetylmorphine and heroin).

For domain 2, we entered terminology to capture studies of people diagnosed with OUD and those that did not formally evaluate OUD as defined by International Classification of Disease (ICD)(World Health Organization, 1992, n.d.) or Diagnostic and Statistical Manual of Mental Disorders (DSM)(American Psychiatric Association, 2013, 2000). Searches included terms that describe behaviours consistent with OUD, combined with terms with opioid-related terms from Domain 1. For example, we combined all opioid-related terms from Domain 1 with explode or Boolean terms related to substance use disorders or injecting drug use (IDU). Some explode or Boolean terms, like “exp Heroin Dependence/” or those related to OAT, were not combined with opioid-related terms, to ensure search all studies of people with OUD were included.

Finally, terms from the first two domains were combined with multipurpose terms related to child maltreatment. We included any explode or Boolean terms related to child abuse or neglect generally and included specific terms related to each form of abuse or neglect. Additionally, we included a group of 5 multipurpose terms that described childhood (e.g. child* OR adolescen* OR youth OR teen* OR juvenile*) with adjacent operators related to abuse or neglect. For example, we included the search phrase “((child* OR adolescen* OR youth OR teen* OR juvenile*) adj6 neglect*).mp.”. Use of adjacent operators in this case allowed us to capture “...child neglect...” and phrases such as, “...neglect as an adolescent...”.

Terms were entered into each database separately and we restricted results to human studies from January 1st, 1990 to May 28th, 2019. We updated our search on June 18th, 2020 to capture all studies from January 1st, 1990 to May 28th, 2019. Subsequently, we removed duplicates using the Covidence platform.

eTable 2.1: Search strategy for opioid-related terms in MEDLINE, Embase, and PsycINFO databases

| Dom -ain | # | Term or Phrase | Title / Abstract or Multipurpose Term | O R | Boolean or Explode Term (Database Specific) | | |
|----------------------|----|-------------------------------------|---|--------|--|---|---|
| | | | | | Medline | EMBASE | psycInfo |
| Opioid-related Terms | 1 | Opiates | "opiate*".ti,ab. | O R | exp Opiate Alkaloids/ exp Analgesics, Opioid/ | exp opiate/ | exp opiates/ |
| | 2 | Opioids | "opioid*".ti,ab. | | exp Narcotics/ | exp narcotic analgesic agent/ | exp narcotic drugs/ |
| | 3 | Narcotics | "narcot*".ti,ab. | | | exp opiate agonist/ | exp opiate agonist/ or exp narcotic agonists/ |
| | 4 | Opiate agonists | | | | exp opiate antagonist/ | exp narcotic antagonists/ |
| | 5 | Opiate antagonists | | | exp Opium/ | | |
| | 6 | Opium | "opium*".ti,ab. | | exp Heroin/ | exp diamorphine/ | exp Heroin/ |
| | 7 | Heroin | "heroin*".ti,ab. OR "diamorphine*".ti,ab. | | exp Opiate Substitution Treatment/ | exp opiate substitution treatment/ | exp Methadone Maintenance/ |
| | 8 | OST | "OST".ti,ab. | | exp Methadone/ | exp methadone/ OR exp methadone treatment/ | exp Methadone/ |
| | 9 | Methadone | "methadone*".ti,ab. OR "MMT".ti,ab. | | exp buprenorphine/ | exp buprenorphine/ | exp Buprenorphine/ |
| | 10 | Buprenorphine | "buprenorphine*".ti,ab. | | (exp morphine derivatives/ OR exp morphine/ OR exp oxycodone/ OR exp codeine/ OR exp hydrocodone/ OR exp fentanyl/ OR exp hydromorphone/ OR exp oxymorphone/ OR exp meperidine/ OR exp tapentadol/ OR exp tramadol/ OR exp meptazinol/ OR exp papaveretum/ OR exp pentazocine/ OR exp pethidine/ OR exp levorphanol/ OR exp butorphanol/ OR exp propoxyphene/ OR alfentanil/ OR exp remifentanil/ OR exp sufentanil/ OR exp dextropropoxyphene/) | (exp morphine derivative/ OR exp morphine/ OR exp oxycodone/ OR exp codeine/ OR exp hydrocodone/ OR exp fentanyl/ OR exp dihydrocodeine/ OR exp hydromorphone/ OR exp oxymorphone/ OR exp meperidine/ OR exp tapentadol/ OR exp tramadol/ OR exp dipipanone/ OR exp meptazinol/ OR exp papaveretum/ OR exp pentazocine/ OR exp pethidine/ OR exp levorphanol/ OR exp butorphanol/ OR exp propoxyphene/ OR exp alfentanil/ OR exp remifentanil/ OR exp sufentanil/ OR exp ketobemidone/ OR exp levacetylmethadol/ OR exp dextropropoxyphene/) | (exp morphine/ or exp codeine/ or exp fentanyl/ or exp meperidine/ or exp tramadol/ or exp pentazocine/) |
| | 11 | Other prescribed opioid terms | (morphin* OR morfin* OR oxycodone OR codeine OR hydrocodone OR fentanyl OR dihydrocodeine OR hydromorphone OR oxymorphone OR meperidine one OR tapentadol OR tramadol OR dipipanone OR meptazinol OR papaveretum OR pentazocine OR pethidine OR levorphanol OR butorphanol OR propoxyphene OR alfentanil OR remifentanil OR sufentanil OR ketobemidone OR levomethadyl OR levacetylmethadol OR dextropropoxyphene).ti,ab. | | | | |
| | 12 | ALL OPIOID TERMS | 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 | | | | |

Table Notes: *Number represents line number for search term as entered into database

eTable 2.2: Search strategy for OUD-related terms in MEDLINE, Embase, and PsycINFO databases

| Domain | #* | Term or Phrase | Title / Abstract or Multipurpose Term | OR | Boolean or Explode Term (Database Specific) | | | |
|------------------------|----|-----------------------------------|--|----|---|--|--|--|
| | | | | | Medline | EMBASE | psycInfo | |
| 2.1 Use Disorder Terms | 13 | Dependence | 12 AND ("dependen*".mp.) | OR | | 12 AND exp drug dependence/ | 12 AND exp Drug Dependency/ | |
| | 14 | Addiction | 12 AND ("addict*".mp.) | | | 12 AND exp addiction/ | 12 AND exp Drug Addiction/ | |
| | 15 | Abuse | (12 AND "abuse*".mp.) OR (12 AND "abusing".mp.) | | | 12 AND (exp drug abuse/ OR exp substance abuse/ OR prescription drug diversion/) | (12 AND exp Drug Abuse/) | |
| | 16 | Misuse | (12 AND "misuse*".mp.) OR (12 AND "misusing".mp.) | | | 12 AND exp drug misuse/ | | |
| | 17 | Prescription misuse | (12 AND "non?prescri*".mp.) OR (12 AND "extra?medical".mp.) OR (12 AND "non?medical".mp.) OR (12 AND "aberran*".mp.) | | | 12 AND exp prescription drug misuse/ | | |
| | 18 | Use disorder | 12 AND ("disorder*".mp.) | | | | | |
| | 19 | OUD | 12 AND ("OUD".mp.) | | | | | |
| | 20 | SUD | 12 AND ("SUD".mp.) | | | | | |
| | 21 | Problem use | 12 AND (problem adj3 use*.mp.) | | | | | |
| | 22 | Injecting-related terms | (12 AND "inject*".mp.) OR (12 AND "intravenous".mp.) | | | 12 AND exp substance abuse, intravenous/ | 12 AND (exp intravenous drug abuse/ OR exp injection drug user/) | 12 AND (exp intravenous injections/ OR exp intravenous drug usage/ OR exp drug self administration/) |
| | 23 | Injecting-related acronyms | 12 AND ("PWID".mp. OR "IDU".mp. OR "IDUs".mp. OR "IVDU".mp.) | | | | | |
| | 24 | OUD Explodes | | | | exp opioid-related disorders/ | exp opiate addiction/ | exp Heroin Addiction/ |
| | 25 | Heroin SUD | | | | exp Heroin dependence/ | exp heroin addiction/ OR exp heroin dependence/ | |
| | 26 | Morphine SUD | | | | exp Morphine Dependence/ | exp morphine addiction/ | |
| | 27 | OPIOID TERMS + OUD TERMS | 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 | | | | | |
| 2.2 OAT- Related Terms | 28 | OAT | 12 AND ("OST".mp. OR "OAT".mp. OR "OAT".mp. OR "ORT".mp.) | OR | exp Opiate Substitution Treatment/ | exp opiate substitution treatment/ | | |
| | 29 | Any MAT recipients | 12 AND ("methadone" OR "MAT").mp. | | exp Methadone/ | exp methadone/ OR exp methadone treatment/ | exp Methadone/ OR exp Methadone Maintenance/ | |
| | 30 | MMT | 12 AND ("MMT".mp.) | | | 12 AND exp maintenance therapy/ | | |
| | 31 | Buprenorphine | 12 AND ("buprenorphine*".mp. OR "BMT".mp.) | | exp buprenorphine/ | exp buprenorphine/ | exp Buprenorphine/ | |
| | 32 | Treatment | 12 AND ("therap*".mp.) | | | | | |
| | 33 | Therapy | 12 AND ("treatment*".mp.) | | | 12 AND (exp "drugs used in the treatment of addiction"/ OR exp drug dependence treatment/) | | |
| | 34 | Substitution | 12 AND ("replacement*".mp OR "substitut*".mp. OR "maintenance".mp.) | | | | | |
| | 35 | Naltrexone | "naltrexone".mp OR "vivitrol".mp. | | exp Naltrexone/ | exp naltrexone/ | exp Naltrexone/ | |
| | 36 | Bup-naloxone combo | | | exp Buprenorphine, Naloxone Drug Combination/ | exp buprenorphine plus naloxone/ | | |
| | 37 | Suboxone | "suboxone".mp. | | | | | |
| | 38 | Subutex | "subutex".mp. | | | | | |
| | 39 | OAT-RELATED TERMS | 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 | | | | | |
| | 40 | (OUD TERMS) + (OAT-RELATED TERMS) | 27 OR 39 | | | | | |

Table Notes: *Number represents line number for search term as entered into database, continued from previous table (eTable 2.1)

eTable 2.3: Search strategy for CM-related terms in MEDLINE, Embase, and PsycINFO databases

| Domain | # | Term or sPhrase | Title / Abstract or Multipurpose Term | OR | Boolean or Explode Term (Database Specific) | | |
|---|--------|---|--|----|--|--|---|
| | | | | | Medline | EMBASE | psycInfo |
| 3. Childhood Maltreatment Related Terms | - | “Childhood” terms | (child* OR adolescen* OR youth OR teen* OR juvenile*) | | | | |
| | 41 | Childhood abuse | ((Childhood terms) adj6 abuse*).mp. | | exp Child Abuse/ OR exp "Adult Survivors of Child Abuse"/ | exp child abuse/ | exp Child Abuse/ |
| | 42 | Assault of a child | ((Childhood terms) adj6 assault*).mp. | | | exp childhood injury/ | |
| | 43 | Childhood maltreatment | ((Childhood terms) adj6 maltreat*).mp. | | | | |
| | 44 | Childhood trauma | ((Childhood terms) adj6 trauma*).mp. | | | exp posttraumatic stress disorder/ AND (Childhood terms).mp. | exp Trauma/ AND (Childhood terms).mp. |
| | 45 | Childhood adverse experience | ((Childhood terms) AND “ACE”).mp. | | exp Adverse Childhood Experiences/ | | |
| | 46 | Childhood stress | ((Childhood terms) adj6 stress*).mp. | | exp Stress Disorders, Traumatic/ AND (Childhood terms).mp. | | |
| | 47 | Childhood neglect | ((Childhood terms) adj6 neglect*).mp. | | | exp child neglect/ | exp Child Neglect/ |
| | 48 | Childhood deprivation | ((Childhood terms) adj6 depriv*).mp. | | exp psychosocial deprivation/ AND (Childhood terms).mp. | | |
| | 49 | Childhood physical abuse | ((Childhood terms) AND (physic* adj6 abuse*)).mp. | | exp Physical Abuse/ AND (Childhood terms).mp. | exp physical abuse/ AND (Childhood terms).mp.) | |
| | 50 | Battered child | ((Childhood terms) adj6 batter*).mp. | | exp battered child syndrome/ | exp battered child syndrome/ | exp Battered Child Syndrome/ |
| | 51 | Childhood sexual abuse/assault | ((Childhood terms) AND (sex* adj6 abuse*).mp)OR ((Childhood terms) AND (sex* adj6 assault*).mp) | | exp Child Abuse, Sexual/ | exp child sexual abuse/ | exp Sexual Abuse/ AND (Childhood terms).mp. |
| | 52 | Rape or Molestation | ((Childhood terms) AND rape* .mp.) OR ((Childhood terms) AND molest* .mp) | | | | |
| | 53 | Childhood emotional abuse | (Childhood terms) AND (emotion* adj6 abuse*).mp. | OR | | exp emotional abuse/ AND (Childhood terms).mp. | exp Emotional Abuse/ AND (Childhood terms).mp. |
| | 54 | Family/House dysfunction | (dysfunction* adj6 famil*).mp. OR (dysfunction* adj6 household*).mp. | | | exp dysfunctional family/ AND (Childhood terms).mp. | exp Dysfunctional Family/ AND (Childhood terms).mp. |
| | 55 | Violent family, family members | (violen* adj6 famil*).mp. OR (violen* adj6 parent*).mp. | | | exp family violence/ AND (Childhood terms).mp. | exp Domestic Violence/ AND (Childhood terms).mp. |
| | 56 | Impaired parents | (impair* adj6 parent*).mp. | | exp child of impaired parents/ | exp child of impaired parents/ | |
| | 57 | Witnessed violence | ((Childhood terms) AND (witness* OR expos*) adj6 violen*).mp. | | exp Domestic Violence/ AND (Childhood terms).mp.) | | |
| | 58 | Victim | ((Childhood terms) adj6 victim*).mp. | | exp Crime Victims/ AND (Childhood terms).mp. | exp victim/ AND (Childhood terms).mp. | |
| | 59 | CTQ Scale | "CTQ".mp. | | | exp Childhood Trauma Questionnaire/ | |
| | 60 | Early stress / adversity | (early* adj6 advers*).mp. OR (early* adj6 stress*).mp. | | | | |
| | 61 | Parental SUD | (addict* OR "substance use*" OR dependen* OR "use disorder*" OR abuse*) adj4 parent*).mp. | | | | |
| | 62 | Parents separation | (parent* adj3 separat*).mp. OR (early* adj3 separat*).mp. | | | | exp Parental Absence/ |
| | 63 | ODU & CM TERMS | 40 AND (41 OR 42 OR 43 OR 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54 OR 55 OR 56 OR 57 OR 58 OR 59 OR 60 OR 61 OR 62) | | | | |
| 64 | Limits | limit 63 to (human and yr="1990 - Current") | | | | | |

Table Notes: *Number represents line number for search term as entered into database, continued from previous table (eTable 2.2)

eTable 2.4: Totals from each database and duplicates

| Source | Number of Studies |
|---|-------------------|
| Medline | 967 |
| EMBASE | 5,633 |
| PsycINFO | 813 |
| Total citations identified | 7,413 |
| Hand-Search* | 47 |
| Duplicates | 975 |
| Total for Title / Abstract Screening | 6,438 |

Table Notes: *Hand-search process described below

eAppendix 3: Study screening protocol

eMethods 3.1: Inclusion and exclusion criteria

Study screening was conducted in Covidence, a web-based systematic review management tool (<https://www.covidence.org>). After removing duplicates through the Covidence platform (k=975), citations were screened by title and abstract.

Title and abstract screening

At the title and abstract screening stage, any observational study that described a sample of human participants with OUD, with proxy characteristics for OUD, or use of illicit or pharmaceutical opioid were included. Explicit evaluation of OUD was not required, but studies of people prescribed opioids for acute pain or cancer pain were excluded. At title and abstract screening stage, we also included studies that mentioned sub-samples of people with OUD or proxy characteristics or OUD. For example, studies of people in treatment for substance use disorder (SUD) or studies of people prescribed opioids for CNCP, which reported evaluation of OUD or proxy characteristics in the abstract). Reference to child maltreatment data in the title or abstract was not necessary for inclusion to full-text review. This criterion was omitted to avoid an overrepresentation of studies that reported significant or elevated child maltreatment data in the title and/or abstract. All citations screened by two reviews and were reviewed by the lead author (TS) and moved to full-text review if there was conflict in assessment.

The main objective at the title and abstract screening stage was to exclude studies that did not present original data (e.g. letters to the editor, editorials, commentaries) and studies that did not present data from human participants. At this stage, reference lists of relevant systematic reviews (reviews hand-searched for relevant studies which were assessed independently against the inclusion/exclusion criteria. After title and abstract screening was complete, 5,558 were deemed irrelevant and 880 were assessed by full-text screening.

Full-text Screening

At the full-text screening stage, studies were excluded if there was no quantitative evaluation of child maltreatment, if an experience of child maltreatment was required for study participation (e.g. 100% of the sample reported CM), or if there were less than 40 participants with OUD or OUD proxy characteristics in the sample. Quantitative evaluation included continuous data or aggregate forms of CM, lifetime abuse, neglect, or child adversity that did not explicitly describe sexual abuse by sex, physical abuse, emotional abuse, physical neglect, or emotional neglect. In all cases, authors were contacted for additional information.

Finally, citations were excluded if they did not report evaluation of OUD and/or proxy characteristics of OUD according to our criteria. Samples were included if the study reported assessment of OUD or opioid use disorder (e.g. using ICD or DSM criteria), reported data on a sample receiving treatment for opioid use (e.g. OAT, detoxification/residential rehabilitation for of opioid use), or if the sample reported behaviours consistent with OUD (e.g. frequent opioid use by PWID).

If additional information was required for the subset of people with OUD (e.g. CM and OUD were evaluated in a larger sample) or if additional information was required about frequency of opioid use or proxy characteristics, authors were contacted. Full-text screening was conducted by two team members (One of SZ, CP, SZ, or SC AND TS) and conflicts were resolved with a third party if necessary (NG, GC and/or LD). Below we present the exclusion reasons for each of the 767 excluded studies and cumulative data is provided in the PRISMA diagram (Figure 1).

Hand-search studies

Reference lists from related reviews and literature were hand-searched and added to the search results separately (Figure 1). Relevant citations were screened by title and abstract and then subject to the same full-text screening process as all other citations. Several of the 47 citations identified by the hand-search were identified from a table in "Life of a Heroin User"(Darke, 2011) that briefly described rates of abuse and neglect among people who inject drugs or with substance use disorders. However, many of the studies did not explicitly describe opioid or heroin use and therefore did not fulfill our inclusion criteria.

eTable 3.1: Full-text exclusion reasons by name of study

| Study Author, Year | Title | Exclusion Reason |
|-----------------------|--|--|
| Krausz 2014 | Is exposure to childhood maltreatment associated with adult psychological distress among adult intravenous drug user? | CM Requirement for inclusion in study |
| Gilmore 2019 | Prescription Opioid Misuse After a Recent Sexual Assault: A Randomized Clinical Trial of a Video Intervention | CM Requirement for inclusion in study |
| Schiff 2015 | Prolonged exposure for treating PTSD among female methadone patients who were survivors of sexual abuse in Israel | CM Requirement for inclusion in study |
| Ehrman 2020 | 267. Differences in Substance Use, Sexual Risk Behaviors and Depression in Commercially Sexually Exploited and At-Risk-For Youth Versus 2014 Youth Risk Behavior Survey Participants | CM Requirement for inclusion in study |
| Moeini 2020 | Neuro-Immuno-Endocrine Interactions in Early Life Stress and Heroin Withdrawal Timeline | CM Requirement for inclusion in study |
| Khalil 2019 | Risk factors associated with psychiatric comorbidity in a sample of male egyptian patients with substance use disorder | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Rhee 2019 | Associations of Adverse Childhood Experiences with Past-Year DSM-5 Psychiatric and Substance Use Disorders in Older Adults | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Marchand 2017 | The role of gender in suicidal ideation among long-term opioid users | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Frye 2001 | Intimate partner sexual abuse among women on methadone | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Palmer 2014 | Genomewide genetic and GxE effects on the liability to alcohol and tobacco and illicit drug dependence | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Enoch 2010 | The influence of GABRA2, childhood trauma, and their interaction on alcohol, heroin, and cocaine dependence | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Lynskey 2006 | Subtypes of illicit drug users: A latent class analysis of data from an Australian twin sample | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| El-Bassel 1995 | Correlates of problem drinking among drug-using incarcerated women | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| El-Bassel 1996 | Correlates of crack abuse among drug-using incarcerated women: Psychological trauma, social support, and coping behavior | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Almli 2017 | Problematic alcohol use behavior comorbidity in a highly traumatized urban cohort and its GWAS association with an eqtl of the SCLT1 gene | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Resko 2012 | Early attrition from treatment among women with cooccurring substance use disorders and PTSD | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Medrano 1999 | Prevalence of childhood trauma in a community sample of substance-abusing women | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Brick 2017 | Evidence for genetic correlation of DSM-IV opioid dependence and childhood trauma based on additive genome-wide effects | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Hien 1996 | Trauma and short-term outcome for women in detoxification | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Agrawal 2012 | Cannabinoid receptor genotype moderation of the effects of childhood physical abuse on anhedonia and depression | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Kristjansson 2016 | The variance shared across forms of childhood trauma is strongly associated with liability for psychiatric and substance use disorders | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Tang 2020 | Adverse childhood experiences, internalizing/externalizing symptoms, and associated prescription opioid misuse: A mediation analysis | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Mohammadzadeh 2019 | Direct and indirect associations between perception of childhood trauma and suicidal ideation through emotion dysregulation in males who use heroin | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Daivids 2006 | Childhood Trauma and Later Opioid Dependence | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Ishoy 2005 | [Street prostitution and drug addiction] | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Hien 2000 | Posttraumatic stress disorder and short-term outcome in early methadone maintenance treatment | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Ivandic 2001 | Psychosocial characteristics of drug addicts' families | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Mohammadhosseini 2010 | Domestic abuse before, during and after pregnancy in Jahrom, Islamic Republic of Iran. [French] | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Rizzo 2014 | Parenting concerns of pregnant women in buprenorphine treatment | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Scherrer 2015 | Factors that influence the association between severity of pain and severity of depression in primary care patients | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Simons 2008 | Characteristics of substance among men and women entering a drug treatment program: An exploration of sex differences | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Spak 2001 | [The Gothenburg study of women and alcohol: problems during childhood and adolescence important risk factors] | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Whiteside 2014 | Determinants of long-term prescription opioid use after acute trauma in adolescents | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Lowry 2017 | The effect of minority stress on substance use disparities among sexual minority us high school students | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Bader 2000 | How opiate addicts handle themselves in relation to past remembered interpersonal experiences with their parents. [German] | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|--|--|
| Schwanger 2016 | Childhood maltreatment in behavioral addictions: Preliminary data | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Anonymus 2013 | Med-Sci 2013 Poster Presenter Abstracts | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Karagoz 2015 | The relationship between childhood maltreatment and emotional dysregulation in self mutilation: An investigation among substance dependent patients. [Turkish] | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Savulich 2017 | Effects of naltrexone are influenced by childhood adversity during negative emotional processing in addiction recovery | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Agrawal 2011 | CNR1, physical abuse and anhedonia: The role of the endocannabinoid system in stress adaptation and mood | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Pearce 2012 | The cedar project: Sexual violence related vulnerabilities among young aboriginal people who use drugs in two Canadian cities | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Hassan 2019 | Polydrug use disorders in individuals with opioid use disorder | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Weiss 2019 | Methadone maintenance treatment patients with a history of childhood trauma succeed more in a cognitive paradigm that is associated with a negative reward | Contact Author qualified, but duplicate or cohort overlap (Author already contacted) |
| Marlowe 1997 | Injection into femoral and jugular veins by opiate misusers | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Oviedo-Joekes 2011 | History of reported sexual or physical abuse among long-term heroin users and their response to substitution treatment | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Dennis 2017 | The transition to recovery: Key predictors and how they relate to aging | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Langan 2001 | Gender differences among prisoners in drug treatment | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Pearce 2015 | The Cedar Project * : historical trauma and vulnerability to sexual assault among young aboriginal women who use illicit drugs in two Canadian cities | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Ressler 2014 | Is dysregulated fear habitual?-Human genetic and neuroscience approaches to PTSD & addiction comorbidity | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| O'Connell 2007 | Childhood characteristics associated with stage of substance use of American Indians: Family background, traumatic experiences, and childhood behaviors | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Dell'Osso 2014 | Towards a unitary perspective between Post-Traumatic Stress Disorder and Substance Use Disorder. Heroin use disorder as case study | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Gannon 2017 | Impact of Mindfulness-Based Parenting on Women in Treatment for Opioid Use Disorder | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Zeid 2018 | Comparisons of Alcohol and Drug Dependence in Terms of Attachments and Clinical Issues | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Wiest 2002 | The relationship between dissociative features and psychological distress and reported childhood abuse in a cocaine-abusing methadone maintenance population | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Gerra 2008 | Adrenocorticotrophic hormone and cortisol plasma levels directly correlate with childhood neglect and depression measures in addicted patients | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Kissin 2007 | HIV seroprevalence in street youth, St Petersburg, Russia | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Myers 2014 | Associations between childhood adversity, adult stressful life events, and past-year drug use disorders in the National Epidemiological Study of Alcohol and Related Conditions (NESARC) | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Schneider 2009 | Prevalence and correlates of intimate partner violence victimization among men and women entering substance use disorder treatment | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Copeland 1992 | A comparison of women seeking drug and alcohol treatment in a specialist women's and two traditional mixed-sex treatment services | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Quigley 2002 | Family and community burdens of addiction: Case-mix analysis at a new community-based methadone treatment service | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Swogger 2011 | Childhood abuse and harmful substance use among criminal offenders | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Libby 2005 | Childhood physical and sexual abuse and subsequent depressive and anxiety disorders for two American Indian tribes | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |

| Study Author, Year | Title | Exclusion Reason |
|----------------------|--|--|
| Warner 1999 | Predictors of initiation of substance use, problems and dependence: Results from the National Comorbidity Survey | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Ducci 2009 | Association of substance use disorders with childhood trauma but not African genetic heritage in an African American cohort | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Evren 2012 | Relationship of defense styles with history of childhood trauma and personality in heroin dependent inpatients | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Fergusson 2008 | The developmental antecedents of illicit drug use: evidence from a 25-year longitudinal study | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Ford 2008 | Complex posttraumatic stress disorder in trauma-exposed adults receiving public sector outpatient substance abuse disorder treatment | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Storey 1999 | Childhood abuse and self-regulation: Risk factors for heroin addiction | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Ghorbani 2019 | The role of emotion dysregulation in the relation of childhood trauma to heroin craving in individuals with heroin dependence | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Icick 2013 | Dysfunctional parental styles perceived during childhood in outpatients with substance use disorders | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Khoury 2010 | Substance use, childhood traumatic experience, and Posttraumatic Stress Disorder in an urban civilian population | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Knight 1998 | Antisocial tendency among drug-addicted adults: Potential long-term effects of parental absence, support and conflict during childhood | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Lau 2005 | The relationship between physical maltreatment and substance use among adolescents: A survey of 95,788 adolescents in Hong Kong | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Li 2012 | Pathways to age of onset of heroin use: a structural model approach exploring the relationship of the COMT gene, impulsivity and childhood trauma | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| McManamaO'Brien 2015 | Childhood exposure to a parental suicide attempt and risk for substance use disorders | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Taplin 2014 | Family history of alcohol and drug abuse, childhood trauma, and age of first drug injection | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Western 2019 | Drug use in the year after prison | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Baykara 2019 | The relationship between self mutilative behavior, suicide attempt history and impulsivity and some clinical variables in male opiate-dependent patients | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Branstetter 2008 | A history of sexual, emotional, or physical abuse predicts adjustment during opioid maintenance treatment | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Du 2013 | Drug-abusing offenders with co-morbid mental disorders: gender differences in problem severity, treatment participation, and recidivism | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Mills 2005 | Post-traumatic stress disorder among people with heroin dependence in the Australian treatment outcome study (ATOS): prevalence and correlates | Could not extract data (e.g. lifetime abuse, merged measure, odds ratio; Author Contacted) |
| Shakarmi 2019 | The association between parents' lifestyles and common psychiatry disorders in children and adolescents: A population-based study | No Childhood Maltreatment data |
| DeNadai 2019 | Diverse diagnostic profiles associated with prescription opioid use disorder in a nationwide sample: One crisis, multiple needs | No Childhood Maltreatment data |
| Probst 2020 | A supportive school environment may reduce the risk of non-medical prescription opioid use due to impaired mental health among students | No Childhood Maltreatment data |
| Wojciechowski 2019 | Borderline personality disorder symptoms and exposure to violence as risk factors for opioid use in adulthood | No Childhood Maltreatment data |
| Betcher 2019 | Effects of Parental Opioid Use: Outcomes of Children of Parents in Medication-Assisted Treatment Compared to Healthy Controls | No Childhood Maltreatment data |
| Milton-Gomes 2019 | An examination of the transformative coping strategies used by biological mothers of emerging adults suffering from heroin addiction | No Childhood Maltreatment data |
| Capaldi 2019 | Men's misuse of prescription opioids from early to middle adulthood: An examination of developmental and concurrent prediction models | No Childhood Maltreatment data |
| Crawford 2019 | Opioid abuse and suicidality in postpartum depression: An analysis of u.s. electronic health records | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|----------------------|---|--------------------------------|
| Kim 2019 | Disparities in disposition and length of stay in hospitalizations for serious infections with and without opioid use disorder | No Childhood Maltreatment data |
| Moran 2019 | Client characteristics, engagement, and outcomes in an integrated treatment program for youth with dual diagnoses | No Childhood Maltreatment data |
| Kabbash 2019 | Effect of tramadol dependence on male sexual dysfunction | No Childhood Maltreatment data |
| Sanmartin 2019 | Prescription opioid misuse, sources of opioids and reasons for opioid misuse among reproductive aged parenting women with major depressive episode | No Childhood Maltreatment data |
| Som 2019 | Prolonged opioid use and prescription patterns in pediatric facial fracture surgery patients | No Childhood Maltreatment data |
| Zhang 2019 | PDG42 OPIOID USE FOR TREATMENT OF ACUTE PAIN AMONG CHILDREN AND ADOLESCENTS ENROLLED IN THE MISSISSIPPI MEDICAID PROGRAM | No Childhood Maltreatment data |
| Schwinn 2019 | Two- and three-year follow-up from a gender-specific, web-based drug abuse prevention program for adolescent girls | No Childhood Maltreatment data |
| Noffsinger 2019 | Alcohol and drug screening of adolescent trauma alert patients at a level 1 pediatric trauma center | No Childhood Maltreatment data |
| Hanley 2019 | Mapping the Affective Dimension of Embodiment with the Sensation Manikin: Validation among Chronic Pain Patients and Modification by Mindfulness-Oriented Recovery Enhancement | No Childhood Maltreatment data |
| Shah 2019 | 227. Does baseline substance use predict subsequent development of mental health disorders in adolescent idiopathic scoliosis patients? | No Childhood Maltreatment data |
| Weerakoon 2020 | Relationship between risky behaviors and non-prescription opioid use among Asian American youth | No Childhood Maltreatment data |
| DeLosRiosRoddy 2019 | 6.6 EVALUATING PARENT MANAGEMENT TRAINING AS AN INTERVENTION IN THE OPIOID ABUSE CRISIS AND ITS IMPACT ON CHILDREN AND MOTHERS IN A RURAL AREA | No Childhood Maltreatment data |
| Kerr 2020 | Paternal and maternal prescription opioid use and misuse: General and specific risks for early adolescents' substance use | No Childhood Maltreatment data |
| Bushnell 2019 | Prescription Benzodiazepine Use in Privately Insured U.S. Children and Adolescents | No Childhood Maltreatment data |
| Lowthian 2020 | A Latent Class Analysis of Parental Alcohol and Drug Use: Findings from the Avon Longitudinal Study of Parents and Children | No Childhood Maltreatment data |
| Pielech 2020 | Receipt of multiple outpatient opioid prescriptions is associated with increased risk of adverse outcomes in youth: opioid prescribing trends, individual characteristics, and outcomes from 2005 to 2016 | No Childhood Maltreatment data |
| Osgood 2019 | Combat exposure, post-traumatic stress symptoms, and health-related behaviors: the role of sleep continuity and duration | No Childhood Maltreatment data |
| Patel 2019 | 2.14 HEROIN OVERDOSE-RELATED CHILD AND ADOLESCENT HOSPITALIZATIONS: INSIGHT ON COMORBID PSYCHIATRIC AND SUBSTANCE USE DISORDERS | No Childhood Maltreatment data |
| Clemans-Cope 2019 | Opioid and Substance Use Disorder and Receipt of Treatment Among Parents Living With Children in the United States, 2015-2017 | No Childhood Maltreatment data |
| Schepis 2019 | Prescription drug misuse: Sources of controlled medications in adolescents | No Childhood Maltreatment data |
| Chapin-Bardales 2019 | Characteristics of Persons Who Inject Drugs with Recent HIV Infection in the United States: National HIV Behavioral Surveillance, 2012 | No Childhood Maltreatment data |
| Footer 2019 | Police-related correlates of client-perpetrated violence among female sex workers in Baltimore City, Maryland | No Childhood Maltreatment data |
| Shakeri 2020 | Distress tolerance in methamphetamine and opium abusers with non-drug abuser (A comparative analysis) | No Childhood Maltreatment data |
| Shadur 2019 | Conceptualization and measurement of parent emotion socialization among mothers in substance abuse treatment | No Childhood Maltreatment data |
| Schepis 2019 | Alcohol use and consequences in matriculating US college students by prescription stimulant/opioid nonmedical misuse status | No Childhood Maltreatment data |
| Nurco 1998 | The family experiences of narcotic addicts and their subsequent parenting practices | No Childhood Maltreatment data |
| Luthar 2007 | Relational Psychotherapy Mothers' Group: A randomized clinical trial for substance abusing mothers | No Childhood Maltreatment data |
| Luthar 2000 | Relational Psychotherapy Mothers' Group: A developmentally informed intervention for at-risk mothers | No Childhood Maltreatment data |
| Moore 1994 | The chola life course: Chicana heroin users and the barrio gang | No Childhood Maltreatment data |
| Hanson 2009 | Clinical features and outcome of patients with inflammatory bowel disease who use narcotics: a case-control study | No Childhood Maltreatment data |
| Eggleston 2009 | Suicidality, aggression, and other treatment considerations among pregnant, substance-dependent women with posttraumatic stress disorder | No Childhood Maltreatment data |
| Edlund 2015 | Opioid abuse and depression in adolescents: Results from the National Survey on Drug Use and Health | No Childhood Maltreatment data |
| Datta 2015 | Descriptive epidemiology and high risk behavior of male prescription opioid abusers: Cross-sectional study from Sikkim, North East India | No Childhood Maltreatment data |
| Zai 2017 | Stress response genes and hair cortisol levels in first nation communities | No Childhood Maltreatment data |
| Westermeyer 1997 | Substance use disorders among young minority refugees: Common themes in a clinical sample | No Childhood Maltreatment data |
| Vaughn 2016 | Racial and ethnic trends and correlates of non-medical use of prescription opioids among adolescents in the United States 2004-2013 | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|-------------------------|---|--------------------------------|
| Vaughn 2012 | Risk profiles among adolescent nonmedical opioid users in the United States | No Childhood Maltreatment data |
| Vakkalan ka 2015 | Abuse, misuse, and suicidal substance use by children on school property | No Childhood Maltreatment data |
| Sharma 2015 | Family and social factors as predictors of drug misuse and delinquent behavior in juveniles | No Childhood Maltreatment data |
| Sekulic 2012 | Substance abuse prevalence and its relation to scholastic achievement and sport factors: an analysis among adolescents of the Herzegovina-Neretva Canton in Bosnia and Herzegovina | No Childhood Maltreatment data |
| Rogal 2012 | Predictors of pain in chronic liver disease | No Childhood Maltreatment data |
| Riehman 2009 | Substance use patterns and mental health diagnosis among youth in mental health treatment: A latent class analysis | No Childhood Maltreatment data |
| Byqvist 1998 | Male drug abuse, criminality and subcultural affiliation in a career perspective | No Childhood Maltreatment data |
| Pickens 2001 | Family history influence on drug abuse severity and treatment outcome | No Childhood Maltreatment data |
| Mohamm adhossein i 2010 | Domestic abuse before, during and after pregnancy in Jahrom, Islamic Republic of Iran | No Childhood Maltreatment data |
| Mills 2004 | Young people with heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS) | No Childhood Maltreatment data |
| Price 2004 | Post-traumatic stress disorder, drug dependence, and suicidality among male Vietnam veterans with a history of heavy drug use | No Childhood Maltreatment data |
| Pugatch 2001 | Heroin use in adolescents and young adults admitted for drug detoxification | No Childhood Maltreatment data |
| Rather 2012 | Substance-dependent adolescents attending a de-addiction center in conflict area, Kashmir, India: Socio-demographic and clinical profile | No Childhood Maltreatment data |
| Riggs 1995 | Depression in substance-dependent delinquents | No Childhood Maltreatment data |
| Rodrigue s 2013 | Childhood experiences and demographic characteristics of homeless veterans with co-occurring mental health and substance use disorders in MISSION | No Childhood Maltreatment data |
| Merikang as 1992 | Familial factors in vulnerability to substance abuse | No Childhood Maltreatment data |
| McCabe 2019 | A prospective study of nonmedical use of prescription opioids during adolescence and subsequent substance use disorder symptoms in early midlife | No Childhood Maltreatment data |
| Mattson 2016 | Prevalence and risk factors for episodic and long-term opioid use after initial prescribing in the emergency department | No Childhood Maltreatment data |
| Martorell i 2014 | Assessment of early psychiatric symptoms among substance users: A preliminary study | No Childhood Maltreatment data |
| Lieb 2010 | Psychiatric comorbidity in substitution treatment of opioid-dependent patients in primary care: Prevalence and impact on clinical features | No Childhood Maltreatment data |
| Lehman 1990 | Alcohol use by heroin addicts 12 years after drug abuse treatment | No Childhood Maltreatment data |
| Kosten 1991 | Gender differences in the specificity of alcoholism transmission among the relatives of opioid addicts | No Childhood Maltreatment data |
| Knight 1996 | Influences of family and friends on client progress during drug abuse treatment | No Childhood Maltreatment data |
| Liu 2014 | Injection drug use is associated with suicide attempts but not ideation or plans in a sample of adolescents with depressive symptoms | No Childhood Maltreatment data |
| Lister 2017 | Baseline risk factors for drug use among African-American patients during first-month induction/stabilization on methadone | No Childhood Maltreatment data |
| Khajehda luee 2013 | The relation of self-esteem and illegal drug usage in high school students | No Childhood Maltreatment data |
| Kennedy 1993 | The Beech Hill Hospital/Outward Bound Adolescent Chemical Dependency Treatment Program | No Childhood Maltreatment data |
| Kaye 2014 | Risk behaviours among substance use disorder treatment seekers with and without adult ADHD symptoms | No Childhood Maltreatment data |
| Karam 2010 | A Rapid Situation Assessment (RSA) study of alcohol and drug use in Lebanon | No Childhood Maltreatment data |
| Johnson 2018 | Patterns of substance use and associated health-risk behaviors in texas alternative high school students | No Childhood Maltreatment data |
| Johnson 1995 | Inhalants to heroin: A prospective analysis from adolescence to adulthood | No Childhood Maltreatment data |
| Johnson 2013 | Prescription Drug Misuse and Risk Behaviors Among Young Injection Drug Users | No Childhood Maltreatment data |
| Kanate 2015 | Community-wide measures of wellness in a remote First Nations community experiencing opioid dependence: Evaluating outpatient buprenorphine-naloxone substitution therapy in the context of a First Nations healing program | No Childhood Maltreatment data |
| Kelley 2003 | Cumulative environmental risk in substance abusing women: Early intervention, parenting stress, child abuse potential and child development | No Childhood Maltreatment data |
| Khuat 2015 | Social context, diversity and risk among women who inject drugs in Vietnam: Descriptive findings from a cross-sectional survey | No Childhood Maltreatment data |
| Koehlmo os 2009 | Homeless in Dhaka: Violence, sexual harassment, and drug-abuse | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|-----------------------|---|--------------------------------|
| Jester 2017 | Temperament in emerging adulthood, not adolescent behavior problems, predicts opiate misuse in mid-twenties | No Childhood Maltreatment data |
| Jobe-Shields 2015 | Family composition and symptom severity among Veterans with comorbid PTSD and substance use disorders | No Childhood Maltreatment data |
| Jaremko 2015 | Psychological and physiological stress negatively impacts early engagement and retention of opioid-dependent individuals on methadone maintenance | No Childhood Maltreatment data |
| Illangasekare 2013 | The syndemic effects of intimate partner violence, HIV/AIDS, and substance abuse on depression among low-income urban women | No Childhood Maltreatment data |
| Icick 2014 | OPRM1 polymorphism and lifetime suicide attempts among stabilized, methadone-maintained outpatients | No Childhood Maltreatment data |
| Hyman 2009 | A Stress-Coping Profile of Opioid Dependent Individuals Entering Naltrexone Treatment: A Comparison With Healthy Controls | No Childhood Maltreatment data |
| Hopfer 2000 | Heroin use among adolescents in treatment for substance use disorders | No Childhood Maltreatment data |
| Hjern 2004 | Illicit drug abuse in second-generation immigrants: A register study in a national cohort of Swedish residents | No Childhood Maltreatment data |
| Hesselbrock 2014 | Developmental trajectories of alcohol and substance use disorders in a high risk sample | No Childhood Maltreatment data |
| Herrero 1990 | Specific treatment demand as a definitory trait of a typology in heroin addicts: Differential profile of two subpopulations | No Childhood Maltreatment data |
| Hernandez-Aguado 1994 | Sharing of injection equipment among 3755 intravenous drug users in Valencia, Spain, 1987-1992 | No Childhood Maltreatment data |
| Hayatbakhsh 2008 | Adolescent problem behaviours predicting DSM-IV diagnoses of multiple substance use disorder | No Childhood Maltreatment data |
| Havens 2006 | Prevalence and correlates of suicidal ideation among young injection vs. noninjection drug users | No Childhood Maltreatment data |
| Hariri 2011 | Risky sexual behavior among patients in Turkey with bipolar disorder, schizophrenia, and heroin addiction | No Childhood Maltreatment data |
| Hannesdottir 2001 | Psychosocial functioning and psychiatric comorbidity among substance-abusing Icelandic adolescents | No Childhood Maltreatment data |
| Hanke 1993 | Women opiate users' perceptions of treatment services in New York City | No Childhood Maltreatment data |
| Hammersley 1990 | The criminality of new drug users in Glasgow | No Childhood Maltreatment data |
| Hammerbacher 2006 | Factors associated with relapse among clients in Australian substance disorder treatment facilities | No Childhood Maltreatment data |
| Hall 2016 | Medication-Assisted Treatment Improves Child Permanency Outcomes for Opioid-Using Families in the Child Welfare System | No Childhood Maltreatment data |
| Hadland 2010 | Non-Injection drug use patterns and history of injection among street youth | No Childhood Maltreatment data |
| Gupta 2014 | Ticomprehensive evaluation of Drug De-Addiction Centres (DDCs) in Punjab (Northern India) | No Childhood Maltreatment data |
| Guo 2016 | Association between nonmedical use of prescription drugs and suicidal behavior among adolescents | No Childhood Maltreatment data |
| Guo 2018 | Association between nonmedical use of opioids or sedatives and suicidal behavior among Chinese adolescents: An analysis of sex differences | No Childhood Maltreatment data |
| Guo 2019 | Association between weekday sleep duration and nonmedical use of prescription drug among adolescents: the role of academic performance | No Childhood Maltreatment data |
| Martinez-Raga 2015 | Attention-Deficit/Hyperactivity Disorders among stable heroin dependent patients in opioid substitution treatment | No Childhood Maltreatment data |
| McCabe 2014 | Non-medical use of prescription opioids during the transition to adulthood: a multi-cohort national longitudinal study | No Childhood Maltreatment data |
| McCabe 2014 | Social contexts of substance use among U.S. high school seniors: A multicohort national study | No Childhood Maltreatment data |
| McCabe 2013 | Motives for medical misuse of prescription opioids among adolescents | No Childhood Maltreatment data |
| McMahon 2002 | Drug dependence, parenting responsibilities, and treatment history: Why doesn't mom go for help? | No Childhood Maltreatment data |
| Meier 2014 | Co-occurring prescription opioid use problems and posttraumatic stress disorder symptom severity | No Childhood Maltreatment data |
| Milne 2012 | Inpatient withdrawal management for young people with substance abuse | No Childhood Maltreatment data |
| Milner 2014 | Adolescents misusing prescription drugs: Who's the riskiest users of them all? | No Childhood Maltreatment data |
| Magura 1998 | Pre- and in-treatment predictors of retention in methadone treatment using survival analysis | No Childhood Maltreatment data |
| Maremani 2012 | Correlations between awareness of illness (insight) and history of addiction in heroin-addicted patients | No Childhood Maltreatment data |
| Moore 2011 | Drug abuse and intimate partner violence: a comparative study of opioid-dependent fathers | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|----------------------|--|--------------------------------|
| Nakawaki 2012 | Predicting adolescents' persistence, non-persistence, and recent onset of nonmedical use of opioids and stimulants | No Childhood Maltreatment data |
| Neale 2000 | Suicidal intent in non-fatal illicit drug overdose | No Childhood Maltreatment data |
| Novak 2011 | Comparing injection and non-injection routes of administration for heroin, methamphetamine, and cocaine users in the United States | No Childhood Maltreatment data |
| Nyamathi 2009 | Correlates of hospitalization for alcohol-using methadone-maintained persons with physical health problems | No Childhood Maltreatment data |
| Mitra 2015 | Drug use patterns predict risk of non-fatal overdose among street-involved youth in a Canadian setting | No Childhood Maltreatment data |
| Liebling 2016 | Access to substance use treatment among young adults who use prescription opioids non-medically | No Childhood Maltreatment data |
| Morris 2012 | "Injection first": a unique group of injection drug users in Tijuana, Mexico | No Childhood Maltreatment data |
| Murphy 1999 | Opiate withdrawal outcome: The predictive ability of admission measures from the Family Assessment Device (F.A.D.) | No Childhood Maltreatment data |
| Mutlu 2014 | Characteristics of heroin users admitted to child and adolescent substance abuse treatment and support center of Turkey | No Childhood Maltreatment data |
| Marshall 2018 | The Effectiveness of Internet- and Field-Based Methods to Recruit Young Adults Who Use Prescription Opioids Nonmedically | No Childhood Maltreatment data |
| Modestin 2001 | Antecedents of opioid dependence and personality disorder: Attention-deficit/hyperactivity disorder and conduct disorder | No Childhood Maltreatment data |
| Oviedo-Joekes 2018 | Characteristics and response to treatment among indigenous people receiving injectable diacetylmorphine or hydromorphone in a randomised controlled trial for the treatment of long-term opioid dependence | No Childhood Maltreatment data |
| Palamar 2016 | Nonmedical opioid use and heroin use in a nationally representative sample of us high school seniors | No Childhood Maltreatment data |
| Palmer 2011 | Genetics of the associations between adolescent indicators of behavioral disinhibition and young adult measures of alcohol, Tobacco and other substance use disorders | No Childhood Maltreatment data |
| Pawar 2013 | Profile of patients presenting to the child and adolescent substance use clinic at a tertiary care de-addiction center | No Childhood Maltreatment data |
| Petrovic 2012 | Affective disorders of adolescent opiate addicts | No Childhood Maltreatment data |
| Pomini 2014 | Rejection attitudes, poor parental bonding, and stressful life events in heroin addicts' families | No Childhood Maltreatment data |
| Pozzi 2017 | Substances use disorders (SUD) and eating disorders (EDS): Is it conceivable the presence of underlying common traits? | No Childhood Maltreatment data |
| Pulver 2016 | Nonmedical use of prescription opioids and injury risk among youth | No Childhood Maltreatment data |
| Rice 2012 | A Model to Identify Patients at Risk for Prescription Opioid Abuse, Dependence, and Misuse | No Childhood Maltreatment data |
| Richards on 2014 | Employment and risk of injection drug use initiation among street involved youth in Canadian setting | No Childhood Maltreatment data |
| Ridenour 2006 | Different lengths of times for progressions in adolescent substance involvement | No Childhood Maltreatment data |
| Rigg 2015 | Comparing characteristics of prescription painkiller misusers and heroin users in the United States | No Childhood Maltreatment data |
| Roy 2002 | Drug injection among street youth: The first time | No Childhood Maltreatment data |
| Russell 2015 | Social influence on adolescent polysubstance use: The escalation to opioid use | No Childhood Maltreatment data |
| Rutherford 1994 | Parental relationships and substance use among methadone patients: The impact on levels of psychological symptomatology | No Childhood Maltreatment data |
| Gorka 2013 | The moderating effect of parental illicit substance use disorders on the relation between adolescent depression and subsequent illicit substance use disorders | No Childhood Maltreatment data |
| Gore-Felton 2003 | The Influence of Gender on Factors Associated with HIV Transmission Risk among Young Russian Injection Drug Users | No Childhood Maltreatment data |
| Gleghorn 1998 | Association between drug use patterns and HIV risks among homeless, runaway, and street youth in Northern California | No Childhood Maltreatment data |
| Gilbert 2001 | Linking drug-related activities with experiences of partner violence: a focus group study of women in methadone treatment | No Childhood Maltreatment data |
| Barman-Adhikari 2017 | Descriptive and injunctive network norms associated with nonmedical use of prescription drugs among homeless youth | No Childhood Maltreatment data |
| Chatham 1995 | Suicidality in a sample of methadone maintenance clients | No Childhood Maltreatment data |
| Aggarwal 2015 | Sociodemographic profile of women substance dependents in swami vivekanand DDTC, Amritsar | No Childhood Maltreatment data |
| SaintOng e 2013 | The relationship between trajectories of family/cultural stressors and depression and suicidal ideation among substance using Mexican-American adults | No Childhood Maltreatment data |
| Salas-Wright 2015 | Substance use and teen pregnancy in the United States: Evidence from the NSDUH 2002-2012 | No Childhood Maltreatment data |
| Sanjuan 2019 | An ecological momentary assessment study examining posttraumatic stress disorder symptoms, prenatal bonding, and substance use among pregnant women | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|----------------------|--|--------------------------------|
| Rotheram-Fuller 2004 | Impaired performance in a test of decision-making by opiate-dependent tobacco smokers | No Childhood Maltreatment data |
| Senel 2004 | Psychosocial correlates of substance use among adolescents in Mersin, Turkey | No Childhood Maltreatment data |
| Sau 2013 | Sociodemographic and substance use correlates of repeated relapse among patients presenting for relapse treatment at an addiction treatment center in Kolkata, India | No Childhood Maltreatment data |
| Schepis 2018 | Prescription drug use, misuse and related substance use disorder symptoms vary by educational status and attainment in U.S. adolescents and young adults | No Childhood Maltreatment data |
| Sheth 2019 | Reduced gamma-amino butyric acid (GABA) and glutamine in the anterior cingulate cortex (ACC) of veterans exposed to trauma | No Childhood Maltreatment data |
| Shiner 2017 | Trends in Opioid Use Disorder Diagnoses and Medication Treatment Among Veterans With Posttraumatic Stress Disorder | No Childhood Maltreatment data |
| Shorey 2013 | Early maladaptive schemas among young adult male substance abusers: A comparison with a non-clinical group | No Childhood Maltreatment data |
| Silbernagel 2019 | Attention-Deficit Hyperactivity Disorder Symptom Status in a Mixed Gender Population of Opioid-Maintained Prison Inmates | No Childhood Maltreatment data |
| Sterling 2004 | Pathways to chemical dependency treatment for adolescents in an HMO | No Childhood Maltreatment data |
| Stevens 2001 | Relationship of cognitive ability to the developmental course of antisocial behavior in substance-dependent patients | No Childhood Maltreatment data |
| Subica 2018 | Substance Use and Suicide in Pacific Islander, American Indian, and Multiracial Youth | No Childhood Maltreatment data |
| Subramaniam 2009 | Clinical characteristics of treatment-seeking prescription opioid vs. heroin-using adolescents with opioid use disorder | No Childhood Maltreatment data |
| Subramaniam 2011 | Predictors of abstinence: National Institute of Drug Abuse multisite buprenorphine/naloxone treatment trial in opioid-dependent youth | No Childhood Maltreatment data |
| Suchman 2001 | The mediating role of parenting stress in methadone-maintained mothers' parenting | No Childhood Maltreatment data |
| Gandolphe 2013 | Autobiographical memory and differentiation of schematic models in substance-dependent patients | No Childhood Maltreatment data |
| Graham 1994 | Drug use among female arrestees: Onset, patterns, and relationships to prostitution | No Childhood Maltreatment data |
| Friedman 1998 | The interaction of SES, race/ethnicity and family organization (living arrangements) of adolescents, in relation to severity of use of drugs and alcohol | No Childhood Maltreatment data |
| Flentje 2014 | Characteristics of transgender individuals entering substance abuse treatment | No Childhood Maltreatment data |
| Fishbein 1994 | Psychological correlates of frequency and type of drug use among jail inmates | No Childhood Maltreatment data |
| Fink 2015 | Potential determinants of unique and co-occurring major depression and nonmedical use of prescription opioids | No Childhood Maltreatment data |
| Fink 2015 | Patterns of major depression and nonmedical use of prescription opioids in the United States | No Childhood Maltreatment data |
| Smyth 2004 | Children attending addiction treatment services in Dublin, 1990-1999 | No Childhood Maltreatment data |
| Soyibo 1999 | Use of illicit drugs among high-school students in Jamaica | No Childhood Maltreatment data |
| Spooner 2000 | A study of the patterns and correlates of substance use among adolescents applying for drug treatment | No Childhood Maltreatment data |
| Stanley 2014 | Rates of substance use of American Indian students in 8th, 10th, and 12th grades living on or near reservations: Update, 2009-2012 | No Childhood Maltreatment data |
| Stenbacka 1992 | Do cannabis drug abusers differ from intravenous drug abusers? The role of social and behavioural risk factors | No Childhood Maltreatment data |
| Tull 2010 | A preliminary examination of the relationships between posttraumatic stress symptoms and crack/cocaine, heroin, and alcohol dependence | No Childhood Maltreatment data |
| Turner 2014 | Physical victimization and high-risk sexual partners among illicit drug-using heterosexual men in New York City | No Childhood Maltreatment data |
| Valzdorf 2012 | Influence of the family on the inclination to use alcohol, toxic and narcotic substances in teenagers | No Childhood Maltreatment data |
| VanDenBree 1998 | Genetic and environmental influences on drug use and abuse/dependence in male and female twins | No Childhood Maltreatment data |
| VanLeeuwen 2004 | A Snapshot of Substance Abuse Among Homeless and Runaway Youth in Denver, Colorado | No Childhood Maltreatment data |
| Vaughan 2017 | Childhood family characteristics and prescription drug misuse in a national sample of Latino adults | No Childhood Maltreatment data |
| Vaughn 2010 | Criminal victimization and comorbid substance use and psychiatric disorders in the United States: results from the NESARC | No Childhood Maltreatment data |
| Virgo 2001 | The prevalence and characteristics of co-occurring serious mental illness (SMI) and substance abuse or dependence in the patients of Adult Mental Health and Addictions Services in eastern Dorset | No Childhood Maltreatment data |
| Rakic 2014 | The prevalence of substance use among adolescents and its correlation with social and demographic factors | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|---|--------------------------------|
| Quinlivan 1999 | Adolescent pregnancy: Psychopathology missed | No Childhood Maltreatment data |
| Loiselle 1993 | Substance abuse in adolescent trauma | No Childhood Maltreatment data |
| Keller 2002 | Parent figure transitions and delinquency and drug use among early adolescent children of substance abusers | No Childhood Maltreatment data |
| James 1996 | Early prevention of alcohol and other drug use among adolescents | No Childhood Maltreatment data |
| Garcia 2014 | Hemophilia and mental health in integral IPS medellin Colombia | No Childhood Maltreatment data |
| Emmanuel 2003 | Factors associated with heroin addiction among male adults in Lahore, Pakistan | No Childhood Maltreatment data |
| Kendler 1999 | Hallucinogen, opiate, sedative and stimulant use and abuse in a population-based sample of female twins | No Childhood Maltreatment data |
| Jain 2018 | Post-Traumatic Stress Disorder, Neighborhood Residency and Satisfaction, and Social Network Characteristics among Underserved Women in Baltimore, Maryland | No Childhood Maltreatment data |
| Habib 2003 | Hepatitis C and injecting drug use: The realities of stigmatisation and discrimination | No Childhood Maltreatment data |
| Gerra 2004 | Substance Use among High-School Students: Relationships with Temperament, Personality Traits, and Parental Care Perception | No Childhood Maltreatment data |
| Donaldson 2015 | Variations in parental monitoring and predictions of adolescent prescription opioid and stimulant misuse | No Childhood Maltreatment data |
| DuMont 2004 | Sexual assault in the lives of urban sex workers: a descriptive and comparative analysis | No Childhood Maltreatment data |
| Whiteside 2016 | Predictors of sustained prescription opioid use after admission for trauma in adolescents | No Childhood Maltreatment data |
| Pan 2013 | The Cedar Project: Impacts of policing among young Aboriginal people who use injection and non-injection drugs in British Columbia, Canada | No Childhood Maltreatment data |
| Mohan 2003 | Agreement between head of household informant and self-report in a community survey of substance use in India | No Childhood Maltreatment data |
| Tang 1996 | Marijuana and heroin use in Hong Kong adolescents | No Childhood Maltreatment data |
| Tanidir 2015 | Trends and gender differences in substance use among children and youths admitted to an addiction treatment center in Turkey: Years 2011-2013 | No Childhood Maltreatment data |
| Wang 2014 | The nonmedical use of prescription medicines among high school students: A cross-sectional study in Southern China | No Childhood Maltreatment data |
| Wang 2017 | The mediating effects of depressive symptoms and sleep quality on the relationship between the non-medical use of prescription drugs and suicidal behaviors among Chinese adolescents | No Childhood Maltreatment data |
| Yarnold 1996 | Heroin use among Miami's public school students, 1992: Peers and the 'drug subculture' overwhelm parents, religion and schools | No Childhood Maltreatment data |
| Tarter 2002 | Predicting adolescent violence: Impact of family history, substance use, psychiatric history, and social adjustment | No Childhood Maltreatment data |
| Tonies 2012 | Biographical data of patients in drug substitution programmes. [German] | No Childhood Maltreatment data |
| Tonies 2012 | Biographical data of patients in drug substitution programmes | No Childhood Maltreatment data |
| Trafton 2007 | Different Components of Opioid-Substitution Treatment Predict Outcomes of Patients With and Without a Parent With Substance-Use Problems | No Childhood Maltreatment data |
| Weber 2001 | Risk factors associated with HIV infection among young gay and bisexual men in Canada | No Childhood Maltreatment data |
| Torresani 2000 | Parental representations in drug-dependent patients and their parents | No Childhood Maltreatment data |
| Tucker 1995 | Substance abuse in patients with comorbid anxiety disorder. A comparative study | No Childhood Maltreatment data |
| Wu 2011 | Treatment use and barriers among adolescents with prescription opioid use disorders | No Childhood Maltreatment data |
| Yoon 2012 | Substance use disorders and adoption: Findings from a national sample | No Childhood Maltreatment data |
| Zhao 2018 | Incarceration history, social network composition, and substance use among homeless youth in Los Angeles | No Childhood Maltreatment data |
| Wilson 2017 | Trait Mindfulness and Progression to Injection Use in Youth With Opioid Addiction | No Childhood Maltreatment data |
| Wisloff-Aase 2019 | Chronic pain among the hospitalized patients after the 22 July 2011 terror attacks in Oslo and at Utoya Island | No Childhood Maltreatment data |
| Wheeler 2019 | Culturally relevant risk and protective factors for nonmedical use of prescription opioids among incarcerated African American men | No Childhood Maltreatment data |
| Wray-Lake 2012 | Associations between community attachments and adolescent substance use in nationally representative samples | No Childhood Maltreatment data |
| Wu 2013 | Comorbid substance use disorders with other Axis I and II mental disorders among treatment-seeking Asian Americans, Native Hawaiians/Pacific Islanders, and mixed-race people | No Childhood Maltreatment data |
| Wu 2013 | Illicit and nonmedical drug use among asian americans, native hawaiians/pacific islanders, and mixed-race individuals | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|---|--------------------------------|
| Young 2012 | Transition from first illicit drug use to first injection drug use among rural Appalachian drug users: a cross-sectional comparison and retrospective survival analysis | No Childhood Maltreatment data |
| Yucht 2002 | The relationship between personality factors and drug-of-choice among adolescent drug abusers | No Childhood Maltreatment data |
| Zimmer-Hofler 1992 | Swiss heroin-addicted females: Career and social adjustment | No Childhood Maltreatment data |
| Fendrich 2018 | Prior prescription opioid misuse in a cohort of heroin users in a treatment study | No Childhood Maltreatment data |
| Favrat 2002 | A staging system to predict prognosis among methadone maintenance patients, based on admission characteristics | No Childhood Maltreatment data |
| Epstein-Ngo 2014 | Event-level analysis of antecedents for youth violence: comparison of dating violence with non-dating violence | No Childhood Maltreatment data |
| Epstein-Ngo 2013 | A daily calendar analysis of substance use and dating violence among high risk urban youth | No Childhood Maltreatment data |
| Ellickson 1999 | Identifying adolescents at risk for hard drug use: Racial/ethnic variations | No Childhood Maltreatment data |
| Elhamady 2014 | Pattern of risky sexual behaviors in opioid-dependent Egyptian adults | No Childhood Maltreatment data |
| El-Sayegh 2006 | Is social anxiety disorder unrecognized in patients with substance dependence? | No Childhood Maltreatment data |
| Edlund 2010 | Risks for opioid abuse and dependence among recipients of chronic opioid therapy: results from the TROUP study | No Childhood Maltreatment data |
| Easow 2008 | A retrospective sibling study of childhood adjustment in adults with substance use disorders | No Childhood Maltreatment data |
| Doherty 2008 | Long-term patterns of drug use among an urban African-American cohort: The role of gender and family | No Childhood Maltreatment data |
| De 2003 | Age at onset typology in opioid-dependent men: An exploratory study from India | No Childhood Maltreatment data |
| Ehrlich 2006 | Characterization of the drug-positive adolescent trauma population: should we, do we, and does it make a difference if we test? | No Childhood Maltreatment data |
| Dietze 2010 | The self-reported personal wellbeing of a sample of Australian injecting drug users | No Childhood Maltreatment data |
| Diamond 2008 | Drug and alcohol use among the Bedouin of the Negev: Prevalence and psychosocial correlates | No Childhood Maltreatment data |
| Farajdana 2012 | Tramadol-induced seizures and trauma | No Childhood Maltreatment data |
| Datta 2018 | Comorbid physical and mental health illness of prescription opioid abusers attending de-addiction centers of Sikkim: A Northeastern State of India | No Childhood Maltreatment data |
| Darke 2004 | Attempted suicide among entrants to three treatment modalities for heroin dependence in the Australian Treatment Outcome Study (ATOS): prevalence and risk factors | No Childhood Maltreatment data |
| Darke 1997 | Polydrug dependence and psychiatric comorbidity among heroin injectors | No Childhood Maltreatment data |
| Cook 2004 | Effects of alcohol and drug use on inpatient and residential treatment among youth with severe emotional disturbance in medicaid-funded behavioral health care plans | No Childhood Maltreatment data |
| Conron 2015 | Heavy episodic drinking and drug use among transgender and other gender minority youth of color | No Childhood Maltreatment data |
| Collins 2003 | Effects of gender and level of parental involvement among parents in drug treatment | No Childhood Maltreatment data |
| Clatts 2007 | Male sex work and HIV risk among young heroin users in Hanoi, Vietnam | No Childhood Maltreatment data |
| Clark 2006 | Substance use disorder trajectory classes: Diachronic integration of onset age, severity, and course | No Childhood Maltreatment data |
| Chou 2014 | Heroin and post-traumatic stress disorder in a women's treatment facility: An exploratory study | No Childhood Maltreatment data |
| Chaudhry 1991 | Familial history of opium use and reported problems among opium addicts in Pakistan | No Childhood Maltreatment data |
| Chatterjee 2018 | Exploring opioid addiction and treatment among individuals experiencing homelessness as part of a family | No Childhood Maltreatment data |
| Chatham 1995 | Heavy drinking in a population of methadone-maintained clients | No Childhood Maltreatment data |
| Cerda 2014 | Family ties: Maternal-offspring attachment and young adult nonmedical prescription opioid use | No Childhood Maltreatment data |
| Costantini 1992 | Family functioning as a predictor of progress in substance abuse treatment | No Childhood Maltreatment data |
| Crofts 1996 | The first hit: Circumstances surrounding initiation into injecting | No Childhood Maltreatment data |
| D'Onofrio 2012 | Familial confounding of the association between maternal smoking during pregnancy and offspring substance use and problems | No Childhood Maltreatment data |
| Bleich 1999 | Correlates of benzodiazepine abuse in methadone maintenance treatment. A 1 year prospective study in an Israeli clinic | No Childhood Maltreatment data |
| Bell 2019 | Long-term Prescription Opioid Utilization, Substance Use Disorders, and Opioid Overdoses after Adolescent Trauma | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|----------------------|---|--------------------------------|
| Asbridge 2015 | Driving under the influence of opioids among high school students in Atlantic Canada: prevalence, correlates, and the role of medical versus recreational consumption | No Childhood Maltreatment data |
| Antonoli 2018 | A drug of choice psychopathological profile: Focus on clinical, sociodemographic, personality, attachment and parental bonding characteristics | No Childhood Maltreatment data |
| Anticevic 2011 | The personality traits and social characteristics of Croatian heroin addicts and cannabis users | No Childhood Maltreatment data |
| Allen 2008 | Neuropsychological assessment of individuals with substance use disorders | No Childhood Maltreatment data |
| Al-Tayyib 2014 | Association between prescription drug misuse and injection among runaway and homeless youth | No Childhood Maltreatment data |
| Ahmadi 2003 | Prevalence of substance use among offspring of opioid addicts | No Childhood Maltreatment data |
| Adamson 2010 | Trends in sociodemographic and drug abuse variables in patients with alcohol and drug use disorders in a Nigerian treatment facility. [French] | No Childhood Maltreatment data |
| Reddy 2014 | Physical abuse is associated with HIV-related drug risk | No Childhood Maltreatment data |
| Patel 2019 | 6.61 ADHD AND SUBSTANCE USE DISORDERS: AN ANALYSIS OF 0.8 MILLION ADOLESCENT INPATIENTS | No Childhood Maltreatment data |
| Fontanari 2019 | Dealing with gender-related and general stress: Substance use among Brazilian transgender youth | No Childhood Maltreatment data |
| Thornton 2020 | Patch Problems? Characteristics of Transdermal Drug Delivery System Exposures Reported to the National Poison Data System | No Childhood Maltreatment data |
| Fishman 1998 | Functional deficits and severity of drug use in adolescents | No Childhood Maltreatment data |
| Maiga 2012 | Tramadol misuse by adolescents and young adults living on the streets | No Childhood Maltreatment data |
| Bauer 1999 | Perinatal effects of prenatal drug exposure: Neonatal aspects | No Childhood Maltreatment data |
| Chatlos 1997 | Substance use and abuse and the impact on academic difficulties | No Childhood Maltreatment data |
| Hadar 1996 | Patterns of psychoactive drugs abuse by detached youths | No Childhood Maltreatment data |
| Hamid 2003 | Trend of drug dependence in Hazara Division | No Childhood Maltreatment data |
| Hoque 2009 | Naltrexone in drug addiction: significance in the prevention of relapse | No Childhood Maltreatment data |
| Kamal 2007 | Factors affecting the outcome of methadone maintenance treatment in opiate dependence | No Childhood Maltreatment data |
| Darke 2010 | Comparative rates of violent crime among regular methamphetamine and opioid users: offending and victimization | No Childhood Maltreatment data |
| Rutherford 1991 | Parental substance use and quality of parental relationships among methadone patients: The impact on levels of psychological symptomatology | No Childhood Maltreatment data |
| Yeh 1995 | Analysis of drug abuse among adolescent psychiatric inpatients at Veterans General Hospital-Taipei | No Childhood Maltreatment data |
| Grover 2005 | Substance-dependent women attending a de-addiction center in North India: Sociodemographic and clinical profile | No Childhood Maltreatment data |
| Hanlon 2005 | Incarcerated drug-abusing mothers: Their characteristics and vulnerability | No Childhood Maltreatment data |
| Keskin 2013 | Separation-individuation process, defense mechanisms, alexithymia and family dynamics among substance dependent individuals | No Childhood Maltreatment data |
| Leghari 2013 | Psycho-social stressors and life events in patients presenting with heroin dependence | No Childhood Maltreatment data |
| Lin 2013 | Gender differences in heroin users receiving methadone maintenance therapy in Taiwan | No Childhood Maltreatment data |
| Lister 2019 | Gender-specific predictors of methadone treatment outcomes among African Americans at an urban clinic | No Childhood Maltreatment data |
| McCarthy 1990 | Narcotics addicts: Effect of family and parental risk factors on timing of emancipation, drug use onset, pre-addiction incarcerations and educational achievement | No Childhood Maltreatment data |
| Mills 2005 | The costs and outcomes of treatment for opioid dependence associated with posttraumatic stress disorder | No Childhood Maltreatment data |
| Mills 2007 | Reliability of self-reported trauma exposure among people with heroin dependence: A longitudinal investigation | No Childhood Maltreatment data |
| Mills 2007 | The impact of post-traumatic stress disorder on treatment outcomes for heroin dependence | No Childhood Maltreatment data |
| Millson 2006 | Determinants of health-related quality of life of opiate users at entry to low-threshold methadone programs | No Childhood Maltreatment data |
| Murphy 1991 | Substance abuse and serious child mistreatment: Prevalence, risk, and outcome in a court sample | No Childhood Maltreatment data |
| Nurco 1998 | Differential contributions of family and peer factors to the etiology of narcotic addiction | No Childhood Maltreatment data |
| Petrescu-Ghenea 2013 | Adolescents presenting with designer drug intoxication in a pediatric toxicology department in Bucharest | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|---|--------------------------------|
| Lev-Wiesel 2006 | Perceived causal and treatment factors related to substance abuse: Gender differences | No Childhood Maltreatment data |
| Li 2002 | Factors related to cue-induced craving of heroin addicts | No Childhood Maltreatment data |
| Nurco 1997 | The early emergence of narcotic addict types | No Childhood Maltreatment data |
| Bader 2000 | How opiate addicts handle themselves in relation to past remembered interpersonal experiences with their parents | No Childhood Maltreatment data |
| Ohlin 2015 | Buprenorphine maintenance program with contracted work/education and low tolerance for non-prescribed drug use: A cohort study of outcome for women and men after seven years | No Childhood Maltreatment data |
| Savage 2015 | The Adverse Effects of Motherhood on Substance Use Treatment Program Outcomes among Adolescent Women | No Childhood Maltreatment data |
| Sussman 2012 | One-year prediction of pain killer use among at-risk older teens and emerging adults | No Childhood Maltreatment data |
| Szilagyi 2007 | The potential role of childhood ADHD in the development of heroin dependence at a young age. [Hungarian] | No Childhood Maltreatment data |
| Wu 1996 | A survey on drug abuse in young males in Longchuan County, Yunnan Province. [Chinese] | No Childhood Maltreatment data |
| Yantsides 2017 | Non-medical use of prescription drugs and its association with heroin use among high school students | No Childhood Maltreatment data |
| Krausz 1998 | Consumption pattern and consumption frequency in long-term heroin addicts. [German] | No Childhood Maltreatment data |
| Yuncu 2016 | Determination of clinical and socio-demographical differences of adolescents applying to a treatment center with family encouragement or the decision of the probation office and determination of predictive factors in maintaining sobriety among probation cases | No Childhood Maltreatment data |
| Karfo 2008 | Use of illicit drugs among Ouagadougou University students | No Childhood Maltreatment data |
| Yuncu 2007 | The sociodemographical and clinical characteristics of substance abusing adolescents according to the presence of street life experience | No Childhood Maltreatment data |
| Luukkonen 2010 | Bullying behaviour and substance abuse among underage psychiatric inpatient adolescents | No Childhood Maltreatment data |
| Ringwalt 2012 | Is there an association between adolescent bullying victimization and substance abuse? | No Childhood Maltreatment data |
| Brucker 2017 | Adverse childhood events scores in opioid misusing patients presenting to the emergency department | No Childhood Maltreatment data |
| Simmat-Durand 2017 | [Out of addictions: Alcohol, or alcohol to alcohol] | No Childhood Maltreatment data |
| Goel 2010 | Substance abuse among people living in slums in a district of Northern India | No Childhood Maltreatment data |
| Al-Tayyib 2015 | Prevalence of nonmedical use of prescription opioids among adolescents in substance use treatment | No Childhood Maltreatment data |
| Kuperman 2005 | Relationship of age of first drink to child behavioral problems and family psychopathology | No Childhood Maltreatment data |
| Buhler 2009 | Risk and protection factors during clinical treatment of drug addicts. [German] | No Childhood Maltreatment data |
| Skodacek 2000 | Some social and subjective data of immature individuals with addiction to psychoactive substances. [Slovak] | No Childhood Maltreatment data |
| Yesim 2013 | Separation-Individuation Process, Defense Mechanisms, Alexithymia and Family Dynamics among Substance Dependent Individuals | No Childhood Maltreatment data |
| Wu 2007 | Is inhalant use a risk factor for heroin and injection drug use among adolescents in the United States? | No Childhood Maltreatment data |
| Zamirinejad 2018 | Predicting the Risk of Opioid Use Disorder Based on Early Maladaptive Schemas | No Childhood Maltreatment data |
| VanDeMark 2004 | New directions for families: A family-oriented intervention for women affected by alcoholism and other drug abuse, mental illness and trauma | No Childhood Maltreatment data |
| Frank 2014 | Problematic substance use in urban adolescents: Role of intrauterine exposures to cocaine and marijuana and post-natal environment | No Childhood Maltreatment data |
| Godley 2017 | Adolescent Community Reinforcement Approach implementation and treatment outcomes for youth with opioid problem use | No Childhood Maltreatment data |
| Griffith 1998 | Implications of family and peer relations for treatment engagement and follow-up outcomes: An integrative model | No Childhood Maltreatment data |
| Roy 2015 | Nonmedical use of prescription medication among adolescents using drugs in Quebec | No Childhood Maltreatment data |
| Larson 2007 | Persistent pain is associated with substance use after detoxification: a prospective cohort analysis | No Childhood Maltreatment data |
| King 2015 | Love on lockdown: how social network characteristics predict separational concurrency among low income African-American women | No Childhood Maltreatment data |
| Johnson 2006 | The association of substance use disorders with trauma exposure and PTSD among African American drug users | No Childhood Maltreatment data |
| Driscoll 2015 | Trauma, Social Support, Family Conflict, and Chronic Pain in Recent Service Veterans: Does Gender Matter? | No Childhood Maltreatment data |
| Ramlagan 2010 | Epidemiology of drug abuse treatment in South Africa | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|--------------------------|--|--------------------------------|
| Pagano 2015 | Social anxiety and peer helping in adolescent addiction treatment | No Childhood Maltreatment data |
| Sung 2005 | Nonmedical use of prescription opioids among teenagers in the United States: Trends and correlates | No Childhood Maltreatment data |
| Skinner 2011 | Opiate-addicted parents in methadone treatment: Long-term recovery, health, and family relationships | No Childhood Maltreatment data |
| Veiskarami 2019 | Early maladjustment schemas in opioid abstiners, opioid abusers and normal individuals | No Childhood Maltreatment data |
| Torrado 2013 | Alexithymia, emotional awareness and perceived dysfunctional parental behaviors in heroin dependents | No Childhood Maltreatment data |
| Baer 2003 | DSM-IV alcohol and substance abuse and dependence in homeless youth | No Childhood Maltreatment data |
| Austin 2018 | Association of childhood abuse and neglect with prescription opioid misuse: Examination of mediation by adolescent depressive symptoms and pain | No Childhood Maltreatment data |
| Schepis 2017 | Age of initiation, psychopathology, and other substance use are associated with time to use disorder diagnosis in persons using opioids nonmedically | No Childhood Maltreatment data |
| Pikovskiy 2018 | Alcohol use disorder and associated physical health complications and treatment amongst individuals with and without opioid dependence: A case-control study | No Childhood Maltreatment data |
| Handelman 2005 | Contrasting predictors of readiness for substance abuse treatment in adults and adolescents: A latent variable analysis of DATOS and DATOS-A participants | No Childhood Maltreatment data |
| Rosenthal 2008 | Drug Use Among Homeless Young People in Los Angeles and Melbourne | No Childhood Maltreatment data |
| Balousek 2007 | Prevalence of interpersonal abuse in primary care patients prescribed opioids for chronic pain | No Childhood Maltreatment data |
| Bartholomew 2002 | Sexual abuse among women entering methadone treatment | No Childhood Maltreatment data |
| Wechsberg 1998 | How are women who enter substance abuse treatment different than men?: A gender comparison from the drug abuse treatment outcome study (DATOS) | No Childhood Maltreatment data |
| Srirak 2005 | HIV infection among female drug users in Northern Thailand | No Childhood Maltreatment data |
| Miller 2002 | Females experiencing sexual and drug vulnerabilities are at elevated risk for HIV infection among youth who use injection drugs | No Childhood Maltreatment data |
| Edelman 2014 | Sexual health risks and health-seeking behaviours among substance-misusing women | No Childhood Maltreatment data |
| Chernobrovkina 2005 | Medical and social factors determining early poly-drug dependence | No Childhood Maltreatment data |
| Buttram 2014 | Health and social problems associated with prescription opioid misuse among a diverse sample of substance-using MSM | No Childhood Maltreatment data |
| Mills 2006 | Trauma, PTSD, and substance use disorders: findings from the Australian National Survey of Mental Health and Well-Being | No Childhood Maltreatment data |
| Razali 2015 | Risk and protective factors for recreational and hard drug use among Malaysian adolescents and young adults | No Childhood Maltreatment data |
| Maunder 2015 | Paths to barriers and difficulty in mental health care: The role of childhood abuse and neglect | No Childhood Maltreatment data |
| Caretti 2012 | Traumatic experience, alexithymia and dissociation in adolescent and adult patients with addictions | No Childhood Maltreatment data |
| Dhawan 2016 | Injection drug use among children and adolescents in India: Ringing the alarm bells | No Childhood Maltreatment data |
| El-Sawy 2010 | Gender differences in risks and pattern of drug abuse in Egypt | No Childhood Maltreatment data |
| Elmahdy 2010 | Family profile of heroin users in Mansoura, Egypt | No Childhood Maltreatment data |
| Galoic-Cigit 2003 | Protective and Risk Factors Connected with the Prevention of the Drug Abuse in the Family | No Childhood Maltreatment data |
| Ghazal 2019 | Rising trend of substance abuse in Pakistan: a study of sociodemographic profiles of patients admitted to rehabilitation centres | No Childhood Maltreatment data |
| Grella 2006 | Mothers in substance abuse treatment: Differences in characteristics based on involvement with child welfare services | No Childhood Maltreatment data |
| Lin 2015 | Prescription opioid misuse among youth in primary care: A comparison of risk factors | No Childhood Maltreatment data |
| Knight 1995 | Psychosocial functioning among adult drug users: The role of parental absence, support, and conflict | No Childhood Maltreatment data |
| Glavak 2003 | Perceived parental acceptance-rejection, family-related factors, and socio-economic status of families of adolescent heroin addicts | No Childhood Maltreatment data |
| Mei-jun 2004 | Coping Styles, Social Support and Parental Rearing Behaviour in Heroin Addicts | No Childhood Maltreatment data |
| Mirkovic - Hajdukov 2017 | Family atmosphere and relationships as predictors of heroin addiction | No Childhood Maltreatment data |
| Rugani 2011 | Life events (Loss and traumatic) and emotional responses to them in heroin-dependent patients before and after the dependence age of onset | No Childhood Maltreatment data |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|---|---|
| Madras 2019 | Associations of Parental Marijuana Use with Offspring Marijuana, Tobacco, and Alcohol Use and Opioid Misuse | No Childhood Maltreatment data |
| Bell 2019 | Long-term prescription opioid utilization, substance use disorders, and opioid overdoses after adolescent trauma | No Childhood Maltreatment data |
| JohnMcConnell 2020 | Project Nurture Integrates Care And Services To Improve Outcomes For Opioid-Dependent Mothers And Their Children | No Childhood Maltreatment data |
| Holland 2020 | Opioid abuse in rural communities among adolescents with bipolar disorder | No Childhood Maltreatment data |
| Fong 2019 | The role of personality and positive outlook in drug seeking behaviour among female youth in cure and care rehabilitation centre | No Childhood Maltreatment data |
| Elliott 2020 | Exposure to Medicines in the Family Medicine Cabinet: Is It a Harbinger of Later Opioid Dependence? | No Childhood Maltreatment data |
| Olopoeni a 2019 | Patterns of prescription opioid use among commercially insured United States youth and young adults with co-morbid chronic pain and mental health conditions | No Childhood Maltreatment data |
| Boone 2020 | Factors associated with the reunification of foster care children and their mothers | No Childhood Maltreatment data |
| Stoicescu 2019 | Intimate partner violence and receptive syringe sharing among women who inject drugs in Indonesia: A respondent-driven sampling study | No Childhood Maltreatment data |
| Clingan 2020 | Survival Sex Trading in Los Angeles County, California, USA | No Childhood Maltreatment data |
| Gilchrist 2006 | Illicit tranquilliser use and dependence among female opiate users | No evaluation of OUD or proxy / Non-OUD participant group |
| Williams 2020 | The Effects of Co-Occurring Interpersonal Trauma and Gender on Opioid Use and Misuse | No evaluation of OUD or proxy / Non-OUD participant group |
| Zhang 2019 | Opioid Use for Treatment of Acute Pain Among Children and Adolescents Enrolled in the Mississippi Medicaid Program | No evaluation of OUD or proxy / Non-OUD participant group |
| Lowry 2020 | Violence victimization, substance use disparities, and gender-nonconforming youth | No evaluation of OUD or proxy / Non-OUD participant group |
| Foster 2019 | The use of opioids in low acuity pediatric trauma patients | No evaluation of OUD or proxy / Non-OUD participant group |
| Flores 2020 | Co-occurring risk factors among U.S. high school students at risk for suicidal thoughts and behaviors | No evaluation of OUD or proxy / Non-OUD participant group |
| Nomura 2012 | Life-time risk for substance use among offspring of abusive family environment from the community | No evaluation of OUD or proxy / Non-OUD participant group |
| McCauley 2010 | The role of traumatic event history in non-medical use of prescription drugs among a nationally representative sample of US adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Pierce 2019 | Influence of Abuse History on Concurrent Benzodiazepine and Opioid Use in Chronic Pain Patients | No evaluation of OUD or proxy / Non-OUD participant group |
| Harrington 2011 | A longitudinal study of risk factors for incident drug use in adults: Findings from a representative sample of the US population | No evaluation of OUD or proxy / Non-OUD participant group |
| Guo 2017 | Associations between childhood maltreatment and non-medical use of prescription drugs among Chinese adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Goldberg 1999 | Relationship between traumatic events in childhood and chronic pain | No evaluation of OUD or proxy / Non-OUD participant group |
| Forster 2017 | Associations between adverse childhood experiences, student-teacher relationships, and non-medical use of prescription medications among adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| El-Bassel 2003 | Intimate partner violence and substance abuse among minority women receiving care from an inner-city emergency department | No evaluation of OUD or proxy / Non-OUD participant group |
| Champion 2011 | African-and Mexican-American Adolescent women with sti and a history of abuse: Biological outcome of a randomised trial of behavioural intervention | No evaluation of OUD or proxy / Non-OUD participant group |
| Baltieri 2014 | Predictors of drug use in prison among women convicted of violent crimes | No evaluation of OUD or proxy / Non-OUD participant group |
| Whiteside 2013 | Prevalence and correlates of nonmedical prescription opiate and nonmedical prescription sedative use among a group of adolescents and young adults with current drug use in an urban emergency department | No evaluation of OUD or proxy / Non-OUD participant group |
| Walton 2013 | Correlates of nonmedical prescription stimulant use among adolescents and emerging adults in the emergency department: Alcohol and other substance use | No evaluation of OUD or proxy / Non-OUD participant group |
| Roy 2003 | Drug Injection among Street Youths in Montreal: Predictors of Initiation | No evaluation of OUD or proxy / Non-OUD participant group |
| Resko 2012 | Solitary alcohol and drug use among adolescents involved in the child welfare system | No evaluation of OUD or proxy / Non-OUD participant group |
| Rutman 2008 | Urban American Indian and Alaska native youth: Youth risk behavior survey 1997-2003 | No evaluation of OUD or proxy / Non-OUD participant group |
| Petska 2019 | Occult drug exposure in young children evaluated for physical abuse: An opportunity for intervention | No evaluation of OUD or proxy / Non-OUD participant group |
| Booth 1997 | Conduct disorder and HIV risk behaviors among runaway and homeless adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Bottilioli 2019 | Negative short-term outcome of detoxification therapy in chronic migraine with medication overuse headache: Role for early life traumatic experiences and recent stressful events | No evaluation of OUD or proxy / Non-OUD participant group |
| Gilbert 2010 | Substance use and intimate partner violence among low income, urban women seeking care in an emergency department | No evaluation of OUD or proxy / Non-OUD participant group |
| Farrugia 2011 | Childhood trauma among individuals with co-morbid substance use and post-traumatic stress disorder | No evaluation of OUD or proxy / Non-OUD participant group |

| Study Author, Year | Title | Exclusion Reason |
|---------------------|--|---|
| Medrano 2002 | Psychological distress in childhood trauma survivors who abuse drugs | No evaluation of OUD or proxy / Non-OUD participant group |
| Ompad 2005 | Childhood sexual abuse and age at initiation of injection drug use | No evaluation of OUD or proxy / Non-OUD participant group |
| Wu 2010 | Childhood trauma and health outcomes in adults with comorbid substance abuse and mental health disorders | No evaluation of OUD or proxy / Non-OUD participant group |
| Banducci 2013 | Clinical characteristics as a function of referral status among substance users in residential treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Ciesla 2008 | Measuring relapse after adolescent substance abuse treatment: A proportional hazard approach | No evaluation of OUD or proxy / Non-OUD participant group |
| Fleischman 2018 | Characteristics of patients with dual-diagnosis in outpatient addiction treatment services in Tel-Aviv | No evaluation of OUD or proxy / Non-OUD participant group |
| Joseph 2016 | Adverse effects associated with higher opioid use | No evaluation of OUD or proxy / Non-OUD participant group |
| Lincoln 2006 | Brief screening for co-occurring disorders among women entering substance abuse treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Brems 2004 | Childhood abuse history and substance use among men and women receiving detoxification services | No evaluation of OUD or proxy / Non-OUD participant group |
| Knight 2001 | Predictors of program completion for women in residential substance abuse treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Lauritzen 2018 | Changes in opiate and stimulant use through 10 years: The role of contextual factors, mental health disorders and psychosocial factors in a prospective SUD treatment cohort study | No evaluation of OUD or proxy / Non-OUD participant group |
| Swift 1996 | Characteristics of women with alcohol and other drug problems: findings of an Australian national survey | No evaluation of OUD or proxy / Non-OUD participant group |
| Markowitz 2011 | Childhood sexual abuse and health risk behaviors in patients with HIV and a history of injection drug use | No evaluation of OUD or proxy / Non-OUD participant group |
| Ramos 2013 | Transcultural study: Prevalence and risk factors of substance misuse on a population of foreign non accompanied minors | No evaluation of OUD or proxy / Non-OUD participant group |
| Savulich 2017 | The ICCAM platform: to investigate the neuropharmacology of brain processes relevant to addiction | No evaluation of OUD or proxy / Non-OUD participant group |
| Schepis 2019 | Prescription Drug Misuse Sources of Controlled Medications in Adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Shin 2010 | Childhood sexual abuse and adolescent substance use: A latent class analysis | No evaluation of OUD or proxy / Non-OUD participant group |
| Surratt 2004 | Sex Work and Drug Use in a Subculture of Violence | No evaluation of OUD or proxy / Non-OUD participant group |
| Torchalla 2011 | Substance use and predictors of substance dependence in homeless women | No evaluation of OUD or proxy / Non-OUD participant group |
| Wong 2013 | The risk of adolescent suicide across patterns of drug use: A nationally representative study of high school students in the United States from 1999 to 2009 | No evaluation of OUD or proxy / Non-OUD participant group |
| Fendrich 1997 | Childhood abuse and the use of inhalants: Differences by degree of use | No evaluation of OUD or proxy / Non-OUD participant group |
| Sansone 2010 | Childhood trauma and pain medication prescription in adulthood | No evaluation of OUD or proxy / Non-OUD participant group |
| Hayatbakhsh 2009 | Predictors of young adults' amphetamine use and disorders: A prospective study | No evaluation of OUD or proxy / Non-OUD participant group |
| Jarvis 1998 | Exploring the nature of the relationship between child sexual abuse and substance use among women | No evaluation of OUD or proxy / Non-OUD participant group |
| Burnette 2008 | Violence perpetration and childhood abuse among men and women in substance abuse treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Chasser 2016 | Profiles of youths with PTSD and addiction | No evaluation of OUD or proxy / Non-OUD participant group |
| Walton 2011 | High prevalence of childhood emotional, physical and sexual trauma among a Canadian cohort of HIV-seropositive illicit drug users | No evaluation of OUD or proxy / Non-OUD participant group |
| Cucciare 2011 | Sexual assault and substance use in male veterans receiving a brief alcohol intervention | No evaluation of OUD or proxy / Non-OUD participant group |
| Dube 2003 | Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the adverse childhood experiences study | No evaluation of OUD or proxy / Non-OUD participant group |
| Traube 2012 | A national study of risk and protective factors for substance use among youth in the child welfare system | No evaluation of OUD or proxy / Non-OUD participant group |
| Hartel 2006 | Gender differences in illicit substance use among middle-aged drug users with or at risk for HIV infection | No evaluation of OUD or proxy / Non-OUD participant group |
| Kang 2008 | Gender differences in health status and care among HIV-infected minority drug users | No evaluation of OUD or proxy / Non-OUD participant group |
| Khodneva 2013 | Trajectories of depressive symptoms and illicit drug use: Longitudinal temporal associations and comorbidity in a community sample of adults (the CARDIA study) | No evaluation of OUD or proxy / Non-OUD participant group |
| Rodriguez-Diaz 2013 | Relationship between psychoactive substance use and family maltreatment: A prison population analysis | No evaluation of OUD or proxy / Non-OUD participant group |
| Lowry 2017 | Social stress and substance use disparities by sexual orientation among high school students | No evaluation of OUD or proxy / Non-OUD participant group |
| Pedersen 2003 | Children and adolescents who sell sex: a community study | No evaluation of OUD or proxy / Non-OUD participant group |

| Study Author, Year | Title | Exclusion Reason |
|-----------------------|---|---|
| Scherrer 2014 | Factors that influence the association between severity of pain and severity of depression in primary care patients | No evaluation of OUD or proxy / Non-OUD participant group |
| Yu 2006 | A comparison study of positive and negative childhood maltreatment groups in adult substance abuse disorder patients | No evaluation of OUD or proxy / Non-OUD participant group |
| Carruthers 2012 | Gender differences in adolescents entering residential substance abuse treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Decker 2016 | Physical and Sexual Violence Predictors: 20 Years of the Women's Interagency HIV Study Cohort | No evaluation of OUD or proxy / Non-OUD participant group |
| Fuller 2002 | High-risk behaviors associated with transition from illicit non-injection to injection drug use among adolescent and young adult drug users: A case-control study | No evaluation of OUD or proxy / Non-OUD participant group |
| Jeal 2004 | A health needs assessment of street-based prostitutes: Cross-sectional survey | No evaluation of OUD or proxy / Non-OUD participant group |
| Johnson 2006 | Drug use by incarcerated women offenders | No evaluation of OUD or proxy / Non-OUD participant group |
| Kipke 1993 | Substance use among youth seen at a community-based health clinic | No evaluation of OUD or proxy / Non-OUD participant group |
| Miller 2006 | Elevated rates of HIV infection among young Aboriginal injection drug users in a Canadian setting | No evaluation of OUD or proxy / Non-OUD participant group |
| Morrill 2011 | Atale of two epidemics: Unique characteristics of young adult patients with hepatitis C infection followed at an Urban community health center | No evaluation of OUD or proxy / Non-OUD participant group |
| Roy 2011 | Initiation to drug injection among street youth: A gender-based analysis | No evaluation of OUD or proxy / Non-OUD participant group |
| Roy 2011 | Modeling initiation into drug injection among street youth | No evaluation of OUD or proxy / Non-OUD participant group |
| Rougemon-Bucking 2018 | Non-medical use of prescription drugs by young men: impact of potentially traumatic events and of social-environmental stressors | No evaluation of OUD or proxy / Non-OUD participant group |
| Tomassi 2017 | Influence of childhood trauma on diagnosis and substance use in first-episode psychosis | No evaluation of OUD or proxy / Non-OUD participant group |
| Wilson 2009 | A prospective examination of the path from child abuse and neglect to illicit drug use in middle adulthood: the potential mediating role of four risk factors | No evaluation of OUD or proxy / Non-OUD participant group |
| Weber 2004 | Predictors of initiation into prostitution among female street youths | No evaluation of OUD or proxy / Non-OUD participant group |
| Austin 2018 | Association of childhood abuse and prescription opioid use in early adulthood | No evaluation of OUD or proxy / Non-OUD participant group |
| Baiden 2019 | Examining the association between prescription opioid misuse and suicidal behaviors among adolescent high school students in the United States | No evaluation of OUD or proxy / Non-OUD participant group |
| Hequembourg 2006 | A comparative study examining associations between women's drug-related lifestyle factors and victimization within the family | No evaluation of OUD or proxy / Non-OUD participant group |
| Copeland 1993 | A comparison of a specialist women's alcohol and other drug treatment service with two traditional mixed-sex services: client characteristics and treatment outcome | No evaluation of OUD or proxy / Non-OUD participant group |
| McGrath 2014 | A comparison of military veterans and civilians seeking treatment for cooccurring substance use disorders and PTSD | No evaluation of OUD or proxy / Non-OUD participant group |
| HyucksunShin 2012 | A longitudinal examination of the relationships between childhood maltreatment and patterns of adolescent substance use among high-risk adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Dilorio 2001 | A test of factors mediating the relationship between unwanted sexual activity during childhood and risky sexual practices among women enrolled in the NIMH Multisite HIV Prevention Trial | No evaluation of OUD or proxy / Non-OUD participant group |
| Young 2011 | Adolescent sexual assault and the medical and nonmedical use of prescription medication | No evaluation of OUD or proxy / Non-OUD participant group |
| Douglas 2010 | Adverse childhood events as risk factors for substance dependence: partial mediation by mood and anxiety disorders | No evaluation of OUD or proxy / Non-OUD participant group |
| Sandoe 2018 | Adverse childhood experience and medication overuse headache: Frequency and effects on response to treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Lei 2018 | Association between childhood maltreatment and non-medical prescription opioid use among Chinese senior high school students: The moderating role of gender | No evaluation of OUD or proxy / Non-OUD participant group |
| Beck 2014 | Childhood abuse types and physical health at the age of 24: Testing health risk behaviors and psychological distress as mediators | No evaluation of OUD or proxy / Non-OUD participant group |
| Dilorio 2002 | Childhood sexual abuse and risk behaviors among men at high risk for HIV infection | No evaluation of OUD or proxy / Non-OUD participant group |
| Blanco 2017 | Childhood sexual abuse as a risk factor for intimate partner violence and the mediating effects on sexual risk behaviors and substance use | No evaluation of OUD or proxy / Non-OUD participant group |
| Wiet 2013 | Childhood sexual trauma related to concurrent opiate and amphetamine use disorders in adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Carliner 2015 | Childhood trauma and initiation of drug use in adolescence | No evaluation of OUD or proxy / Non-OUD participant group |
| Wuest 2008 | Chronic pain in women survivors of intimate partner violence | No evaluation of OUD or proxy / Non-OUD participant group |
| Lone 2006 | Drug abuse in villages of South Kashmir - A pilot study | No evaluation of OUD or proxy / Non-OUD participant group |
| Wong 2013 | Coping and emotion regulation profiles as predictors of nonmedical prescription drug and illicit drug use among high-risk young adults | No evaluation of OUD or proxy / Non-OUD participant group |

| Study Author, Year | Title | Exclusion Reason |
|----------------------|--|---|
| Zhivotenko 2016 | Effect of depression and abuse on chronic pain and opioid use and abuse | No evaluation of OUD or proxy / Non-OUD participant group |
| Barahmand 2016 | Emotion dysregulation mediates between childhood emotional abuse and motives for substance use | No evaluation of OUD or proxy / Non-OUD participant group |
| Galaif 1999 | Ethnic differences in risk for HIV infection and STDs in a sample of African-American and Latina homeless women | No evaluation of OUD or proxy / Non-OUD participant group |
| Argento 2017 | Violence, trauma and living with HIV: Longitudinal predictors of initiating crystal methamphetamine injection among sex workers | No evaluation of OUD or proxy / Non-OUD participant group |
| Bennouna-Greene 2011 | History of abuse and neglect in patients with schizophrenia who have a history of violence | No evaluation of OUD or proxy / Non-OUD participant group |
| Banducci 2014 | The impact of childhood abuse on inpatient substance users: specific links with risky sex, aggression, and emotion dysregulation | No evaluation of OUD or proxy / Non-OUD participant group |
| Bellis 2014 | National household survey of adverse childhood experiences and their relationship with resilience to health-harming behaviors in England | No evaluation of OUD or proxy / Non-OUD participant group |
| Barrett 2013 | Mental health correlates of anger and violence among individuals entering substance use treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Quinn 2019 | Internalizing and externalizing factors on the pathway from adverse experiences in childhood to non-medical prescription opioid use in adulthood | No evaluation of OUD or proxy / Non-OUD participant group |
| Kecojevic 2015 | Prescription drug misuse and sexual risk behaviors among young men who have sex with men (ymsm) in philadelphia | No evaluation of OUD or proxy / Non-OUD participant group |
| Kecojevic 2012 | Initiation into prescription drug misuse: differences between lesbian, gay, bisexual, transgender (LGBT) and heterosexual high-risk young adults in Los Angeles and New York | No evaluation of OUD or proxy / Non-OUD participant group |
| Kecojevic 2015 | Risk factors for high levels of prescription drug misuse and illicit drug use among substance-using young men who have sex with men (YMSM) | No evaluation of OUD or proxy / Non-OUD participant group |
| Elifson 2006 | Predictors of sexual risk-taking among new drug users | No evaluation of OUD or proxy / Non-OUD participant group |
| DeBeck 2013 | Risk factors for progression to regular injection drug use among street-involved youth in a Canadian setting | No evaluation of OUD or proxy / Non-OUD participant group |
| Wongtongkam 2015 | Exploring family and community involvement to protect thai youths from alcohol and illegal drug abuse | No evaluation of OUD or proxy / Non-OUD participant group |
| McCullumsmith 2013 | Gender and racial differences for suicide attempters and ideators in a high-risk community corrections population | No evaluation of OUD or proxy / Non-OUD participant group |
| Cohen 2004 | Medically eligible women who do not use HAART: the importance of abuse, drug use, and race | No evaluation of OUD or proxy / Non-OUD participant group |
| Copeland 2012 | Premature mortality in Scottish injecting drug users: a life-history approach | No evaluation of OUD or proxy / Non-OUD participant group |
| Delos-Reyes 2014 | Prescription drug misuse among adolescents court-referred to residential treatment | No evaluation of OUD or proxy / Non-OUD participant group |
| Guo 2018 | The mediating effects of depressive symptoms on the association of childhood maltreatment with non-medical use of prescription drugs | No evaluation of OUD or proxy / Non-OUD participant group |
| Huang 2011 | The long-term effects of childhood maltreatment experiences on subsequent illicit drug use and drug-related problems in young adulthood | No evaluation of OUD or proxy / Non-OUD participant group |
| Ishoy 2005 | Street prostitution and drug addiction. [Danish] | No evaluation of OUD or proxy / Non-OUD participant group |
| Jacob 2018 | Trauma alert! How social complexity contributes to medical complexity | No evaluation of OUD or proxy / Non-OUD participant group |
| Khalil 2018 | Risk Factors Associated with Psychiatric Comorbidity in a Sample of Male Egyptian Patients with Substance Use Disorder | No evaluation of OUD or proxy / Non-OUD participant group |
| Lawental 2018 | Serious mental illness among young adult women who use drugs in the club scene: co-occurring biopsychosocial factors | No evaluation of OUD or proxy / Non-OUD participant group |
| Simpson Ba 1994 | Screening for childhood physical and sexual abuse among outpatient substance abusers | No evaluation of OUD or proxy / Non-OUD participant group |
| Rhoades 2014 | Prescription drug misuse among homeless youth | No evaluation of OUD or proxy / Non-OUD participant group |
| Webster 2005 | Predicting aberrant behaviors in opioid-treated patients: preliminary validation of the Opioid Risk Tool | No evaluation of OUD or proxy / Non-OUD participant group |
| Young 2012 | Nonmedical use of prescription opioids among adolescents: Subtypes based on motivation for use | No evaluation of OUD or proxy / Non-OUD participant group |
| Blankertz 1993 | Childhood risk factors in dually diagnosed homeless adults | No evaluation of OUD or proxy / Non-OUD participant group |
| Deykin 1994 | Suicidal ideation and attempts among chemically dependent adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Gil-Rivas 1997 | Sexual and physical abuse: Do they compromise drug treatment outcomes? | No evaluation of OUD or proxy / Non-OUD participant group |
| Hodgins 2010 | The association between childhood maltreatment and gambling problems in a community sample of adult men and women | No evaluation of OUD or proxy / Non-OUD participant group |
| Ouimette 2000 | Physical and sexual abuse among women and men with substance use disorders | No evaluation of OUD or proxy / Non-OUD participant group |
| Ravndal 2001 | Childhood maltreatment among Norwegian drug abusers in treatment | No evaluation of OUD or proxy / Non-OUD participant group |

| Study Author, Year | Title | Exclusion Reason |
|----------------------|---|---|
| Silverman 1996 | The long-term sequelae of child and adolescent abuse: A longitudinal community study | No evaluation of OUD or proxy / Non-OUD participant group |
| Westermeyer 2001 | Effects of childhood physical abuse on course and severity of substance abuse | No evaluation of OUD or proxy / Non-OUD participant group |
| Guarino 2017 | The role of adverse childhood experiences in initiation of substance use and sexual behaviors among opioid-using young adults | No evaluation of OUD or proxy / Non-OUD participant group |
| Martin 2005 | The relationship between sexual abuse and drug use: A view of African-American college students in Texas | No evaluation of OUD or proxy / Non-OUD participant group |
| Stewart 2013 | Prescription medication misuse among adolescents with severe mental health problems in Ontario, Canada | No evaluation of OUD or proxy / Non-OUD participant group |
| Groenewald 2019 | Associations Between Adolescent Chronic Pain and Prescription Opioid Misuse in Adulthood | No evaluation of OUD or proxy / Non-OUD participant group |
| Kaplan 2004 | The role of affect regulation as a mediating mechanism between childhood trauma and adolescent and adult substance abuse | No evaluation of OUD or proxy / Non-OUD participant group |
| Ayers 2000 | Taxometric analysis of borderline and antisocial personality disorders in a drug and alcohol dependent population | No evaluation of OUD or proxy / Non-OUD participant group |
| Chiang 2006 | Heroin use among youths incarcerated for illicit drug use: psychosocial environment, substance use history, psychiatric comorbidity, and route of administration | No evaluation of OUD or proxy / Non-OUD participant group |
| Gilchrist 2015 | Factors associated with physical or sexual intimate partner violence perpetration by men attending substance misuse treatment in Catalunya: A mixed methods study | No evaluation of OUD or proxy / Non-OUD participant group |
| Rossow 2001 | Shattered childhood: a key issue in suicidal behavior among drug addicts? | No evaluation of OUD or proxy / Non-OUD participant group |
| Barman-Adhikari 2019 | Prevalence and correlates of nonmedical use of prescription drugs (NMUPD) among young adults experiencing homelessness in seven cities across the United States | No evaluation of OUD or proxy / Non-OUD participant group |
| Bouvier 2019 | Prevalence and Correlates of Depressive Symptomology among Young Adults Who Use Prescription Opioids Non-medically | No evaluation of OUD or proxy / Non-OUD participant group |
| Swedo 2020 | Adolescent Opioid Misuse Attributable to Adverse Childhood Experiences | No evaluation of OUD or proxy / Non-OUD participant group |
| Pierce 2020 | Centralized pain and pain catastrophizing mediate the association between lifetime abuse history and self-reported pain medication side effects | No evaluation of OUD or proxy / Non-OUD participant group |
| Williams 2020 | Exploring stress, cognitive, and affective mechanisms of the relationship between interpersonal trauma and opioid misuse | No evaluation of OUD or proxy / Non-OUD participant group |
| Clayton 2019 | Prescription opioid misuse associated with risk behaviors among adolescents | No evaluation of OUD or proxy / Non-OUD participant group |
| Merrick 2020 | Adverse Childhood Experiences Increase Risk for Prescription Opioid Misuse | No evaluation of OUD or proxy / Non-OUD participant group |
| Hu 2020 | Psychosocial stressors, prescription drug use/misuse, and risk of cognitive impairment among middle-aged and older adults | No evaluation of OUD or proxy / Non-OUD participant group |
| Groenewald 2019 | Associations between sleep-deprivation during adolescence and prescription opioid misuse in young adulthood | No evaluation of OUD or proxy / Non-OUD participant group |
| Sherman 2019 | Drivers of HIV Infection among Cisgender and Transgender Female Sex Worker Populations in Baltimore City: Results from the SAPHIRE Study | No evaluation of OUD or proxy / Non-OUD participant group |
| Cunradi 2019 | Gender differences in adverse childhood experiences and alcohol and drug use among an urban emergency department sample | No evaluation of OUD or proxy / Non-OUD participant group |
| Goldstick 2019 | Predicting transitions in drug use disorder in the context of alcohol use disorder diagnosis | Not an opioid using cohort |
| vanderPol 2013 | Predicting the transition from frequent cannabis use to cannabis dependence: a three-year prospective study | Not an opioid using cohort |
| Lewis 2020 | 145. When a House is Never a Home: Housing Instability Among Youth Affected by Parental Drug Abuse | Not an opioid using cohort |
| Shoal 2005 | The relation between social problems and substance use in adolescent boys: An investigation of potential moderators | Not an opioid using cohort |
| Shaw 2019 | Family structure and past-30day opioid misuse among justice-involved children | Not an opioid using cohort |
| Rende 1999 | Sibling aggregation for psychopathology in offspring of opiate addicts: Effects of parental comorbidity | Not an opioid using cohort |
| Kluczniok 2016 | Transgenerational effects of maternal depression on affect recognition in children | Not an opioid using cohort |
| Kaplan 2016 | Borderline personality disorder in youth: The prospective impact of child abuse on non-suicidal self-injury and suicidality | Not an opioid using cohort |
| Ismayilova 2018 | Building Competencies to Prevent Youth Substance Use in Kazakhstan: Mixed Methods Findings From a Pilot Family-Focused Multimedia Trial | Not an opioid using cohort |
| Malcolm-Smith 2013 | Opioid function is dysregulated subsequent to early social trauma: Healthy young adults' response to a buprenorphine challenge | Not an opioid using cohort |
| Ding 2014 | Adverse childhood experiences and interaction with methamphetamine use frequency in the risk of methamphetamine-associated psychosis | Not an opioid using cohort |
| Walter 1991 | Risk factors for substance use among high school students: Implications for prevention | Not an opioid using cohort |
| Knowlton 2008 | Externalizing behaviors among children of HIV seropositive former and current drug users: Parent support network factors as social ecological risks | Not an opioid using cohort |
| Ornduff 2002 | Child abuse potential in at-risk African American mothers: The role of life experience variables | Not an opioid using cohort |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|--|----------------------------------|
| Rosen 2002 | Physical and sexual abuse history and addiction treatment outcomes | Not an opioid using cohort |
| Sinnerton 2019 | Neuropeptide y promoter polymorphisms and childhood trauma effects on anxiety sensitivity in a South African adolescent population | Not an opioid using cohort |
| Stancil 2019 | Naltrexone Reduces Binge Eating and Purging in Adolescents in an Eating Disorder Program | Not an opioid using cohort |
| Farnia 2020 | Investigating the prevalence of child abuse in the families with addicted parents in Iran: With emphasis on family risk factors | Not an opioid using cohort |
| Fried 2005 | Psychosocial and pharmacological predictors of the cognitive functioning of children prenatally exposed to illicit drugs | Not an opioid using cohort |
| Johnson 2013 | Studying the playbook: Mediating variables in relationships between sports team participation and health-risk behaviors among alternative high school students | Not an opioid using cohort |
| Famularo 1992 | Parental substance abuse and the nature of child maltreatment | Not an opioid using cohort |
| Ozturk 2015 | Determination of childhood and adult attention-deficit/hyperactivity disorder symptoms in male heroin dependent patients and clinical effects | Not an opioid using cohort |
| Lukacher 1991 | Characteristics of adolescents who abuse narcotic and toxic drugs: A clinico-sociological investigation | Not an opioid using cohort |
| Swartz 2006 | Substance use in persons with schizophrenia: Baseline prevalence and correlates from the NIMH CATIE study | Not an opioid using cohort |
| Spak 2001 | The Gothenburg study of women and alcohol: problems during childhood and adolescence important risk factors. [Swedish] | Not an opioid using cohort |
| Wilens 2002 | A family study of the high-risk children of opioid- and alcohol-dependent parents | Not an opioid using cohort |
| Taukoor 2017 | Substance use in adolescents with mental illness in Durban, South Africa | Not an opioid using cohort |
| Freisthler 2017 | Drug Use, the Drug Environment, and Child Physical Abuse and Neglect | Not an opioid using cohort |
| Betcher 2018 | 5.61 Child Outcomes Associated With Parental Opioid Use Disorder: A Descriptive Study | Not an opioid using cohort |
| Freeman 2001 | Child and adolescent sexual abuse history in a sample of 1,490 women sexual partners of injection drug-using men | Not an opioid using cohort |
| Hayatbakhsh 2009 | Multiple risk factor model predicting cannabis use and use disorders: a longitudinal study | Not an opioid using cohort |
| Rogosch 2010 | From child maltreatment to adolescent cannabis abuse and dependence: A developmental cascade model | Not an opioid using cohort |
| Roy 2009 | Characteristics of cocaine dependent patients who attempt suicide | Not an opioid using cohort |
| Park 2019 | The epidemiology of violence and posttraumatic stress disorder among street-based female sex workers in Baltimore, Maryland | Not an opioid using cohort |
| Nagdee 2019 | The psycho-social and clinical profile of women referred for psycho-legal evaluation to forensic mental health units in South Africa | Not an opioid using cohort |
| Klanecky 2009 | Coerced childhood sexual abuse moderates the association between cigarette smoking initiation and college drug use frequency | Sample Size < 40 people with OUD |
| PetersJr 2003 | The relationship between sexual abuse and drug use: Findings from Houston's safer choices 2 program | Sample Size < 40 people with OUD |
| Mezzich 1997 | Violence, suicidality, and alcohol/drug use involvement in adolescent females with a psychoactive substance use disorder and controls | Sample Size < 40 people with OUD |
| Robinson 2020 | Screening for alcohol and substance use in pediatric trauma patients: A retrospective review | Sample Size < 40 people with OUD |
| McCabe 2005 | Male street prostitution in Dublin and San Francisco: A psychocultural analysis (Ireland, California) | Sample Size < 40 people with OUD |
| Mills 2014 | The feasibility and acceptability of a brief intervention for clients of substance use services experiencing symptoms of post traumatic stress disorder | Sample Size < 40 people with OUD |
| Najavits 1999 | A clinical profile of women with posttraumatic stress disorder and substance dependence | Sample Size < 40 people with OUD |
| Gomez 2018 | Adverse childhood experiences and illicit drug use in adolescents: Findings from a national addictions treatment population in Singapore | Sample Size < 40 people with OUD |
| Miles 2002 | Severity of substance abuse and psychiatric problems among perinatal drug-dependent women | Sample Size < 40 people with OUD |
| Mergler 2017 | Relationships between a Dissociative Subtype of PTSD and Clinical Characteristics in Patients with Substance Use Disorders | Sample Size < 40 people with OUD |
| Linden 2013 | Addiction in maternity: Prevalence of mental illness, substance use, and trauma | Sample Size < 40 people with OUD |
| Moen 2003 | Negative memories of childhood and current drug use | Sample Size < 40 people with OUD |
| Phillips 2014 | Addressing adolescent substance use in a paediatric health-care setting | Sample Size < 40 people with OUD |
| Sanford 2014 | Consumer perceptions of trauma assessment and intervention in substance abuse treatment | Sample Size < 40 people with OUD |
| Stephens 2014 | Risk and protective factors associated with substance use disorders in adolescents with first-episode mania | Sample Size < 40 people with OUD |
| Tasoren 2017 | Drug Use and Self-Harming Behavior Among Incarcerated Men: Does Childhood Abuse, Anger, and Executive Function Make a Difference? | Sample Size < 40 people with OUD |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|--|----------------------------------|
| Trevino 2014 | The relationship between age of first reported trauma and substance specific use in incarcerated women | Sample Size < 40 people with OUD |
| Najavits 2012 | Dissociation, PTSD, and Substance Abuse: An Empirical Study | Sample Size < 40 people with OUD |
| Perry 2015 | Improving antenatal risk assessment in women exposed to high risks | Sample Size < 40 people with OUD |
| Gerra 2017 | Increased oxytocin levels among abstinent heroin addicts: Association with aggressiveness, psychiatric symptoms and perceived childhood neglect | Sample Size < 40 people with OUD |
| Lynskey 2003 | Escalation of drug use in early-onset cannabis users vs co-twin controls | Sample Size < 40 people with OUD |
| Skinner 2009 | Predicting functional resilience among young-adult children of opiate-dependent parents | Sample Size < 40 people with OUD |
| Acheson 2019 | Early Life Adversity and Increased Delay Discounting: Findings From the Family Health Patterns Project | Sample Size < 40 people with OUD |
| Bach 2019 | Effects of social exclusion and physical pain in chronic opioid maintenance treatment: fMRI correlates | Sample Size < 40 people with OUD |
| Schneeberger 2017 | Alcohol consumption and use of health care services in people with severe mental illness and stressful childhood experiences | Sample Size < 40 people with OUD |
| Kok 2015 | Assessing traumatic experiences in screening for PTSD in substance use disorder patients: What is the gain in addition to PTSD symptoms? | Sample Size < 40 people with OUD |
| Roesler 1993 | Chemical dissociation in adults sexually victimized as children: Alcohol and drug use in adult survivors | Sample Size < 40 people with OUD |
| Triffleman 1995 | Childhood trauma and posttraumatic stress disorder in substance abuse inpatients | Sample Size < 40 people with OUD |
| Cohen 2010 | Comparison of childhood sexual histories in subjects with pedophilia or opiate addiction and healthy controls: is childhood sexual abuse a risk factor for addictions? | Sample Size < 40 people with OUD |
| Raketic 2013 | Women and addiction (alcohol and opiates): comparative analysis of psychosocial aspects | Sample Size < 40 people with OUD |
| Navarro-Mateu 2019 | Childhood adversities and 5-HTTLPR polymorphism as risk factors of substance use disorders: Retrospective case-control study in Murcia (Spain) | Sample Size < 40 people with OUD |
| Saraiya 2020 | Perspectives on trauma and the design of a technology-based trauma-informed intervention for women receiving medications for addiction treatment in community-based settings | Sample Size < 40 people with OUD |
| Moreland 2020 | Examining Stressors and Available Parenting Resources for Opioid-Using Mothers: Qualitative Findings from an Inpatient Substance Use Treatment Program | Sample Size < 40 people with OUD |
| Paterno 2020 | Challenges and Lessons Learned From Digital Storytelling With Parenting Women in Recovery | Sample Size < 40 people with OUD |
| Dir 2019 | Risk of Trauma Exposure And Traumatic Stress Among Adolescents With An Opioid-Using Parent | Sample Size < 40 people with OUD |
| Kristiansen 2020 | Trauma in childhood and adolescence and impaired executive functions are associated with uncertain reflective functioning in mothers with substance use disorder | Sample Size < 40 people with OUD |
| Groh 2020 | Trauma Severity in Early Childhood Correlates with Stress and Satiety Hormone Levels in a Pilot Cohort Receiving Diamorphine Maintenance Treatment | Sample Size < 40 people with OUD |
| Swain 2020 | Resting State Functional Connectivity & Parental Bonding in Postpartum Women on Buprenorphine for Opioid Use Disorder | Sample Size < 40 people with OUD |
| Peles 2017 | Is a History of Sexual Abuse Related to Poor Sleep Among Former Opioid-Addicted Women With and Without Methadone Maintenance Treatment? | Sample Size < 40 people with OUD |
| Ofiaeli 2020 | 269. Substance Abuse in Adolescents | Sample Size < 40 people with OUD |
| Garland 2019 | Adverse childhood experiences predict autonomic indices of emotion dysregulation and negative emotional cue-elicited craving among female opioid-treated chronic pain patients | Sample Size < 40 people with OUD |
| Guillen 2020 | Substance use, stressful life events and mental health: A longitudinal study among homeless women in Madrid (Spain) | Sample Size < 40 people with OUD |
| Scheer 2019 | Intimate Partner Violence and Illicit Substance Use Among Sexual and Gender Minority Youth: The Protective Role of Cognitive Reappraisal | Sample Size < 40 people with OUD |
| Shepherd 2019 | An analysis of high-risk offending pathways for young females in custody | Sample Size < 40 people with OUD |
| Evren 2012 | Relationship of self-mutilative behaviours with severity of borderline personality, childhood trauma and impulsivity in male substance-dependent inpatients | Sample Size < 40 people with OUD |
| Rizzo 2014 | Parenting and concerns of pregnant women in buprenorphine treatment | Sample Size < 40 people with OUD |
| Falot 2011 | The trauma recovery and empowerment model: A quasi-experimental effectiveness study | Sample Size < 40 people with OUD |
| Baykara 2019 | The relationship between self mutilative behavior, suicide attempt history and impulsivity and some clinical variables in male opiate-dependent patients. [Turkish] | Sample Size < 40 people with OUD |
| Rosenkranz 2012 | Motivation and maltreatment history among youth entering substance abuse treatment | Sample Size < 40 people with OUD |
| Westermeyer 1994 | Substance abuse and associated psychiatric disorder among 100 adolescents | Sample Size < 40 people with OUD |
| Damman 2017 | The influence of comorbid personality disorder on patients in heroin-assisted treatment: Pilot data on clinical outcome | Sample Size < 40 people with OUD |
| Evren 2013 | The mediator roles of trait anxiety, hostility, and impulsivity in the association between childhood trauma and dissociation in male substance-dependent inpatients | Sample Size < 40 people with OUD |

| Study Author, Year | Title | Exclusion Reason |
|--------------------|--|--|
| Gerra 2014 | Dysregulated responses to emotions among abstinent heroin users: correlation with childhood neglect and addiction severity | Sample Size < 40 people with OUD |
| Martin 2011 | A multisite study of the association between emotion dysregulation and deliberate self-harm among substance use disorder inpatients: Replication and extension | Sample Size < 40 people with OUD |
| Savulich 2017 | Effects of naltrexone are influenced by childhood adversity during negative emotional processing in addiction recovery | Sample Size < 40 people with OUD |
| Schwaninger 2017 | Patients with non-substance-related disorders report a similar profile of childhood trauma experiences compared to heroin-dependent patients | Sample Size < 40 people with OUD |
| Simons 2008 | Characteristics of substance abusing men and women entering a drug treatment program: An exploration of sex differences | Sample Size < 40 people with OUD |
| Karagoz 2015 | The relationship between childhood maltreatment and emotional dysregulation in self mutilation: An investigation among substance dependent patients | Sample Size < 40 people with OUD |
| Rivera 2016 | Illicit drug use, childhood trauma, and domestic violence among enrollees in methadone treatment programs | Sample Size < 40 people with OUD |
| Cohen 2012 | Identifying psychological traits potentially subserving aberrant motivation or inhibitory failure in pedophilic behavior | Sample Size < 40 people with OUD |
| Garami 2019 | Examining perceived stress, childhood trauma and interpersonal trauma in individuals with drug addiction | Sample Size < 40 people with OUD |
| Macfie 2020 | Pregnant women's history of childhood maltreatment and current opioid use: The mediating role of reflective functioning | Sample Size < 40 people with OUD |
| Proescholdt 2018 | Early Screening for Posttraumatic Stress Disorder in Inpatient Detoxification and Motivation Treatment: Results and Consequences | Sample Size < 40 people with OUD |
| Gordon 1996 | Toxicology screening in adolescent trauma | Wrong Study Type (Case-report / Case series) |
| Jansson 2017 | The Effect of Sexual Abuse and Prenatal Substance Use on Successful Breastfeeding | Wrong Study Type (Case-report / Case series) |
| Lecomte 1998 | Suicide among youth and young adults, 15 through 24 years of age: A report of 392 cases from Paris, 1989-1996 | Wrong Study Type (Case-report / Case series) |
| Pinkerton 2017 | Opioid addiction and misuse in adult and adolescent patients with cancer | Wrong Study Type (Editorial or commentary) |
| Ivanov 2015 | Adolescent substance abuse disorders assessments and practice treatments | Wrong Study Type (Editorial or commentary) |
| Hien 1994 | Trauma and trauma-related disorders for women on methadone: Prevalence and treatment considerations | Wrong Study Type (Editorial or commentary) |
| Ford 2012 | Posttraumatic stress disorder and psychological trauma | Wrong Study Type (Editorial or commentary) |
| Tilson 2018 | Adverse Childhood Experiences (ACEs): An Important Element of a Comprehensive Approach to the Opioid Crisis | Wrong Study Type (Editorial or commentary) |
| Ojha 2011 | The context of methadone maintenance treatment in Nepal | Wrong Study Type (Editorial or commentary) |
| Wells 2009 | Substance abuse and child maltreatment | Wrong Study Type (Editorial or commentary) |
| Jansson 2013 | Plenary conference 4: A good start in life and early prevention: Policy' evidence-based programs and monitoring methods in Sweden | Wrong Study Type (Editorial or commentary) |
| Rosenblum 2013 | [The treatment of drug-addicted parents and their children] | Wrong Study Type (Editorial or commentary) |
| Silverman 2007 | In this issue | Wrong Study Type (Editorial or commentary) |
| Pakier 1990 | Predictors of substance abuse in a methadone maintained sample | Wrong Study Type (Other) |
| MacCall 2001 | Substance misuse, psychiatric disorder and parental relationships in patients attending a student health service | Wrong Study Type (Other) |
| Walsh 2014 | Patterns of drug and alcohol use associated with lifetime sexual revictimization and current posttraumatic stress disorder among three national samples of adolescent, college, and household-residing women | Wrong Study Type (Other) |
| Ford 2013 | PTSD and substance abuse treatment | Wrong Study Type (Other) |
| Onigutite 2019 | Substance use in adolescents presenting to the emergency department | Wrong Study Type (Other) |
| Morris 2019 | Opioid prescription rates and risk for substantiated child abuse and neglect: A Bayesian spatiotemporal analysis | Wrong Study Type (Other) |
| Polli 2019 | When Environment Meets Genetics: A Clinical Review of the Epigenetics of Pain, Psychological Factors, and Physical Activity | Wrong Study Type (Other) |
| Ghertner 2018 | The role of substance use in child welfare caseloads | Wrong Study Type (Other) |
| Kramer 2017 | Life members wisdom clinical perspectives: Care integration for childhood sexual abuse: Posttraumatic stress disorder, heroin, and other adverse outcomes | Wrong Study Type (Other) |
| Wilson 2010 | Predictors of drug-use patterns in maltreated children and matched controls followed up into middle adulthood | Wrong Study Type (Other) |
| Manocha 2019 | Is early life trauma an independent predictor of developing substance use disorder irrespective of PTSD diagnosis? | Wrong Study Type (Other) |
| Kreis 2016 | Relational pathways to substance misuse and drug-related offending in women: The role of trauma, insecure attachment, and shame | Wrong Study Type (Qualitative) |

| Study Author, Year | Title | Exclusion Reason |
|-----------------------|---|--------------------------------|
| Tiberio 2018 | Context and characteristics of illicit drug use in coastal and interior Tanzania | Wrong Study Type (Qualitative) |
| Senarathna 2012 | Risk behaviour of street children in Colombo | Wrong Study Type (Qualitative) |
| Sawyer-Kurian 2011 | Exploring the intersecting health risks of substance abuse, sexual risk, and violence for female South African teen dropouts | Wrong Study Type (Qualitative) |
| Sanders 2008 | Multiple drug use and polydrug use amongst homeless traveling youth | Wrong Study Type (Qualitative) |
| Land 2017 | Current systems of care for pregnant and parenting opiate-addicted women in Broome County of New York State | Wrong Study Type (Qualitative) |
| Hopwood 2008 | Resilient coping: Applying adaptive responses to prior adversity during treatment for hepatitis C infection | Wrong Study Type (Qualitative) |
| Hardesty 1999 | Mothering through addiction: A survival strategy among Puerto Rican addicts | Wrong Study Type (Qualitative) |
| McCurdy 2005 | Heroin and HIV risk in Dar es Salaam, Tanzania: Youth hangouts, mageto and injecting practices | Wrong Study Type (Qualitative) |
| Moran 2018 | Barriers to progressing through a methadone maintenance treatment programme: perspectives of the clients in the Mid-West of Ireland's drug and alcohol services | Wrong Study Type (Qualitative) |
| Sales 2000 | Surviving violence: Pregnancy and drug use | Wrong Study Type (Qualitative) |
| Sun 2016 | Trauma and Chinese heroin users | Wrong Study Type (Qualitative) |
| Syvertsen 2017 | Down in the valley: Trajectories of injection initiation among young injectors in California's Central Valley | Wrong Study Type (Qualitative) |
| McCoy 2005 | White chicks on dope: Heroin and identity dynamics in New York in the 1990s | Wrong Study Type (Qualitative) |
| Jessup 2003 | Extrinsic barriers to substance abuse treatment among pregnant drug dependent women | Wrong Study Type (Qualitative) |
| Zamudio-Haas 2015 | Providing Medication Assisted Treatment (mat) as an HIV prevention intervention: Programmatic strategies to maximize service utilization in Dar Es Salaam, Tanzania | Wrong Study Type (Qualitative) |
| Dertadian 2017 | Self-limiting non-medical pharmaceutical opioid use among young people in Sydney, Australia: An exploratory study | Wrong Study Type (Qualitative) |
| Cornford 2012 | Heroin users' experiences of depression: a qualitative study | Wrong Study Type (Qualitative) |
| Walsh 2002 | Abused women in recovery: A qualitative study of women in substance abuse recovery who were abused, either physically or sexually as children | Wrong Study Type (Qualitative) |
| McCaughey 2014 | Substance use, intimate partner violence and sexual assault among adolescent and young adult female family planning clients | Wrong Study Type (Qualitative) |
| Mosdell 2019 | Psychic retreats into heroin: Institutional trauma and loss in the lives of substance using mothers | Wrong Study Type (Qualitative) |
| Rivera-Oquendo 2007 | Puerto rican young women's substance abuse: A qualitative study of young female cocaine and heroin drug users ages 18 to 35 from san juan metropolitan area | Wrong Study Type (Qualitative) |
| Bekir 1993 | Role reversals in families of substance misusers: A transgenerational phenomenon | Wrong Study Type (Qualitative) |
| Streicher-Bremer 2001 | Expanding the understanding of heroin addiction in women who were sexually abused as children | Wrong Study Type (Qualitative) |
| Hammersley 2016 | Trauma in the childhood stories of people who have injected drugs | Wrong Study Type (Qualitative) |
| Lloyd 2019 | Capital depreciation: The lack of recovery capital and post-release support for prisoners leaving the Drug Recovery Wings in England and Wales | Wrong Study Type (Qualitative) |
| Greenfield 2011 | Gender research in the national institute on drug abuse national treatment clinical trials network: A summary of findings | Wrong Study Type (Review) |
| Kumar 2008 | Women and substance use in India and Bangladesh | Wrong Study Type (Review) |
| Romanowicz 2019 | The effects of parental opioid use on the parent-child relationship and children's developmental and behavioral outcomes: A systematic review of published reports | Wrong Study Type (Review) |
| Chatham 1999 | Gender differences at admission and follow-up in a sample of methadone maintenance clients | Wrong Study Type (Review) |
| Darke 2013 | Pathways to heroin dependence: Time to re-appraise self-medication | Wrong Study Type (Review) |
| Darke 2017 | Developmental trajectories to heroin dependence: Theoretical and clinical issues | Wrong Study Type (Review) |
| Maniglio 2011 | The role of child sexual abuse in the etiology of substance-related disorders | Wrong Study Type (Review) |
| Simpson 2002 | Concomitance between childhood sexual and physical abuse and substance use problems: A review | Wrong Study Type (Review) |
| Spiegel 2016 | Conceptualizing a subtype of patients with chronic pain: The necessity of obtaining a history of sexual abuse | Wrong Study Type (Review) |

eAppendix 4: Data extraction

Variables were extracted into a Microsoft Access database and double-checked by at least one team member (either TS, SC, or LT). Conflicts were resolved through consult to LD, GC, or NG. Data was then exported through queries as a .csv file.

eTable 4.1: Variables for data extraction

| Domain | List of variables |
|-------------------------------|---|
| Study characteristics | <ul style="list-style-type: none"> – Author, Study year, Publication Year, Publication Type – Details on recruitment methodology including location, sampling format (e.g. random or consecutive), or other methods (e.g. participant outreach, chart review). – Description of participants including history or current behaviour (3-4 sentences) – Inclusion or inclusion criteria (n; %) <ul style="list-style-type: none"> ○ Inclusion of <i>only</i> people with specific types of injection or sexual behaviour, mental health disorders, substance use disorders, physical health disorders, details on history of/current incarceration, lost to follow-up (LTFU), refusal to participate, or ○ Exclusion due to presence of mental health disorders, substance use disorders, physical health disorders, details on history of/current incarceration, lost to follow-up (LTFU), or refusal to participate |
| Sample Characteristics | <ul style="list-style-type: none"> – Number of total participants, Number of participants with OUD – Description of OUD & Primary type of opioid use – Mean or median age, location, recruitment setting – Number of men or women in the study – Number of people with a history of parental psychopathology or parental SUD – Number of people who reported “low” socio-economic status (SES) or poverty during childhood and/or details on definition – Details on history of IDU including, number of participants and description of OUD |
| Quantitative CM Data | <ul style="list-style-type: none"> – Frequency (Numerator) of CM including childhood sexual abuse, physical abuse, emotional or psychological abuse, neglect, physical neglect, emotional neglect, and witnessing family violence (if reported separately) – Denominator for each type of CM listed above, including reasons for refusal and n missing – Data on subtypes of abuse or neglect including frequent abuse, penetrative abuse, or supervisory neglect – Definition of CM including details regarding: <ul style="list-style-type: none"> ○ Chronicity, frequency, or perpetrator details (e.g. family member, father, etc.) ○ Age considered “childhood” ○ Scale utilised ○ Format and details regarding the question, including events describing the abuse or neglect ○ Citation ○ Cut-off used for continuous scales ○ Continuous numeric values for continuous scales ○ Prevalence of “frequent” or “chronic” or “severe” abuse or neglect if reported separated |
| Risk of Bias data | <ul style="list-style-type: none"> – Inclusion or Exclusion criteria related to age, sex, IDU, opioid use, mental health, physical health – Details regarding formal evaluation of opioid use disorder or dependence or details describing qualification for proxy OUD – Details describing the score for each evaluation of CM including events or chronicity of the experience AND/OR age describing the experience of childhood |

eAppendix 5: Study descriptions of eligible studies

eTable 5.1: Studies of people with opioid use disorder with continuous or aggregate childhood maltreatment (CM) data only

| Study, Year | Type of | Definition / Scale | Description | Notes |
|----------------------|-------------------|--|--|---|
| Agachanli 2018 | Continuous | CTQ- All 5 CM Types | Women on OAT (N=51) for at least 1 month due to OUD from Istanbul, Turkey | - |
| Alexander 2019 | Continuous | ACE- Overall | Women with children in OAT (N=175). Secondary to Alexander 2018, which includes prevalence data on emotional abuse. | Data on other individual ACE questions related to CM not reported, only as aggregate continuous ACE score. |
| Banducci 2014 | Aggregate CM only | CTQ- Any Moderate to severe CM | Subset of 73 people with OUD from a sample of 280 people in SUD treatment in Washington D.C., USA | 41% any form of mod-severe CM on CTQ |
| Boscarino 2011 | Aggregate CM only | ACE- "History of high childhood adversity" | People with lifetime pharmaceutical OUD from a private health system in Pennsylvania (N=246). | 35% ""History of high childhood adversity" on ACE |
| Coker 2018 | Continuous | CTQ- All 5 CM Types | Women on buprenorphine (N=64) attending an outpatient clinic in Arkansas, USA. | - |
| Dauids 2006 | Continuous | CTQ- All 5 CM Types | People in OAT in northern Germany (N=69)W | CTQ continuous/severe data only. |
| Dawe 2017 | Aggregate CM only | CECA.Q-Aggregate | Women with children (N=171) enrolled in OAT. | Childhood Experience of Care and Abuse Questionnaire (CECA.Q). Any response YES was coded across 4 questions. |
| Ergelen 2018 | Continuous | CTQ- All 5 CM Types | Subset of 40 Turkish men with OUD at an inpatient facility. | - |
| Feder 2020 | Continuous | ACE- Categorical | Sample of people heroin from the AIDS Linked to the IntraVenous Experience (ALIVE) Study (N=362), a cohort of people with lifetime IDU in Baltimore, USA. We were unable to locate data on specific ACE questions for subset reporting current heroin use. | Categorical scores of ACE (e.g. 0-3, etc.) |
| Gannon 2016 | Continuous | ACE- Continuous Total Score | Women with children receiving OAT in Philadelphia, USA | Categorical and continuous ACE scores out of ten reported |
| Gerra 2016 | Continuous | CECA.Q- Continuous | Men with sexual dysfunction issues (n=40) in chronic methadone treatment. | CECA-Q sub-scales include neglect, parent antipathy, physical abuse and sexual abuse. |
| Ivandic 2001 | Aggregate CM only | No scale- Sexual, physical, or emotional abuse | People in inpatient treatment at two hospitals in Zagreb, Croatia (N=101) | - |
| Kalyoncu 2007 | Continuous | Combined men/women sexual abuse | People in treatment for heroin dependence in Istanbul, Turkey (N=100). | - |
| Kapitany-Foveny 2020 | Continuous | CTQ- All 5 CM Types | People in an OAT program in Budapest, Hungary (N=198). | - |
| Lawson 2013 | Aggregate CM Only | The Life Stressor Checklist—Revised (LSC-R)2 | People in an outpatient treatment program for people with pharmaceutical OUD (N=41). | Aggregate Child trauma=90%, included general events |
| Moncrieff 1994 | Aggregate CM only | General questions about sexual abuse | People in a treatment program for heroin use (N=40). | Qualitative evaluation of sexual abuse, not separated by sex. |
| Roy 2003 | Continuous | CTQ- All 5 CM Types | People with cocaine and/or opiate dependence (n=246) from a Veterans health system from NJ, USA. | Author responded that data is unavailable. |
| Roy 2001 | Continuous | CTQ- All 5 CM Types | Subset of Roy, 2003 who had not used heroin recently (n=131). | Author responded that data is unavailable. |
| Roy 2002 | Continuous | CTQ- All 5 CM Types | Subset of Roy, 2003, only primary opiate dependence (n=246). | Author responded that data is unavailable. |
| Roy 2010 | Continuous | CTQ- All 5 CM Types | People with lifetime opiate dependence (N=597), but not currently using heroin from two treatment sites in NJ, USA. | Author responded that data is unavailable. |
| Somer 2003 | Continuous | Traumatic Experiences Questionnaire- 4 Types (No Physical Neglect) | People with heroin use disorder (N=100), mix of women and men with continuous abuse scores in Israel. | Mean trauma scores. Traumatic Experiences Questionnaire – Hebrew Version (H-TEQ) |
| Towers 2019 | Aggregate CM only | Physical or sexual abuse before 13 years | Women who were pregnant (N=411) receiving OAT in Tennessee, USA | 62% before 13 years, combined physical and sexual abuse for < 13 years, but reported separate for lifetime |
| Towers 2018 | Aggregate CM only | Physical or sexual abuse before 13 years | -- | Conference abstract for Towers 2019 |

Table Notes: Secondary continuous studies highlighted in grey; **Abbreviations:** CM=Childhood Maltreatment; ACE= Adverse Child Experiences Scale; CTQ: Childhood Trauma Questionnaire

eAppendix 6: Risk of bias

Each of the 62 studies included in the primary analyses was evaluated for risk of bias (Table 3). Studies were evaluated once for inclusion/exclusion criteria risk of bias, once for evaluation of OUD, and separately for each type of CM reported by the study. Two authors independently evaluated risk of bias for each study after reviewing the extracted data and full-text. TS and either SC or LT evaluated each study independently, compared results and resolved through a third party (NG, GC, or LD), if necessary.

eMethods 6.1: Inclusion or exclusion criteria risk

Each study was categorised into one of three groups according to participant inclusion and exclusion criteria: ‘Low risk of inclusion/exclusion criteria bias’, ‘High risk of overestimate’, or ‘High risk of underestimate’. Qualitative decisions were made according to evidence-based associations between CM and variables described in participant inclusion or exclusion criteria.

- **‘High risk of overestimate’**: If a study only recruited participants with ‘severe’ cases of OUD (e.g. only people who dropped out of OAT treatment)(Kang et al., 2002), required high-risk injection/sexual behaviour for participation(Hailes et al., 2019), recruited only participants with post-traumatic stress disorder (PTSD)(Schiff et al., 2010), comorbid alcohol dependence(Hailes et al., 2019), or HIV(Arriola et al., 2005). These decisions were made qualitatively according to evidence that suggests that people included.
- **‘High risk of underestimate’**: Studies that reported greater than 20% participant drop-out or refusal were also considered ‘High risk of underestimate’, due to associations between experience of CM and missing data. Additionally, some studies described exclusion of participants (>20%) due to sensitivity of the questions and past experience, which would bias the estimate downwards. Finally, studies that excluded participants with common comorbid mental or substance use disorders, including other substance use(Moselhy et al., 2010; Pinto et al., 2011) and depression(Gardner et al., 2011; Garfield et al., 2017; Santos Goni et al., 2010), were considered high risk of underestimate . Finally, studies that recruited only adolescents(Davis et al., 2019; Walker et al., 2014), were considered high of underestimate due to participants not experiencing the full duration of childhood (i.e. most participants were under 18) and underestimates from ‘informant’ report(Stoltenborgh et al., 2015).

eMethods 6.2: Evaluation of OUD

Included studies evaluated presence of OUD by either a structured measure or formal evaluation. If studies assessed presence of OUD using ICD or DSM criteria, the risk of bias was classified as using a “structured evaluation”. Assessment of opioid dependence according to ICD criteria was considered a structured evaluation of OUD. Studies that described a participant sample that was receiving OAT for OUD, in residential, detoxification, or other inpatient treatment for chronic opioid use, people using opioids frequently (e.g. ~daily illicit or extra-medical opioid use), and/or people who frequently inject drugs and primarily use opioids were classified as ‘proxy’ evaluation.

eMethods 6.3: Evaluation of CM history

Definitions of each type of CM were assessed separately for each study. Child maltreatment definitions were categorised as ‘Similar to WHO or CDC definition’, ‘Specific (e.g. ‘severe’, childhood <15 year, etc.)’, or ‘Non-specific (e.g. were you abused?)’. Description of events in the definition or scale (e.g. only penetrative abuse for sexual abuse), or lack thereof (e.g. ‘were you sexually abused as a child?’), age restrictions on ‘childhood’ (e.g. before age 15 only) contributed to the risk of bias classification for child maltreatment definition.

- **‘Similar to WHO or CDC definition’**- Descriptions of each definition of CM according to the WHO and CDC are detailed in Panel 1 of the manuscript. These definitions provided detail describing the events or experience, similar to those in Panel 1. For the Childhood Trauma Questionnaire (CTQ), a commonly utilised continuous measure for each type of CM, we utilised the “moderate-severe” cut-off cited by Bernstein et al (Bernstein et al., 2003). Binary answers to ACE questions were also considered similar.
- **‘Non-specific (e.g. were you abused?)’**- Non-specific definitions required participant interpretation of events during their childhood. Examples include “Were you sexually abused as a child?” or “Were you neglected while growing up?”.
- **‘Specific’**- Definitions described a narrow experience compared to definitions from Panel 1. Details regarding Age (≤ 14 years only), description of events (e.g. only severe frequent beatings for physical abuse or rape only for sexual abuse), or restriction of perpetrator (e.g. parent only for sexual abuse) were considered.

eTable 6.1: Summary of risk of bias and quality of prevalence estimate

| Author, Year | Inclusion/Exclusion Criteria Risk of Bias | OD Evaluation | Sexual abuse definition | Physical abuse definition | Emotional abuse definition | Physical neglect definition | Emotional neglect definition |
|-------------------|---|------------------|--|--|--|--|---------------------------------|
| Nelson, 2006 | Low risk of bias | Structured | Similar to WHO or CDC | - | - | - | - |
| Evans, 2019 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Afifi, 2012 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Campbell, 2016 | Low risk of bias | Structured | Non-specific (e.g. were you abused?) | Similar to WHO or CDC | Similar to WHO or CDC | Non-specific (e.g. were you abused?) | - |
| Naqavi, 2011 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Santos Goni, 2010 | High risk of underestimate | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Non-specific (e.g. were you abused?) | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - |
| Sansone, 2009 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Specific (e.g. 'severe', childhood <15 year, etc.) | Non-specific (e.g. were you abused?) | Specific (e.g. 'severe', childhood <15 year, etc.) | - |
| Nyamathi, 2010 | High risk of overestimate | Proxy | - | Non-specific (e.g. were you abused?) | - | - | - |
| Bailey, 1994 | High risk of underestimate | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - | - | - |
| Vogel, 2011 | Low risk of bias | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Kaboski, 2011 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Similar to WHO or CDC | - | - | - |
| Stein, 2017 | Low risk of bias | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Sartor, 2014 | Low risk of bias | Structured | Specific (i.e. 'severe', childhood <15 year, etc.) | Specific (i.e. 'severe', childhood <15 year, etc.) | - | - | - |
| Browne, 1998 | Low risk of bias | Proxy | Similar to WHO or CDC | Specific (i.e. 'severe', childhood <15 year, etc.) | - | - | - |
| Somer, 2010 | Low risk of bias | Proxy | - | Similar to WHO or CDC | Similar to WHO or CDC | - | Similar to WHO or CDC |
| Cash, 2003 | Low risk of bias | Proxy | Specific (i.e. 'severe', childhood <15 year, etc.) | Specific (i.e. 'severe', childhood <15 year, etc.) | - | - | - |
| Isralowitz, 2001 | Low risk of bias | Proxy | Non-specific (i.e. were you abused?) | Non-specific (i.e. were you abused?) | - | - | - |
| Schiff, 2010 | High risk of underestimate | Proxy | Non-specific (i.e. were you abused?) | - | - | - | - |
| Pinto, 2011 | High risk of overestimate | Structured | Non-specific (i.e. were you abused?) | Non-specific (i.e. were you abused?) | - | - | - |
| Peles, 2012 | Low risk of bias | Structured | Similar to WHO or CDC | - | - | - | - |
| Rodriguez, 2017 | Low risk of bias | Proxy | - | - | Similar to WHO or CDC | - | Similar to WHO or CDC |
| Orellana, 2014 | Low risk of bias | Proxy | Similar to WHO or CDC | - | - | - | - |
| Kumar, 2016 | Low risk of bias | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Cohen, 2009 | High risk of overestimate | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - | - | - |
| Derefinko, 2019 | Low risk of bias | Proxy | - | - | Similar to WHO or CDC | - | Similar to WHO or CDC |
| Shand, 2011 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |

| | | | | | | | |
|--------------------|----------------------------|------------|--|--|--|-----------------------|-----------------------|
| Walker, 2014 | High risk of underestimate | Proxy | Non-specific (e.g. were you abused?) | Non-specific (e.g. were you abused?) | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - |
| Bohnert, 2011 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - | - |
| Gardner, 2020 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Garfield, 2017 | High risk of underestimate | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Engstrom, 2012 | Low risk of bias | Proxy | Specific (i.e. 'severe', childhood <15 year, etc.) | Similar to WHO or CDC | - | - | - |
| Fudalej, 2015 | Low risk of bias | Structured | Non-specific (i.e. were you abused?) | Non-specific (i.e. were you abused?) | - | - | - |
| El-Bassel, 2001 | High risk of overestimate | Proxy | Specific (i.e. 'severe', childhood <15 year, etc.) | Similar to WHO or CDC | - | - | - |
| Golden, 2018 | High risk of underestimate | Proxy | Non-specific (i.e. were you abused?) | Non-specific (i.e. were you abused?) | Specific (i.e. 'severe', childhood <15 year, etc.) | - | - |
| Koyuncu, 2003 | High risk of underestimate | Structured | Specific (i.e. 'severe', childhood <15 year, etc.) | Non-specific (i.e. were you abused?) | Specific (i.e. 'severe', childhood <15 year, etc.) | - | - |
| Blatchley, 2000 | Low risk of bias | Proxy | Specific (i.e. 'severe', childhood <15 year, etc.) | - | - | - | - |
| Moselhy, 2010 | High risk of underestimate | Structured | Non-specific (e.g. were you abused?) | Non-specific (e.g. were you abused?) | - | - | - |
| Bartholomew, 2005 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - | - | - |
| Wang, 2010 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | - | - |
| Isralowitz, 2002 | Low risk of bias | Proxy | Non-specific (e.g. were you abused?) | Non-specific (e.g. were you abused?) | - | - | - |
| Dissabandara, 2009 | Low risk of bias | Proxy | Non-specific (e.g. were you abused?) | Non-specific (e.g. were you abused?) | - | - | - |
| Davis, 2019 | High risk of underestimate | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - |
| Hien, 2000 | Low risk of bias | Proxy | Non-specific (e.g. were you abused?) | Non-specific (e.g. were you abused?) | - | - | - |
| Gilbert, 1997 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Similar to WHO or CDC | - | - | - |
| Shannon, 2007 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Specific (e.g. 'severe', childhood <15 year, etc.) | Non-specific (e.g. were you abused?) | - | - |
| Weiss, 2019 | Low risk of bias | Structured | Non-specific (e.g. were you abused?) | Non-specific (e.g. were you abused?) | - | - | - |
| Heffernan, 2000 | Low risk of bias | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | - | - | - |
| Grella, 1995 | High risk of overestimate | Proxy | Non-specific (e.g. were you abused?) | Non-specific (e.g. were you abused?) | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - |
| McCurdy, 2009 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - | - | - |
| Palis, 2011 | High risk of overestimate | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |

| | | | | | | | |
|------------------|---------------------------|------------|--|--|--|-----------------------|-----------------------|
| Mirhashem, 2017 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Medrano, 1999 | High risk of overestimate | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Teegen, 2000 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - | - |
| Lovell, 2002 | Low risk of bias | Proxy | - | Non-specific (e.g. were you abused?) | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - |
| Plotzker, 2007 | Low risk of bias | Proxy | Specific (e.g. 'severe', childhood <15 year, etc.) | Specific (e.g. 'severe', childhood <15 year, etc.) | - | - | - |
| Wickersham, 2016 | Low risk of bias | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | - | - | - |
| Darke, 2013 | High risk of overestimate | Proxy | - | Similar to WHO or CDC | - | - | - |
| Lake, 2015 | High risk of overestimate | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Kang, 2002 | High risk of overestimate | Proxy | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | |
| Rovis, 2019 | Low risk of bias | Structured | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC | Similar to WHO or CDC |
| Khosravani, 2019 | Low risk of bias | Structured | - | - | Similar to WHO or CDC | - | Similar to WHO or CDC |
| Alexander, 2018 | Low risk of bias | Proxy | - | - | Similar to WHO or CDC | - | - |

Table notes: Abbreviations: World Health Organisation (WHO), Centers for Disease Control and Prevention (CDC)

eAppendix 7: Results from analyses and figures excluded from the main text

Below we provide the forest plots for each estimate. Forest plots are presented for Table 2, Table 3, and meta-regressions. Meta-regressions are provided for percent of men in the sample, mean/median age of the sample, and publication year. All results are presented and grouped by type of CM. A table of the results from the meta-regressions are provided in etable 7.1 below. In meta-regressions of prevalence of childhood physical and emotional neglect, pooled estimates declined over time.

eTable 7.1: Meta-regressions of each type of childhood maltreatment among samples of people with opioid use disorder

| | Sexual Abuse (Women) | | | Sexual Abuse (Men) | | | Physical Abuse | | | Emotional Abuse | | | Physical Neglect | | | Emotional Neglect | | |
|---|----------------------|-------------------|-------|--------------------|--------------------|-------|------------------|---------------------|-------|------------------|---------------------|-------|----------------------|-----------------------------|---------------|----------------------|-----------------------------|---------------|
| | Study (Total) | Coef. (SE) | p | Study (Total) | Coef. (SE) | p | Study (Total) | Coef. (SE) | p | Study (Total) | Coef. (SE) | p | Study (Total) | Coef. (SE) | p | Study (Total) | Coef. (SE) | p |
| % Male | - | - | - | - | - | - | 48 (18324) | -0.0234 (0.0762) | 0.760 | 31 (11030) | 0.1027 (0.1034) | 0.331 | 17 (7504) | -0.2405 (0.2470) | 0.389 | 17 (6964) | -0.0018 (0.0016) | 0.278 |
| Average sample age at interview* | 15 (3425) | 0.008 (0.0047) | 0.116 | 12 (4146) | 0.0073 (0.0041) | 0.137 | 29 (11042) | -0.0002 (0.0043) | 0.965 | 18 (6680) | 0.0014 (0.0048) | 0.758 | 11 (1301) | -0.0028 (0.0100) | 0.788 | 9 (2890) | 0.0059 (0.0165) | 0.729 |
| Publication Year | 38 (8478) | 0.004 (0.0044) | 0.401 | 25 (9940) | 0.0050 (0.0033) | 0.148 | 48 (18324) | 0.0011 (0.0034) | 0.751 | 31 (11030) | -0.0048 (0.0047) | 0.327 | 17 (7504) | -0.0179 (0.0067) | 0.019* | 17 (6964) | -0.0185 (0.0083) | 0.042* |

Tables Notes: *Age at interview refers to either mean or median age of the sample with OUD; Significant results in bold

eTable 7.2: Pooled prevalence estimates for each type of childhood maltreatment in people with opioid use disorder stratified by other sample characteristics

| Strata | Sexual Abuse (Women) | | | Sexual Abuse (Men) | | | Physical Abuse | | | Emotional Abuse | | | Physical Neglect | | | Emotional Neglect | | |
|--|------------------------|----------------------------|----------------|--------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² |
| Pooled estimates from current review | 38 (8478) | 41 (36-47) | 96 | 25 (9940) | 16 (12-20) | 97 | 48 (18324) | 38 (33-44) | 99 | 31 (11030) | 43 (38-49) | 97 | 17 (7504) | 38 (30-45) | 96 | 17 (6964) | 42 (32-51) | 99 |
| Mean / median age of sample¹ | | p=0.03* | | | p<0.01* | | | p=0.99 | | | p<0.01* | | | p=0.01* | | | p<0.85 | |
| Adolescents | 2 (734) | 29 (26-32) | - | 1 (1365) ⁴ | 3 (2-4) | - | 3 (2168) | 38 (5-71) | - | 3 (2167) | 36 (13-60) | - | 1 (40) | 35 (21-52) | - | 1 (40) | 41 (34-49) | - |
| 19 - 30 | 2 (233) | 28 (22-34) | - | - | - | - | 3 (216) | 37 (15-60) | - | 2 (164) | 57 (50-65) | - | - | - | - | - | - | - |
| 30 - 40 | 12 (3190) | 43 (32-54) | 98 | 11 (4121) | 18 (11-24) | 97 | 20 (8132) | 29 (28-50) | 99 | 13 (3934) | 44 (36-53) | 96 | 8 (2745) | 39 (26-51) | 96 | 8 (2745) | 45 (35-55) | 96 |
| > 40 | 3 (523) | 39 (28-49) | - | 3 (685) | 16 (3-28) | - | 5 (1161) | 37 (29-45) | 88 | 2 (573) | 47 (43-51) | - | 1 (193) | 22 (19-25) | - | 1 (193) | 43 (27-59) | - |
| GBD Income Region³ | | p<0.01* | | | p=0.12 | | | p=0.82 | | | p=0.98 | | | p<0.01* | | | p<0.01* | |
| High-Income 'Super Region' | 35 (8031) | 43 (37-48) | 97 | 22 (9429) | 17 (13-21) | 98 | 42 (17151) | 38 (32-44) | 99 | 26 (9882) | 43 (38-48) | 96 | 15 (7142) | 38 (31-46) | 98 | 15 (6464) | 44 (40-49) | 98 |
| Other 'Super-Regions' | 3 (447) | 27 (23-31) | - | 3 (511) | 10 (4-17) | - | 6 (1173) | 36 (21-52) | 97 | 5 (1148) | 44 (20-67) | 99 | 2 (362) | 40 (32-47) | - | 2 (500) | 58 (50-67) | - |

Notes: ¹Average age of sample not reported by all studies; ²Europe includes Israel; ³GBD= Global Burden of Disease Regions as defined by the World Health Organization; ⁴One study excluded due to zero participants reporting experience of sexual abuse

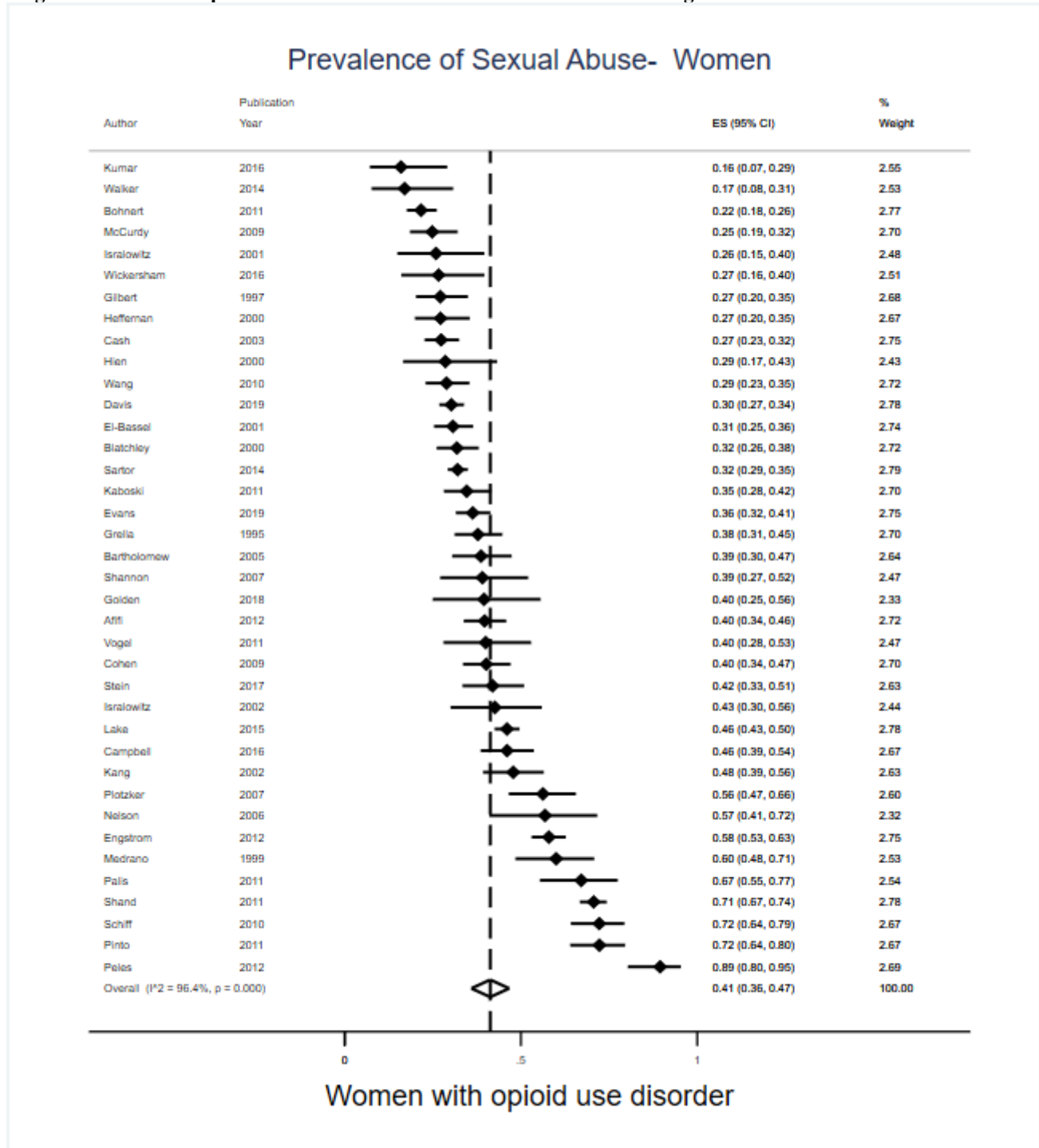
eTable 7.3: Pooled prevalence estimates for each type of childhood maltreatment in people with opioid use disorder stratified by other study-level characteristics

| Strata | Sexual Abuse (Women) | | | Sexual Abuse (Men) | | | Physical Abuse | | | Emotional Abuse | | | Physical Neglect | | | Emotional Neglect | | |
|---|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² | Study (k) (Total N) | Est. (95%CI) p-value | I ² |
| Pooled estimates from current review | 38 (8478) | 41 (36-47) | 96 | 25 (9940) | 16 (12-20) | 97 | 48 (18324) | 38 (33-44) | 99 | 31 (11030) | 43 (38-49) | 97 | 17 (7504) | 38 (30-45) | 96 | 17 (6964) | 42 (32-51) | 99 |
| Language of publication | | - | | p<0.01* | | | p=0.61 | | | p=0.97 | | | p<0.01* | | | p<0.01* | | |
| English | 38 (8478) | 41 (36-47) | 96 | 23 (9734) | 17 (13-21) | 98 | 44 (17903) | 39 (33-44) | 99 | 28 (10739) | 43 (38-49) | 97 | 16 (7354) | 40 (32-47) | 98 | 16 (6814) | 44 (34-53) | 98 |
| Non-English | - | - | - | 2 (206) | 5 (2-8) | - | 4 (421) | 33 (12-54) | 96 | 3 (291) | 44 (7-81) | - | 1 (150) | 30 (20-39) | - | 1 (150) | 7 (4-13) | - |
| Year of Publication | | p=0.14 | | p=0.02* | | | p=0.72 | | | p=0.68 | | | p=0.27 | | | p<0.01* | | |
| 1990 - 2010 | 17 (2484) | 41 (33-49) | 84 | 7 (1260) | 10 (4-15) | 93 | 18 (2957) | 38 (36-41) | 96 | 7 (1089) | 50 (37-63) | 95 | 3 (625) | 51 (23-79) | - | 1 (80) | 79 (68-87) | - |
| 2010 – 2020 | 21 (5996) | 44 (36-52) | 97 | 18 (8680) | 18 (15-23) | 98 | 30 (15367) | 30 (23-38) | 99 | 24 (9941) | 41 (35-47) | 97 | 14 (6879) | 34 (27-41) | 97 | 16 (6884) | 39 (29-49) | 99 |

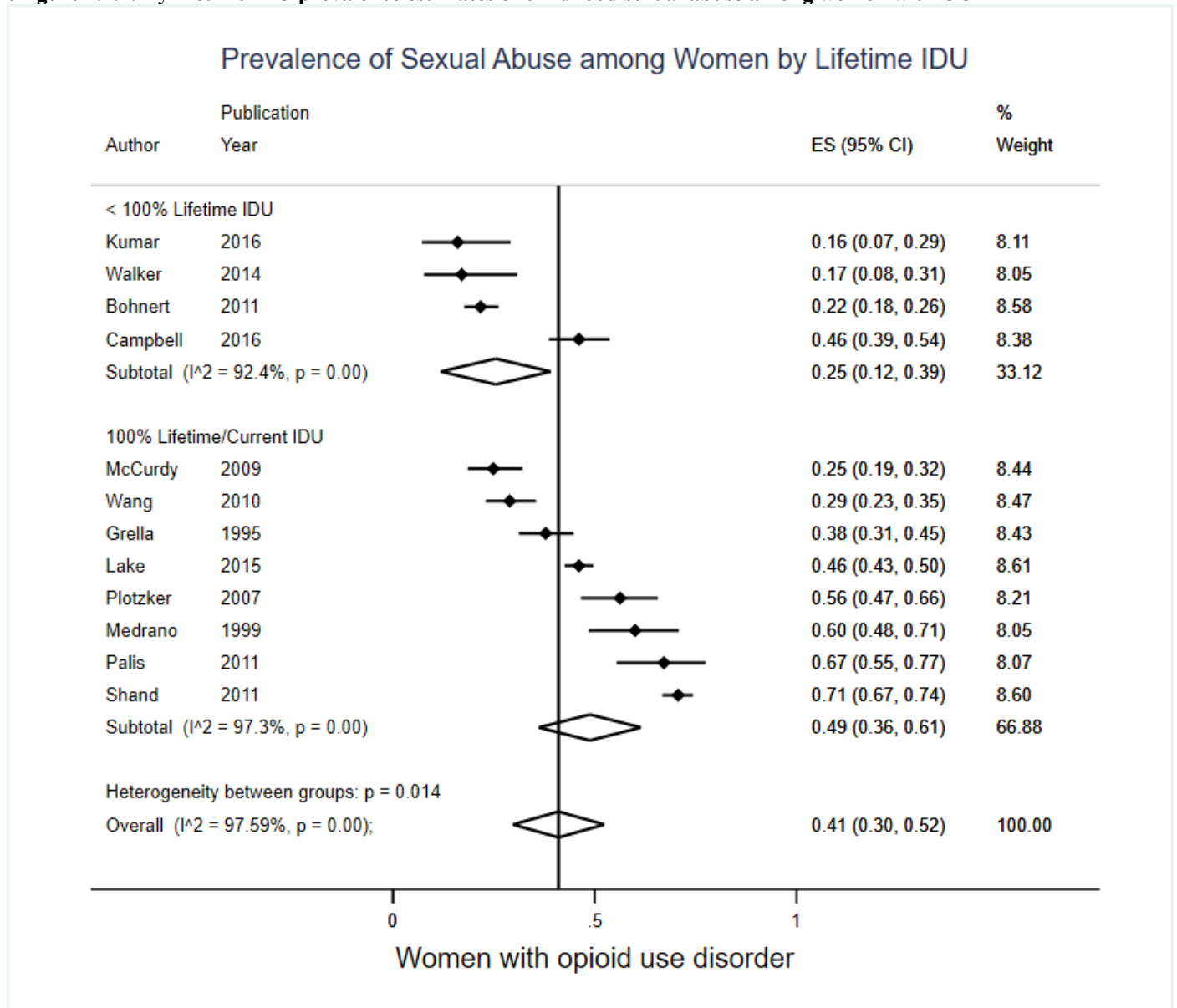
Notes: ¹One study full-text in English, but supplementary information required translation; ²Not all studies reported first year of sample recruitment

eAppendix 7.1: Childhood sexual abuse among women with opioid use disorder

eFigure 7.1.1: Overall prevalence estimate of childhood sexual abuse among women with OUD

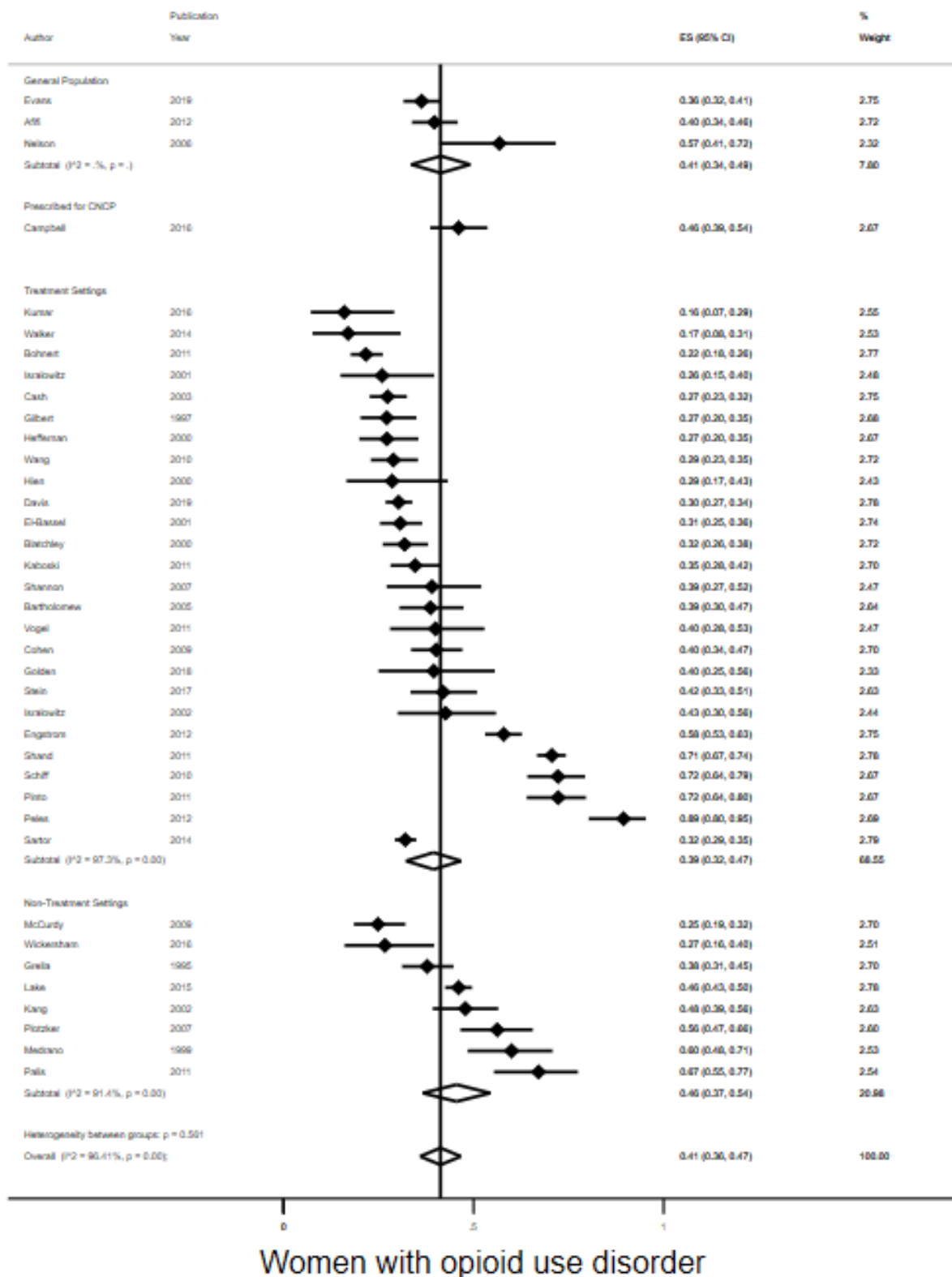


eFigure 7.1.2: By lifetime IDU prevalence estimates of childhood sexual abuse among women with OUD

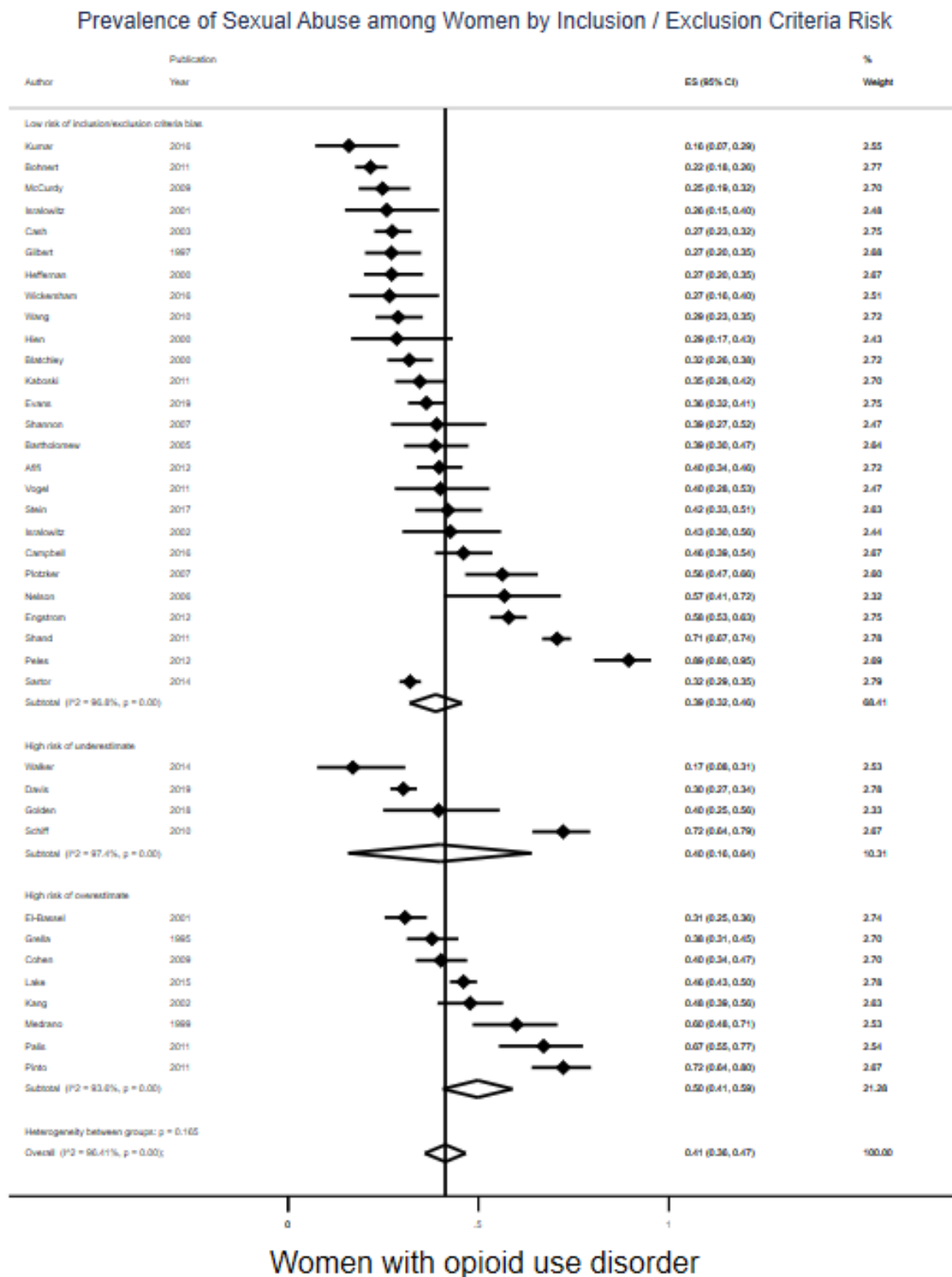


eFigure 7.1.3: By recruitment setting prevalence estimates of childhood sexual abuse among women with OUD

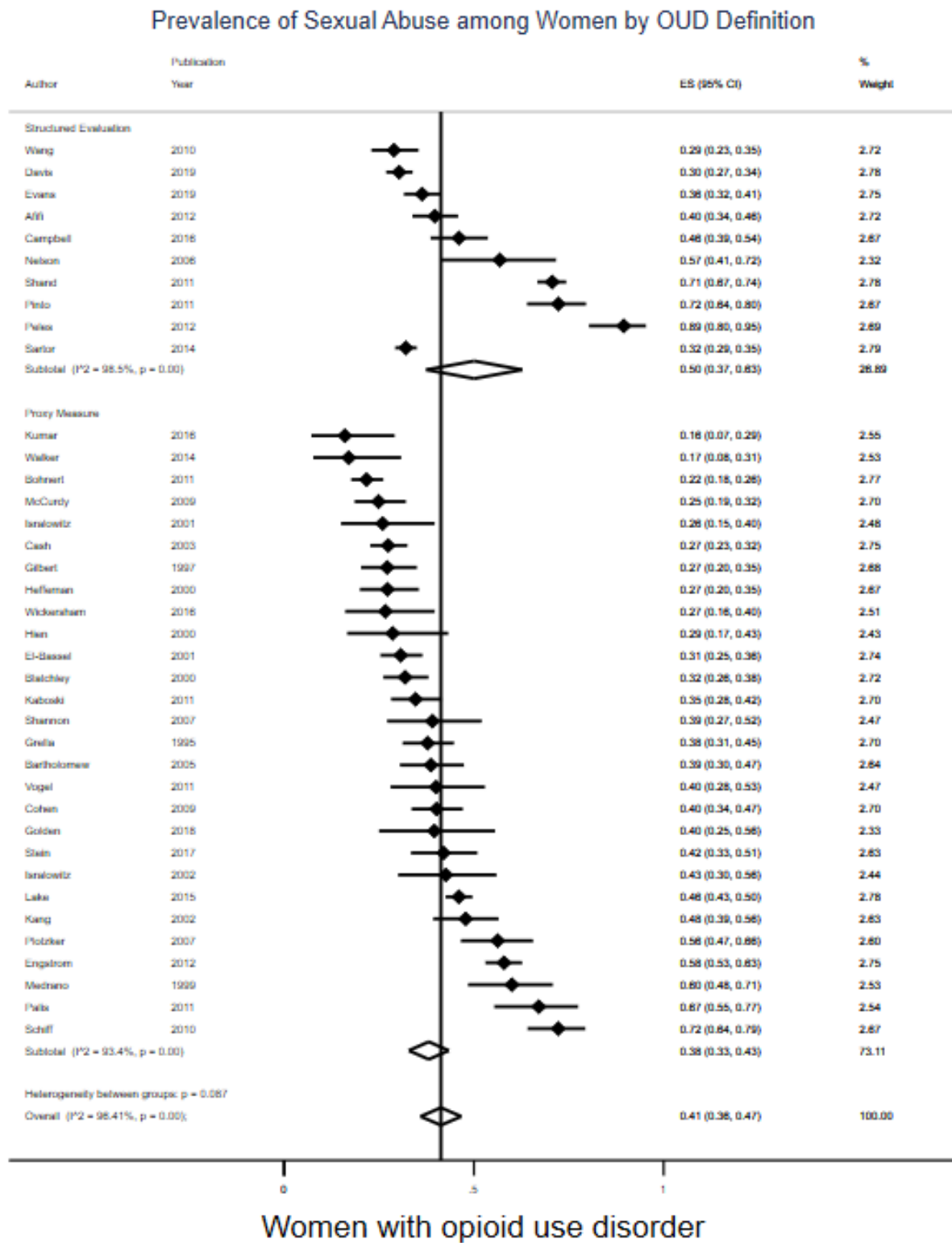
Prevalence of Sexual Abuse among Women by Recruitment Setting



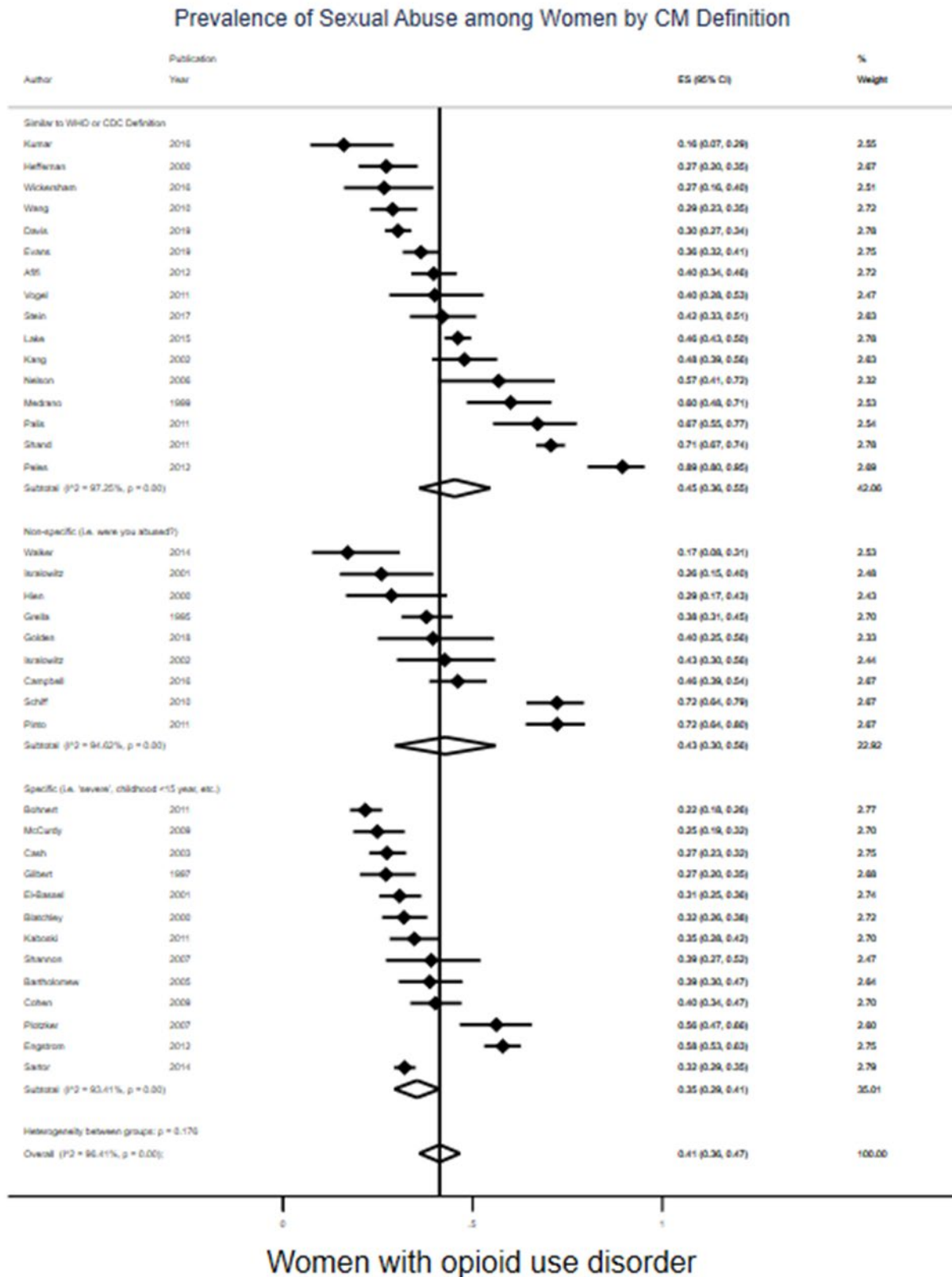
eFigure 7.1.4: By inclusion/exclusion criteria prevalence estimates of childhood sexual abuse among women with OUD



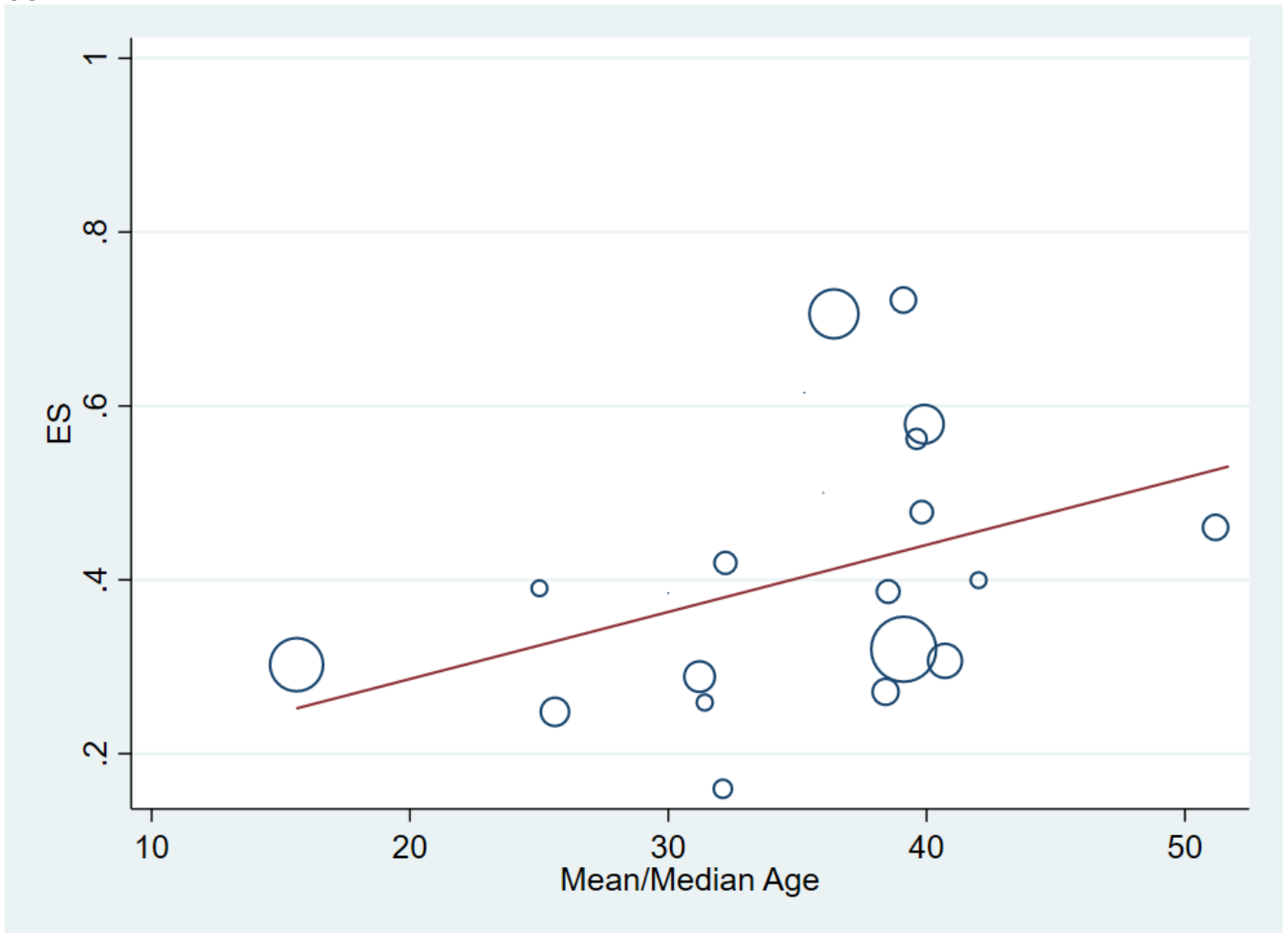
eFigure 7.1.5: By OUD definition prevalence estimates of childhood sexual abuse among women with OUD



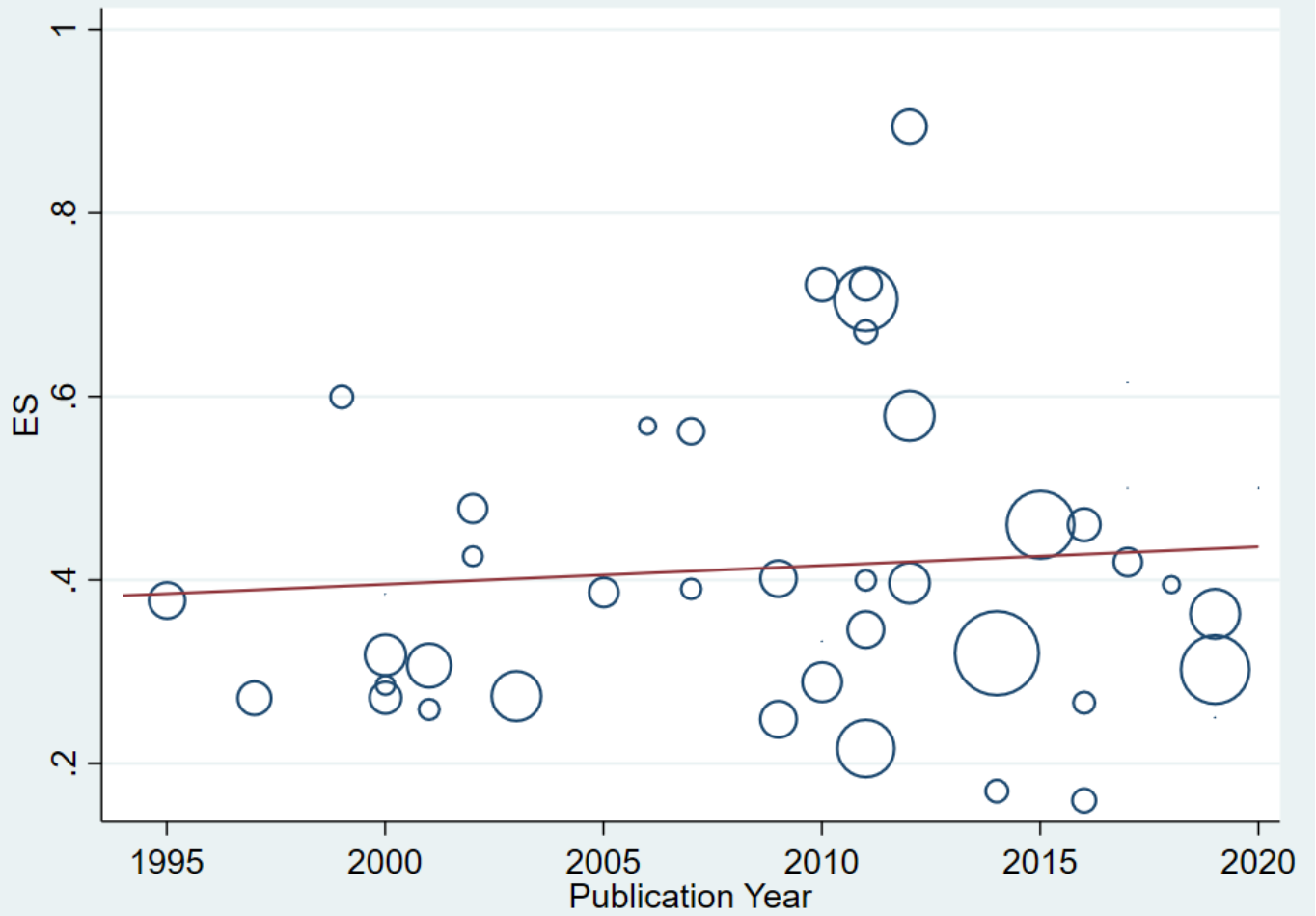
eFigure 7.1.6: By CM definition prevalence estimates of childhood sexual abuse among women with OUD



eFigure 7.1.7: Meta-regression by mean/median sample age for prevalence of childhood sexual abuse among women with OUD

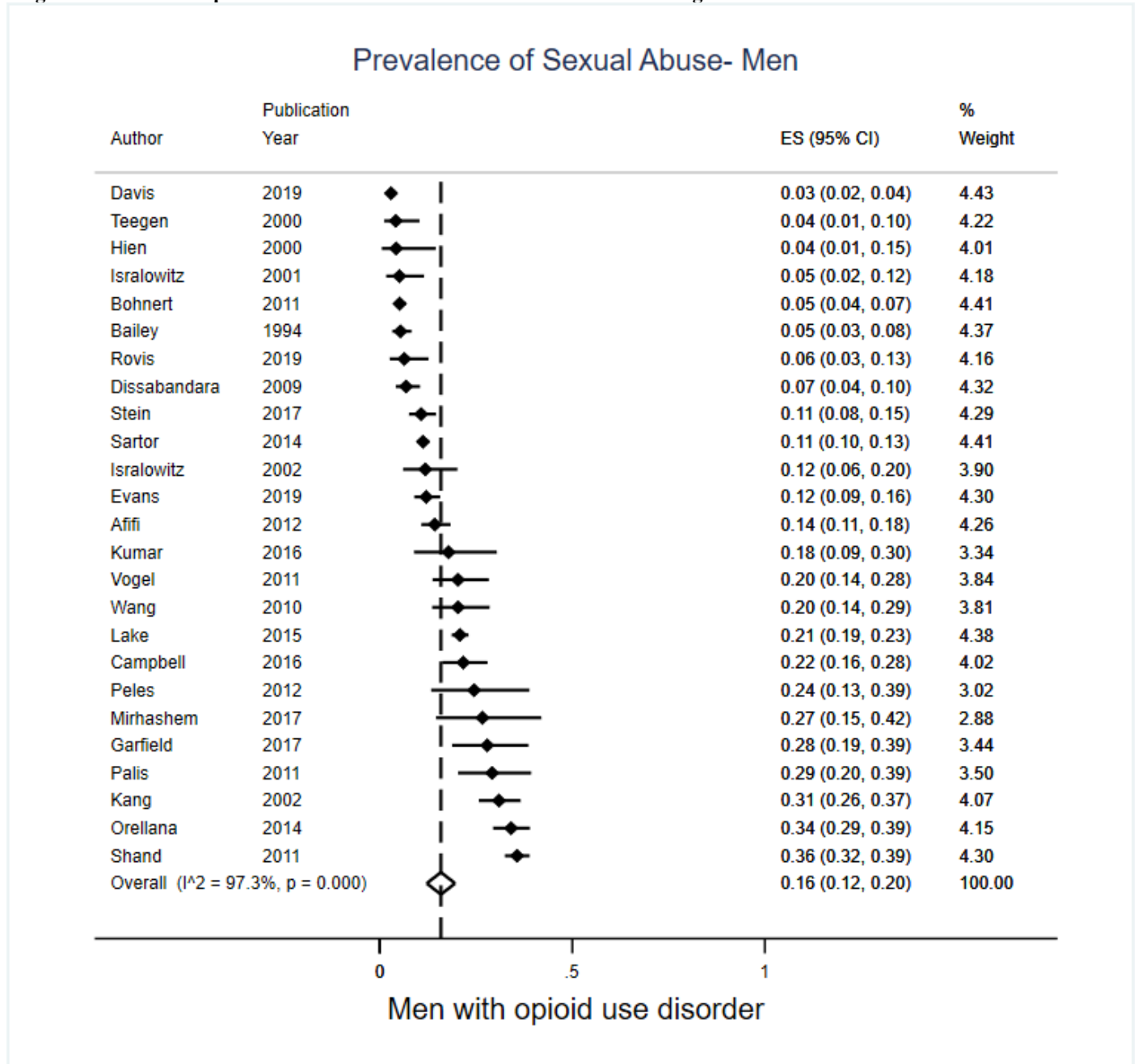


eFigure 7.1.8: Meta-regression by publication year for prevalence of childhood sexual abuse among women with OUD

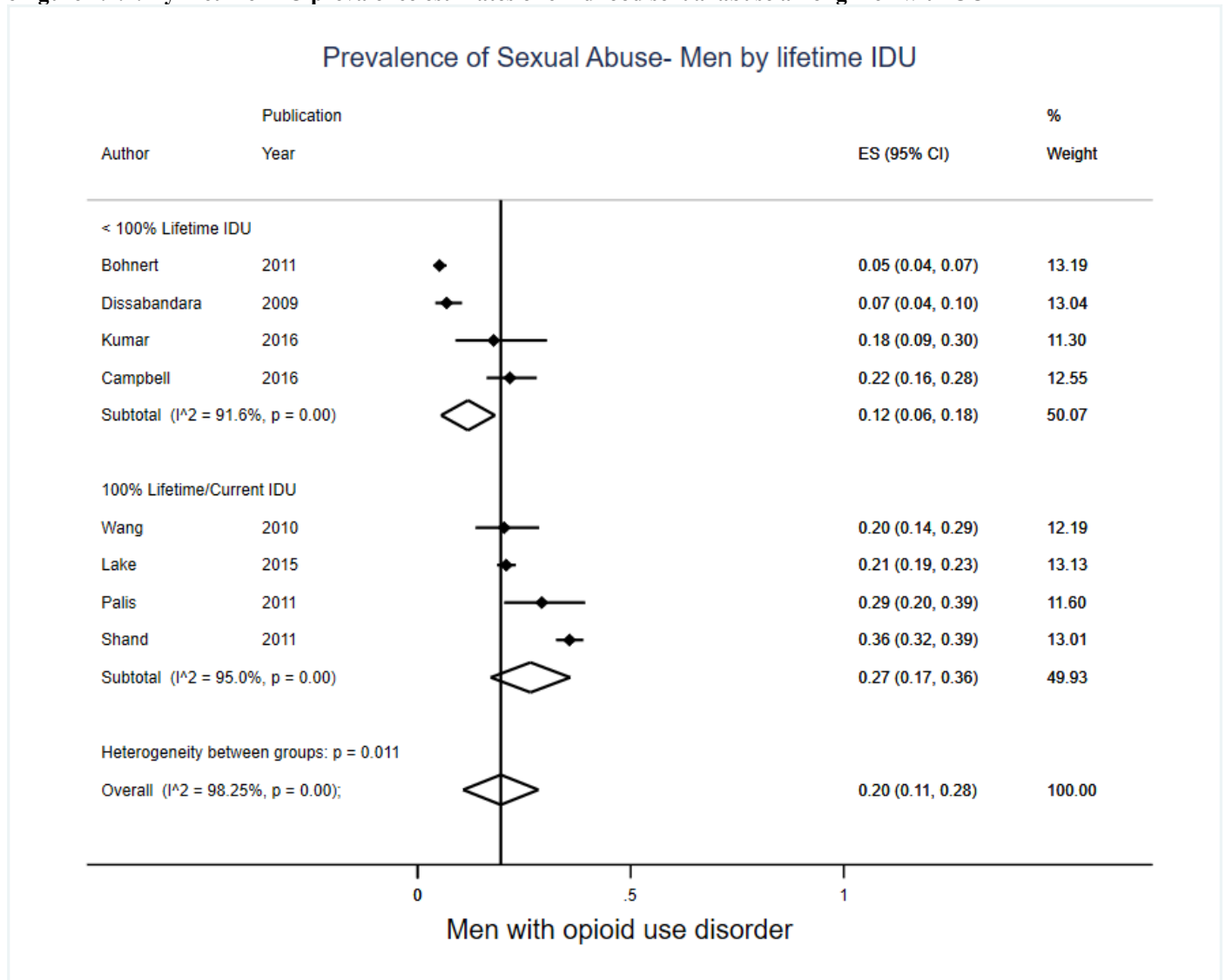


eAppendix 7.2: Childhood sexual abuse among men with opioid use disorder

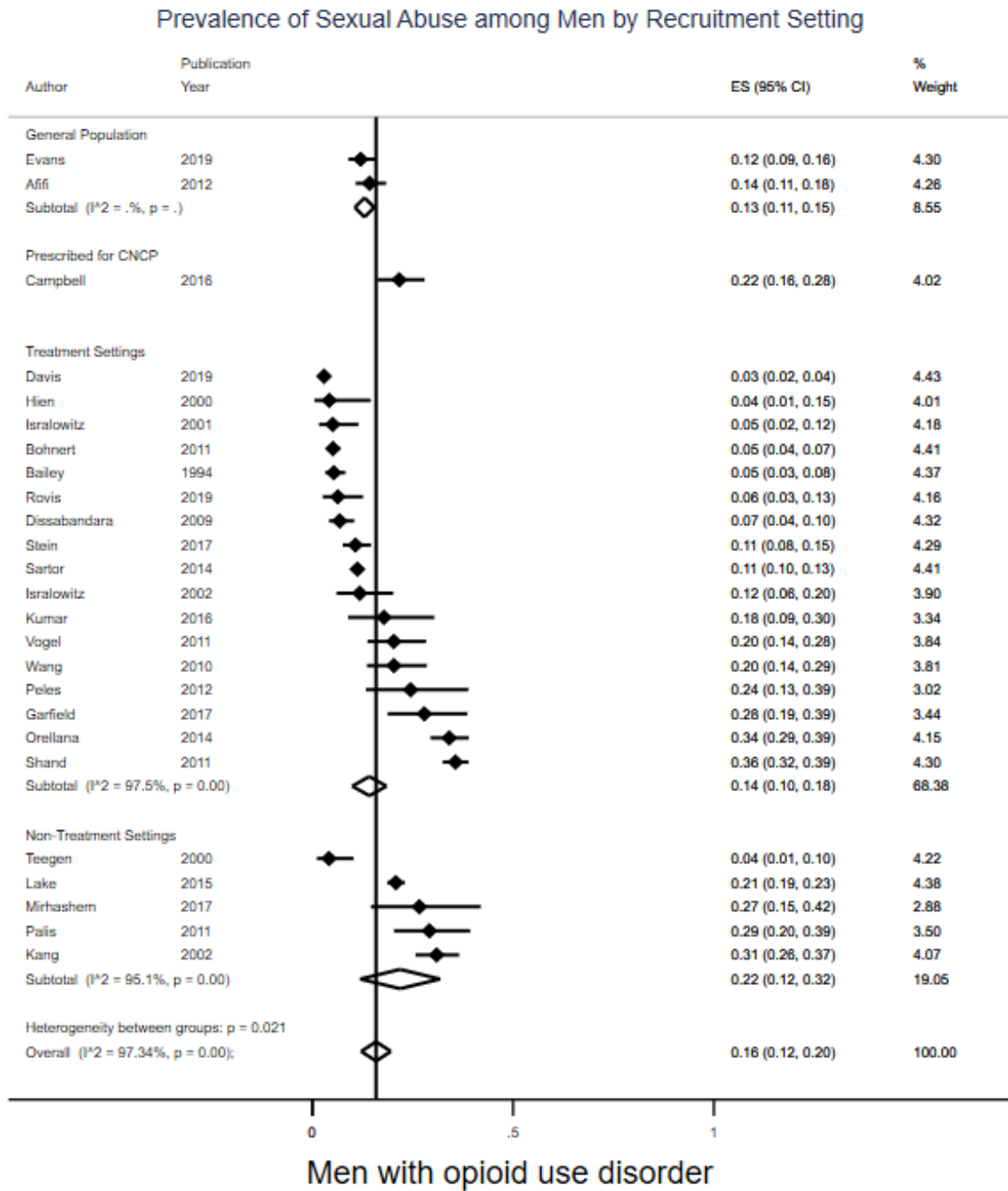
eFigure 7.2.1: Overall prevalence estimate of childhood sexual abuse among men with OUD



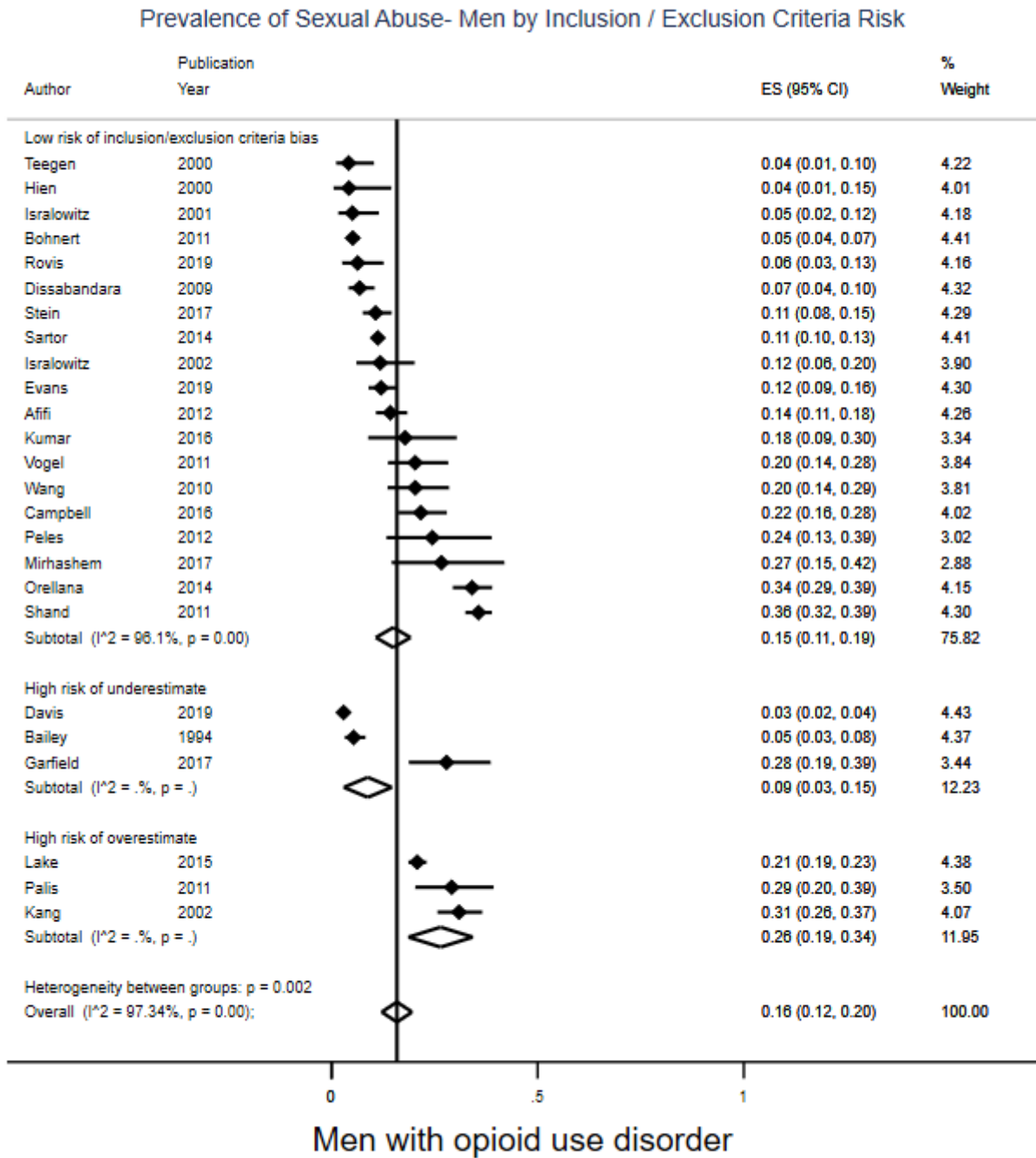
eFigure 7.2.2: By lifetime IDU prevalence estimates of childhood sexual abuse among men with OUD



eFigure 7.2.3: By recruitment setting prevalence estimates of childhood sexual abuse among men with OUD

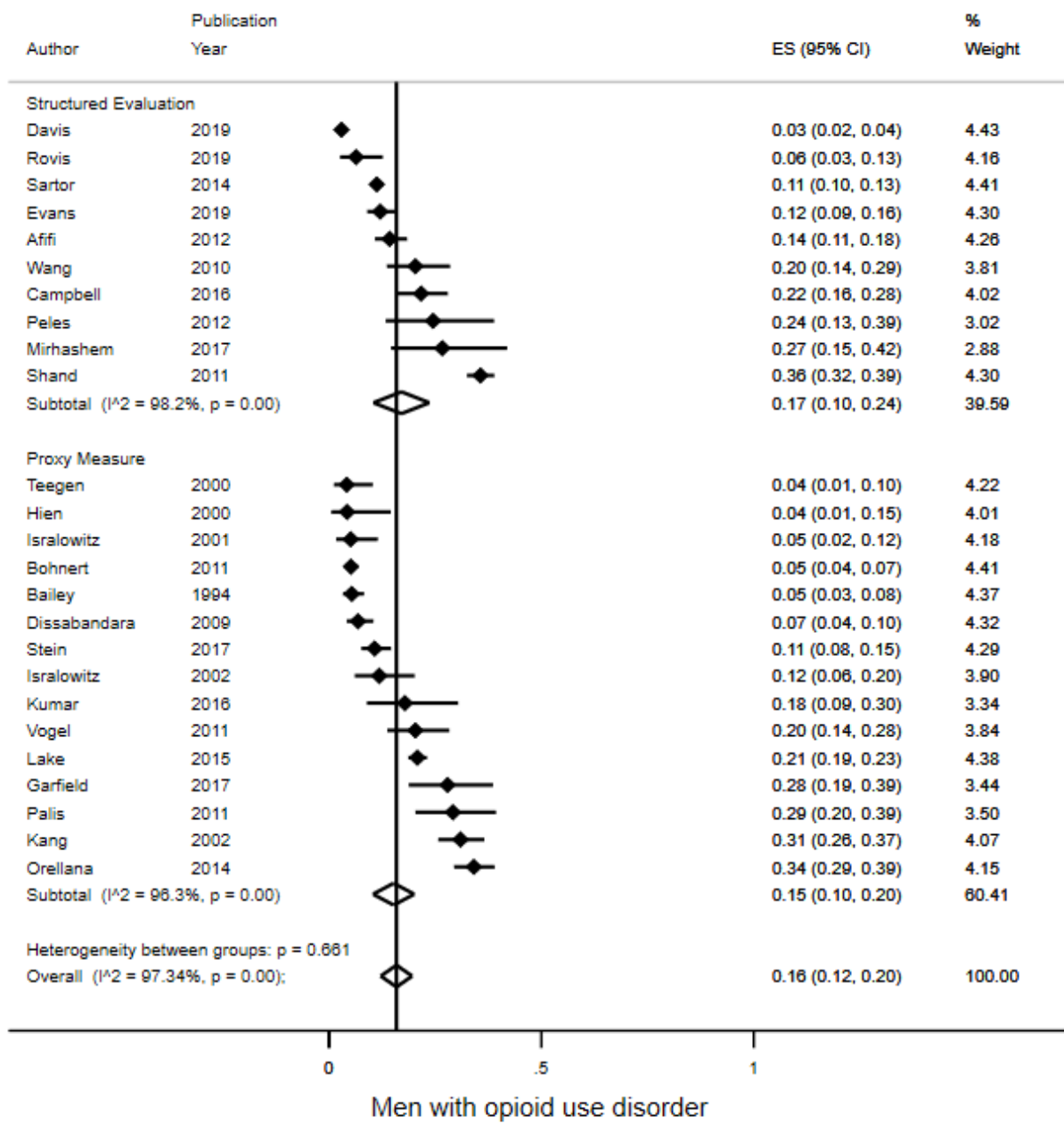


eFigure 7.2.4: By inclusion/exclusion criteria prevalence estimates of childhood sexual abuse among men with OUD



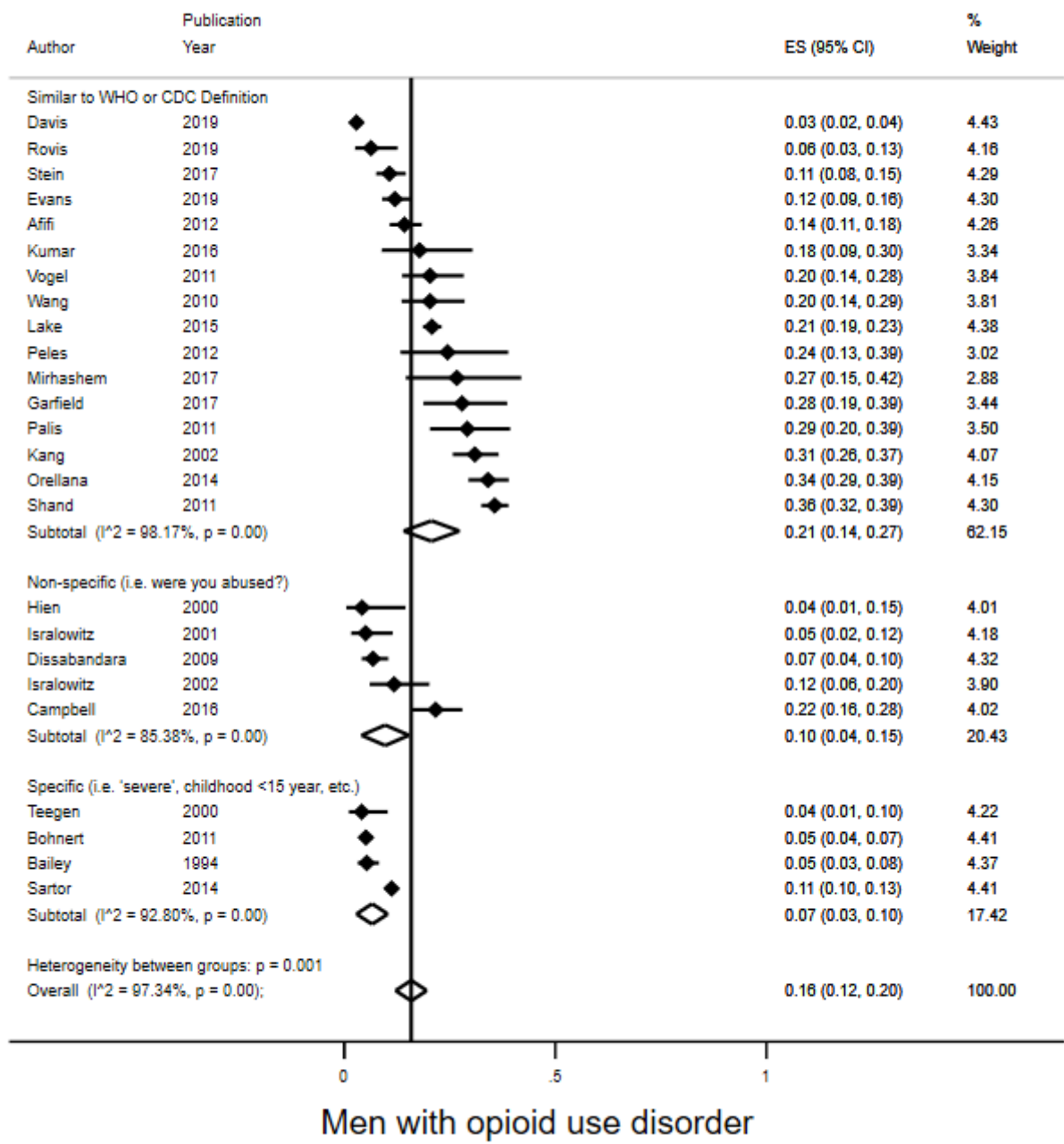
eFigure 7.2.5: By OUD definition prevalence estimates of childhood sexual abuse among men with OUD

Prevalence of Sexual Abuse among men by OUD definition

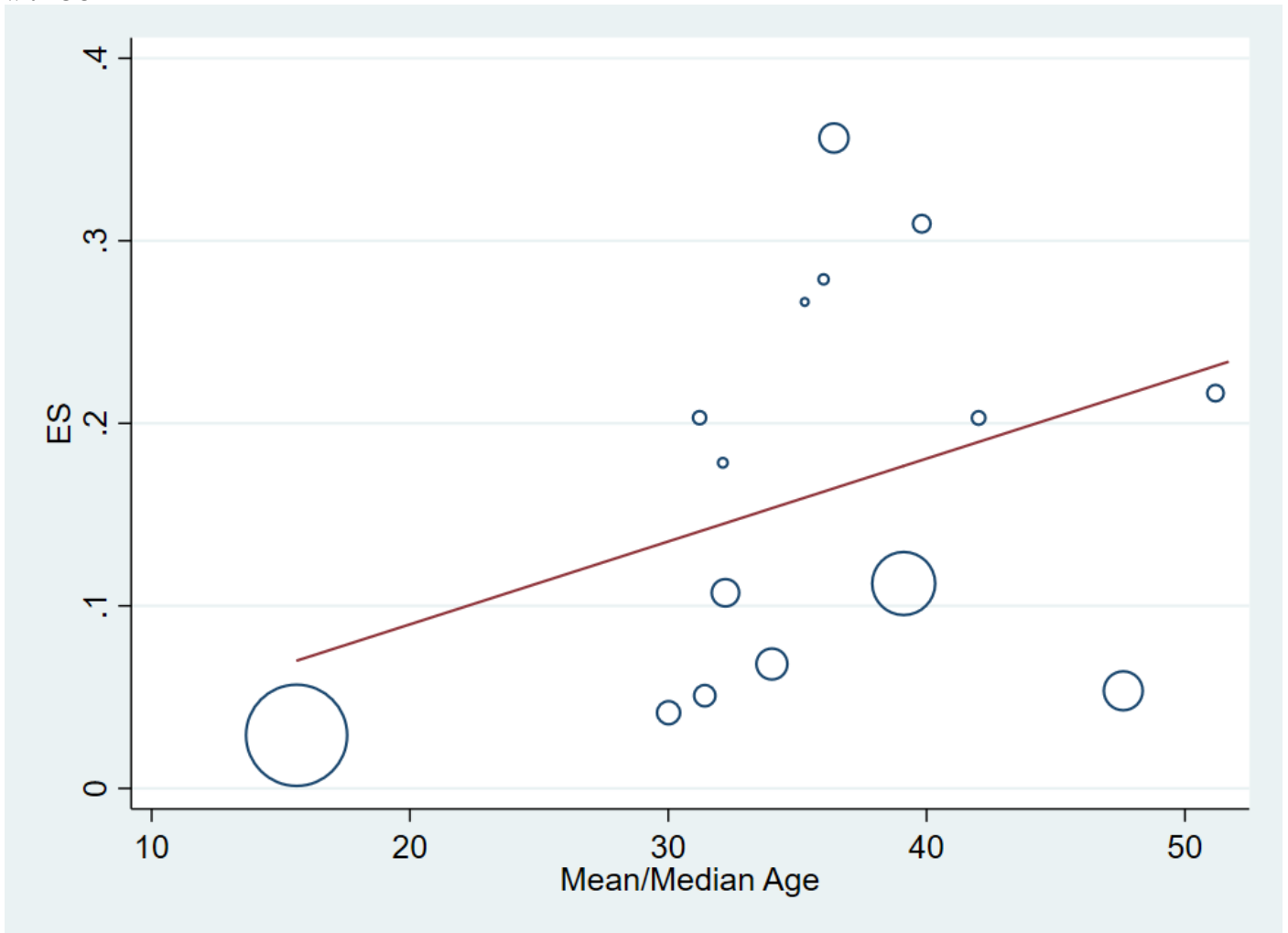


eFigure 7.2.6: By childhood maltreatment definition prevalence estimates of childhood sexual abuse among men with OUD

Prevalence of Sexual Abuse among Men by CM definition



eFigure 7.2.7: Meta-regression by mean/median sample age for prevalence estimates of childhood sexual abuse among men with OUD

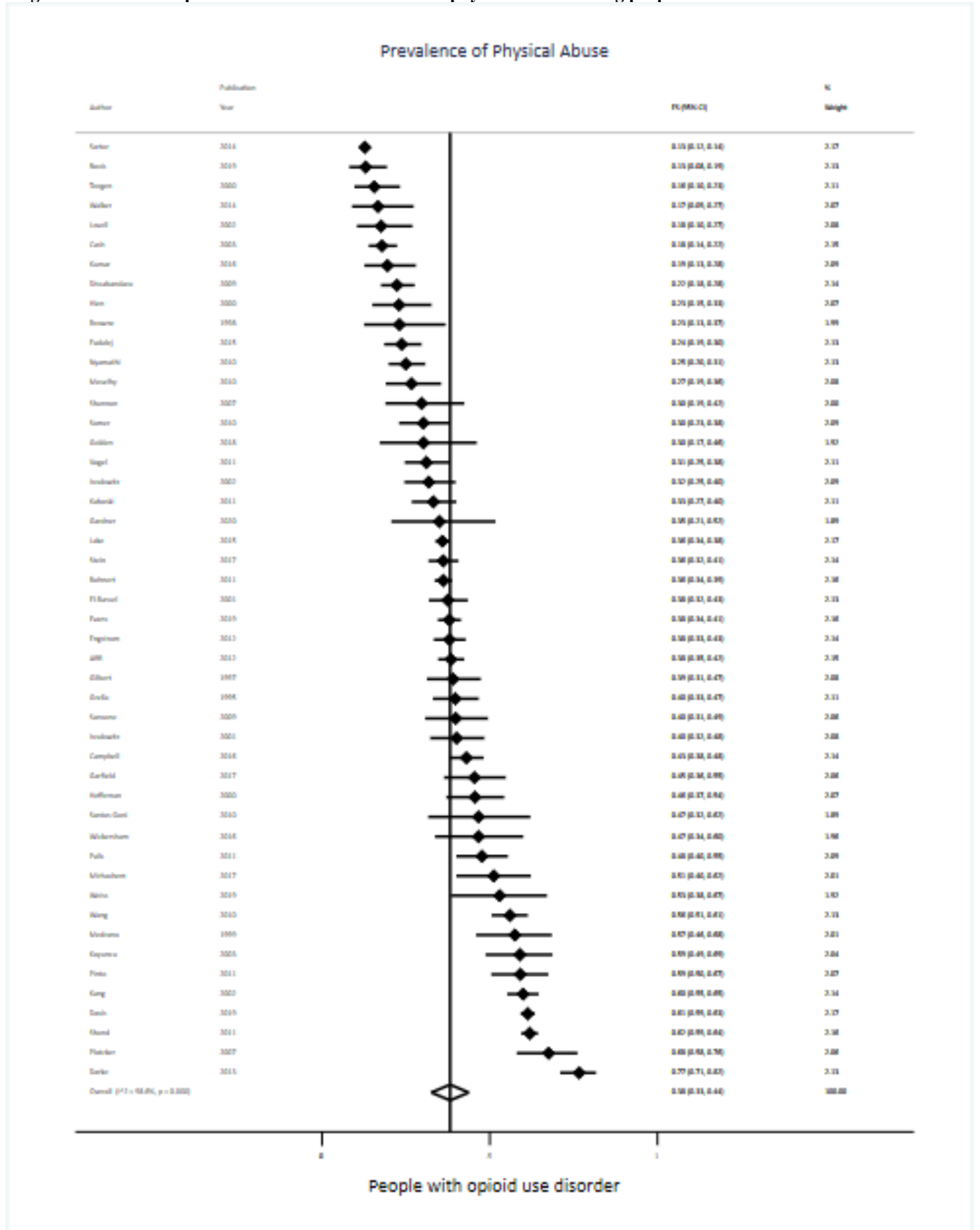


eFigure 7.2.8: Meta-regression by publication year for prevalence estimates of childhood sexual abuse among men with OUD

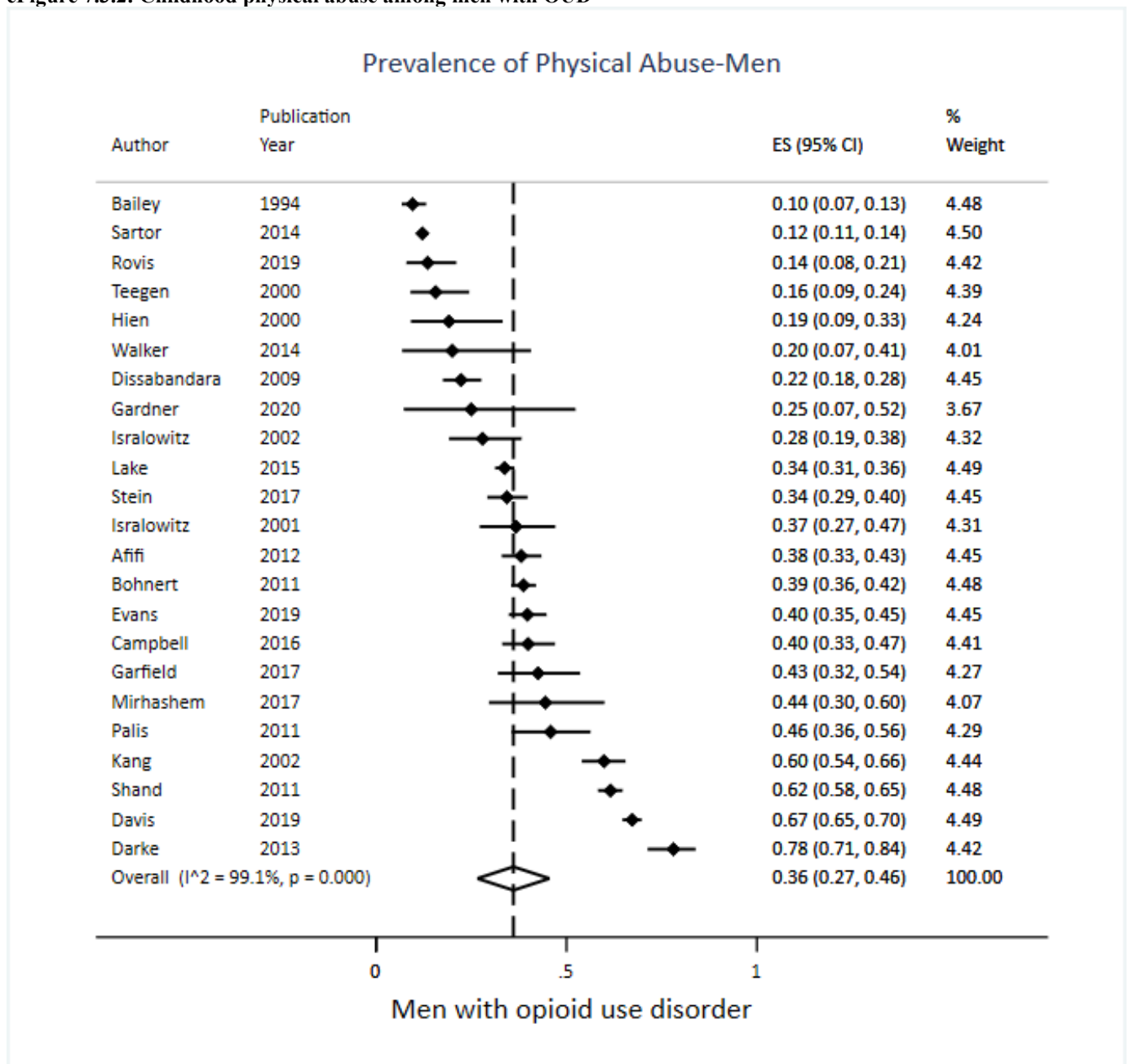


eAppendix 7.3: Childhood physical abuse among people with opioid use disorder

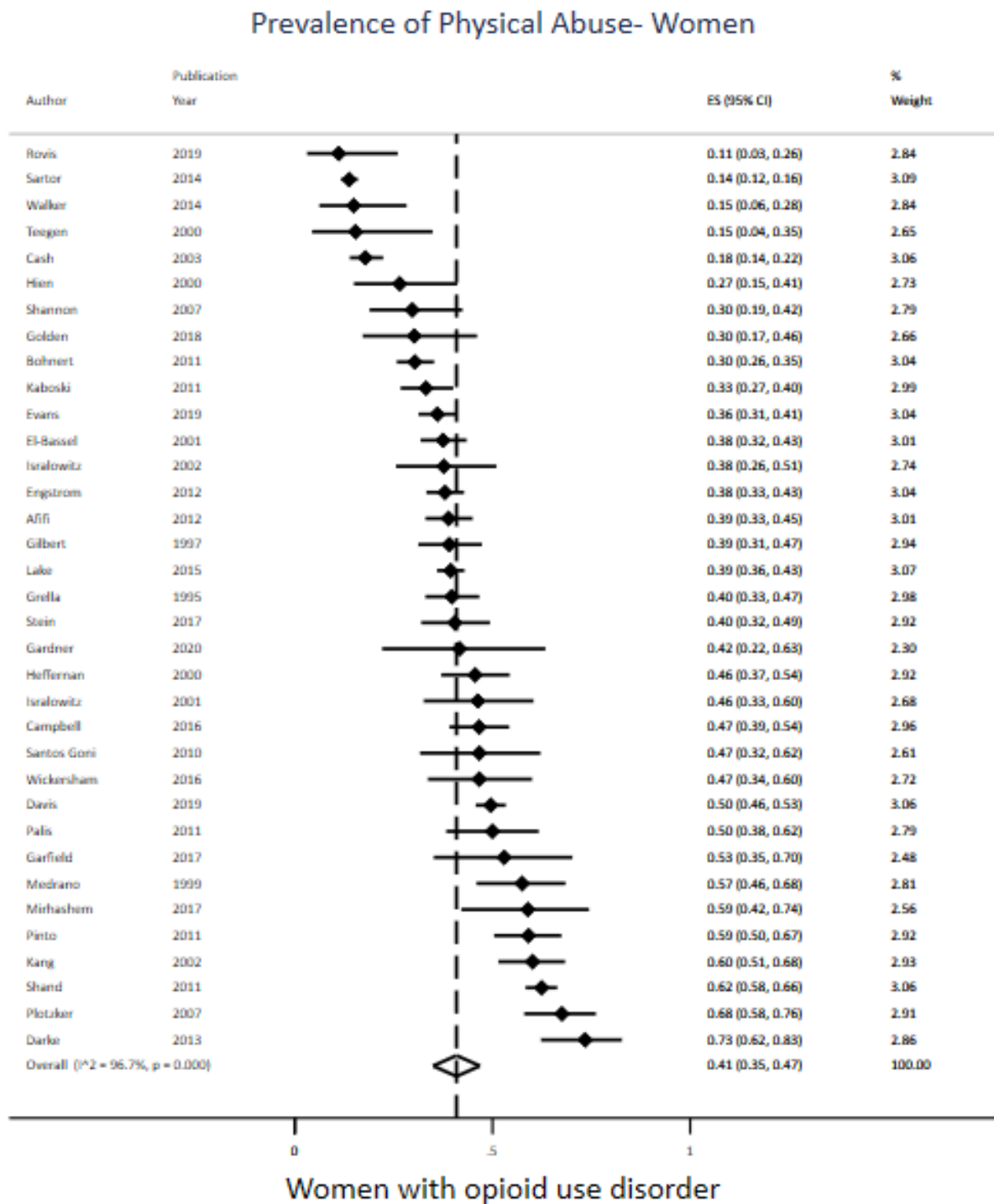
eFigure 7.3.1: Overall prevalence estimate of childhood physical abuse among people with OUD



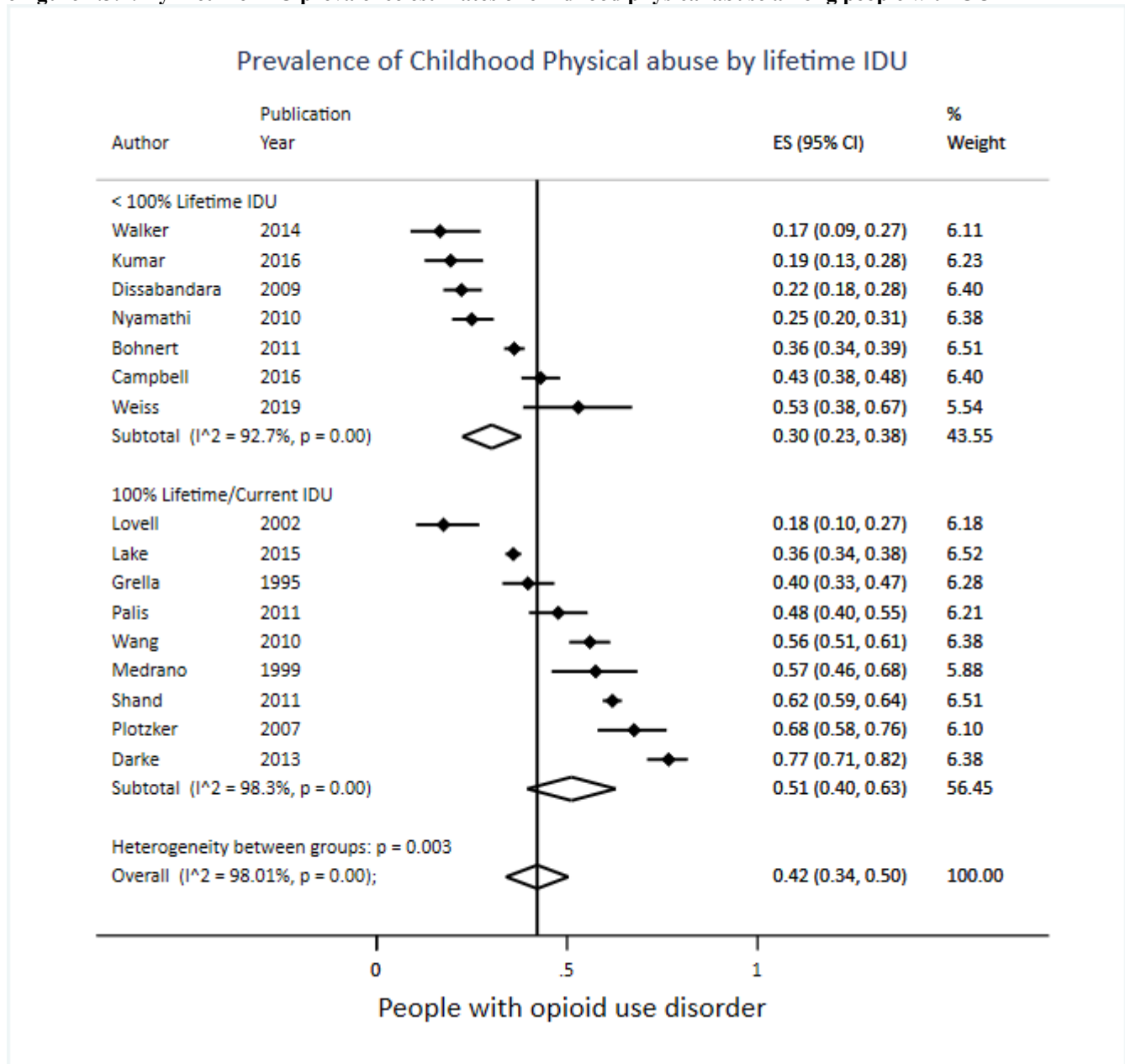
eFigure 7.3.2: Childhood physical abuse among men with OUD



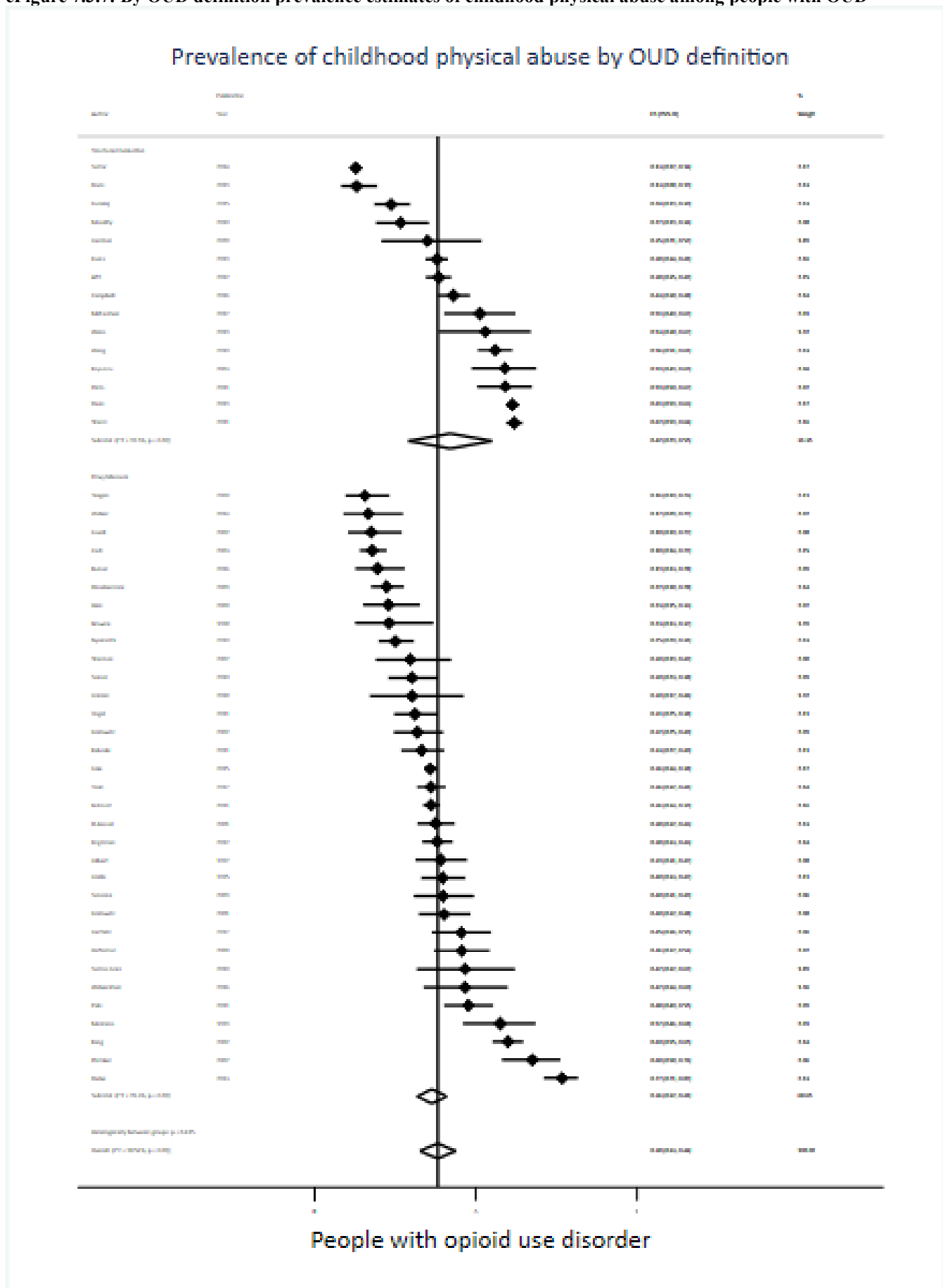
eFigure 7.3.3: Childhood physical abuse among women with OUD



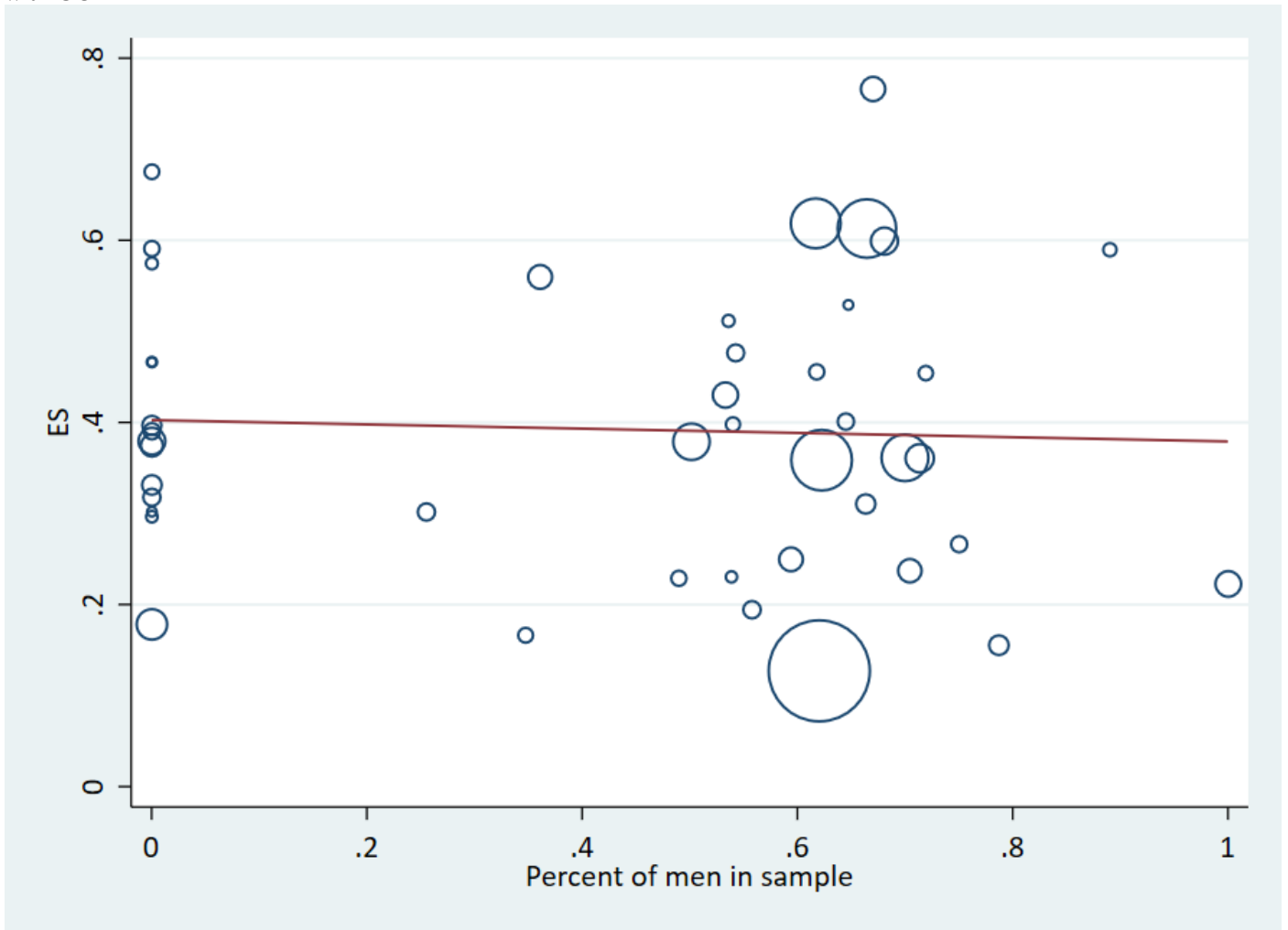
eFigure 7.3.4: By lifetime IDU prevalence estimates of childhood physical abuse among people with OUD



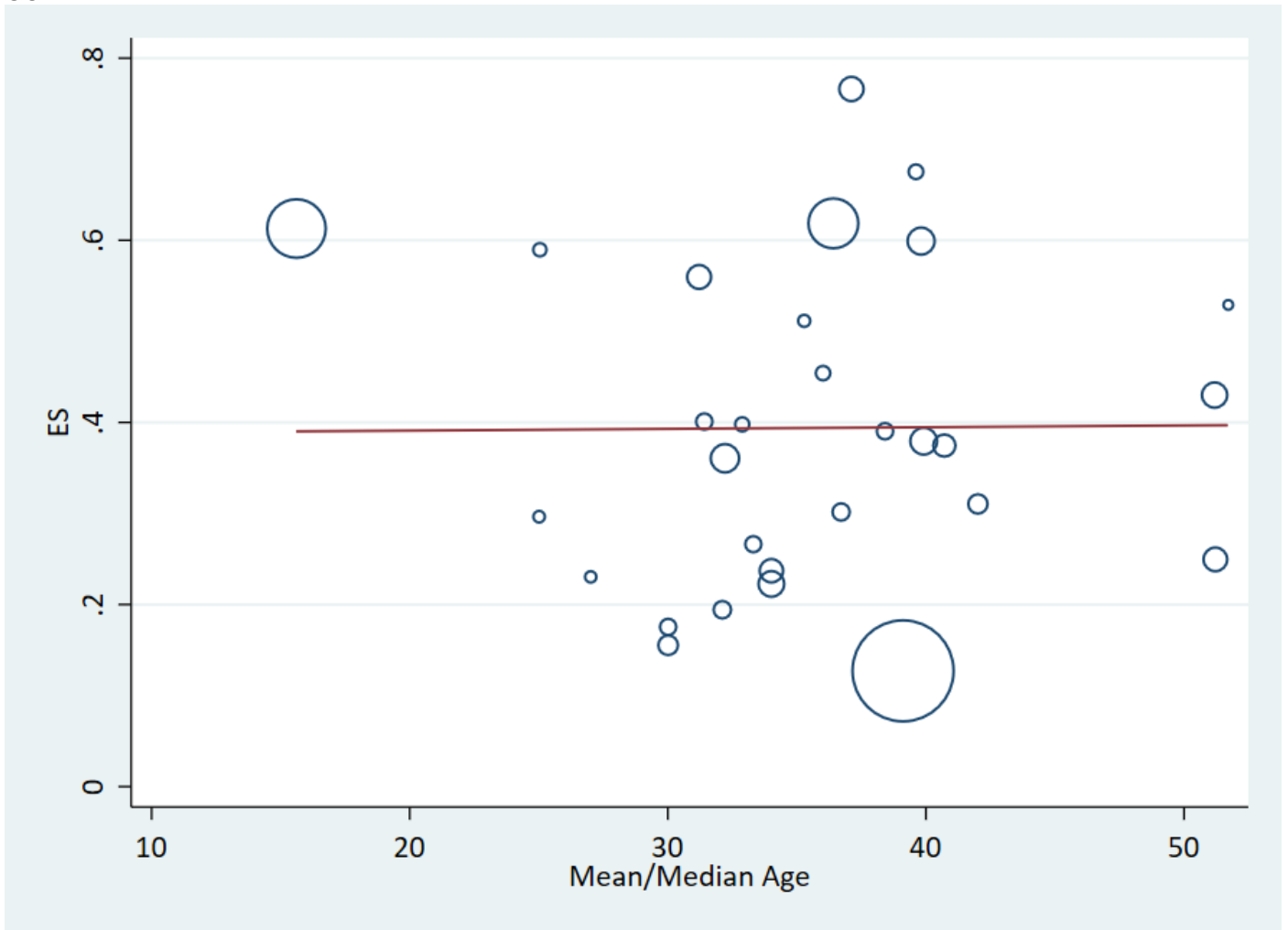
eFigure 7.3.7: By OUD definition prevalence estimates of childhood physical abuse among people with OUD



eFigure 7.3.9: Meta-regression by mean/median sample age for prevalence estimates of childhood sexual abuse among men with OUD



eFigure 7.3.10: Meta-regression by publication year for prevalence estimates of childhood sexual abuse among men with OUD

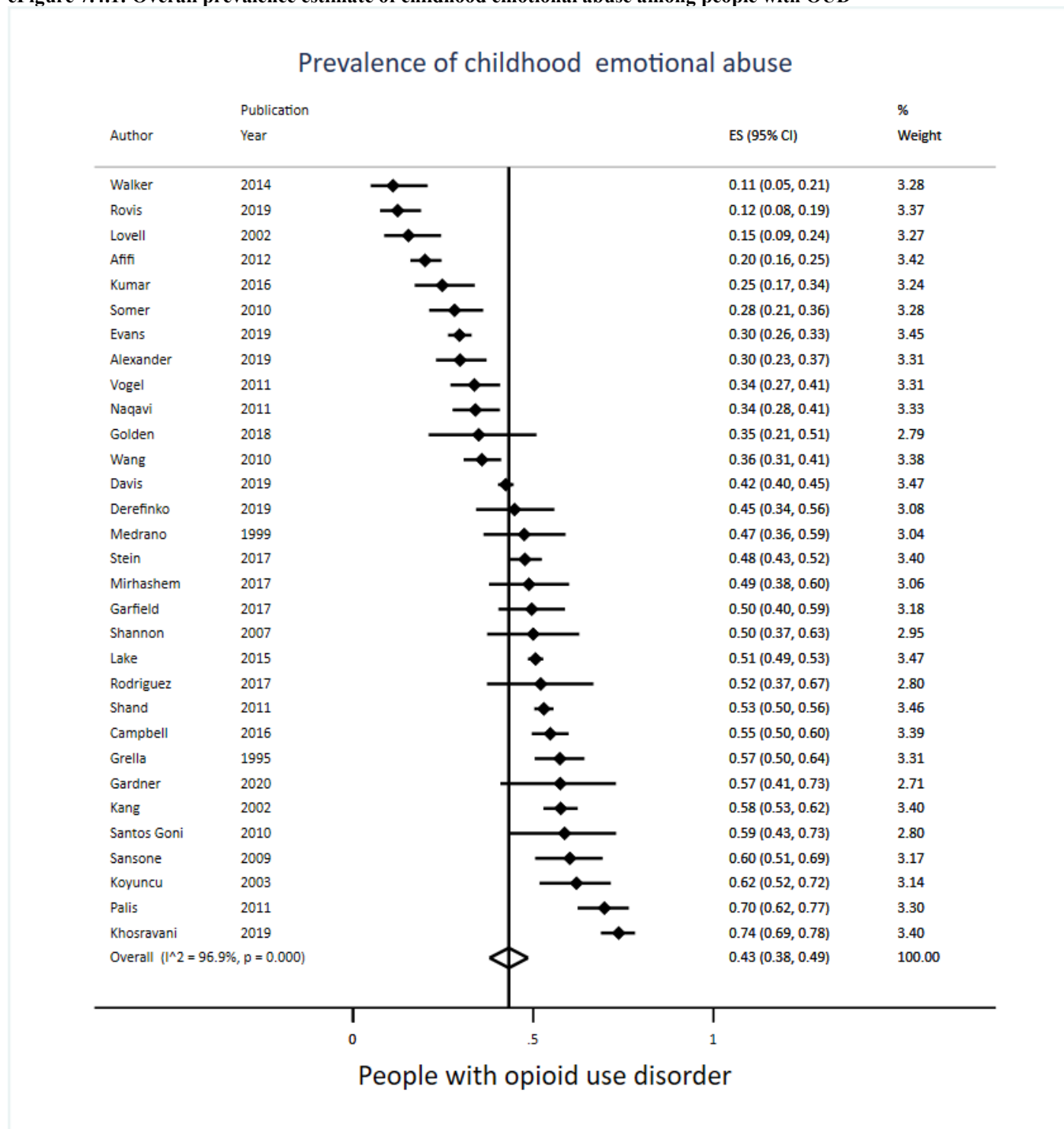


eFigure 7.3.11: Meta-regression by publication year for prevalence estimates of childhood sexual abuse among men with OUD



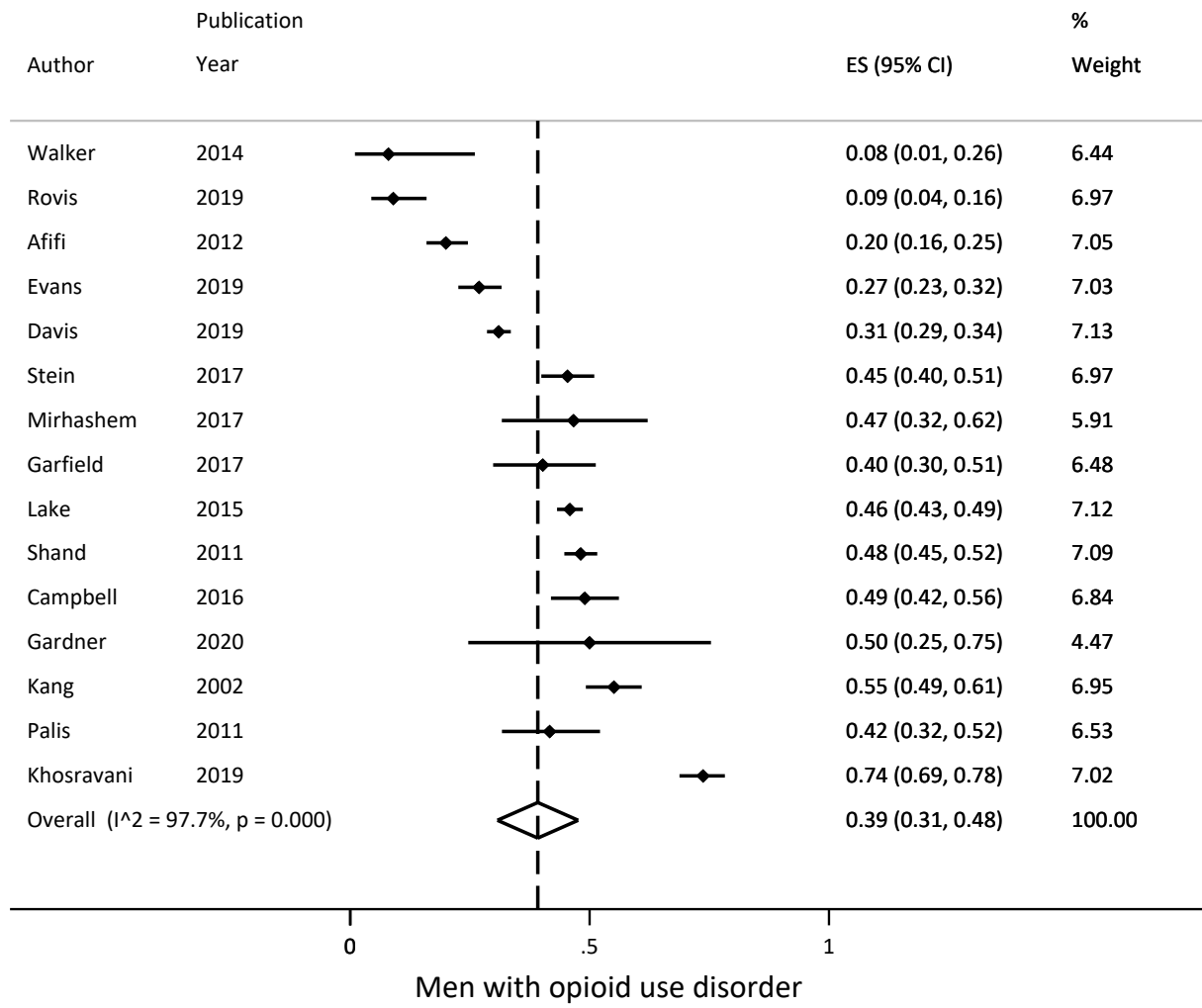
eAppendix 7.4: Childhood emotional abuse among people with opioid use disorder

eFigure 7.4.1: Overall prevalence estimate of childhood emotional abuse among people with OUD

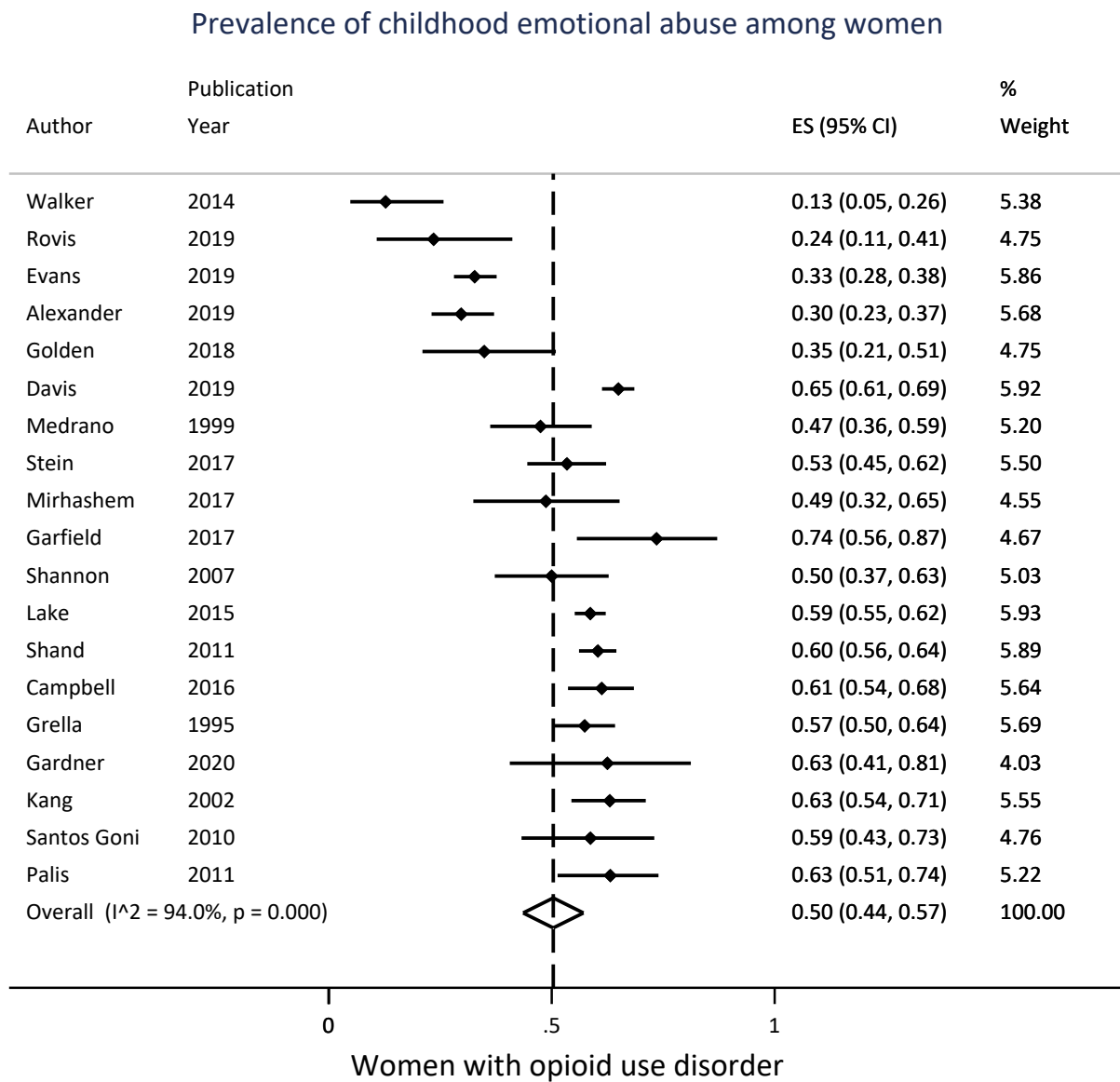


eFigure 7.4.2: Childhood emotional abuse among men with OUD

Prevalence of childhood emotional abuse among men

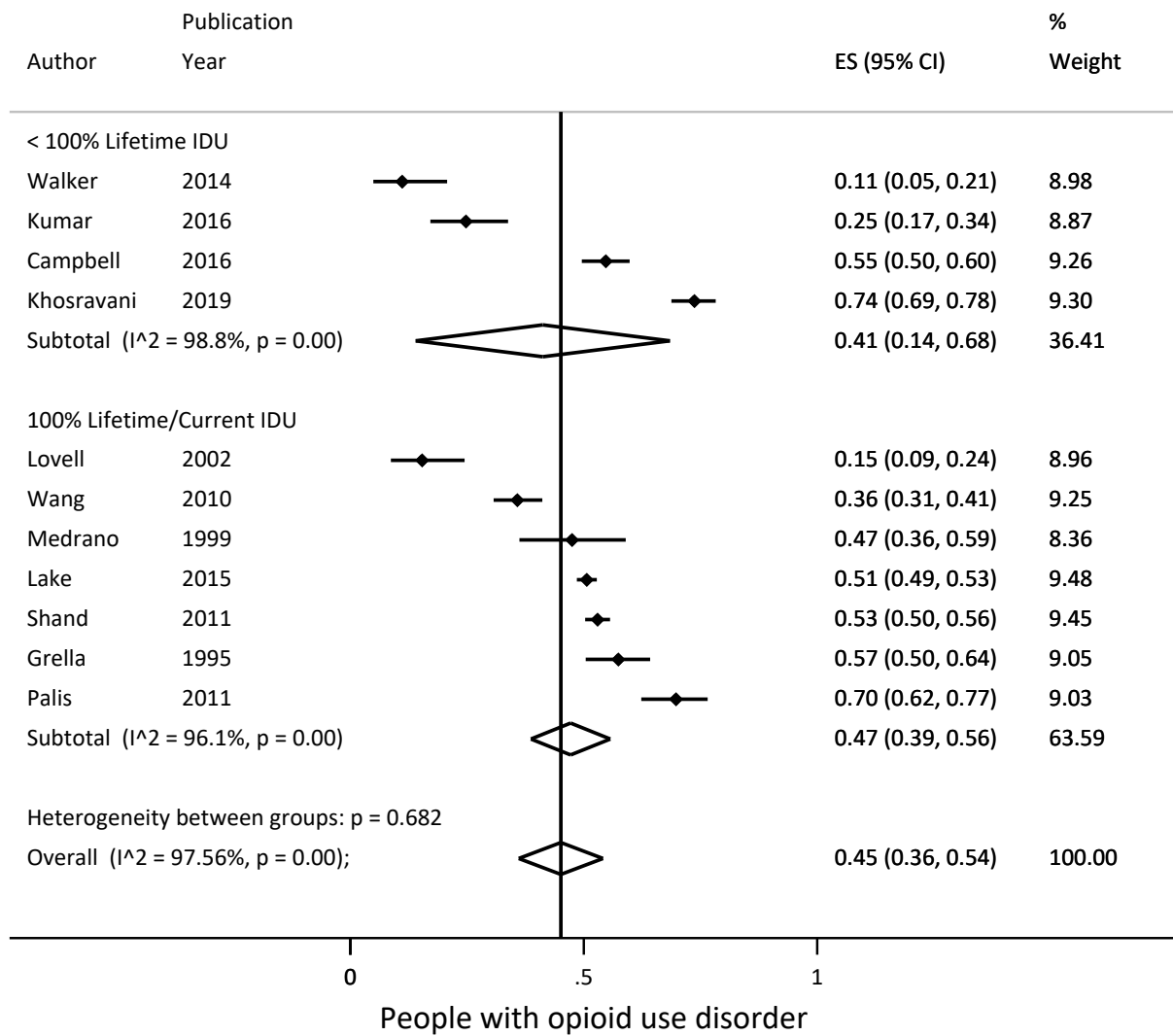


eFigure 7.4.3: Childhood emotional abuse among women with OUD



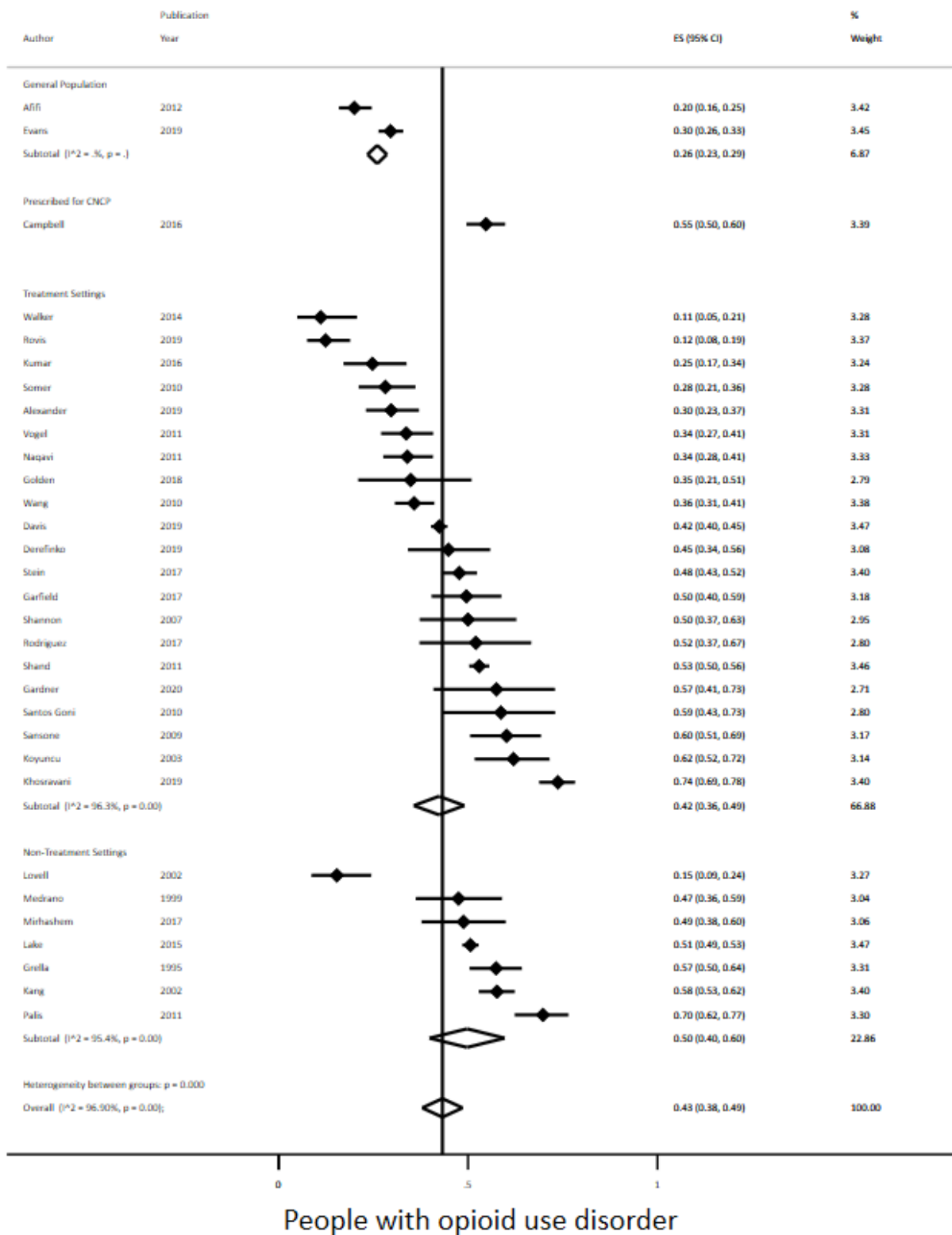
eFigure 7.4.4: By lifetime IDU prevalence estimates of childhood emotional abuse among people with OUD

Prevalence of childhood emotional abuse by lifetime IDU



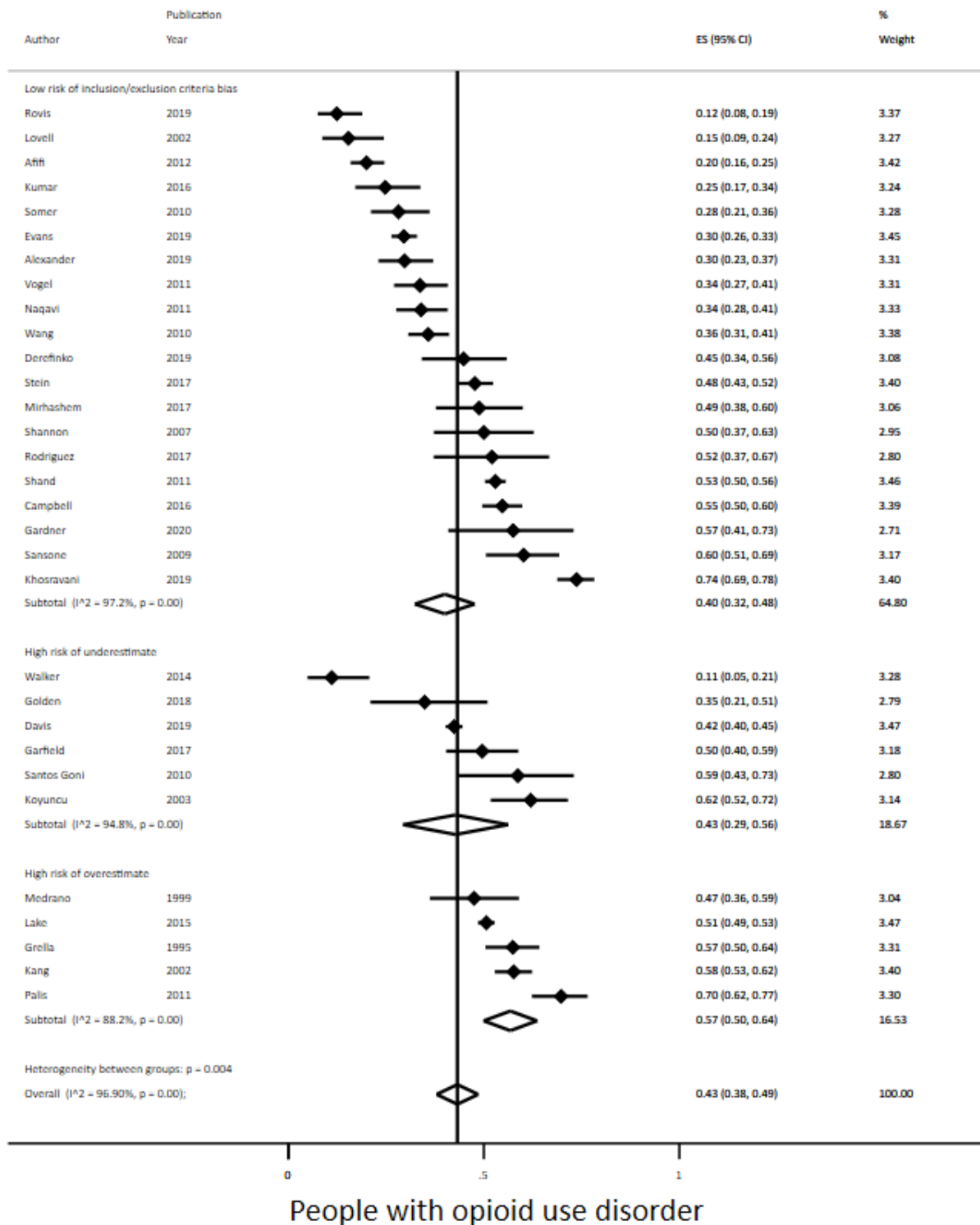
eFigure 7.4.5: By recruitment setting prevalence estimates of childhood emotional abuse among people with OUD

Prevalence of childhood emotional abuse by Recruitment Setting



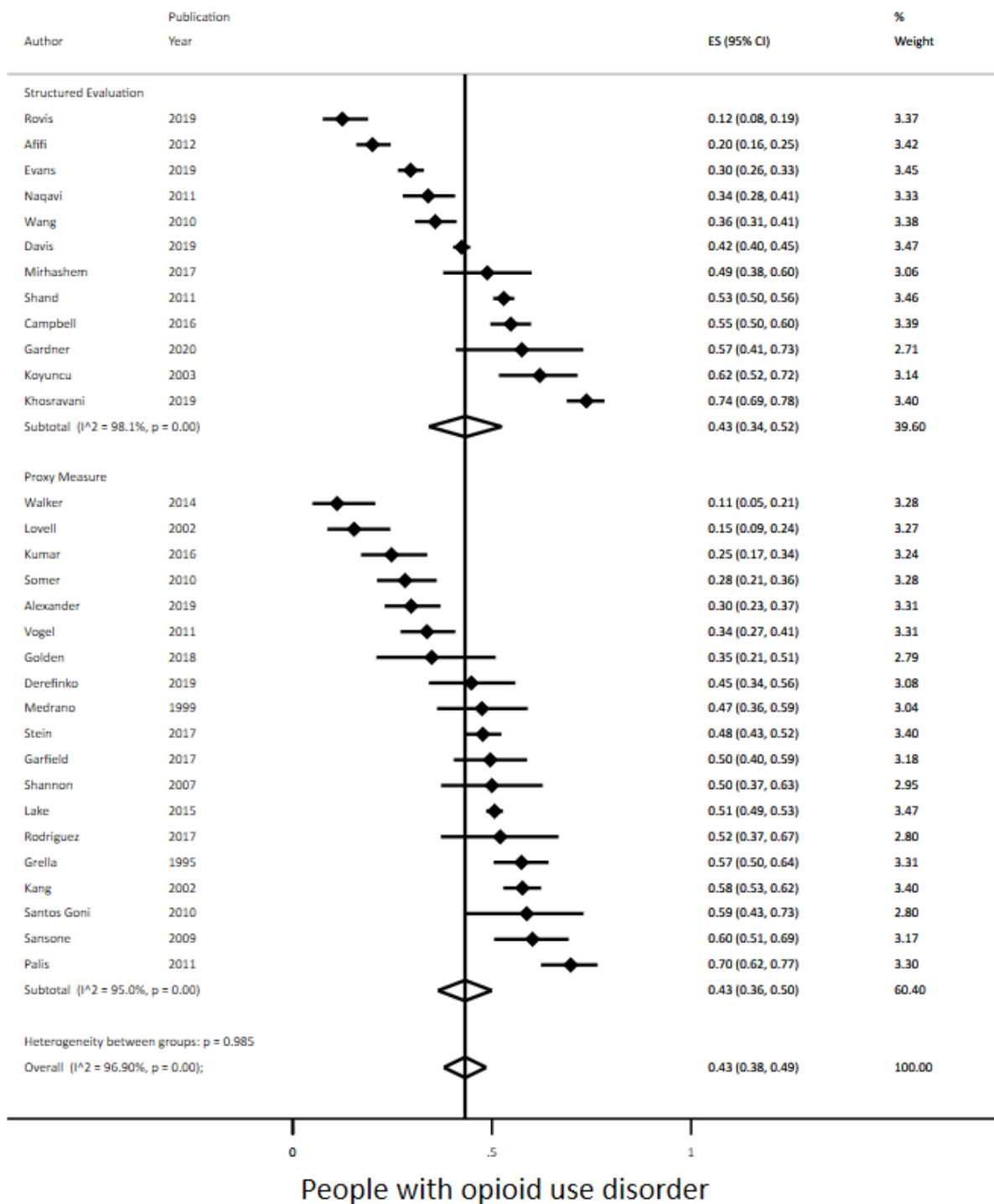
eFigure 7.4.6: By inclusion/exclusion criteria prevalence estimates of childhood emotional abuse among people with OUD

Prevalence of childhood emotional abuse by inclusion/exclusion criteria



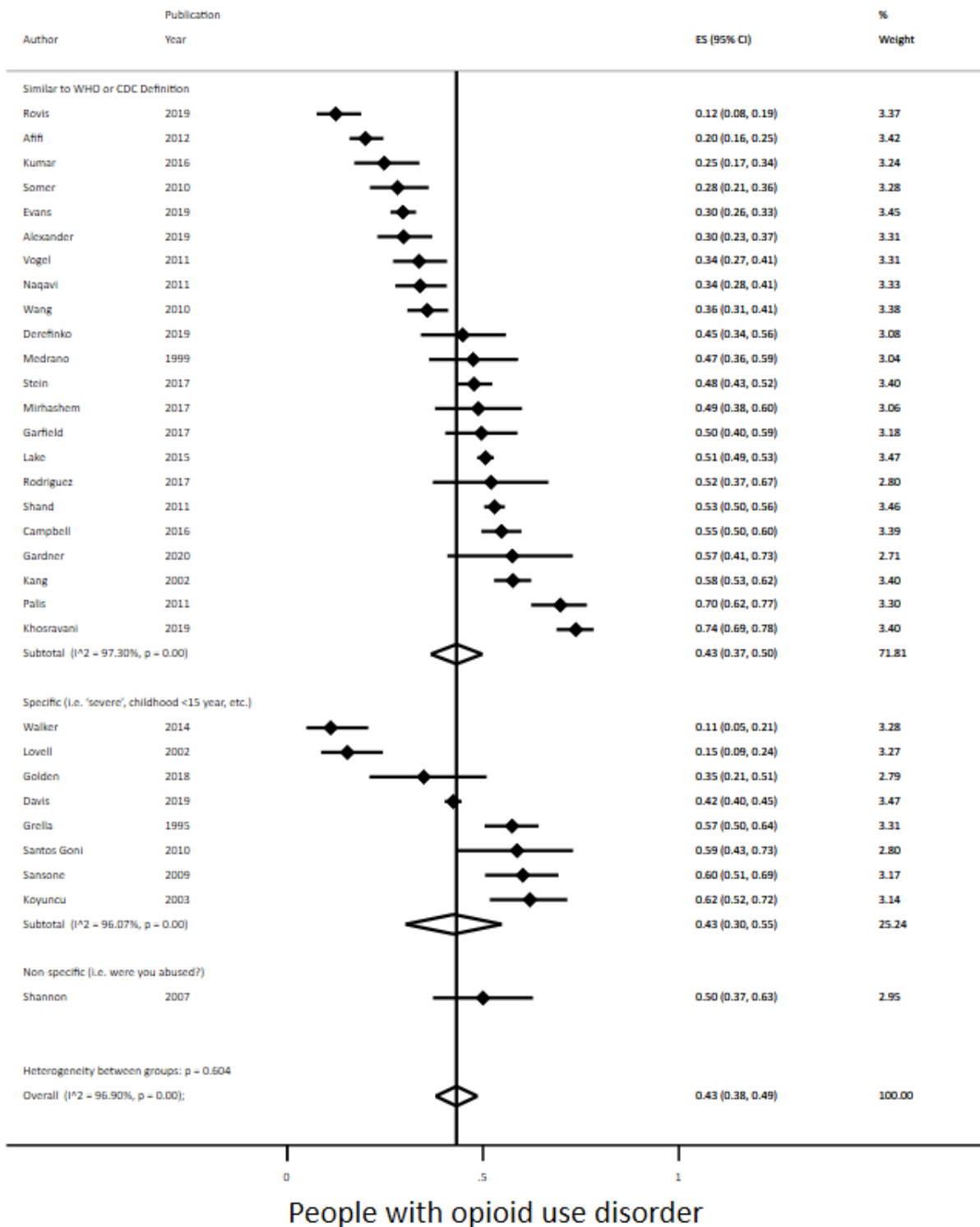
eFigure 7.4.7: By OUD definition prevalence estimates of childhood emotional abuse among people with OUD

Prevalence of childhood emotional abuse by OUD definition

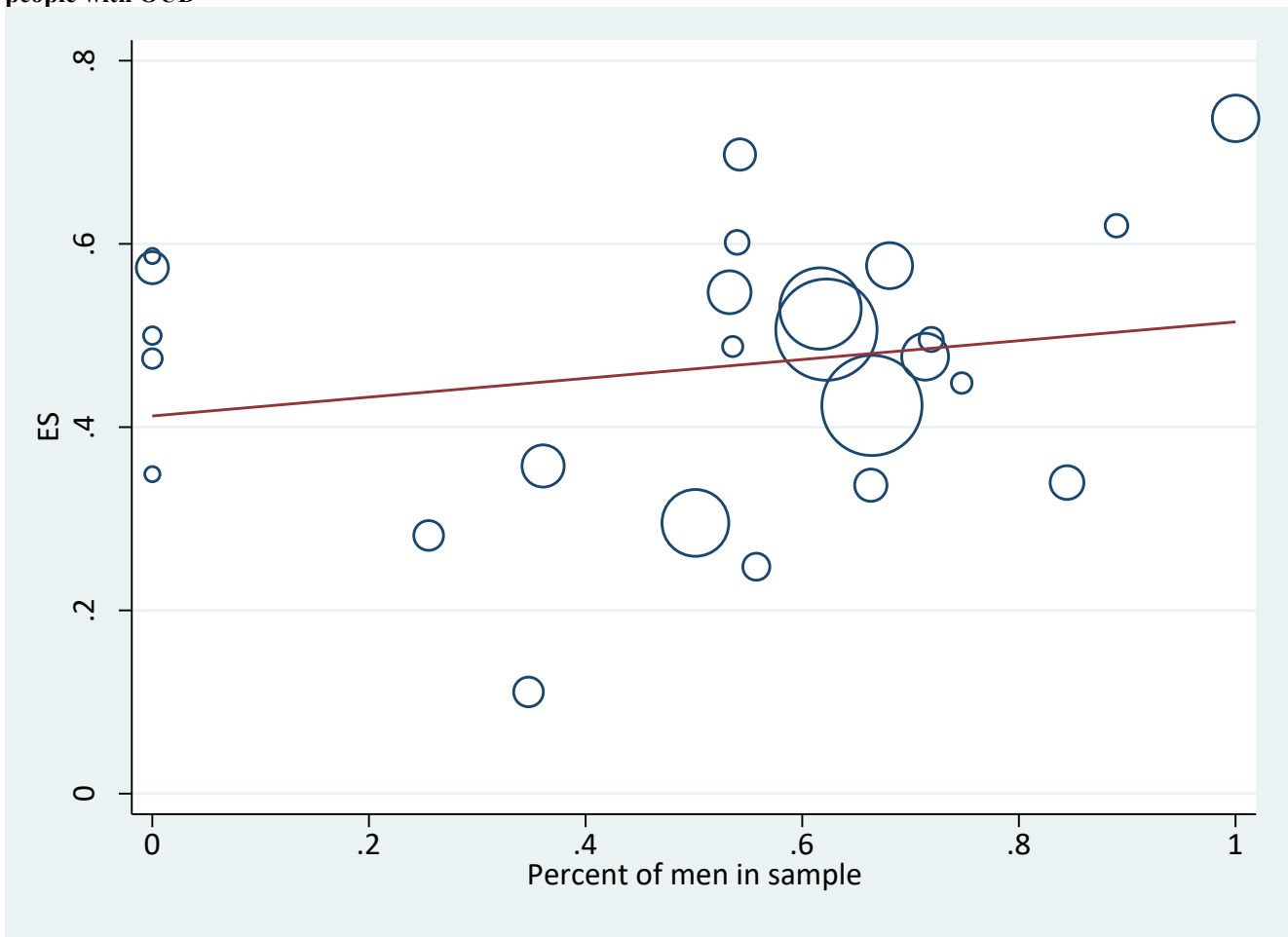


eFigure 7.4.8: By CM definition prevalence estimates of childhood emotional abuse among people with OUD

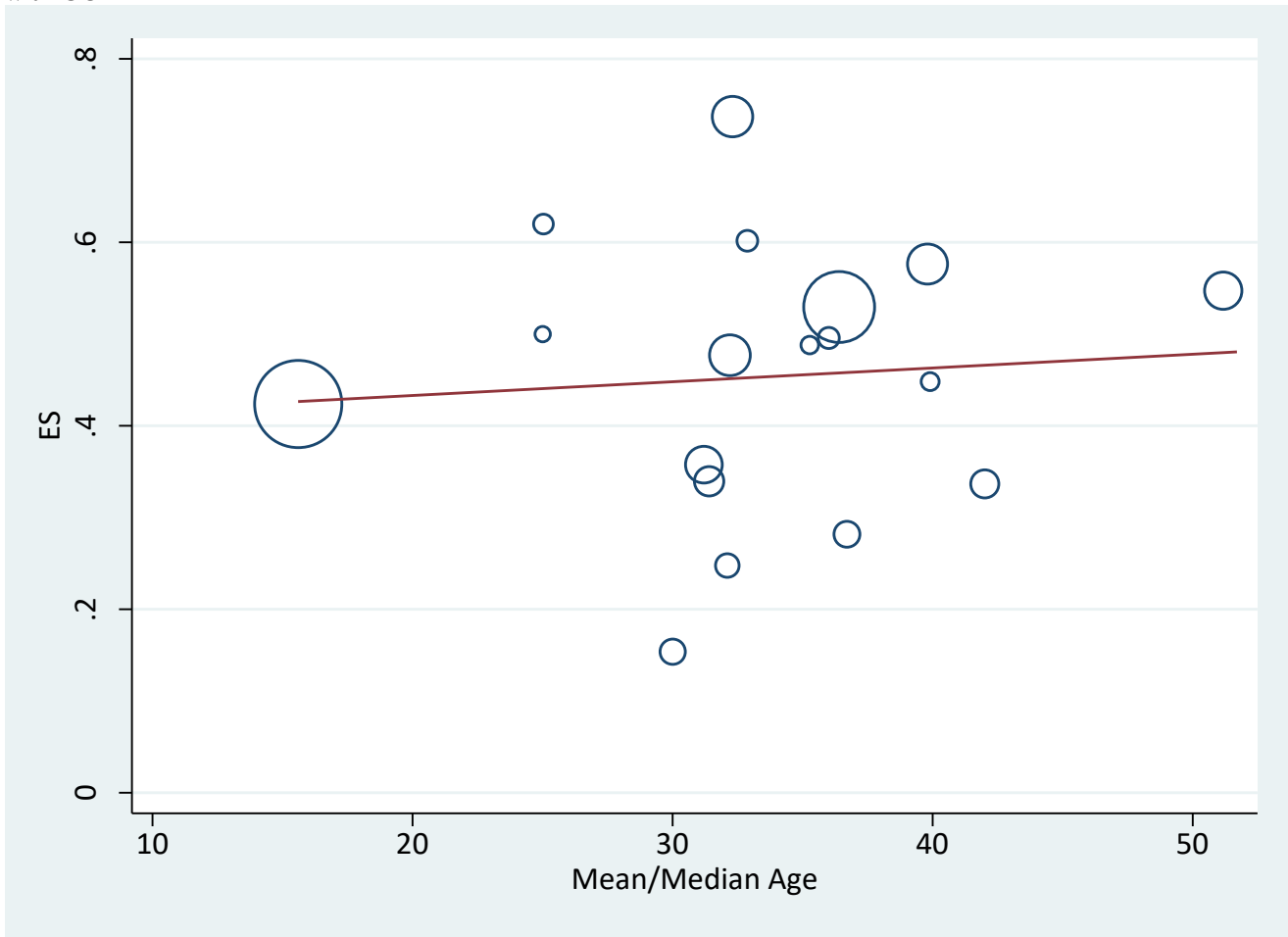
Prevalence of childhood emotional abuse by CM definition



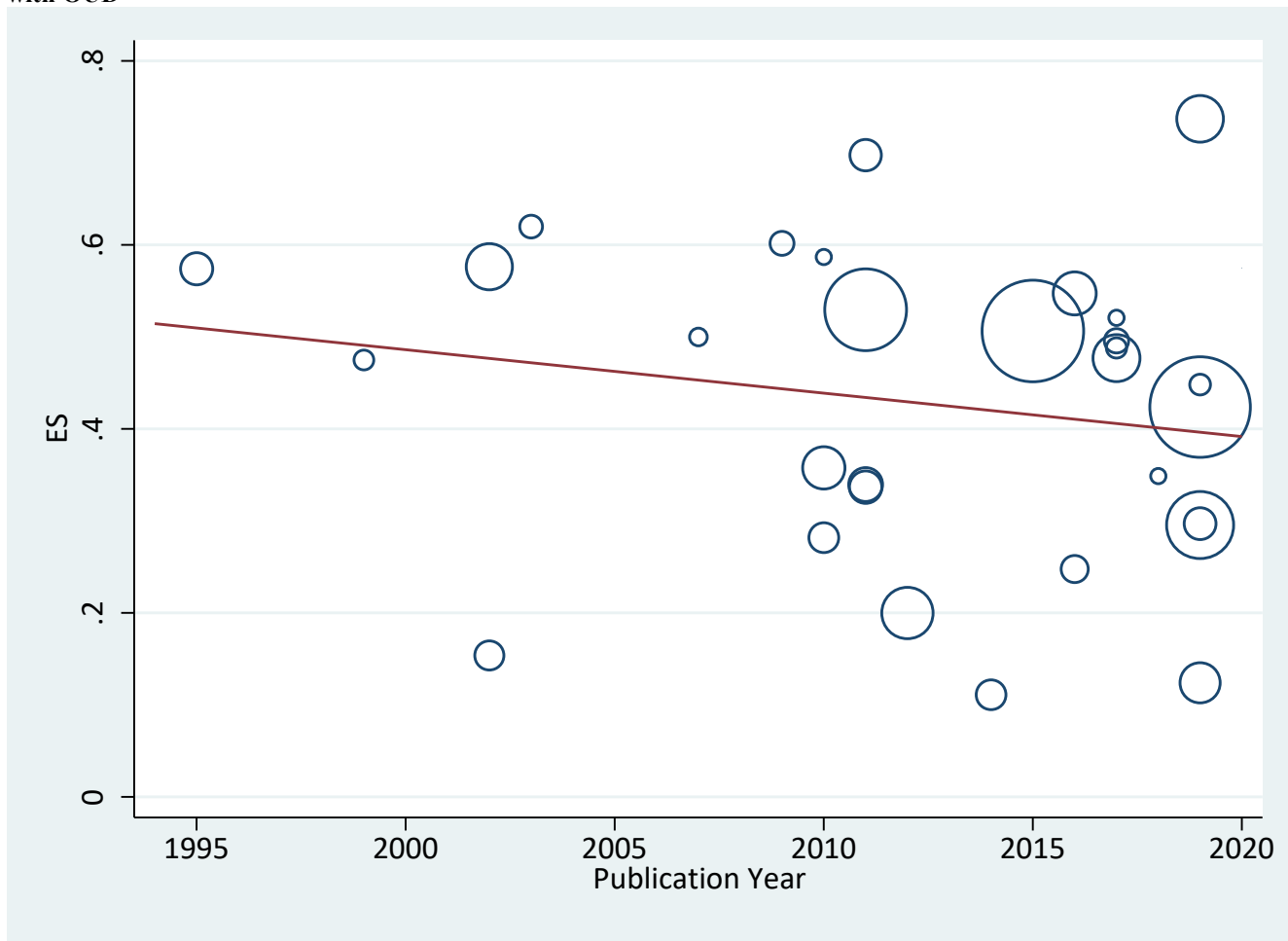
eFigure 7.4.9: Meta-regression by percent of men in sample for prevalence estimates of childhood emotional abuse among people with OUD



eFigure 7.4.10: Meta-regression by mean/median age for prevalence estimates of childhood emotional abuse among people with OUD

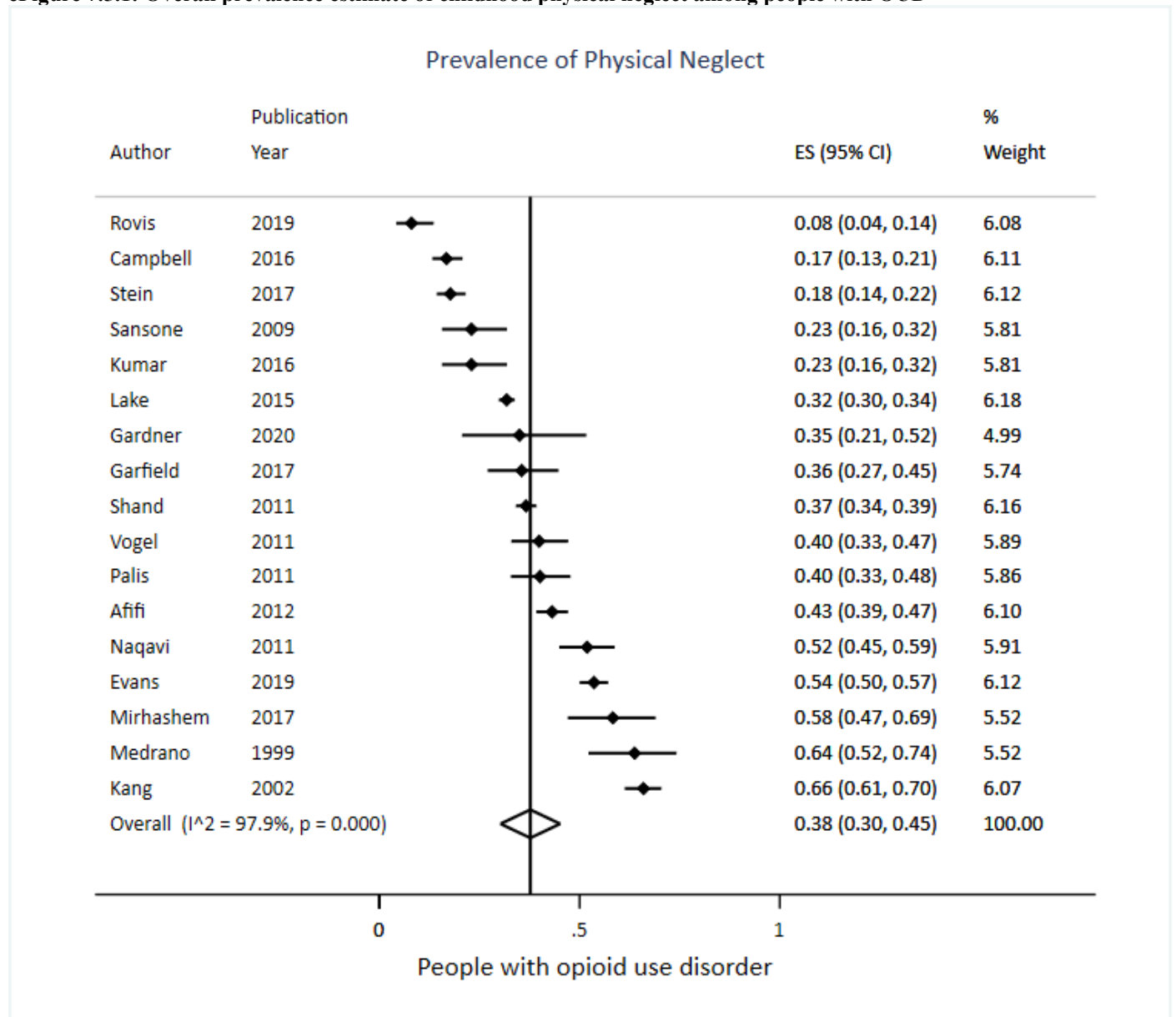


eFigure 7.4.11: Meta-regression by publication year for prevalence estimates of childhood emotional abuse among people with OUD

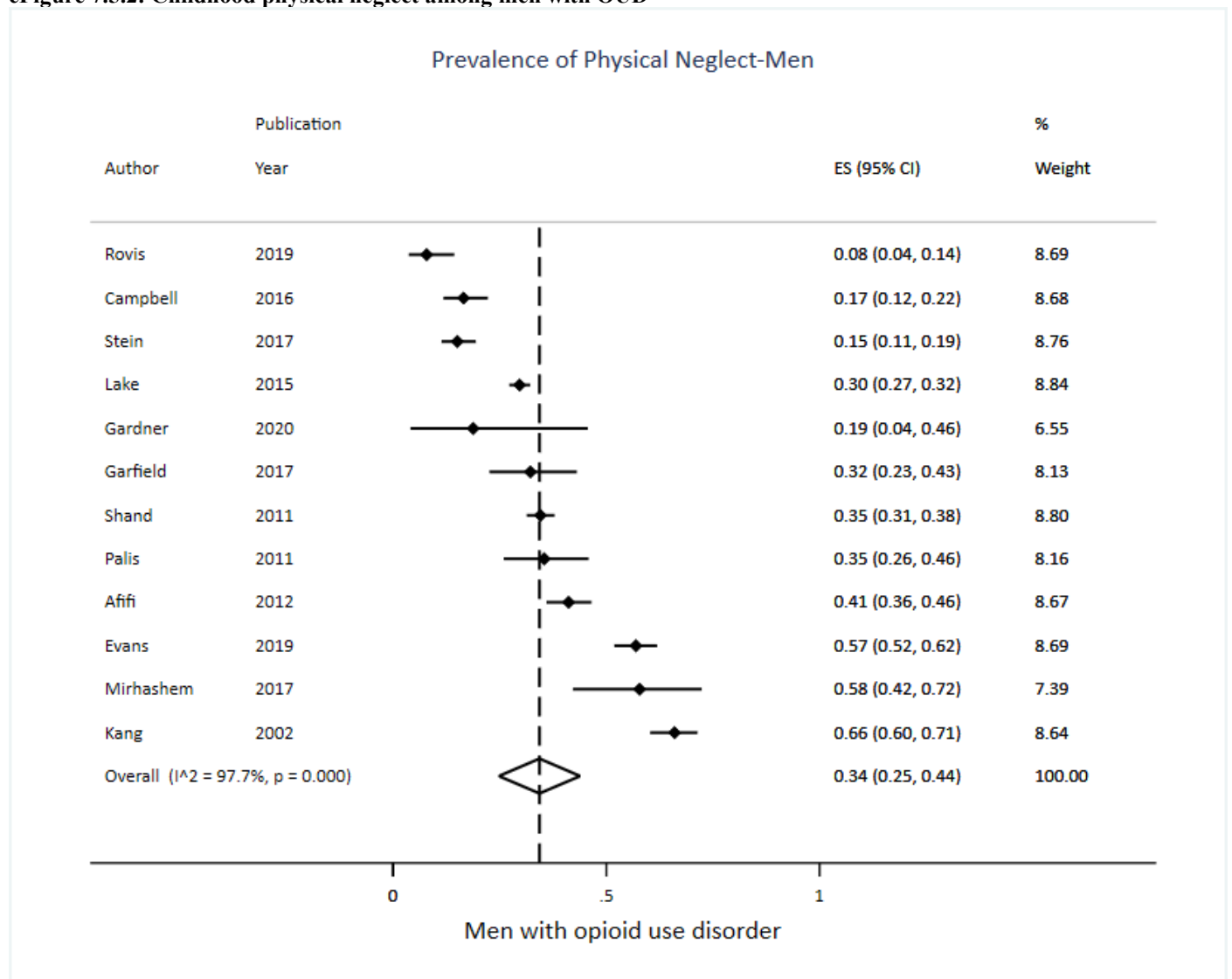


eAppendix 7.5: Childhood physical neglect among people with opioid use disorder

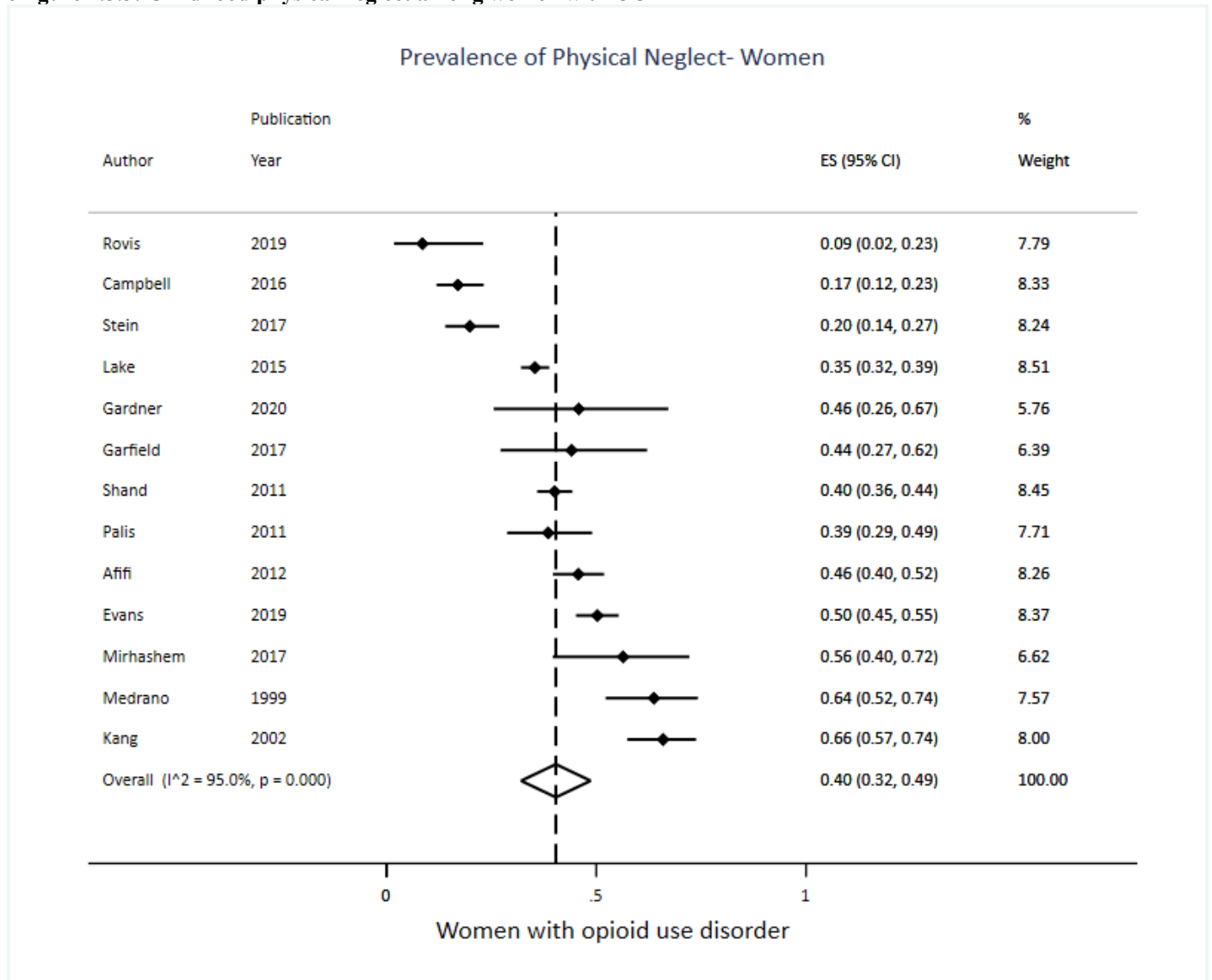
eFigure 7.5.1: Overall prevalence estimate of childhood physical neglect among people with OUD



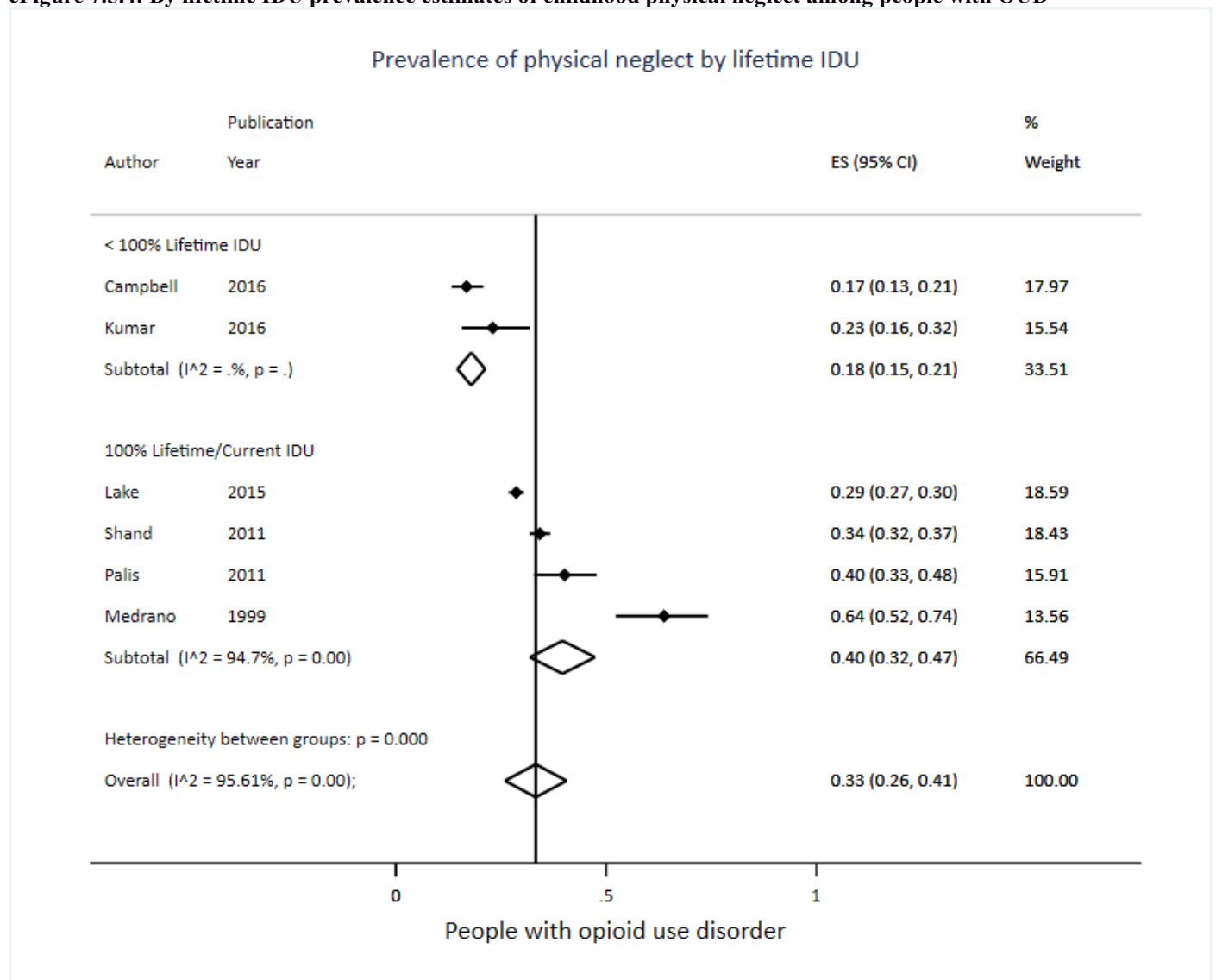
eFigure 7.5.2: Childhood physical neglect among men with OUD



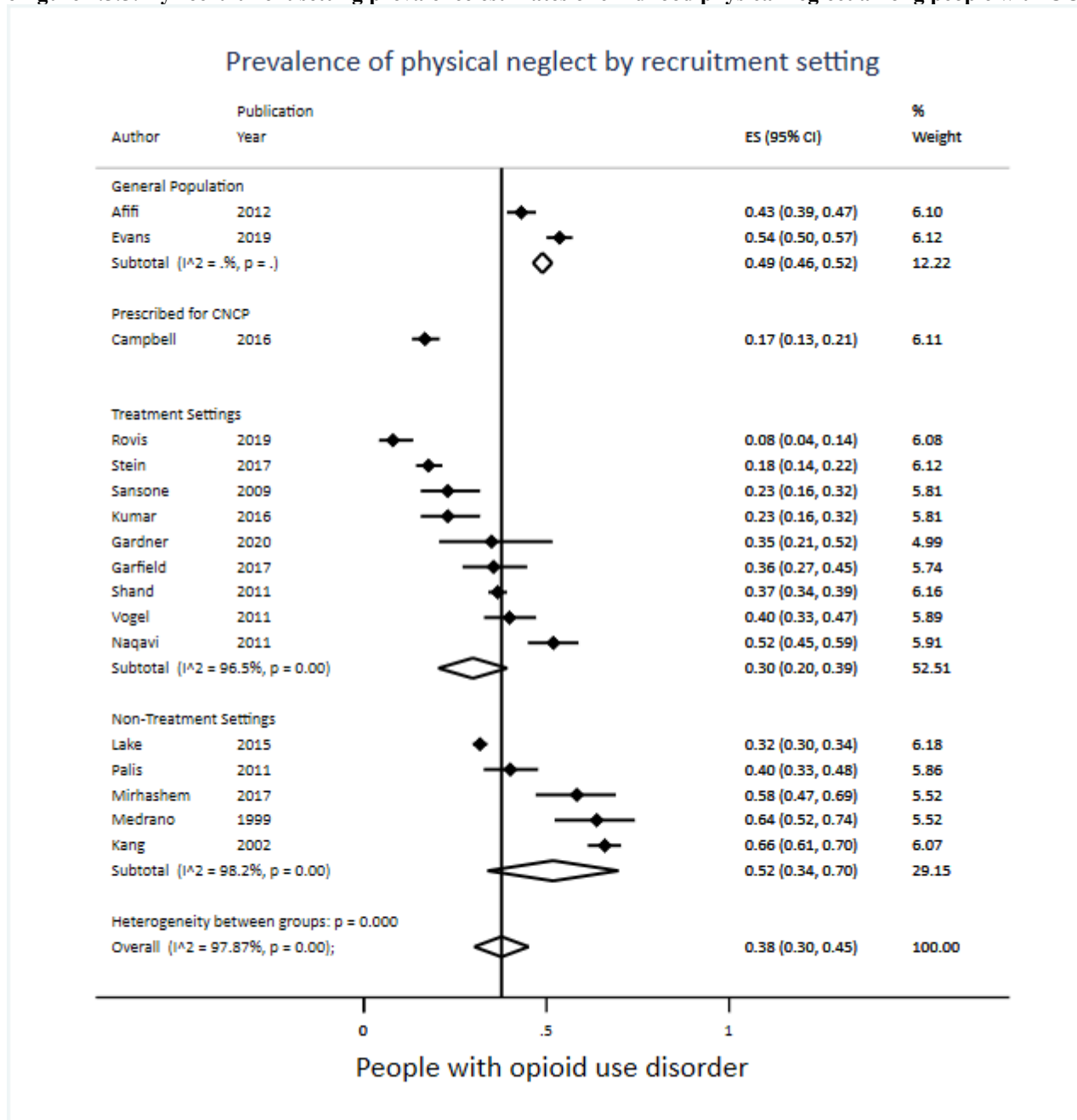
eFigure 7.5.3: Childhood physical neglect among women with OUD



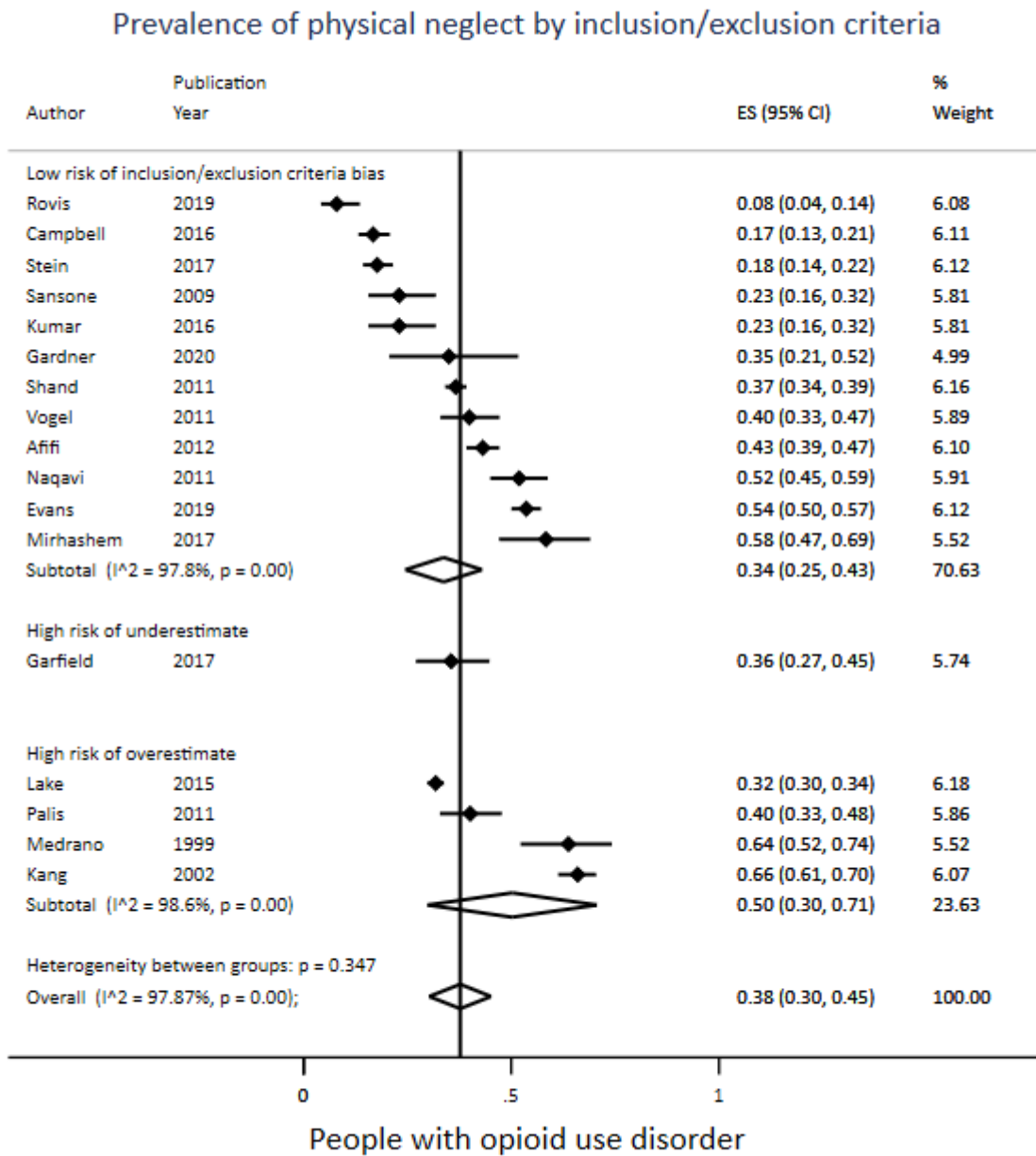
eFigure 7.5.4: By lifetime IDU prevalence estimates of childhood physical neglect among people with OUD



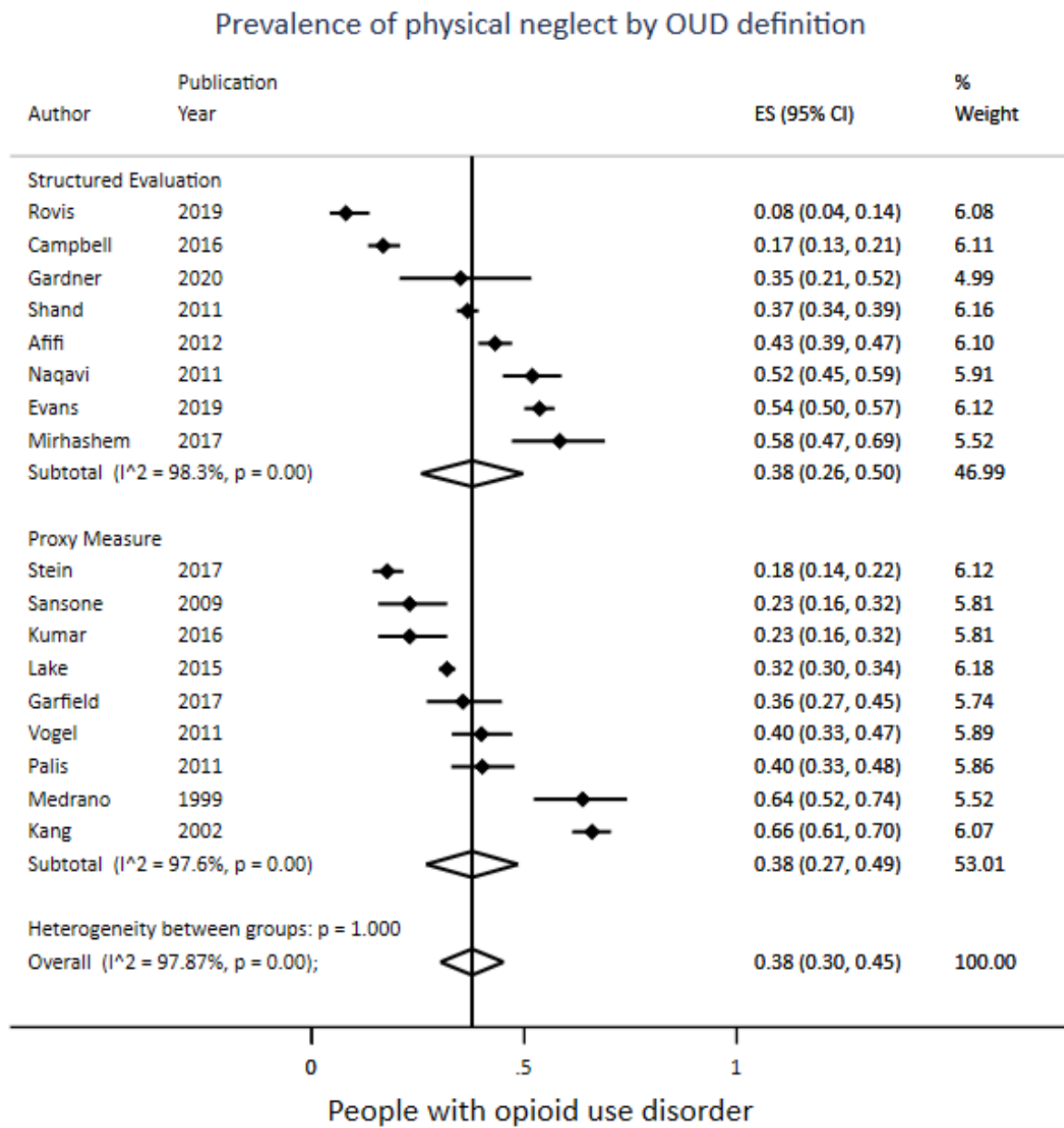
eFigure 7.5.5: By recruitment setting prevalence estimates of childhood physical neglect among people with OUD



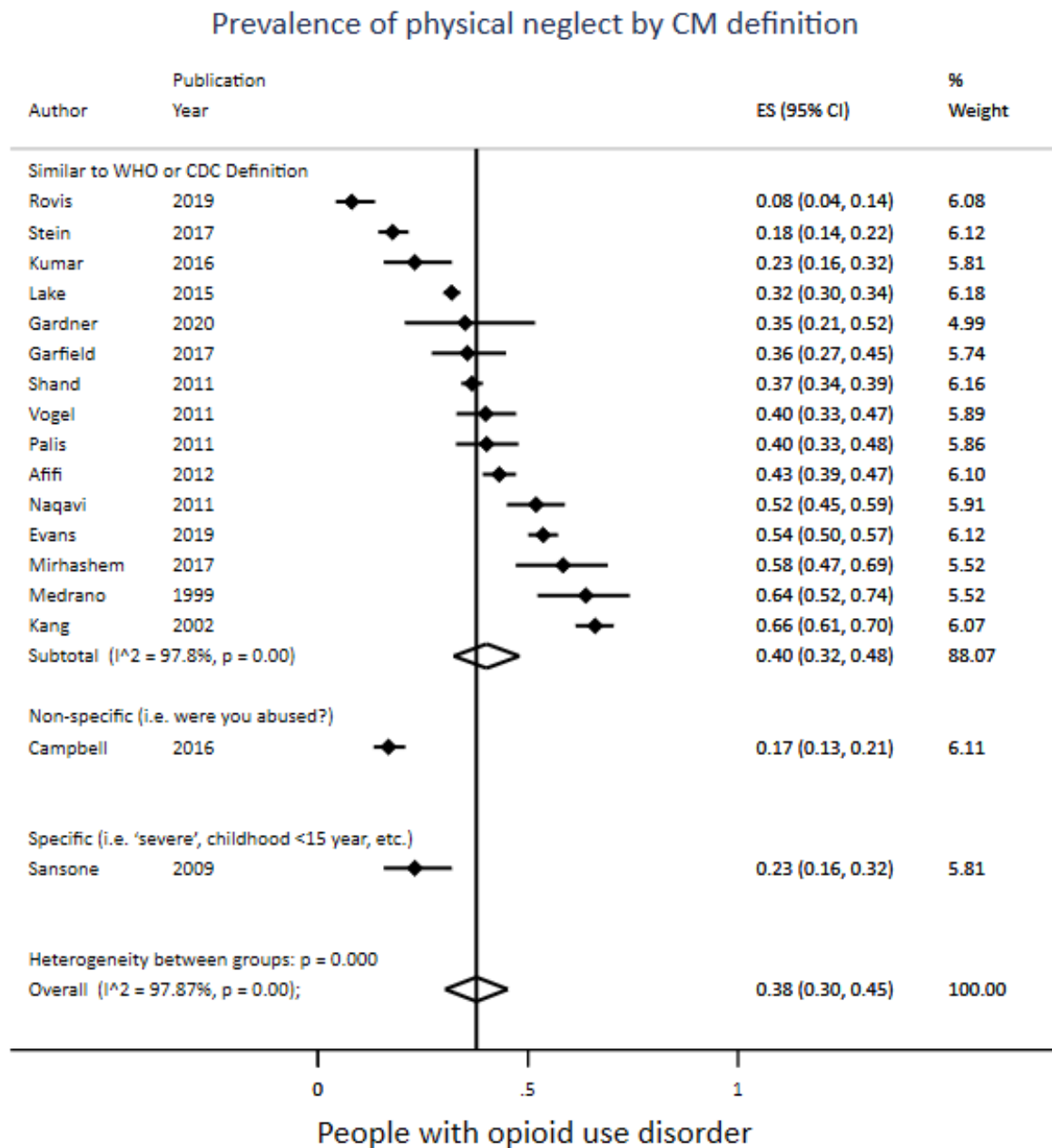
eFigure 7.5.6: By inclusion/exclusion criteria prevalence estimates of childhood physical neglect among people with OUD



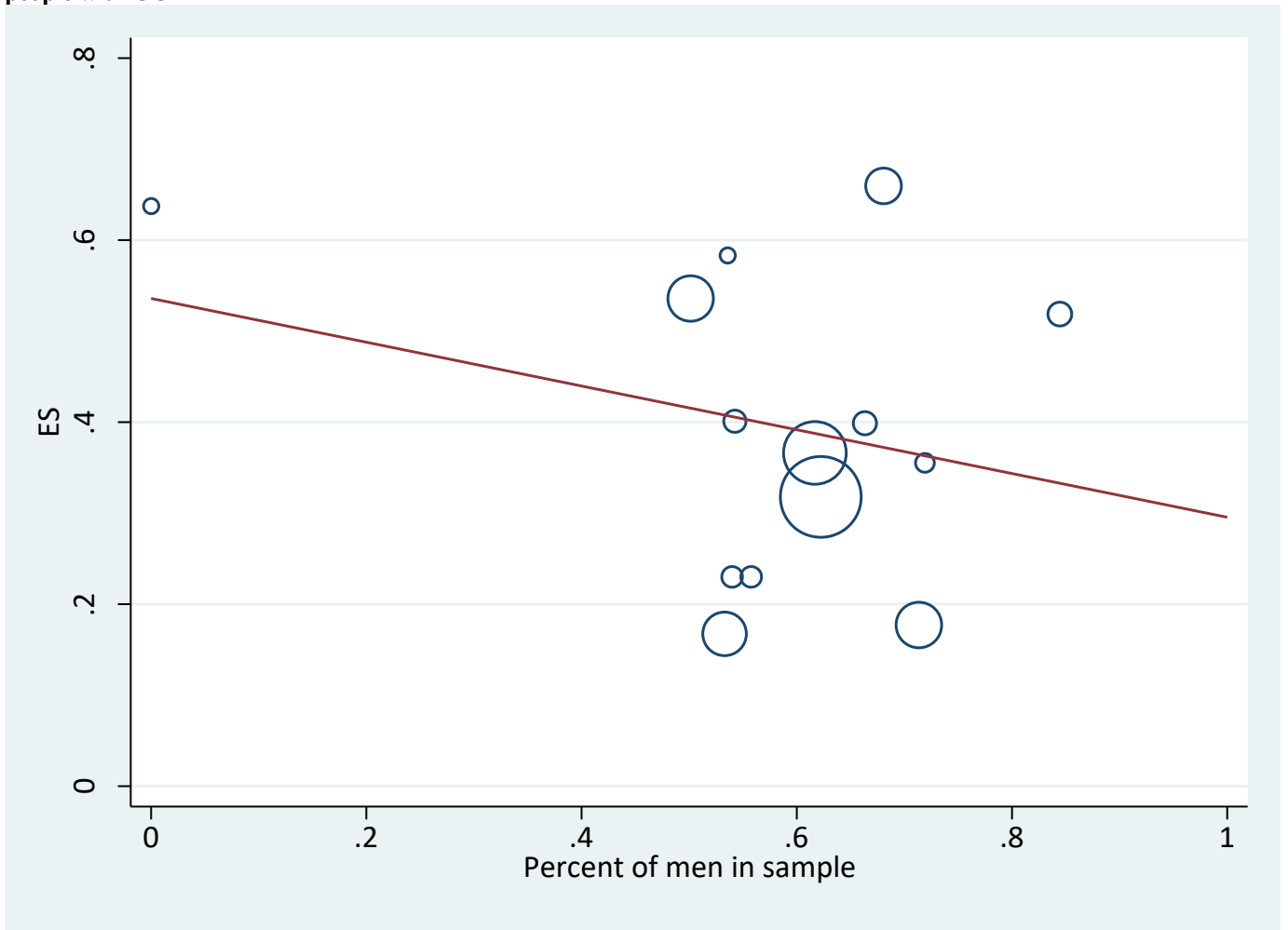
eFigure 7.5.7: By OUD definition prevalence estimates of childhood physical neglect among people with OUD



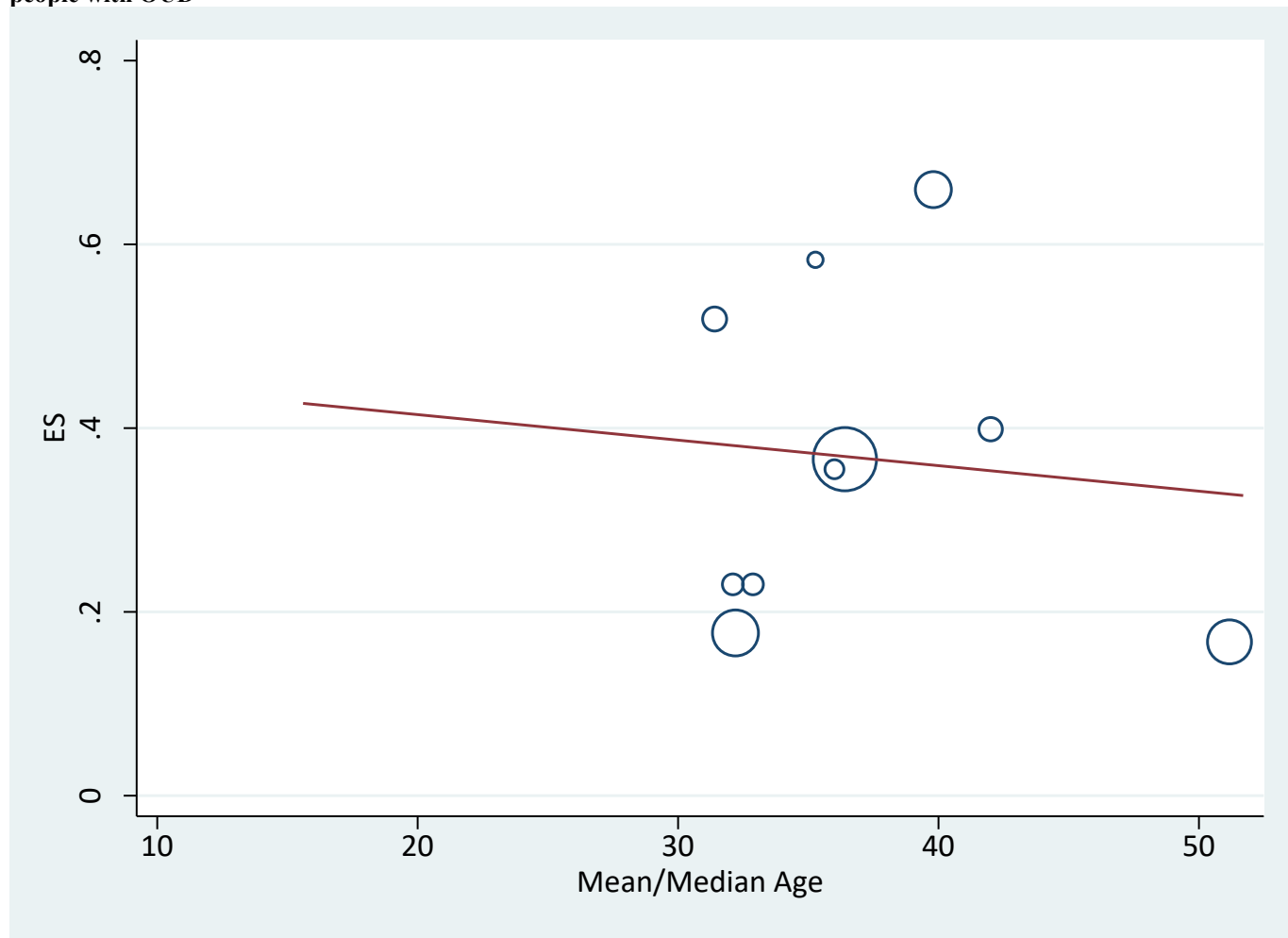
eFigure 7.5.8: By CM definition prevalence estimates of childhood physical neglect among people with OUD



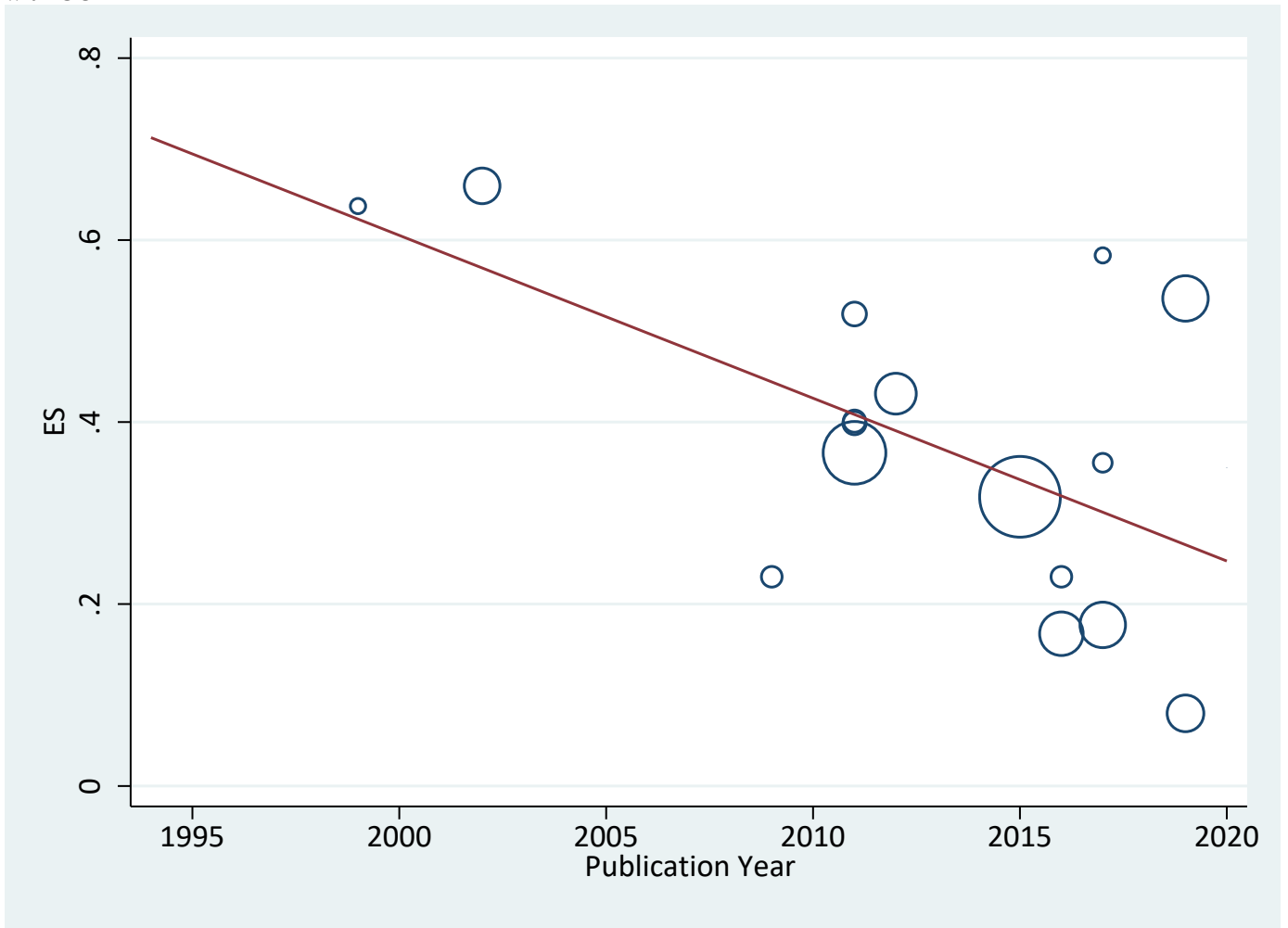
eFigure 7.5.9: Meta-regression by percent of men in sample for prevalence estimates of childhood physical neglect among people with OUD



eFigure 7.5.10: Meta-regression by mean/median sample age for prevalence estimates of childhood physical neglect among people with OUD

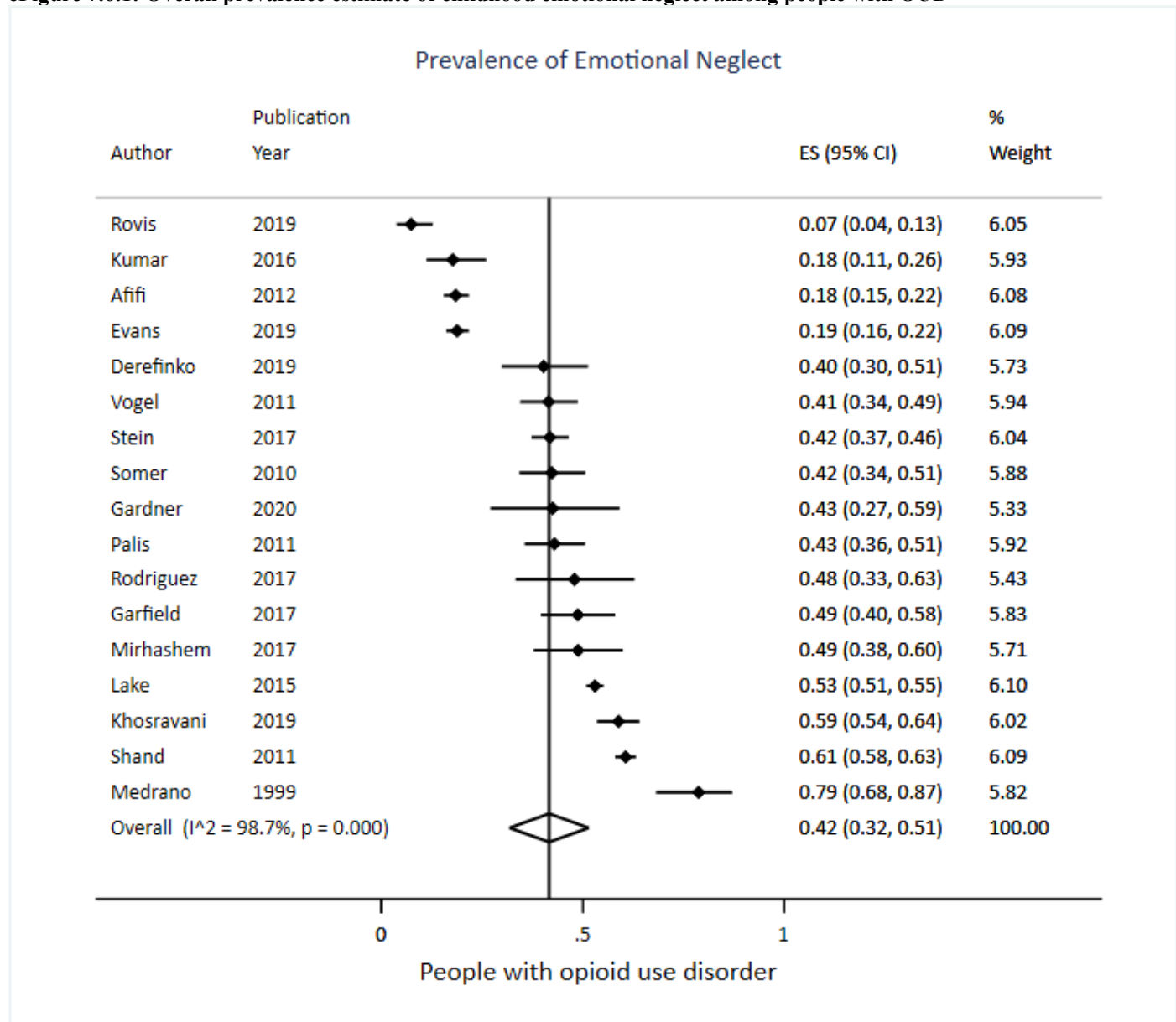


eFigure 7.5.11: Meta-regression by publication year for prevalence estimates of childhood physical neglect among people with OUD

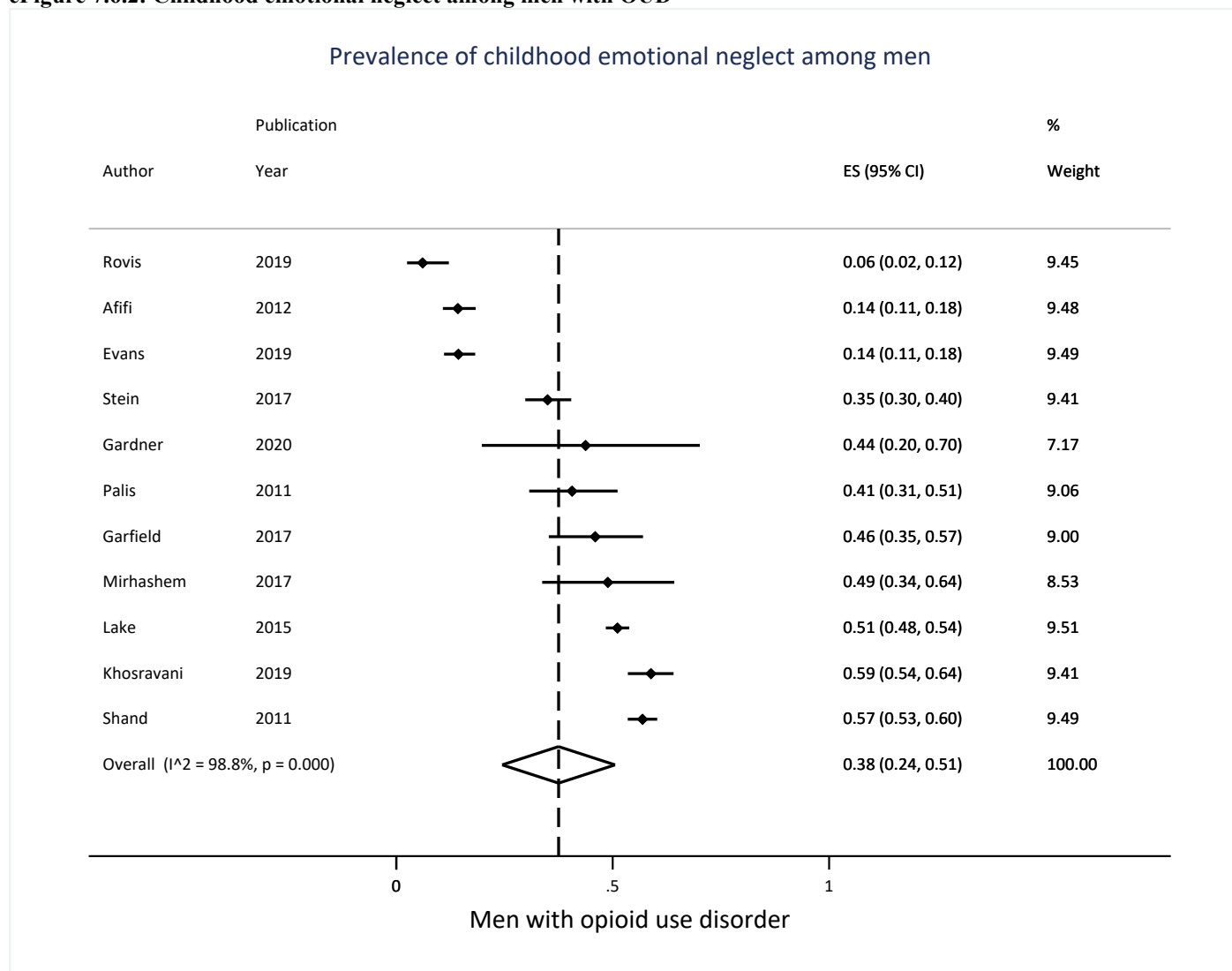


eAppendix 7.6: Childhood emotional neglect among people with opioid use disorder

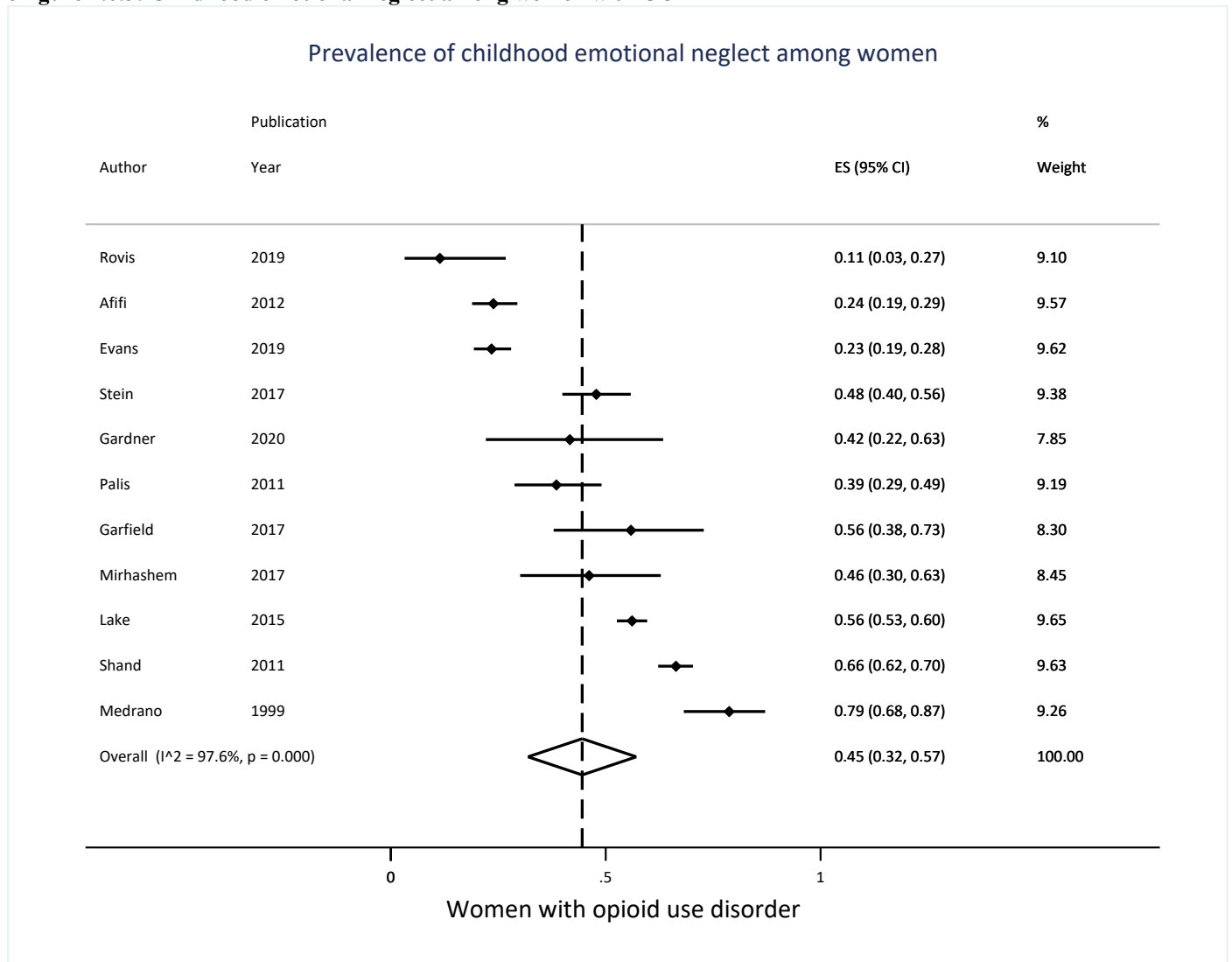
eFigure 7.6.1: Overall prevalence estimate of childhood emotional neglect among people with OUD



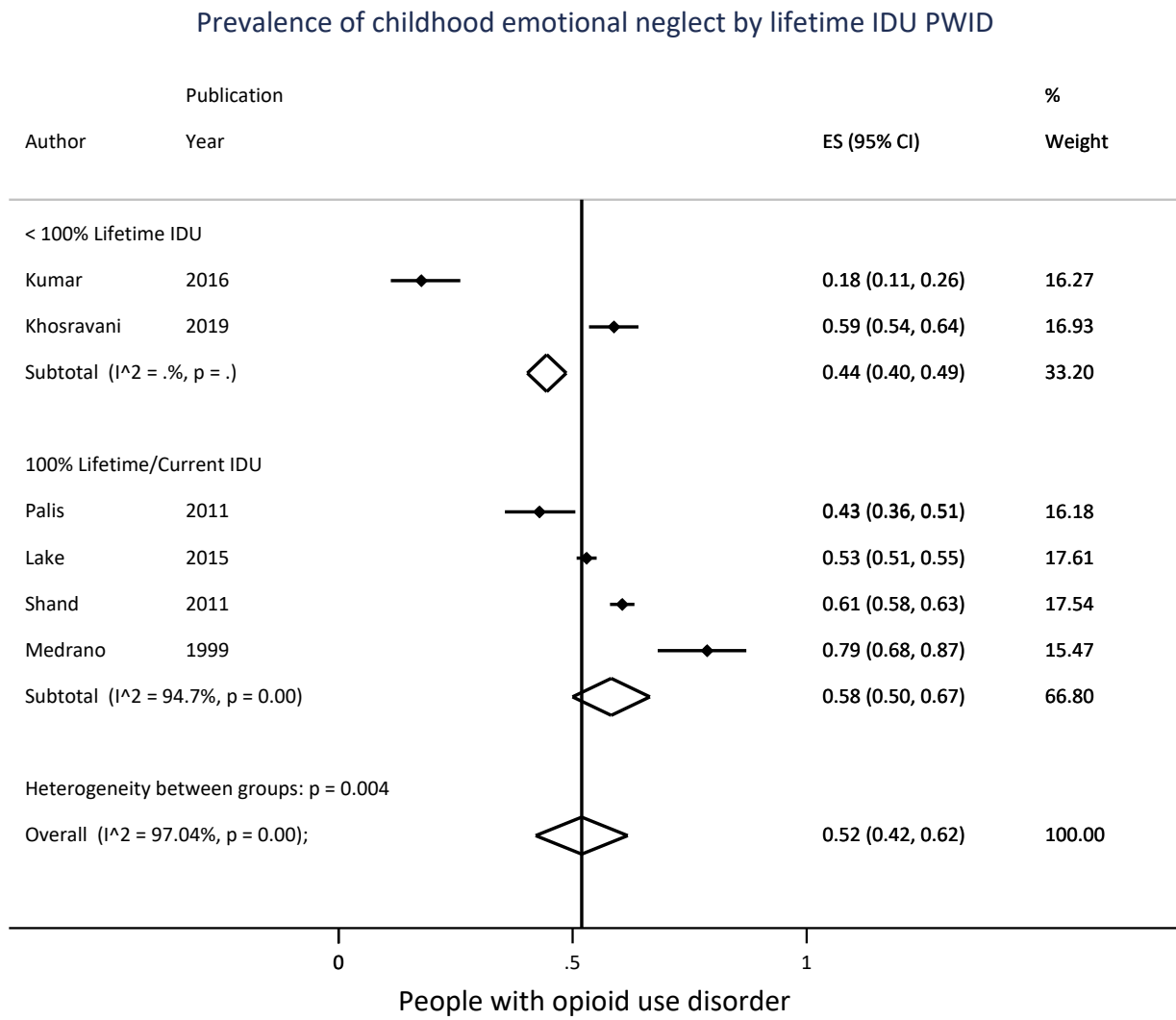
eFigure 7.6.2: Childhood emotional neglect among men with OUD



eFigure 7.6.3: Childhood emotional neglect among women with OUD

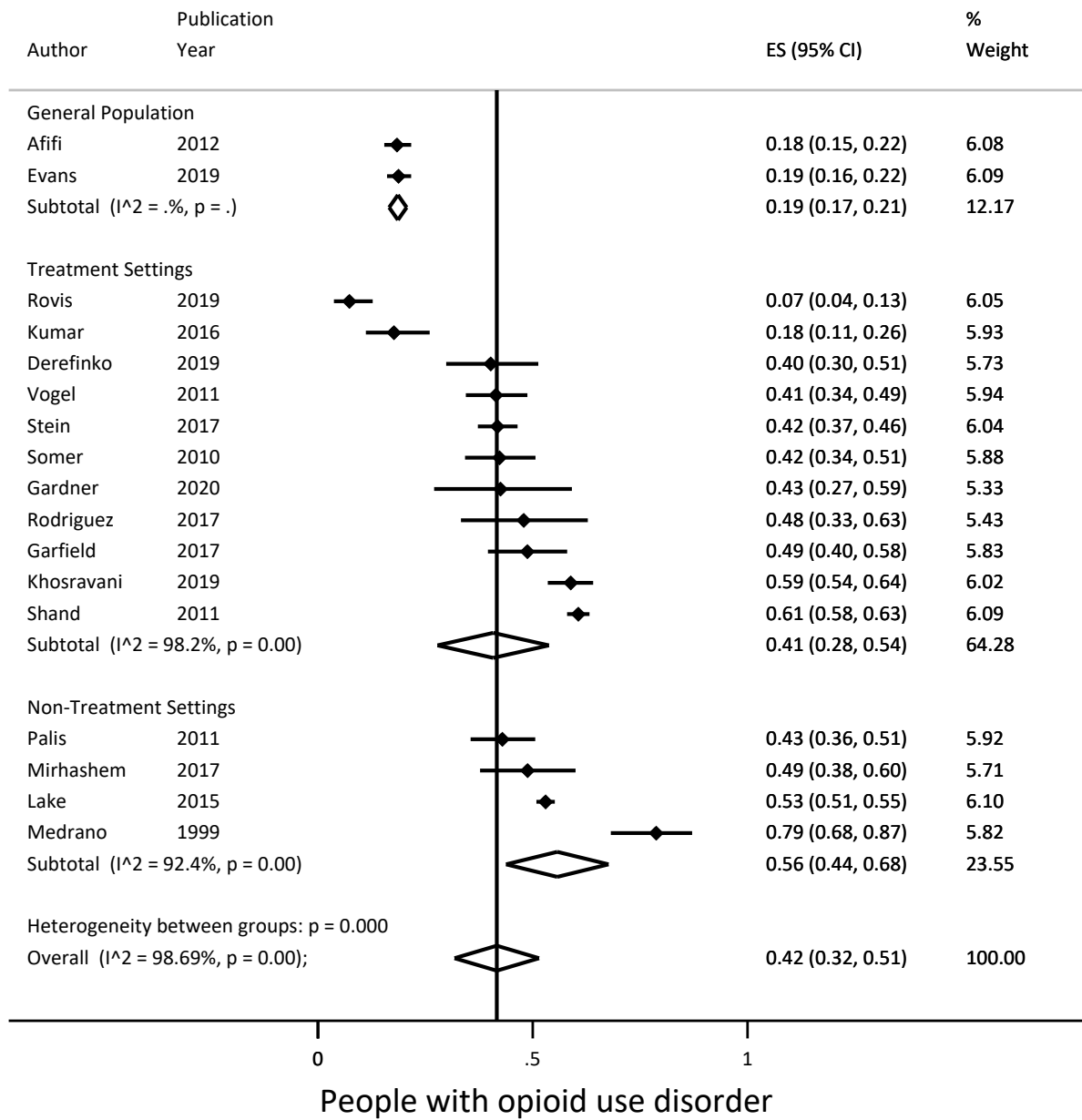


eFigure 7.6.4: By lifetime IDU prevalence estimates of childhood emotional neglect among people with OUD

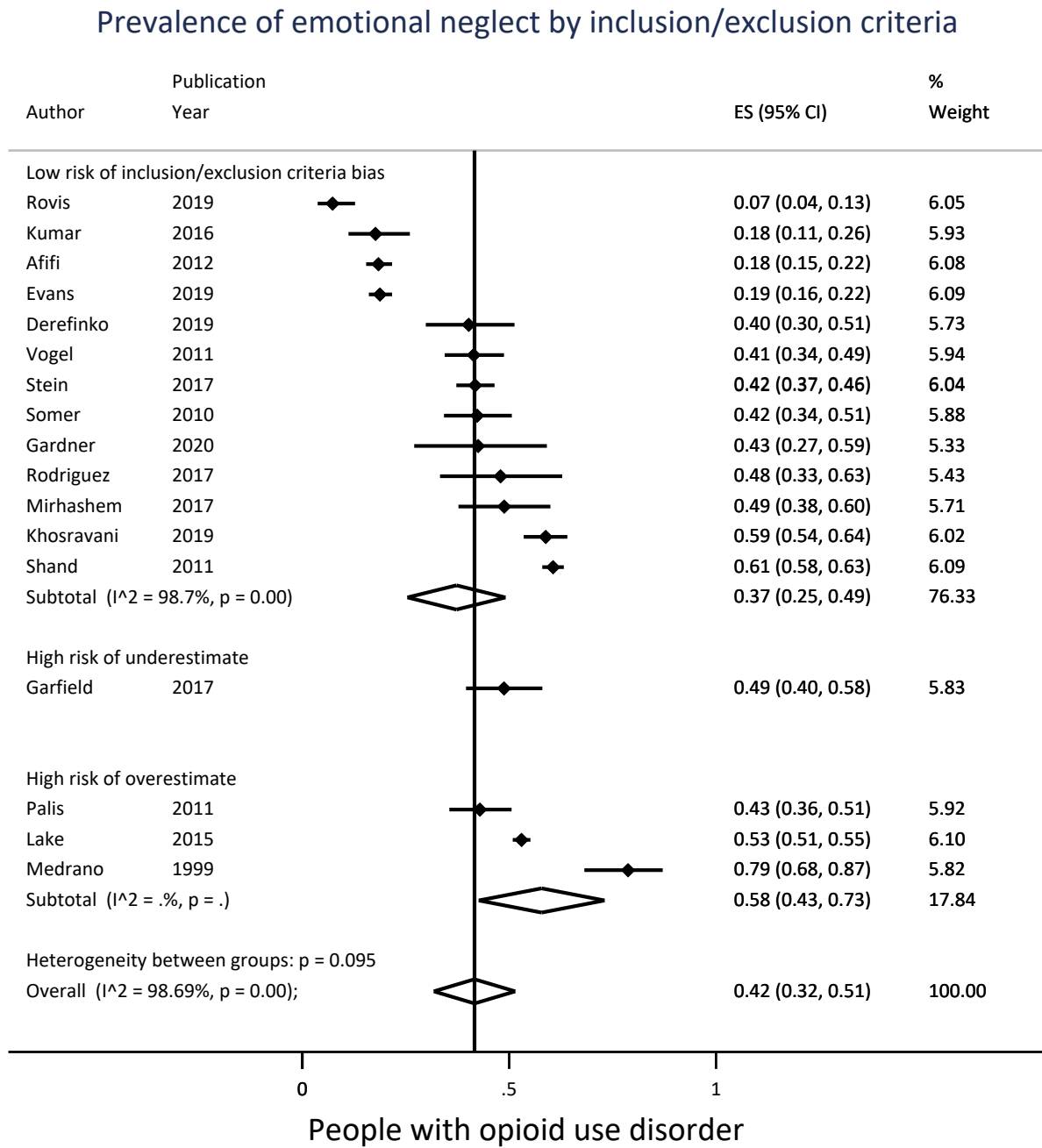


eFigure 7.6.5: By recruitment setting prevalence estimates of childhood emotional neglect among people with OUD

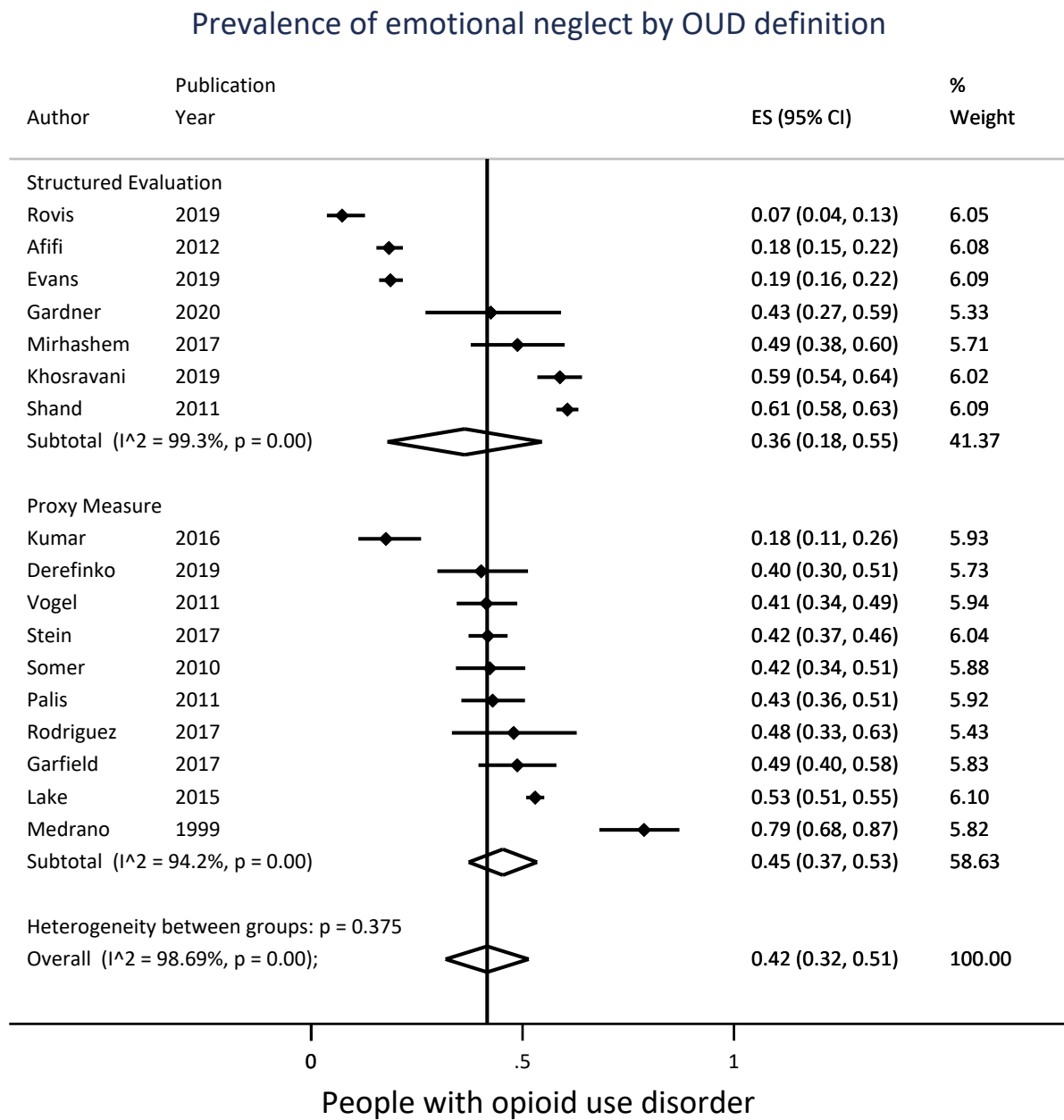
Prevalence of childhood emotional neglect by Recruitment Setting



eFigure 7.6.6: By inclusion/exclusion criteria prevalence estimates of childhood emotional neglect among people with OUD

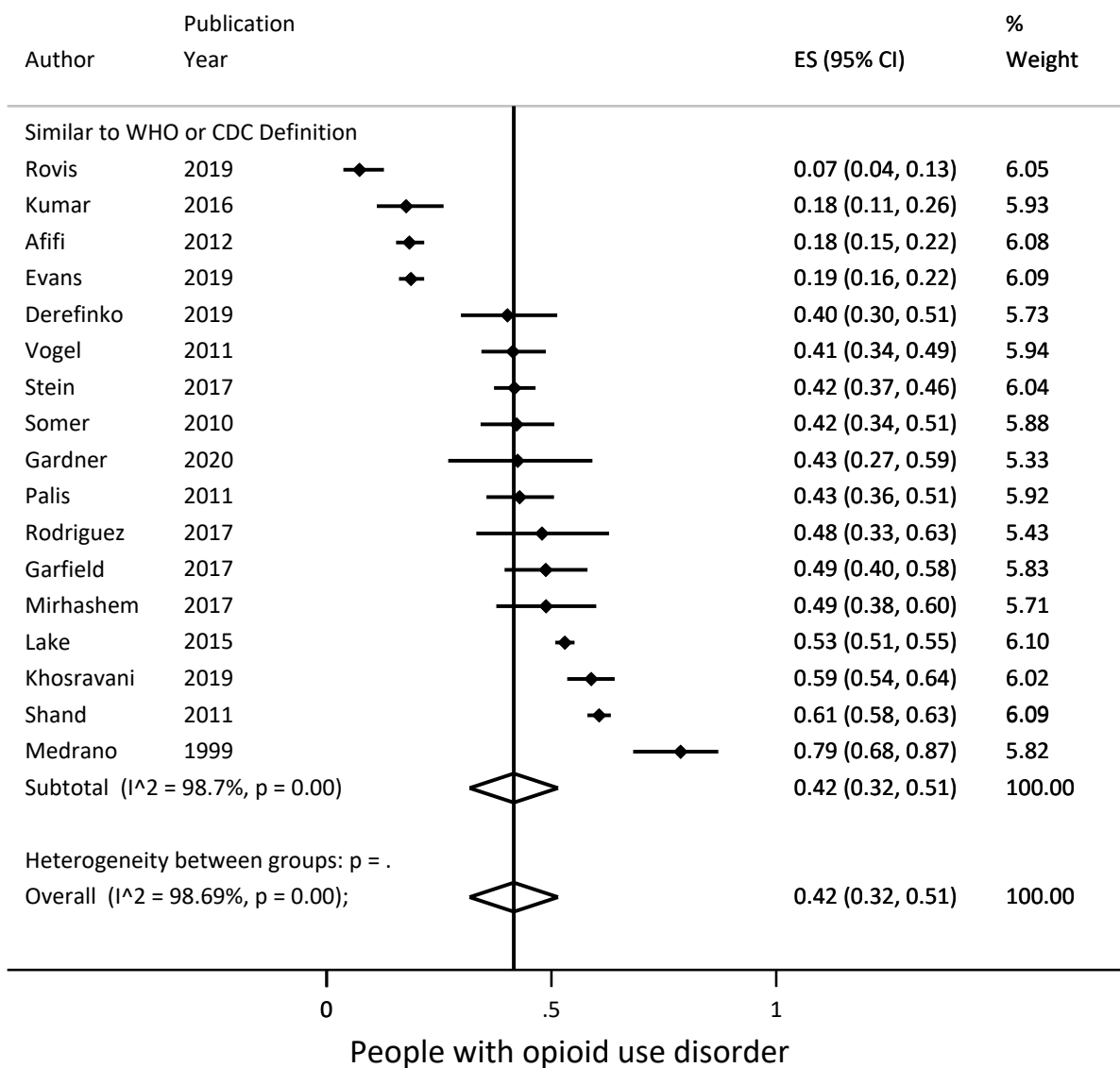


eFigure 7.6.7: By OUD definition prevalence estimates of childhood emotional neglect among people with OUD

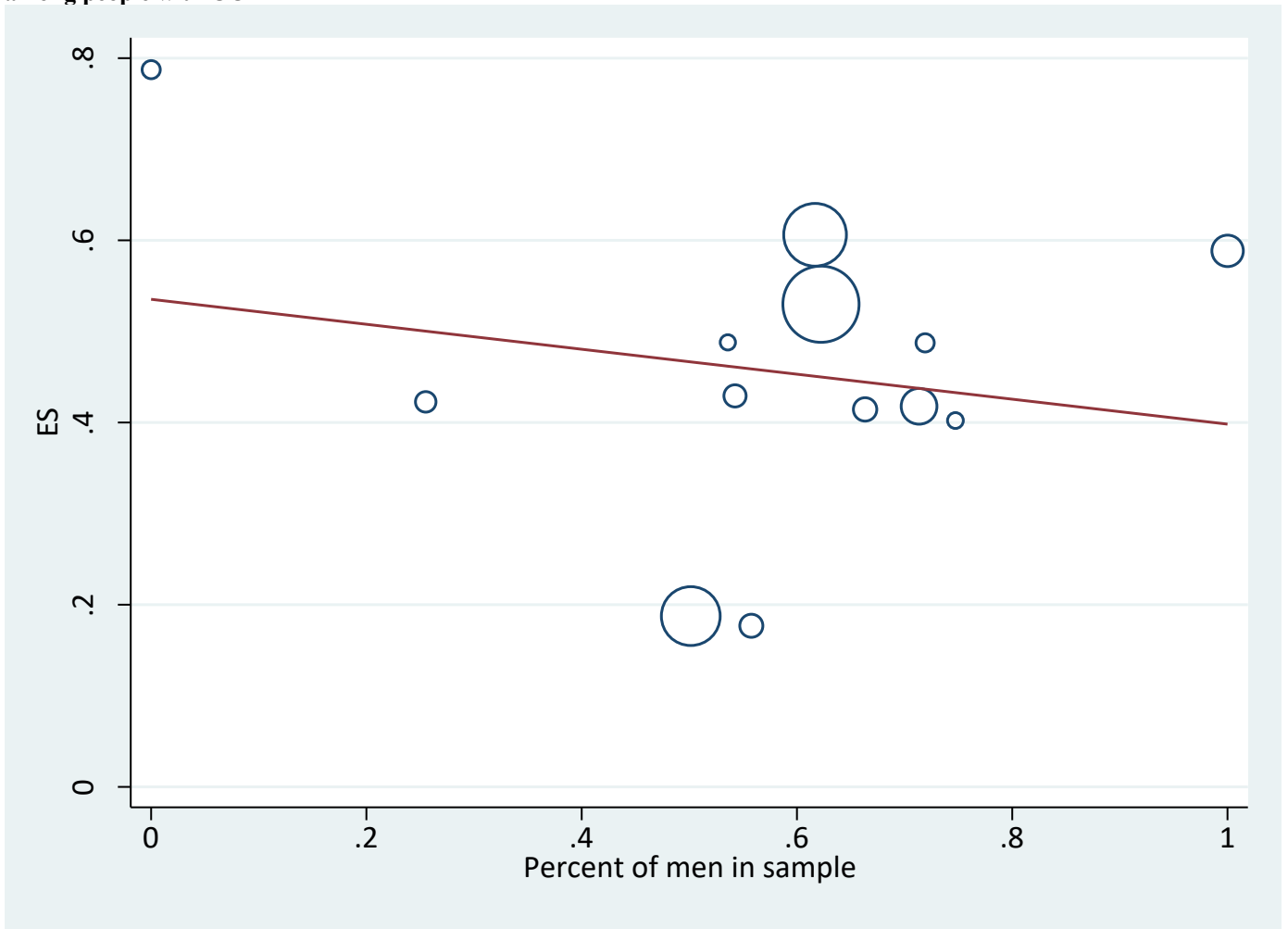


eFigure 7.6.8: By CM definition prevalence estimates of childhood emotional neglect among people with OUD

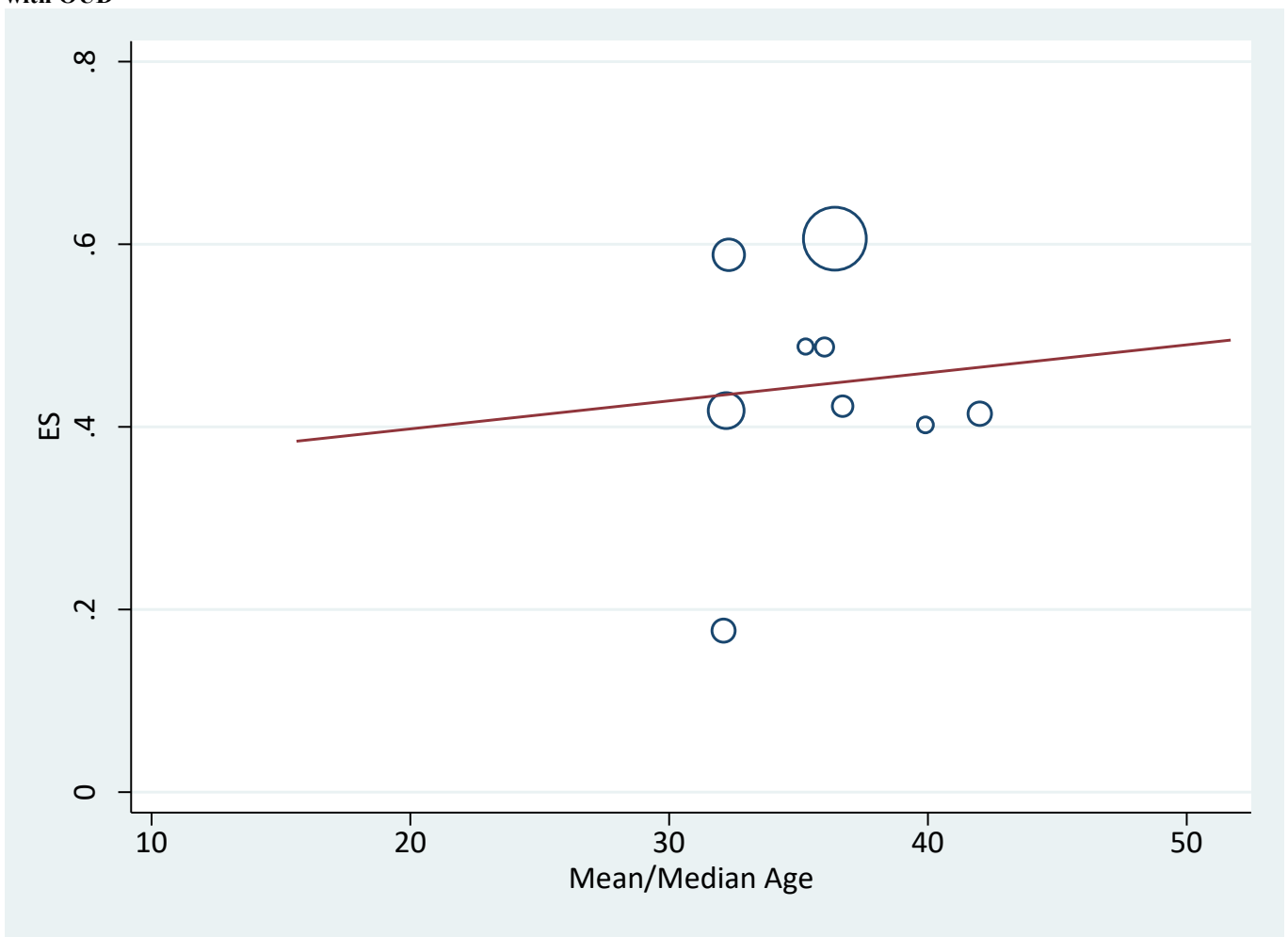
Prevalence of emotional neglect by CM definition



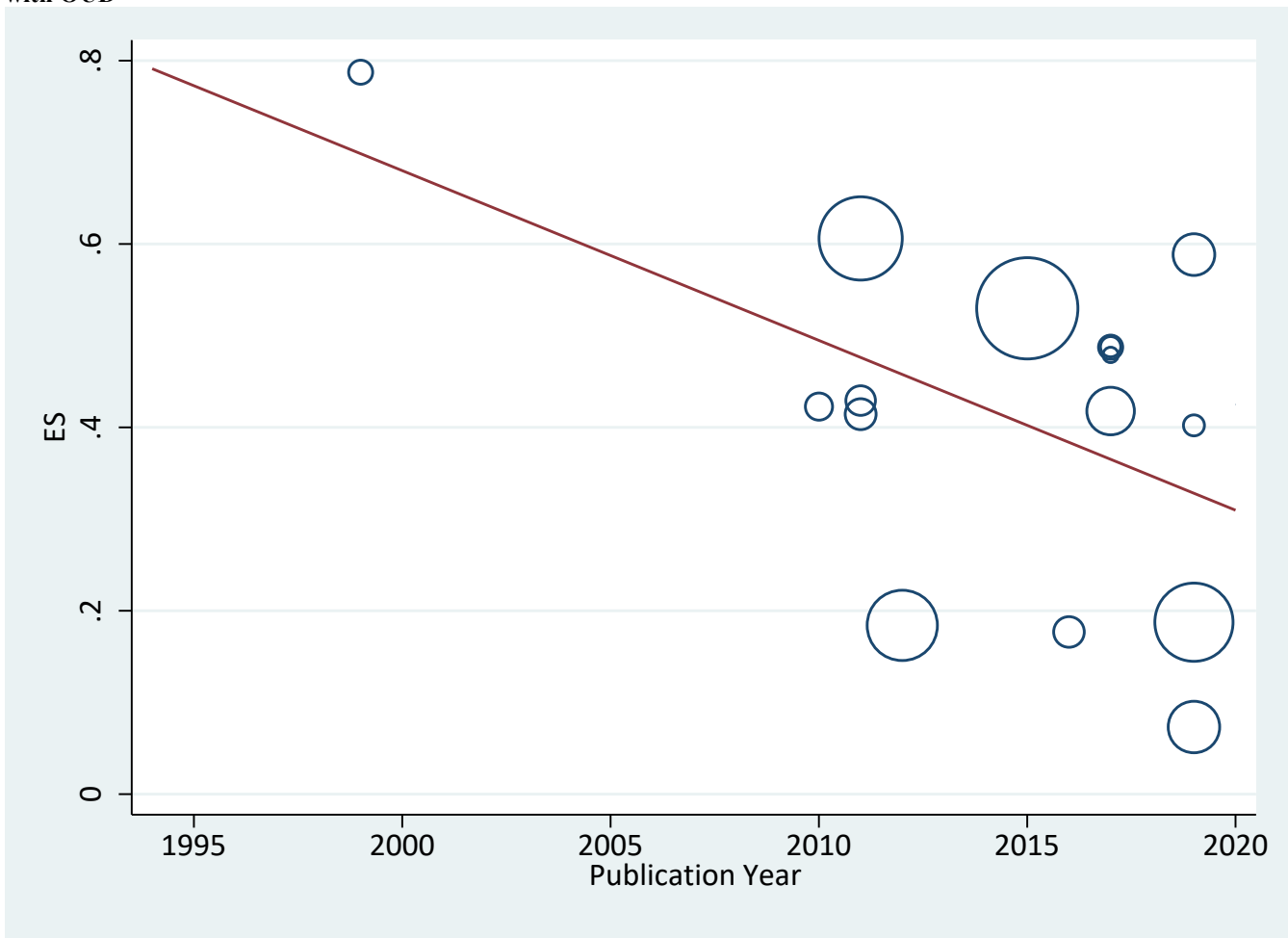
eFigure 7.6.9: Meta-regression by percent of males in sample for prevalence estimates of childhood emotional neglect among people with OUD



eFigure 7.6.10: Meta-regression by publication year for prevalence estimates of childhood emotional neglect among people with OUD



eFigure 7.6.11: Meta-regression by publication year for prevalence estimates of childhood emotional neglect among people with OUD



eAppendix 8: Sensitivity Analyses

Sensitivity analyses were conducted after stratified meta-analyses due to the high levels of heterogeneity reported by each meta-analysis of CM type and associations between methodological factors (e.g. inclusion and exclusion criteria, outcome measurement, publication year, etc.) and CM type. The table below displays results of the analyses, which excludes studies that are potential sources of bias.

Summary

Heterogeneity statistics remained significant ($p < 0.01$) in all analyses, however, there was a decrease in I^2 values as sensitivity analyses were restricted by risk of bias, year of publication and region of sample recruitment. Results were similar after restricting the included studies and confidence intervals of pooled estimates overlapped for each type of CM.

eTable 8.1: Sensitivity analyses of childhood maltreatment prevalence estimates among people with opioid use disorder

| Strata | Sexual Abuse (Women) | | | Sexual Abuse (Men) | | | Physical Abuse | | | Emotional Abuse | | | Physical Neglect | | | Emotional Neglect | | |
|---|------------------------|----------------------------|-------|------------------------|----------------------------|-------|------------------------|----------------------------|-------|------------------------|----------------------------|-------|------------------------|----------------------------|-------|------------------------|----------------------------|-------|
| | Study (k) (Total N) | Est. (95%CI) p-value | I^2 | Study (k) (Total N) | Est. (95%CI) p-value | I^2 | Study (k) (Total N) | Est. (95%CI) p-value | I^2 | Study (k) (Total N) | Est. (95%CI) p-value | I^2 | Study (k) (Total N) | Est. (95%CI) p-value | I^2 | Study (k) (Total N) | Est. (95%CI) p-value | I^2 |
| Pooled estimates from current review | 38 (8478) | 41 (36-47) | 96 | 25 (9940) | 16 (12-20) | 97 | 48 (18324) | 38 (33-44) | 99 | 31 (11030) | 43 (38-49) | 97 | 17 (7504) | 38 (30-45) | 96 | 17 (6964) | 42 (32-51) | 99 |
| Low risk of inclusion/exclusion bias, English studies only | 29 (3603) | 39 (32-46) | 97 | 17 (6193) | 16 (12-21) | 96 | 30 (11520) | 36 (29-43) | 98 | 19 (5409) | 42 (32-49) | 97 | 11 (4393) | 36 (27-45) | 97 | 12 (4302) | 40 (28-52) | 99 |
| Low risk of CM Measurement bias, Low risk of inclusion/exclusion bias, English studies | 11 (5367) | 43 (29-57) | 98 | 10 (2741) | 22 (14-29) | 95 | 16 (5598) | 40 (34-47) | 96 | 16 (5141) | 42 (34-49) | 97 | 9 (3880) | 40 (31-49) | 97 | 8 (3688) | 36 (21-51) | 98 |
| Publication Year 2010-Current, Low any risk of bias, English studies | 9 (2007) | 43 (34-43) | 98 | 10 (2741) | 22 (14-29) | 95 | 14 (5311) | 40 (33-47) | 96 | 16 (5141) | 42 (34-49) | 97 | 9 (3880) | 40 (31-49) | 97 | 8 (3688) | 36 (21-51) | 98 |

Notes: ¹Pooled estimates from current review presented in Table 2 of manuscript

eReferences

1. Abrahamsson T, Berge J, Ojehagen A, Hakansson A. Benzodiazepine, z-drug and pregabalin prescriptions and mortality among patients in opioid maintenance treatment-A nation-wide register-based open cohort study. *Drug and Alcohol Dependence* 2017; **174**: 58-64.
2. Apelt SM, Scherbaum N, Golz J, Backmund M, Soyka M. Safety, effectiveness and tolerance of buprenorphine-naloxone in the treatment of OUD: Results from a nationwide non-interventional study in routine care. *Pharmacopsychiatry* 2013; **46**(3): 94-107.
3. Arendt M, Munk-Jorgensen P, Sher L, Jensen SO. Mortality among individuals with cannabis, cocaine, amphetamine, MDMA, and opioid use disorders: A nationwide follow-up study of Danish substance users in treatment. *Drug and Alcohol Dependence* 2011; **114**(2-3): 134-9.
4. Azim T, Chowdhury EI, Reza M, et al. Prevalence of infections, HIV risk behaviors and factors associated with HIV infection among male injecting drug users attending a needle/syringe exchange program in Dhaka, Bangladesh. *Subst Use Misuse* 2008; **43**(14): 2124-44.
5. Bakker A, Streef E. Benzodiazepine maintenance in opiate substitution treatment: Good or bad? A retrospective primary care case-note review. *Journal of Psychopharmacology* 2017; **31**(1): 62-6.
6. Bargagli AM, Sperati A, Davoli M, Forastiere F, Perucci CA. Mortality among problem drug users in Rome: an 18-year follow-up study, 1980-97. *Addiction* 2001; **96**(10): 1455-63.
7. Bargagli AM, Hickman M, Davoli M, et al. Drug-related mortality and its impact on adult mortality in eight European countries. *European Journal of Public Health* 2006; **16**(2): 198-202.
8. Barrio G, Molist G, de la Fuente L, et al. Mortality in a cohort of young primary cocaine users: Controlling the effect of the riskiest drug-use behaviors. *Addictive Behaviors* 2013; **38**(3): 1601-4.
9. Bart G, Wyman Z, Wang Q, Hodges JS, Karim R, Bart BA. Methadone and the QTc Interval: Paucity of Clinically Significant Factors in a Retrospective Cohort. *Journal of Addiction Medicine* 2017; **11**(6): 489-93.
10. Bartu A, Freeman NC, Gawthorne GS, Codde JP, Holman CDJ. Mortality in a cohort of opiate and amphetamine users in Perth, Western Australia. *Addiction* 2004; **99**(1): 53-60.
11. Bauer SM, Loipl R, Jagsch R, et al. Mortality in opioid-maintained patients after release from an addiction clinic. *European Addiction Research* 2008; **14**(2): 82-91.
12. Bird SM. Over 1200 drugs-related deaths and 190,000 opiate-user-years of follow-up: Relative risks by sex and age group. *Addiction Research & Theory* 2010; **18**(2): 194-207.
13. Bogdanowicz KM, Stewart R, Chang C-K, et al. Identifying mortality risks in patients with opioid use disorder using brief screening assessment: Secondary mental health clinical records analysis. *Drug and Alcohol Dependence* 2016; **164**: 82-8.
14. Bogdanowicz KM, Stewart R, Broadbent M, et al. Double trouble: Psychiatric comorbidity and opioid addiction-All-cause and cause-specific mortality. *Drug and Alcohol Dependence* 2015; **148**: 85-92.
15. Brugal MT, Molist G, Sarasa-Renedo A, et al. Assessing gender disparities in excess mortality of heroin or cocaine users compared to the general population. *International Journal of Drug Policy* 2016; **38**: 36-42.
16. de la Fuente L, Molist G, Espelt A, et al. Mortality risk factors and excess mortality in a cohort of cocaine users admitted to drug treatment in Spain. *Journal of Substance Abuse Treatment* 2014; **46**(2): 219-26.
17. Molist G, Brugal MT, Barrio G, et al. Effect of ageing and time since first heroin and cocaine use on mortality from external and natural causes in a Spanish cohort of drug users. *International Journal of Drug Policy* 2018; **53**: 8-16.
18. Bukten A, Stavseth MR, Clasuen T. From restrictive to more liberal: variations in mortality among patients in opioid maintenance treatment over a 12-year period. *BMC health services research* 2019; **19**(1): 553.
19. Clausen T, Anchersen K, Waal H. Mortality prior to, during and after opioid maintenance treatment (OMT): A national prospective cross-registry study. *Drug and Alcohol Dependence* 2008; **94**(1-3): 151-7.
20. Clausen T, Waal H, Thoresen M, Gossop M. Mortality among opiate users: Opioid maintenance therapy, age and causes of death. *Addiction* 2009; **104**(8): 1356-62.
21. Buster MCA, van Brussel GHA, van den Brink W. An increase in overdose mortality during the first 2 weeks after entering or re-entering methadone treatment in Amsterdam. *Addiction* 2002; **97**(8): 993-1001.
22. Callaghan RC, Gatley JM, Veldhuizen S, Lev-Ran S, Mann R, Asbridge M. Alcohol- or drug-use disorders and motor vehicle accident mortality: A retrospective cohort study. *Accident Analysis and Prevention* 2013; **53**: 149-55.
23. Callaghan RC, Cunningham JK, Verdichevski M, Sykes J, Jaffer SR, Kish SJ. All-cause mortality among individuals with disorders related to the use of methamphetamine: A comparative cohort study. *Drug and Alcohol Dependence* 2012; **125**(3): 290-4.
24. Cerovecki V, Tiljak H, Adzic ZO, Krizmaric M, Pregelj P, Kastelic A. Risk factors for fatal outcome in patients with OUD treated with methadone in a family medicine setting in Croatia. *Croatian Medical Journal* 2013; **54**(1): 42-8.
25. Chang K-C, Wang J-D, Saxon A, Matthews AG, Woody G, Hser Y-I. Causes of death and expected years of life lost among treated opioid-dependent individuals in the United States and Taiwan. *International Journal of Drug Policy* 2017; **43**: 1-6.
26. Chen CY, Wu PN, Su LW, Chou YJ, Lin KM. Three-year mortality and predictors after release: a longitudinal study of the first-time drug offenders in Taiwan. *Addiction* 2010; **105**(5): 920-7.
27. Cottler LB, Hu H, Smallwood BA, Anthony JC, Wu LT, Eaton WW. Nonmedical Opioid Pain Relievers and All-Cause Mortality: A 27-Year Follow-Up From the Epidemiologic Catchment Area Study. *American journal of public health* 2016; **106**(3): 509-16.
28. Davstad I, Allebeck P, Leifman A, Stenbacka M, Romelsjo A. Self-reported drug use and mortality among a nationwide sample of Swedish conscripts - A 35-year follow-up. *Drug and Alcohol Dependence* 2011; **118**(2-3): 383-90.

29. Degenhardt L, Larney S, Randall D, Burns L, Hall W. Causes of death in a cohort treated for OUD between 1985 and 2005. *Addiction* 2014; **109**(1): 90-9.
30. Degenhardt L, Randall D, Hall W, Law M, Butler T, Burns L. Mortality among clients of a state-wide opioid pharmacotherapy program over 20 years: Risk factors and lives saved. *Drug and Alcohol Dependence* 2009; **105**(1-2): 9-15.
31. Degenhardt L, Larney S, Kimber J, et al. The impact of opioid substitution therapy on mortality post-release from prison: Retrospective data linkage study. *Addiction* 2014; **109**(8): 1306-17.
32. Gibson A, Randall D, Degenhardt L. The increasing mortality burden of liver disease among opioid-dependent people: Cohort study. *Addiction* 2011; **106**(12): 2186-92.
33. Larney S, Randall D, Gibson A, Degenhardt L. The contributions of viral hepatitis and alcohol to liver-related deaths in opioid-dependent people. *Drug and Alcohol Dependence* 2013; **131**(3): 252-7.
34. Delorme J, Chenaf C, Kabore J-L, et al. Incidence of high dosage buprenorphine and methadone shopping behavior in a retrospective cohort of opioid-maintained patients in France. *Drug and Alcohol Dependence* 2016; **162**: 99-106.
35. Espelt A, Barrio G, Alamo-Junquera D, et al. Lethality of opioid overdose in a community cohort of young heroin users. *European Addiction Research* 2015; **21**(6): 300-6.
36. Esteban J, Gimeno C, Barril J, Aragono A, Climent JM, de la Cruz Pellin M. Survival study of opioid addicts in relation to its adherence to methadone maintenance treatment. *Drug and Alcohol Dependence* 2003; **70**(2): 193-200.
37. Evans JL, Tsui JJ, Hahn JA, Davidson PJ, Lum PJ, Page K. Mortality among young injection drug users in San Francisco: A 10-year follow-up of the UFO study. *American Journal of Epidemiology* 2012; **175**(4): 302-8.
38. Evans E, Li L, Min J, et al. Mortality among individuals accessing pharmacological treatment for OUD in California, 2006-10. *Addiction* 2015; **110**(6): 996-1005.
39. Evans E, Li L, Min JE, et al. Gender differences in mortality among treated opioid-dependent patients. *Drug and Alcohol Dependence* 2015; **156**: e64.
40. Ferri M, Bargagli AM, Faggiano F, et al. Mortality of drug users attending public treatment centres in Italy 1998-2001: A cohort study. *Epidemiologia e Prevenzione* 2007; **31**(5): 276-82.
41. Fridell M, Hesse M. Psychiatric severity and mortality in substance abusers: A 15-year follow-up of drug users. *Addictive Behaviors* 2006; **31**(4): 559-65.
42. Fugelstad A, Agren G, Romelsjö A. Changes in Mortality, Arrests, and Hospitalizations in Nonvoluntary Treated Heroin Addicts in Relation to Methadone Treatment. *Substance Use & Misuse* 1998; **33**(14): 2803-17.
43. Fugelstad A, Anell A, Agren G. Long-term mortality and causes of death among hospitalized Swedish drug users. *Scandinavian journal of public health* 2014; **42**(4): 364-9.
44. Galli M, Musicco M. Mortality of intravenous drug users living in Milan, Italy: Role of HIV-1 infection. *AIDS* 1994; **1994**(8): 1457-63.
45. Gao L, Robertson JR, Bird SM. Non drug-related and opioid-specific causes of 3262 deaths in Scotland's methadone-prescription clients, 2009-2015. *Drug & Alcohol Dependence* 2019; **197**: 262-70.
46. Gao L, Dimitropoulou P, Robertson JR, McTaggart S, Bennie M, Bird SM. Risk-factors for methadone-specific deaths in Scotland's methadone-prescription clients between 2009 and 2013. *Drug and Alcohol Dependence* 2016; **167**: 214-23.
47. Ghodse H, Oyefeso A, Kilpatrick B. Mortality of drug addicts in the United Kingdom 1967-1993. *International Journal of Epidemiology* 1998; **27**(3): 473-8.
48. Oppenheimer E, Tobutt C, Taylor C, Andrew T. Death and survival in a cohort of heroin addicts from London clinics: A 22-year follow-up study. *Addiction* 1994; **89**(10): 1299-308.
49. Gjersing L, Bretteville-Jensen AL. Gender differences in mortality and risk factors in a 13-year cohort study of street-recruited injecting drug users. *BMC public health* 2014; **14**: 440.
50. Goldstein A, Herrera J. Heroin addicts and methadone treatment in Albuquerque: A 22-year follow up. *Drug and Alcohol Dependence* 1995; **40**(2): 139-50.
51. Haarr D, Nessa J. Treatment of opiate-dependent patients in a general practice. *Tidsskr for den Norske Laegeforening: Tidsskrift for Praktisk Medicin, ny Raekke* 2007; **127**(13): 1770-2.
52. Hayashi K, Dong H, Marshall BDL, et al. Sex-Based Differences in Rates, Causes, and Predictors of Death among Injection Drug Users in Vancouver, Canada. *American Journal of Epidemiology* 2016; **183**(6): 544-52.
53. Hickman M, Steer C, Tilling K, et al. The impact of buprenorphine and methadone on mortality: a primary care cohort study in the United Kingdom. *Addiction (Abingdon, England)* 2018; **113**(8): 1461-76.
54. Cornish R, Macleod J, Strang J, Vickerman P, Hickman M. Risk of death during and after opiate substitution treatment in primary care: Prospective observational study in UK General Practice Research Database. *BMJ: British Medical Journal* 2010; **341**(7779): 1-8.
55. Hser Y-I, Mooney LJ, Saxon AJ, et al. High mortality among patients with opioid use disorder in a large healthcare system. *Journal of Addiction Medicine* 2017; **11**(4): 315-9.
56. Huang Y-F, Kuo H-S, Lew-Ting C-Y, et al. Mortality among a cohort of drug users after their release from prison: An evaluation of the effectiveness of a harm reduction program in Taiwan. *Addiction* 2011; **106**(8): 1437-45.
57. Jafari S, Rahimi-Movaghar A, Craib KJP, Baharlou S, Mathias R. A follow-up study of drug users in Southern Iran. *Addiction Research & Theory* 2010; **18**(1): 59-70.
58. Jerkeman A, Hakansson A, Rylance R, Wagner P, Blome MA, Bjorkman P. Death from liver disease in a cohort of injecting opioid users in a Swedish city in relation to registration for opioid substitution therapy. *Drug and Alcohol Review* 2017; **36**(3): 424-31.
59. Jimenez-Trevino L, Saiz PA, Garcia-Portilla MP, et al. A 25-year follow-up of patients admitted to methadone treatment for the first time: Mortality and gender differences. *Addictive Behaviors* 2011; **36**(12): 1184-90.

60. Jones AA, Vila-Rodriguez F, Leonova O, et al. Mortality from treatable illnesses in marginally housed adults: a prospective cohort study. *BMJ Open* 2015; **5**(8): e008876.
61. Kelty E, Hulse G. Examination of mortality rates in a retrospective cohort of patients treated with oral or implant naltrexone for problematic opiate use. *Addiction* 2012; **107**(10): 1817-24.
62. Fellows-Smith J. Opioid-dependent error processing. *Journal of Opioid Management* 2011; **7**(6): 443-9.
63. Kelty E, Hulse G. Fatal and non-fatal opioid overdose in opioid dependent patients treated with methadone, buprenorphine or implant naltrexone. *International Journal of Drug Policy* 2017; **46**: 54-60.
64. Kelty E, Dobbins T, Hulse G. Incidence of cancer and cancer related mortality in opiate dependent patients treated with methadone, buprenorphine or implant naltrexone as compared with non-opiate using controls. *Heroin Addiction and Related Clinical Problems* 2017; **19**(3): 65-72.
65. Tait RJ, Ngo HT, Hulse GK. Mortality in heroin users 3 years after naltrexone implant or methadone maintenance treatment. *Journal of Substance Abuse Treatment* 2008; **35**(2): 116-24.
66. Khademi H, Malekzadeh R, Pourshams A, et al. Opium use and mortality in Golestan Cohort Study: prospective cohort study of 50,000 adults in Iran. *BMJ (Clinical research ed)* 2012; **344**(e2502): 1-12.
67. Langendam MW, van Brussel GHA, Coutinho RA, van Ameijden EJC. The impact of harm-reduction-based methadone treatment on mortality among heroin users. *American Journal of Public Health* 2001; **91**(5): 774-80.
68. Larney S, Bohnert AS, Ganoczy D, et al. Mortality among older adults with opioid use disorders in the Veteran's Health Administration, 2000-2011. *Drug and Alcohol Dependence* 2015; **147**: 32-7.
69. Laroche MR, Bernson D, Land T, et al. Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study. *Ann Intern Med* 2018.
70. Ledberg A. Mortality related to methadone maintenance treatment in Stockholm, Sweden, during 2006-2013. *Journal of Substance Abuse Treatment* 2017; **74**: 35-41.
71. Lejckova P, Mravcik V. Mortality of hospitalized drug users in the Czech Republic. *Journal of Drug Issues* 2007; **37**(1): 103-18.
72. Liao D-L, Chen P-C, Chen C-H, et al. Higher methadone doses are associated with lower mortality in patients of OUD in Taiwan. *Journal of Psychiatric Research* 2013; **47**(10): 1530-4.
73. Chang K-C, Lu T-H, Lee K-Y, Hwang J-S, Cheng C-M, Wang J-D. 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 and Alcohol Dependence* 2015; **153**: 152-8.
74. Huang CL-C, Master CWL. Factors associated with mortality among heroin users after seeking treatment with methadone: A population-based cohort study in Taiwan. *Journal of Substance Abuse Treatment* 2013; **44**(3): 295-300.
75. Lee CTC, Chen VCH, Tan HKL, et al. Suicide and other-cause mortality among heroin users in Taiwan: A prospective study. *Addictive Behaviors* 2013; **38**(10): 2619-23.
76. Lindblad R, Hu L, Oden N, Wakim P, Rosa C, VanVeldhuisen P. Mortality Rates Among Substance Use Disorder Participants in Clinical Trials: Pooled Analysis of Twenty-Two Clinical Trials Within the National Drug Abuse Treatment Clinical Trials Network. *Journal of Substance Abuse Treatment* 2016; **70**: 73-80.
77. Liu E, Rou K, McGoogan JM, et al. Factors associated with mortality of HIV-positive clients receiving methadone maintenance treatment in China. *Journal of Infectious Diseases* 2013; **208**(3): 442-53.
78. Lloyd B, Barratt MJ, Ferris J, Best D, Lubman DI. Factors influencing mortality among alcohol and drug treatment clients in Victoria, Australia: The role of demographic and substance use characteristics. *Australian and New Zealand Journal of Psychiatry* 2013; **47**(9): 859-67.
79. Lopez D, Martineau H, Palle C. Mortality of individuals arrested for heroin, cocaine or crack use. Paris, France: Observatoire Francais des Drogues et des Toxicomanies, 2004.
80. Lopez-Quintero C, Roth KB, Eaton WW, et al. Mortality among heroin users and users of other internationally regulated drugs: A 27-year follow-up of users in the Epidemiologic Catchment Area Program household samples. *Drug and Alcohol Dependence* 2015; **156**: 104-11.
81. Lovrecic B, Semerl JS, Tavcar R, Maremmani I. Sociodemographic and clinical differences among deceased and surviving cohort members of opioid maintenance therapy. *Heroin Addiction and Related Clinical Problems* 2011; **13**(3): 39-48.
82. Lovrecic M, Lovrecic B, Maremmani I, Maremmani AGI. Excess suicide mortality in heroin use disorder patients seeking opioid agonist treatment in Slovenia and risk factors for suicide. *Heroin Addiction and Related Clinical Problems* 2018; **20**(2): 35-40.
83. Marsden J, Stillwell G, Jones H, et al. Does exposure to opioid substitution treatment in prison reduce the risk of death after release? A national prospective observational study in England. *Addiction* 2017; **112**(8): 1408-18.
84. Marzo J-N, Rotily M, Meroueh F, et al. Maintenance therapy and 3-year outcome of opioid-dependent prisoners: A prospective study in France (2003-06). *Addiction* 2009; **104**(7): 1233-40.
85. Maughan BC, Becker EA. Drug-related mortality after discharge from treatment: A record-linkage study of substance abuse clients in Texas, 2006-2012. *Drug and Alcohol Dependence* 2019; **204** (no pagination)(107473).
86. Merrill ELC, Bird SM, Hutchinson SJ. Mortality of those who attended drug services in Scotland 1996-2006: Record-linkage study. *International Journal of Drug Policy* 2012; **23**(1): 24-32.
87. Metzger DS, Donnell D, Celentano DD, et al. Expanding substance use treatment options for HIV prevention with buprenorphine-naloxone: HIV Prevention Trials Network 058. *JAIDS Journal of Acquired Immune Deficiency Syndromes* 2015; **68**(5): 554-61.
88. Moskalewicz J, Sieroslowski J. Mortality of narcotic addicts using injections. *Przegląd Epidemiologiczny* 1996; **50**(3): 323-32.

89. Muga R, Rivas I, Faure E, et al. Sex-specific disease outcomes of HIV-positive and HIV-negative drug users admitted to an opioid substitution therapy program in Spain: A cohort study. *BMC Infectious Diseases* 2014; **14** (504).
90. Muhuri PK, Gfroerer JC. Mortality associated with illegal drug use among adults in the United States. *The American Journal of Drug and Alcohol Abuse* 2011; **37**(3): 155-64.
91. Naderi-Heiden A, Gleiss A, Backer C, et al. Mortality and employment after in-patient opiate detoxification. *European Psychiatry* 2012; **27**(4): 294-300.
92. Nagot N, Hoang TG, Vallo R, et al. Mortality among people who inject drugs in Haiphong, Vietnam: High burden of infectious causes. 2018.
93. Nambiar D, Agius PA, Stoove M, Hickman M, Dietze P. Mortality in the Melbourne injecting drug user cohort study (MIX). *Harm Reduction Journal* 2015; **12**(55): 1-5.
94. O'Connor G, McGinty T, Yeung SJ, et al. Cross-sectional study of the characteristics, healthcare usage, morbidity and mortality of injecting drug users attending an inner city emergency department. *Emergency Medicine Journal* 2014; **31**(8): 625-9.
95. Odegard E, Amundsen EJ, Kielland KB. Fatal overdoses and deaths by other causes in a cohort of Norwegian drug abusers--a competing risk approach. *Drug and Alcohol Dependence* 2007; **89**(2-3): 176-82.
96. Orti RM, Domingo-Salvany A, Munoz A, MacFarlane D, Suelves JM, Anto JM. Mortality trends in a cohort of opiate addicts, Catalonia, Spain. *International Journal of Epidemiology* 1996; **25**(3): 545-53.
97. Pan C-H, Jhong J-R, Tsai S-Y, Lin S-K, Chen C-C, Kuo C-J. Excessive suicide mortality and risk factors for suicide among patients with heroin dependence. *Drug and Alcohol Dependence* 2014; **145**: 224-30.
98. Parmar MK, Strang J, Choo L, Meade AM, Bird SM. Randomized controlled pilot trial of naloxone-on-release to prevent post-prison opioid overdose deaths. *Addiction* 2017; **112**(3): 502-15.
99. Pavarin RM, Fioritti A, Sanchini S. Mortality trends among heroin users treated between 1975 and 2013 in Northern Italy: Results of a longitudinal study. *Journal of Substance Abuse Treatment* 2017; **77**: 166-73.
100. Antolini G, Pirani M, Morandi G, Sorio C. Gender difference and mortality in a cohort of heroin users in the Provinces of Modena and Ferrara, 1975-1999. *Epidemiologia e Prevenzione* 2006; **30**(2): 91-9.
101. Peles E, Schreiber S, Sason A, Adelson M. Similarities and changes between 15- and 24-year survival and retention rates of patients in a large medical-affiliated methadone maintenance treatment (MMT) center. *Drug & Alcohol Dependence* 2018; **185**: 112-9.
102. Pierce M, Bird SM, Hickman M, Millar T. National record linkage study of mortality for a large cohort of opioid users ascertained by drug treatment or criminal justice sources in England, 2005-2009. *Drug and Alcohol Dependence* 2015; **146**: 17-23.
103. Price RK, Risk NK, Murray KS, Virgo KS, Spitznagel EL. Twenty-five year mortality of US serviceman deployed in Vietnam: Predictive utility of early drug use. *Drug and Alcohol Dependence* 2001; **64**(3): 309-18.
104. Quan VM, Vongchak T, Jittiwutikarn J, et al. Predictors of mortality among injecting and non-injecting HIV-negative drug users in northern Thailand. *Addiction* 2007; **102**(3): 441-6.
105. Quan VM, Minh NL, Ha TV, et al. Mortality and HIV transmission among male Vietnamese injection drug users. *Addiction* 2011; **106**(3): 583-9.
106. Reece AS. Favorable mortality profile of naltrexone implants for opiate addiction. *Journal of Addictive Diseases* 2010; **29**(1): 30-50.
107. Risser D, Honigschnabl S, Stichenwirth M, et al. Mortality of opiate users in Vienna, Austria. *Drug and Alcohol Dependence* 2001; **64**(3): 251-6.
108. Rossow I. Suicide among drug addicts in Norway. *Addiction* 1994; **89**(12): 1667-73.
109. Russolillo A, Moniruzzaman A, Somers JM. Methadone maintenance treatment and mortality in people with criminal convictions: A population-based retrospective cohort study from Canada. *PLoS Medicine / Public Library of Science* 2018; **15**(7): e1002625.
110. Sanchez-Carbonell X, Seus L. Ten-year survival analysis of a cohort of heroin addicts in Catalonia: The EMETYST project *Addiction* 2000; **95**(6): 941-8.
111. Sanvisens A, Vallecillo G, Bolao F, et al. Temporal trends in the survival of drug and alcohol abusers according to the primary drug of admission to treatment in Spain. *Drug and Alcohol Dependence* 2014; **136**: 115-20.
112. Scherbaum N, Specka M, Hauptmann G, Gastpar M. Does maintenance treatment reduce the mortality rate of opioid addicts? *Fortschritte der Neurologie-Psychiatrie* 2002; **70**(9): 455-61.
113. Smyth BP, Fagan J, Kernan K. Outcome of heroin-dependent adolescents presenting for opiate substitution treatment. *Journal of Substance Abuse Treatment* 2012; **42**(1): 35-44.
114. Soyka M, Apelt SM, Lieb M, Wittchen HU. One-year mortality rates of patients receiving methadone and buprenorphine maintenance therapy: a nationally representative cohort study in 2694 patients. *Journal of Clinical Psychopharmacology* 2006; **26**(6): 657-60.
115. Soyka M, Trader A, Klotsche J, et al. Six-year mortality rates of patients in methadone and buprenorphine maintenance therapy: Results from a nationally representative cohort study. *Journal of Clinical Psychopharmacology* 2011; **31**(5): 678-80.
116. Stenbacka M, Leifman A, Romelsjo A. Mortality among opiate abusers in Stockholm: A longitudinal study. *Heroin Addiction and Related Clinical Problems* 2007; **9**(3): 41-50.
117. Stoove MA, Dietze PM, Jolley D. Overdose deaths following previous non-fatal heroin overdose: Record linkage of ambulance attendance and death registry data. *Drug and alcohol review* 2009; **28**(4): 347-52.
118. Uosukainen H, Kauhanen J, Bell J, et al. Mortality among clients seeking treatment for buprenorphine abuse in Finland. *Drug and Alcohol Dependence* 2013; **133**(2): 391-7.

119. Veldhuizen S, Callaghan RC. Cause-specific mortality among people previously hospitalized with opioid-related conditions: A retrospective cohort study. *Annals of Epidemiology* 2014; **24**(8): 620-4.
120. Vlahov D, Wang C, Ompad D, et al. Mortality risk among recent-onset injection drug users in five U.S. cities. *Substance Use & Misuse* 2008; **43**(3-4): 413-28.
121. von Greiff N, Skogens L, Berlin M, Bergmark A. Mortality and Cause of Death-A 30-Year Follow-Up of Substance Misusers in Sweden. *Substance use & misuse* 2018; **53**(12): 2043-51.
122. Wahren CA, Brandt L, Allebeck P. Has mortality in drug addicts increased? A comparison between two hospitalized cohorts in Stockholm. *International Journal of Epidemiology* 1997; **26**(6): 1219-26.
123. Wang C, Vlahov D, Galai N, et al. The effect of HIV infection on overdose mortality. *AIDS* 2005; **19**(9): 935-42.
124. Zhang L, Ruan YH, Jiang ZQ, et al. A 1-year prospective cohort study on mortality of injecting drug users. *Zhonghua liu xing bing xue za zhi = Zhonghua liuxingbingxue zazhi* 2005; **26**(3): 190-3.
125. Peles E, Schreiber S, Adelson M. 15-year survival and retention of patients in a general hospital-affiliated methadone maintenance treatment (MMT) center in Israel. *Drug and Alcohol Dependence* 2010; **107**(2-3): 141-8.
126. Jones ME, Swerdlow AJ. Bias in the standardized mortality ratio when using general population rates to estimate expected number of deaths. *American Journal of Epidemiology* 1998; **148**: 1012-7.