Association of socioeconomic status with cardiovascular disease and cardiovascular risk factors: A systematic review and meta-analysis

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Online Resource 2 Quality assessment of the included studies using the NIH-QAT

No	Title	Author (year)	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Overall Quality
1	Low socioeconomic status increases short-term mortality of acute myocardial infarction despite universal health coverage	Wang et al.(2014)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
2	The relation between socioeconomic status and short-term mortality after acute myocardial infarction persists in the elderly: Results from a nationwide study	Van Oeffelen et al.(2012)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

#	Title	Author															Risk of bias
3	Neighbourhood socioeconomic inequalities in incidence of acute myocardial infarction: a cohort study quantifying age- and gender-specific differences in relative and absolute terms	Koopman et al.(2012)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
4	Social inequalities in mild and severe myocardial infarction: how large is the gap in health expectancies?	Tetzlaff et al.(2021)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	NR	Y	low risk of bias
5	Health inequalities in terms of myocardial infarction and all-cause mortality: a study with German claims data covering 2006 to 2015	Geyer et al.(2019)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

6	Relationship between the shift of socioeconomic status and cardiovascular mortality	Sung et al.(2020)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
7	Socioeconomic and behavioral determinants of cardiovascular diseases among older adults in Belgium and France: A longitudinal analysis from the SHARE study	Hassen et al.(2020)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
8	Neighborhood socioeconomic context and long-term survival after myocardial infarction	Gerber et al.(2010)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
9	Socioeconomic status and depression as combined risk factors for acute myocardial infarction and stroke: A population-based study of 2.7	Cho et al.(2019)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

#	Title	Author															Risk of bias
	million Korean adults																
10	Socioeconomic Status, Functional Recovery, and Long-Term Mortality among Patients Surviving Acute Myocardial Infarction	Alter et al.(2013)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
11	Socioeconomic status and risk of cardiovascular disease in 20 low-income, middle-income, and high-income countries: the Prospective Urban Rural Epidemiologic (PURE) study	Rosengren et al.(2019)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
12	Socioeconomic status and incident cardiovascular disease in a developing country: findings from the Isfahan	Masoudkabir et al.(2012)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

	cohort study (ICS)														
13	Outcomes among 3.5 million newly diagnosed hypertensive Canadians	Quan et al.(2013)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
14	Recurrent Atherosclerotic Cardiovascular Event Rates Differ Among Patients Meeting the Very High Risk Definition According to Age, Sex, Race/Ethnicity, and Socioeconomic Status	An et al.(2020)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
15	Midlife wealth mobility and long-term cardiovascular health	Machado et al.(2021)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
16	Socio-economic status and 1 year mortality among patients hospitalized for	Ge et al.(2022)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

No	Title	Reference																Overall
	heart failure in China																	
17	Socioeconomic status and mortality after acute myocardial infarction: A study from Iran	Donyavi et al.(2011)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	NR	Y	low risk of bias
18	Early-life and adult socioeconomic determinants of myocardial infarction incidence and fatality	Kilpi et al.(2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
19	Life course analysis on income and incident AMI: a Danish register-based cohort study	Kriegbaum et al.(2019)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
20	Disentangling the relative importance of different socioeconomic resources for myocardial infarction incidence and	Kilpi et al.(2016)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

	survival: a longitudinal study of over 300,000 Finnish adults															
21	The role of health-related behavioural factors in accounting for inequalities in coronary heart disease risk by education and area deprivation: prospective study of 1.2 million UK women	Floud et al.(2016)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
22	A small-area ecologic study of myocardial infarction, neighborhood deprivation, and sex: A bayesian modeling approach	Deguen et al.(2010)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
23	Performance of the Atherosclerotic Cardiovascular Disease Pooled Cohort Risk	Colantonio et al.(2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

#	Title	Author															Risk of bias
24	Equations by Social Deprivation Status Impact of area deprivation on the cardiac mortality in the UK between 1991 and 2010: evidence from a population-based longitudinal study	Jin et al.(2021)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
25	The impact of social deprivation on mortality following acute myocardial infarction, stroke or subarachnoid haemorrhage: A record linkage study	Thorne et al.(2015)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
26	Individual education, area income, and mortality and recurrence of myocardial infarction in a Medicare cohort: the National Longitudinal Mortality Study	Coady et al.(2014)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

27	Socioeconomic differences in incidence and relative survival after a first acute myocardial infarction in the Basque Country, Spain	Machón et al.(2012)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias
28	Impact of Socioeconomic Deprivation and Area of Residence on Access to Coronary Revascularization and Mortality After a First Acute Myocardial Infarction in Québec	Christensen et al.(2011)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	NR	Y	low risk of bias
29	Level of education and risk of heart failure: a prospective cohort study with echocardiography evaluation	Blais et al.(2012)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	NR	Y	low risk of bias

No.	Title	Study	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Risk of bias
30	Acute myocardial infarction: Does survival depend on geographical location and social background?	Kjærulff et al.(2019)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	NR	Y	low risk of bias
31	Socio-economic factors & longevity in a cohort of Kerala State, India	Sauvaget et al.(2011)	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	low risk of bias

Abbreviation: Y, yes. N, no. NR, not reported. NA, not applicable.

NIH-CAT: National Institutes of Health Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies

Item1: Was the research question or objective in this paper clearly stated?

Item 2: Was the study population clearly specified and defined?

Item 3: Was the participation rate of eligible persons at least 50%?

Item 4: Were all the subjects selected or recruited from the same or similar populations (including the same time period)?Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?

Item 5: Was a sample size justification, power description, or variance and effect estimates provided?

Item 6: For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?

Item 7: Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?

Item 8: For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?

Item 9: Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?

Item 10: Was the exposure(s) assessed more than once over time?

Item 11: Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?

Item 12: Were the outcome assessors blinded to the exposure status of participants?

Item 13: Was loss to follow-up after baseline 20% or less?

Item 14: Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?