

APPENDIX 3 – CRITICAL APPRAISAL TOOL FOR PREVALENCE STUDIES BY HOY ET AL. (2012)*

Name of author(s): Year of publication: Study title:			
Risk of bias items		Risk of bias levels	Points scored
1	Was the study's target population a close representation of the national population in relation to relevant variables, e.g. age, sex, occupation?	Yes (LOW RISK): The study's target population was a close representation of the national population.	0
		No (HIGH RISK): The study's target population was clearly NOT representative of the national population.	1
2	Was the sampling frame a true or close representation of the target population?	Yes (LOW RISK): The sampling frame was a true or close representation of the target population.	0
		No (HIGH RISK): The sampling frame was NOT a true or close representation of the target population.	1
3	Was some form of random selection used to select the sample, OR, was a census undertaken?	Yes (LOW RISK): A census was undertaken, OR, some form of random selection was used to select the sample (e.g. simple random sampling, stratified random sampling, cluster sampling, systematic sampling).	0
		No (HIGH RISK): A census was NOT undertaken, AND some form of random selection was NOT used to select the sample.	1
4	Was the likelihood of non-response bias minimal?	Yes (LOW RISK): The response rate for the study was $\geq 75\%$, OR, an analysis was performed that showed no significant difference in relevant demographic characteristics between responders and non-responders.	0
		No (HIGH RISK): The response rate was $< 75\%$, and if any analysis comparing responders and non-responders was done, it showed a significant difference in relevant demographic characteristics between responders and non-responders.	1
5	Were data collected directly from the subjects (as opposed to a proxy)?	Yes (LOW RISK): All data were collected directly from the subjects.	0
		No (HIGH RISK): In some instances, data were collected from a proxy.	1
6	Was an acceptable case definition used in the study?	Yes (LOW RISK): An acceptable case definition was used.	0
		No (HIGH RISK): An acceptable case definition was NOT used.	1

7	Was the study instrument that measured the parameter of interest (e.g. prevalence of low back pain) shown to have reliability and validity (if necessary)?	Yes (LOW RISK): The study instrument had been shown to have reliability and validity (if this was necessary), e.g. test-re-test, piloting, validation in a previous study, etc.	0
		No (HIGH RISK): The study instrument had NOT been shown to have reliability or validity (if this was necessary).	1
8	Was the same mode of data collection used for all subjects?	Yes (LOW RISK): The same mode of data collection was used for all subjects.	0
		No (HIGH RISK): The same mode of data collection was NOT used for all subjects.	1
9	Were the numerator(s) and denominator(s) for the parameter of interest appropriate?	Yes (LOW RISK): The paper presented appropriate numerator(s) AND denominator(s) for the parameter of interest (e.g. the prevalence of low back pain).	0
		No (HIGH RISK): The paper did present numerator(s) AND denominator(s) for the parameter of interest but one or more of these were inappropriate.	1
10	Summary on the overall risk of study bias	LOW RISK	0-3
		MODERATE RISK	4-6
		HIGH RISK	7-9

* **Reference:** Hoy D, Brooks P, Woolf A, Blyth F, March L, Bain C, et al. Assessing risk of bias in prevalence studies: modification of an existing tool and evidence of interrater agreement. *J Clin Epidemiol.* 2012 Sep;65(9):934–9.