

Supplemental Text

Search Syntax for PubMed

Terms entered in Search Field: (Gulf War OR Desert Storm OR Desert Shield OR Gulf Syndrome OR Gulf War Syndrome OR Gulf War Illness OR Persian Gulf War OR Persian Gulf Syndrome) AND (health OR symptom* OR health symptom*)

Filters applied: Human Subjects and English Language

Search details returned by PubMed: (("gulf war"[MeSH Terms] OR ("gulf"[All Fields] AND "war"[All Fields]) OR "gulf war"[All Fields]) OR (Desert[All Fields] AND Storm[All Fields]) OR (Desert[All Fields] AND Shield[All Fields]) OR (Gulf[All Fields] AND ("syndrome"[MeSH Terms] OR "syndrome"[All Fields])) OR ("persian gulf syndrome"[MeSH Terms] OR ("persian"[All Fields] AND "gulf"[All Fields] AND "syndrome"[All Fields]) OR "persian gulf syndrome"[All Fields] OR ("gulf"[All Fields] AND "war"[All Fields] AND "syndrome"[All Fields]) OR "gulf war syndrome"[All Fields]) OR (("gulf war"[MeSH Terms] OR ("gulf"[All Fields] AND "war"[All Fields]) OR "gulf war"[All Fields]) AND Illness[All Fields]) OR ("iraq war, 2003-2011"[MeSH Terms] OR ("iraq"[All Fields] AND "war"[All Fields] AND "2003-2011"[All Fields]) OR "2003-2011 iraq war"[All Fields] OR ("persian"[All Fields] AND "gulf"[All Fields] AND "war"[All Fields]) OR "persian gulf war"[All Fields]) OR ("persian gulf syndrome"[MeSH Terms] OR ("persian"[All Fields] AND "gulf"[All Fields] AND "syndrome"[All Fields]) OR "persian gulf syndrome"[All Fields])) AND (("health"[MeSH Terms] OR "health"[All Fields]) OR (symptom[All Fields] OR symptom'[All Fields] OR symptom"[All Fields] OR symptom'as[All Fields] OR symptom's[All Fields] OR symptoma[All Fields] OR symptomaattinen[All Fields] OR symptomach[All Fields] OR symptomagology[All Fields] OR symptomaiik[All Fields] OR symptomaik[All Fields] OR symptomakik[All Fields] OR symptomality[All Fields] OR symptomalogi[All Fields] OR symptomalogia[All Fields] OR symptomalogic[All Fields] OR symptomalogical[All Fields] OR symptomalogie[All Fields] OR symptomalogy[All Fields] OR symptomalologie[All Fields] OR symptomalology[All Fields] OR symptomamic[All Fields] OR symptomamy[All Fields] OR symptomanalyse[All Fields] OR symptomangebot[All Fields] OR symptomarer[All Fields] OR symptomarm[All Fields] OR symptomarme[All Fields] OR symptomarmem[All Fields] OR symptomarmen[All Fields] OR symptomarmer[All Fields] OR symptomarmes[All Fields] OR symptomarmut[All Fields] OR symptomas[All Fields] OR symptomastischer[All Fields] OR symptomata[All Fields] OR symptomatalogy[All Fields] OR symptomatc[All Fields] OR symptomatci[All Fields] OR symptomate[All Fields] OR symptomathic[All Fields] OR symptomathological[All Fields] OR symptomathologies[All Fields] OR symptomathology[All Fields] OR symptomati[All Fields] OR symptomatibus[All Fields] OR symptomatic[All Fields] OR symptomatic'[All Fields] OR symptomatica[All Fields] OR symptomatical[All Fields] OR symptomatically[All Fields] OR symptomatice[All Fields] OR symptomaticfor[All Fields] OR symptomaticity[All Fields] OR symptomatick[All Fields] OR symptomaticka[All Fields] OR symptomaticke[All Fields] OR symptomatickeho[All Fields] OR symptomatickej[All Fields] OR symptomatickou[All Fields] OR symptomaticku[All Fields] OR symptomaticky[All Fields] OR symptomatickych[All Fields] OR symptomaticlacunar[All Fields] OR symptomaticly[All Fields] OR symptomatico[All Fields] OR symptomaticpatent[All Fields] OR symptomatics[All Fields] OR symptomatics'[All Fields] OR symptomatictherapies[All Fields] OR

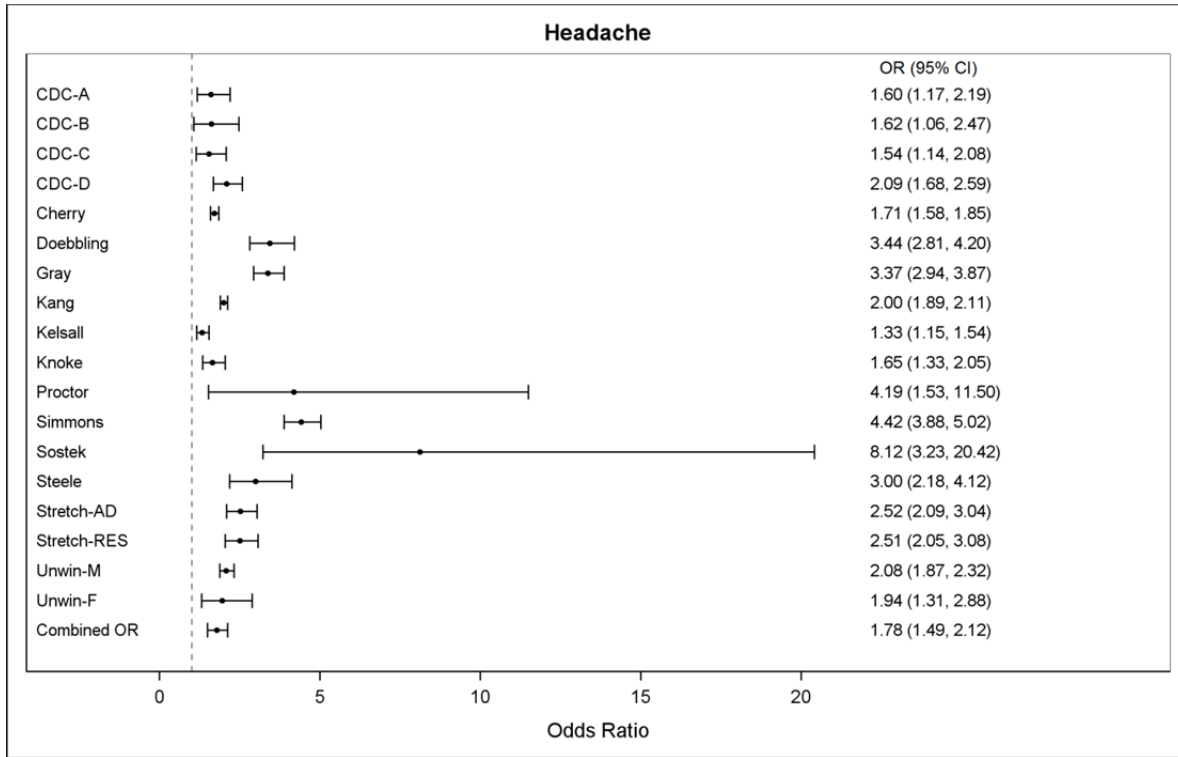
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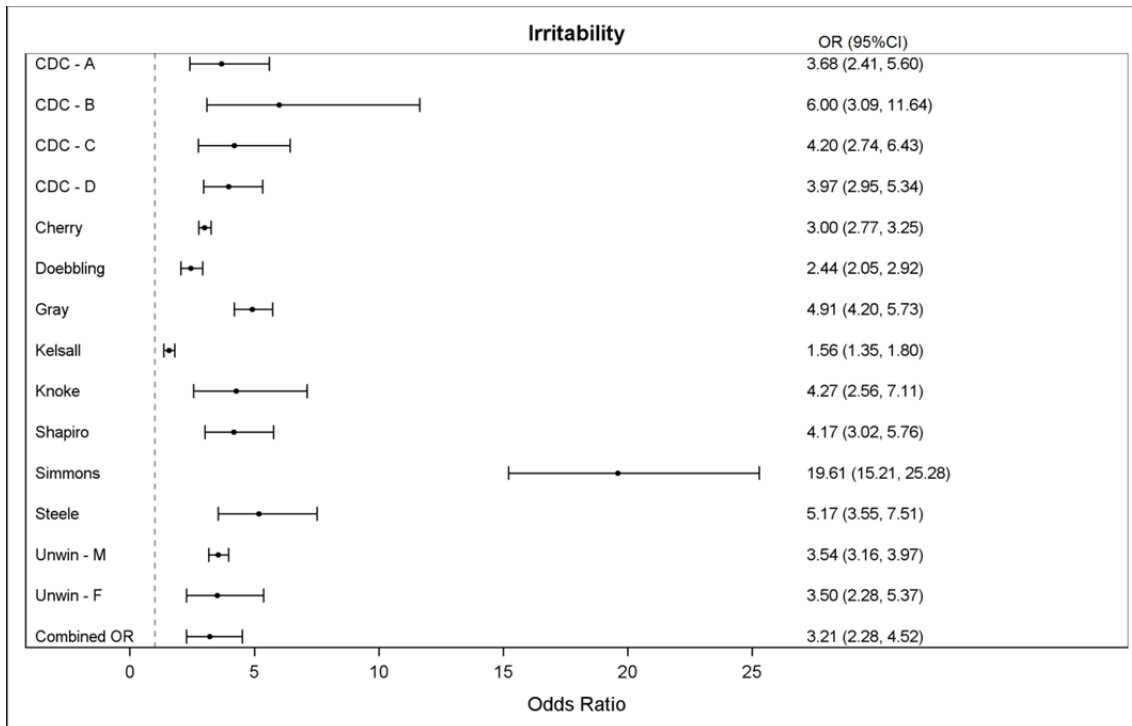
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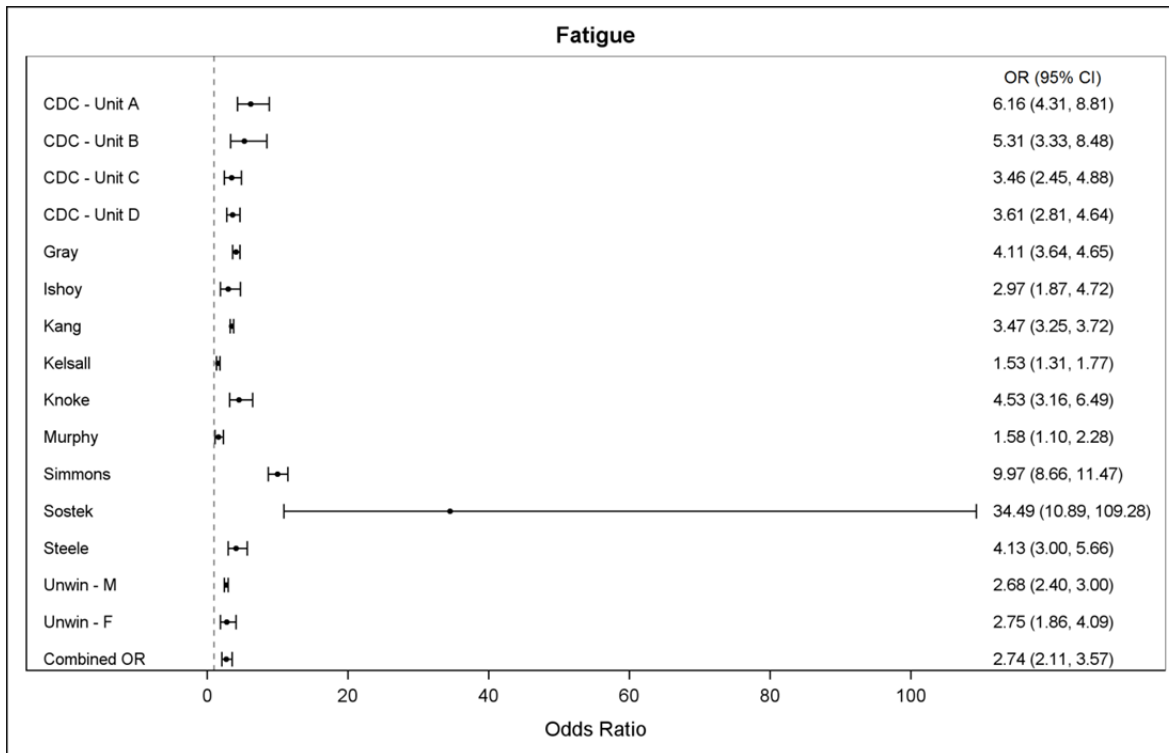
Supplemental Figures. Forest plots: Individual study and combined odds ratios of symptom reporting in GW-deployed veterans compared to GW-era controls



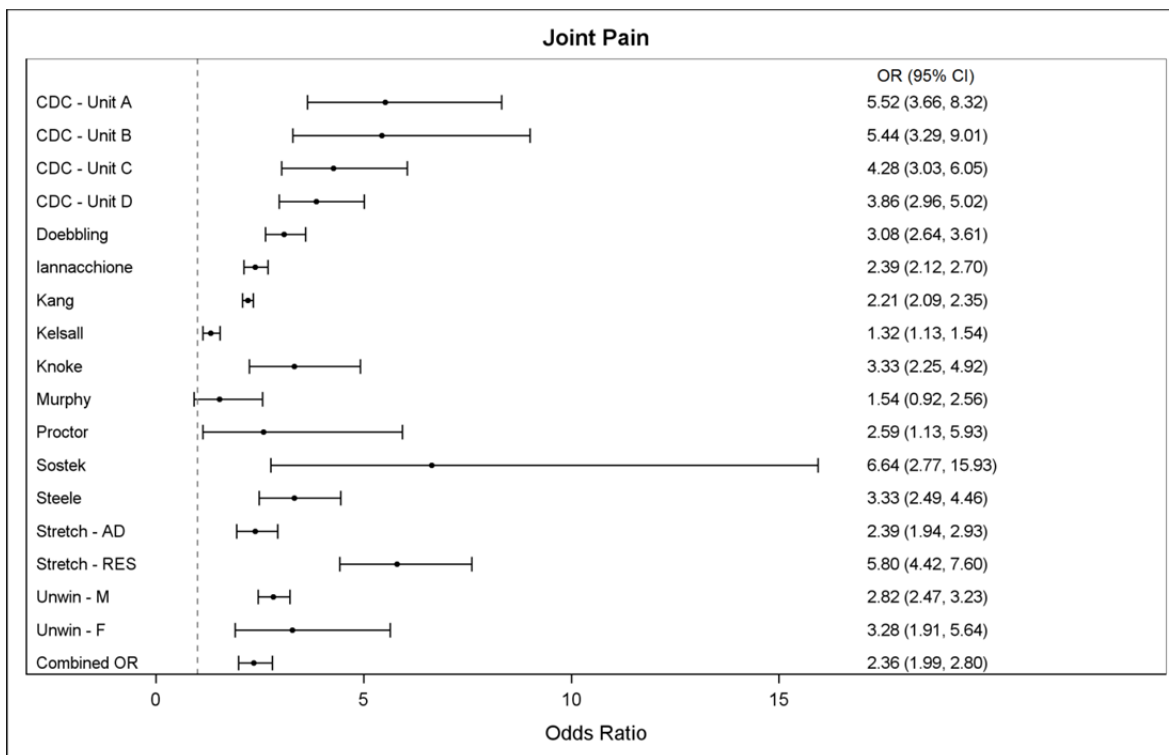
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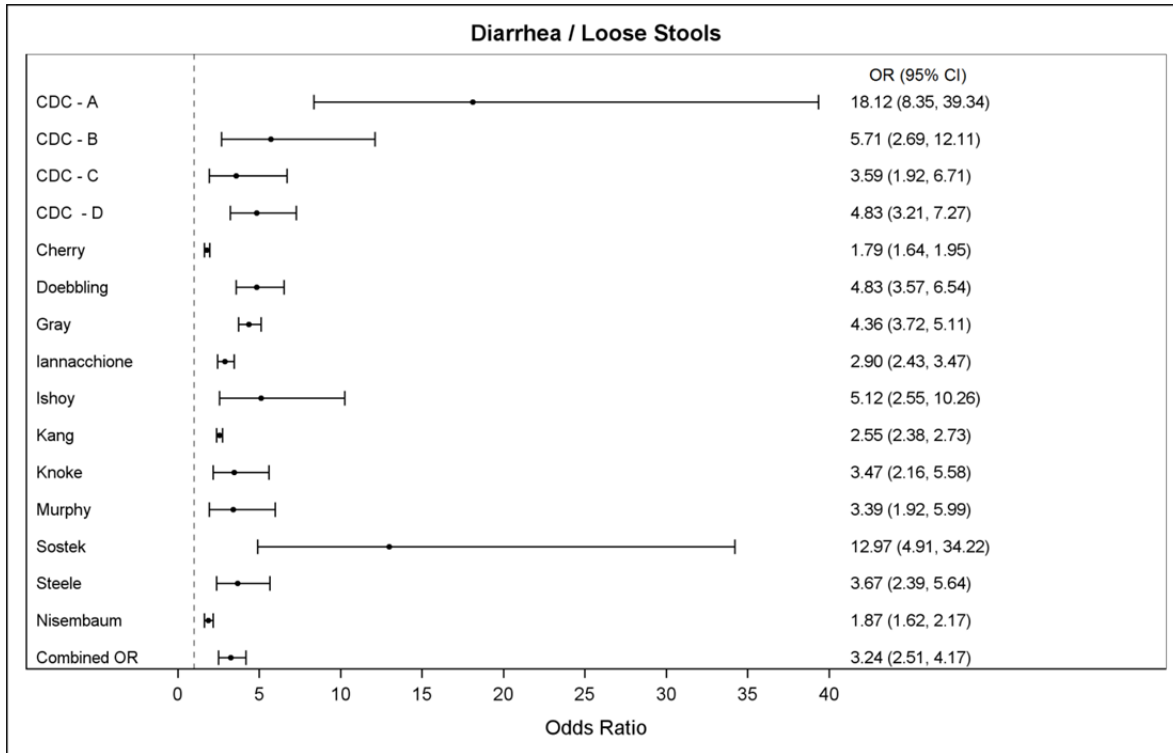
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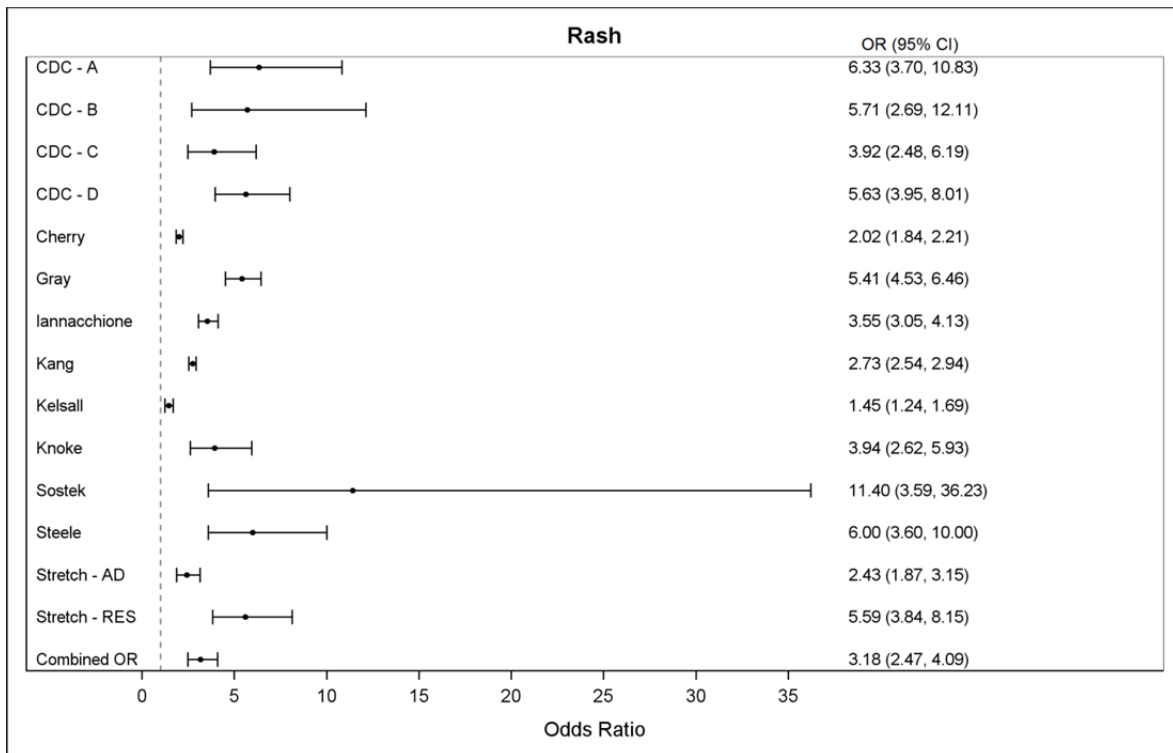
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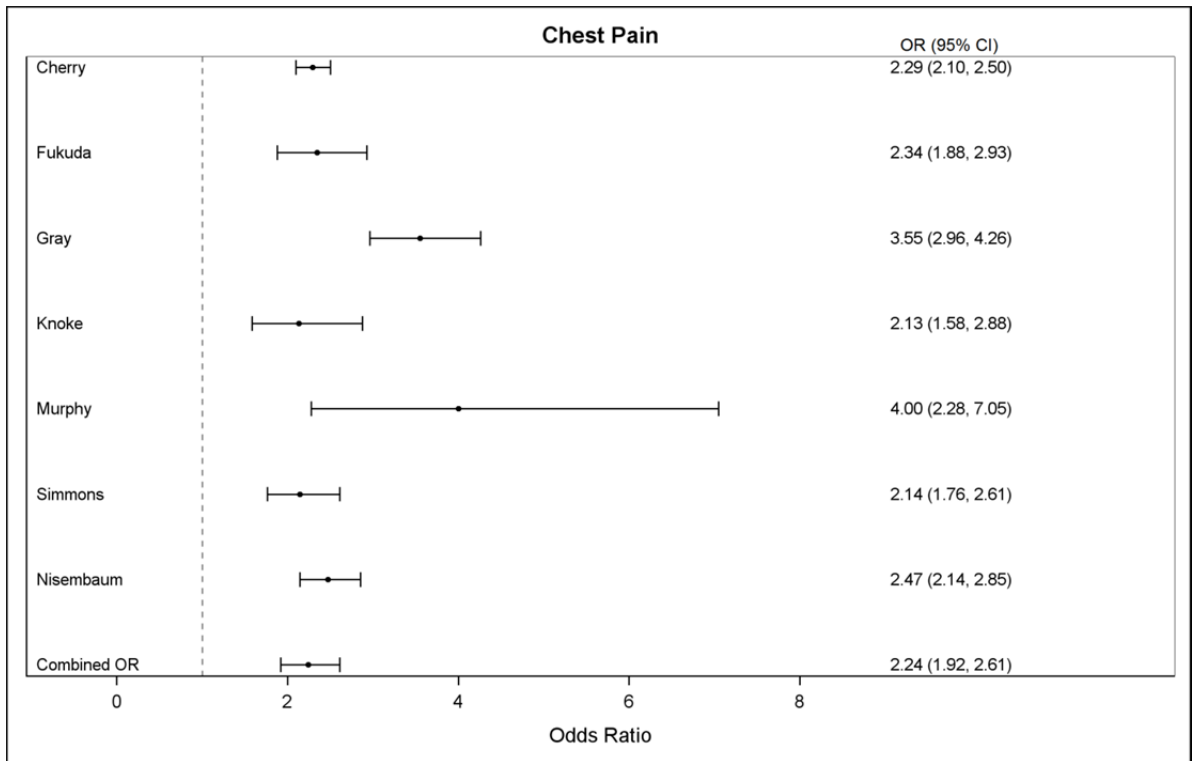
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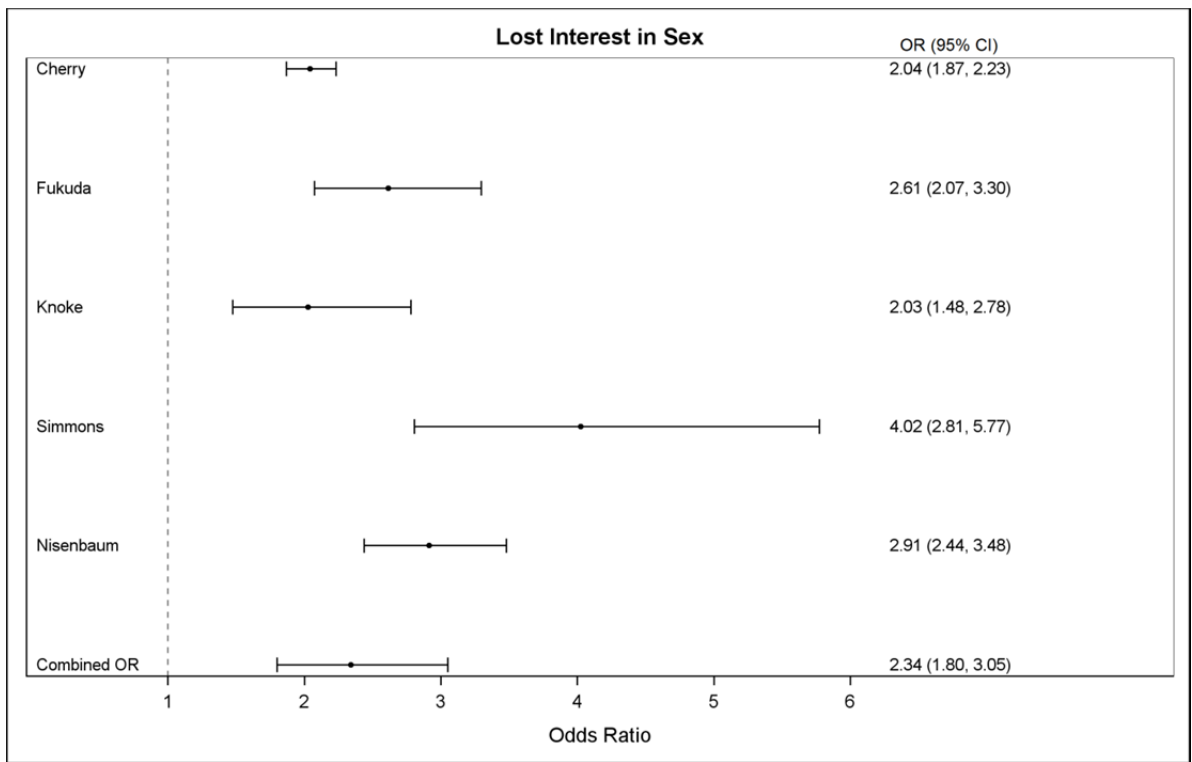
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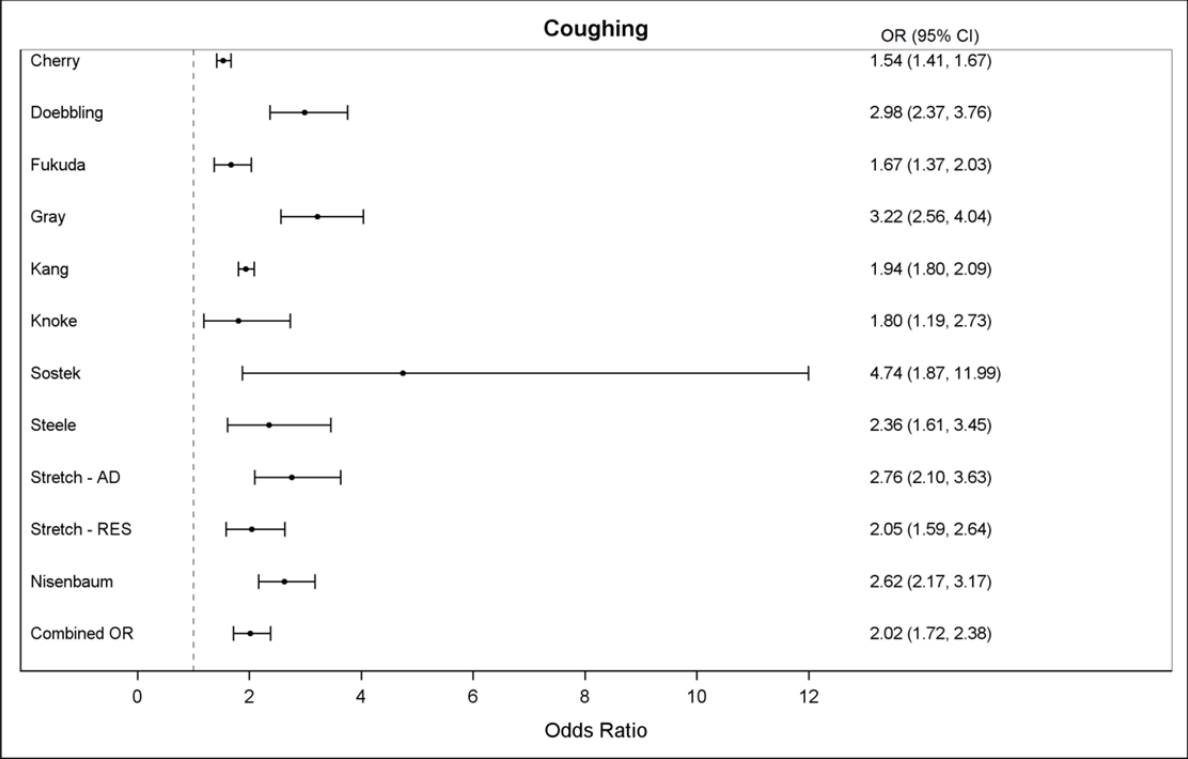
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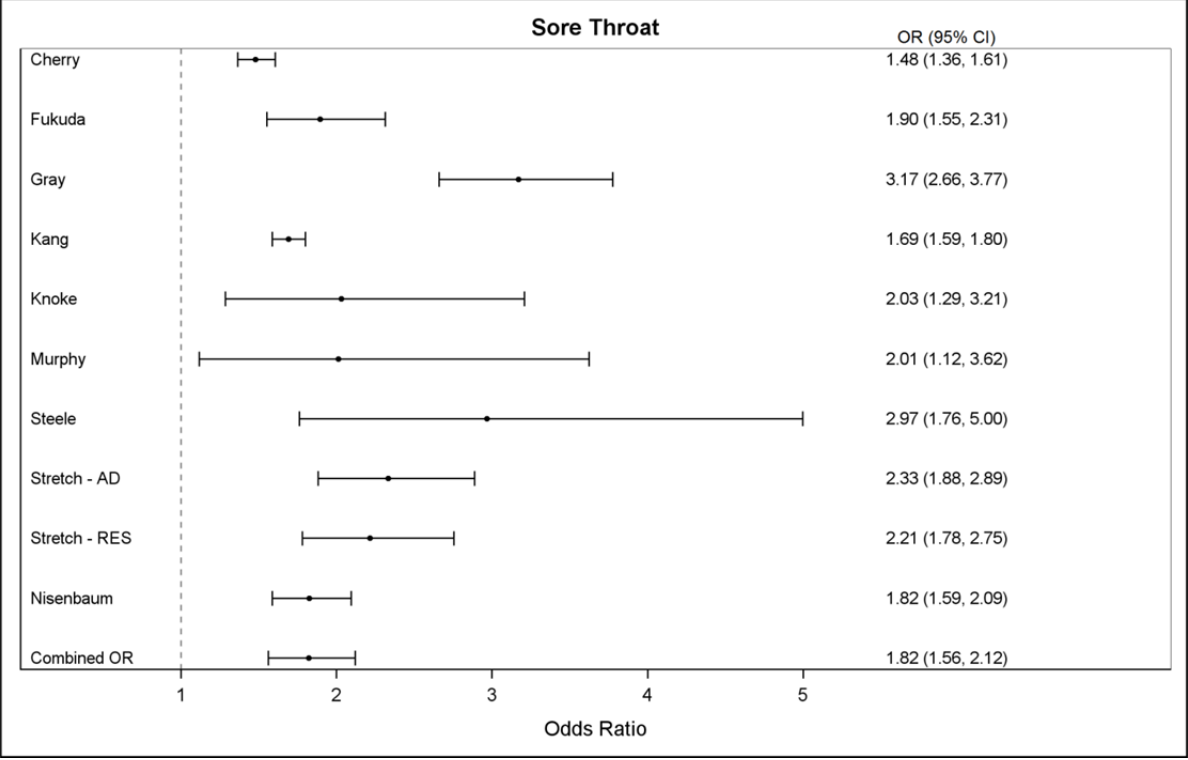
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Supplemental Table. Wampold et al. (1990) threats to validity checklist

Hypothesis Validity
1. Inconsequential Hypotheses
2. Ambiguous Hypotheses
3. Non-congruence of research and statistical hypotheses
4. Diffuse statistical hypotheses and tests <ul style="list-style-type: none"> a. Multiple statistical tests per hypotheses b. Omnibus tests and follow-ups; post-hoc tests c. Statistical tests with extraneous independent variables not specific in hypotheses
Statistical Conclusion Validity
1. Low statistical power
2. Violated assumptions of statistic
3. Error rate problems <ul style="list-style-type: none"> a. Type I b. Type II
4. Unreliability of measures <ul style="list-style-type: none"> a. Independent variables b. Dependent variables
5. Restricted range
6. Unreliability of treatment implementation
7. Irrelevancies in experimental setting
8. Heterogeneity of participants
9. Inaccurate effect size estimates
Internal Validity
1. Ambiguous temporal precedence (direction of causality)
2. Selection
3. History
4. Maturation
5. Regression
6. Mortality/attrition
7. Testing
8. Instrumentation
9. Additive and interaction effects of threats to internal validity
Construct Validity
1. Inadequate explication of constructs
2. Construct confounding
3. Mono-operation bias
4. Mono-method bias
5. Confounding constructs with limited levels of constructs
6. Treatment sensitive factorial structure
7. Reactive self-report changes
8. Reactivity to experimental situation (e.g., hypothesis guessing)
9. Experimenter expectancies (non-blinded)
10. Novelty and disruption effects
11. Compensatory equalization of treatment

12. Compensatory rivalry
13. Resentful demoralization
14. Treatment diffusion
External Validity
1. Interaction of the causal relation with units (selection of participants)
2. Interaction of the causal relation over treatment variations
3. Interaction of the causal relation with outcomes
4. Interaction of the causal relation with setting
5. Context dependent mediation