

NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE CASE CONTROL STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Exposure categories. A maximum of two stars can be given for Comparability.

Selection

- 1) Is the case definition adequate?
 - a) yes, with independent validation *
 - b) yes, eg record linkage or based on self reports
 - c) no description
- 2) Representativeness of the cases
 - a) consecutive or obviously representative series of cases *
 - b) potential for selection biases or not stated
- 3) Selection of Controls
 - a) community controls *
 - b) hospital controls
 - c) no description
- 4) Definition of Controls
 - a) no history of disease (endpoint) *
 - b) no description of source

Comparability

- 1) Comparability of cases and controls on the basis of the design or analysis
 - a) study controls for _____ (Select the most important factor.) *
 - b) study controls for any additional factor * (This criteria could be modified to indicate specific control for a second important factor.)

Exposure

- 1) Ascertainment of exposure
 - a) secure record (eg surgical records) *
 - b) structured interview where blind to case/control status *
 - c) interview not blinded to case/control status
 - d) written self report or medical record only
 - e) no description
- 2) Same method of ascertainment for cases and controls
 - a) yes *
 - b) no
- 3) Non-Response rate
 - a) same rate for both groups *
 - b) non respondents described
 - c) rate different and no designation

NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE COHORT STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability

Selection

- 1) Representativeness of the exposed cohort
 - a) truly representative of the average _____ (describe) in the community ★
 - b) somewhat representative of the average _____ in the community ★
 - c) selected group of users eg nurses, volunteers
 - d) no description of the derivation of the cohort
- 2) Selection of the non exposed cohort
 - a) drawn from the same community as the exposed cohort ★
 - b) drawn from a different source
 - c) no description of the derivation of the non exposed cohort
- 3) Ascertainment of exposure
 - a) secure record (eg surgical records) ★
 - b) structured interview ★
 - c) written self report
 - d) no description
- 4) Demonstration that outcome of interest was not present at start of study
 - a) yes ★
 - b) no

Comparability

- 1) Comparability of cohorts on the basis of the design or analysis
 - a) study controls for _____ (select the most important factor) ★
 - b) study controls for any additional factor ★ (This criteria could be modified to indicate specific control for a second important factor.)

Outcome

- 1) Assessment of outcome
 - a) independent blind assessment ★
 - b) record linkage ★
 - c) self report
 - d) no description
- 2) Was follow-up long enough for outcomes to occur
 - a) yes (select an adequate follow up period for outcome of interest) ★
 - b) no
- 3) Adequacy of follow up of cohorts
 - a) complete follow up - all subjects accounted for ★
 - b) subjects lost to follow up unlikely to introduce bias - small number lost - > ____ % (select an adequate %) follow up, or description provided of those lost) ★
 - c) follow up rate < ____ % (select an adequate %) and no description of those lost
 - d) no statement

NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE
(adapted for cross-sectional studies)

Selection: (Maximum 3 stars)

- 1) Representativeness of the sample:
 - a) Truly representative of the average in the target population. * (all subjects or random sampling)
 - b) Somewhat representative of the average in the target population. * (non-random sampling)
 - c) Selected group of users.
 - d) No description of the sampling strategy.
- 2) Sample size:
 - a) Justified and satisfactory. *
 - b) Not justified.
- 3) Non-respondents:
 - a) Comparability between respondents and non-respondents' characteristics is established, and the response rate is satisfactory. *
 - b) The response rate is unsatisfactory, or the comparability between respondents and non-respondents is unsatisfactory.
 - c) No description of the response rate or the characteristics of the responders and the non-responders.

Control of confounders: (Maximum 2 stars)

- 1) The subjects in different outcome groups are comparable, based on the study design or analysis. Confounding factors are controlled.
 - a) The study controls for the most important factor (select one). *
 - b) The study control for any additional factor. *

Outcome: (Maximum 4 stars)

- 1) Assessment of the outcome:
 - a) Independent blind assessment. **
 - b) Record linkage. *
 - c) Self report.
 - d) No description.
- 2) Statistical test:
 - a) The statistical test used to analyze the data is clearly described and appropriate, and the measurement of the association is presented, including confidence intervals and the probability level (p value). *
 - b) The statistical test is not appropriate, not described or incomplete.
- 3) Ascertainment of the outcome measurement:
 - a) Validated measurement tool*
 - b) Non-validated measurement tool, but the tool is available or described.
 - c) No description of the measurement tool.