

Causation PICO question
- exposure + outcome

Critical appraisal by
EH Critical appraisal club.
n=10

Instructions for completion:

Please refer to the attached dictionary for definition of terms and instructions for completing each section. For each criteria, score by placing a check mark in the appropriate box.

First Author: Wade
Year: 2003
Journal: Env. Health Perspectives
Reviewer: Michelle Ng

P-general public
E-microbial water quality
O-GI illness

CRITERION	YES	NO
Q1. Did the authors have a clearly focused question [population, intervention (strategy), and outcome(s)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q2. Were appropriate inclusion criteria used to select primary studies? <i>GI illness</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q3. Did the authors describe a search strategy that was comprehensive? <i>Circle all strategies used:</i> <input checked="" type="checkbox"/> health databases <i>medline, biosis, embase, oldmedline</i> <input checked="" type="checkbox"/> psychological databases <input checked="" type="checkbox"/> social science databases <input checked="" type="checkbox"/> educational databases <input type="checkbox"/> other <input checked="" type="checkbox"/> handsearching <input checked="" type="checkbox"/> key informants <input checked="" type="checkbox"/> reference lists <input checked="" type="checkbox"/> unpublished <i>conference proceedings, reports, unpublished</i> <input checked="" type="checkbox"/> unpublished <i>dissertation databases</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q4. Did search strategy cover an adequate number of years? <i>1950 - 2003</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

For questions 5, 6, and 8, please choose the column relating to the appropriate methodology. Strike a line through the column that does not apply.

Q5. Quantitative reviews: Did the authors describe the level of evidence in the primary studies included in the review? <input type="checkbox"/> Level I → RCTs only <input checked="" type="checkbox"/> Level II → non-randomized, cohort, case-control <input type="checkbox"/> Level III → uncontrolled studies	Q5. Qualitative reviews: Do the authors provide a clear description of the range of methods in each of the primary studies included in the review?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q6. Quantitative reviews: Did the review assess the methodological quality of the primary studies, including: <i>(Minimum requirement: 4/7 of the following)</i> <input type="checkbox"/> Research design <input type="checkbox"/> Study sample <input type="checkbox"/> Participation rates <input type="checkbox"/> Sources of bias (confounders, respondent bias) <input type="checkbox"/> Data collection (measurement of independent/dependent variables) <input type="checkbox"/> Follow-up/attrition rates <input type="checkbox"/> Data analysis <i>- reporting does not imply assessment</i>	Q6. Qualitative reviews: Did the review assess the methodological quality of the primary studies, including: <i>(Minimum requirement: 4/7 of the following)</i> <input type="checkbox"/> Suitability of methodology/paradigm to the research question <input type="checkbox"/> Sampling (selection of participants / settings / documentation) <input type="checkbox"/> Clear description of context, data collection and data analysis <input type="checkbox"/> Rigor: → Audit trail → Some coding by 2 or more coders, if appropriate → Deviant case analysis (negative cases) → Respondent validation (member checking) <input type="checkbox"/> Triangulation <input type="checkbox"/> Reflexivity (researcher and research process) <input type="checkbox"/> Relevance (credibility, consistency, applicability, transferability)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Q7. Are the results of the review transparent? <i>(quality assessment →)</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Q8. Quantitative reviews: Was it appropriate to combine the findings of results across studies? <i>heterogeneity test</i>	Q8. Qualitative reviews: Is there a description of how reviewers determined results were similar enough across studies to compare or combine them?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q9. Were appropriate methods used for combining or comparing results across studies? <i>weighting</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q10. Do the data support the author's interpretation?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
TOTAL SCORE:		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Quality Assessment Rating:
(Circle one)

Strong
(total score 8 – 10)

Moderate
(total score 5 – 7)

Weak
(total score 4 or less)