

Appendix 1.a The Newcastle-Ottawa Quality Assessment Scale for 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 Ø
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 Ø
b) potential for selection biases or not stated
- 3) Selection of Controls
a) community controls Ø b) hospital controls
c) no description
- 4) Definition of Controls
a) no history of disease (endpoint) Ø
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.) Ø
b) study controls for any additional factor Ø (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) Ø
b) structured interview where blind to case/control status Ø
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 Ø
b) no
- 3) Non-Response rate
a) same rate for both groups Ø
b) non respondents described
c) rate different and no designation

Appendix 1. b The Newcastle-Ottawa Quality Assessment Scale for 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 Ø
b) somewhat representative of the average _____ in the community Ø
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 Ø
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) Ø
b) structured interview Ø
c) written self report
d) no description
- 4) Demonstration that outcome of interest was not present at start of study
a) yes Ø
b) no

Comparability

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

Outcome

- 1) Assessment of outcome
 - a) independent blind assessment Ø
 - b) record linkage Ø
 - 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) Ø
 - b) no
- 3) Adequacy of follow up of cohorts
 - a) complete follow up - all subjects accounted for Ø
 - b) subjects lost to follow up unlikely to introduce bias - small number lost - > ____ % (select an adequate %) follow up, or description provided of those lost) Ø
 - c) follow up rate < ____ % (select an adequate %) and no description of those lost
 - d) no statement

Appendix 1. c The Newcastle-Ottawa Quality Assessment Scale for cross-sectional studies. by PA Modesti et al.

Selection: (Maximum 5 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.
- 4) Ascertainment of the exposure (risk factor):
 - a) Validated measurement tool. **
 - b) Non-validated measurement tool, but the tool is available or described.*
 - c) No description of the measurement tool.

Comparability: (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 3 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.