

Supplementary Table S1. Quality assessment ratings for cohort and cross-sectional studies included in the systematic review in publication date order^a

Year	Author	Q1	Q2	Q3	Q4a	Q4b	Q5	Q6	Q7	Q8	Q9a	Q9b	Q10	Q11a	Q11b	Q12	Q13	Q14
<i>Female fertility outcome</i>																		
1994	Florack	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
2007	Chavarro	Y	Y	NR	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	NA	NR	Y
2008	Wellons	Y	Y	Y	Y	Y	N	N	Y	N	N	Y	N	N	Y	NA	NA	Y
2009	Gumundsdottir	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NA	N	Y
2010	Revonta	Y	Y	NR	Y	Y	N	N	NR	N	N	Y	N	N	Y	NA	NA	N
2011	Burdorf	Y	Y	Y	Y	Y	N	N	Y	N	Y	Y	N	Y	Y	NA	NA	Y
2012	Wise	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NA	Y	Y
2012	Mutsaerts	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	NA	NA	Y
2012	Esmaeilzadeh	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	N	Y	Y	NA	NA	Y
2013	Esmaeilzadeh	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	NA	NA	Y
2015	Gaskins	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NA	NR	Y
2015	Khosrorad	Y	Y	NR	Y	Y	Y	N	NR	Y	Y	Y	N	N	Y	NA	NA	N
2016	Cong	Y	Y	NR	Y	Y	NR	N	NA	Y	Y	Y	N	Y	Y	NA	NA	N
2016	McKinnon	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NR	N	Y
2018	Russo	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NR	NA	Y
2019	Taberner-Rico ^b	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	N	Y	NA	NA	Y
2020	Mena	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	NA	NR	Y
2020	Lam	Y	Y	NR	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	NA	Y	N
2020	Mirzaei	Y	Y	NR	Y	Y	N	N	N	Y	Y	Y	N	Y	Y	NA	NA	Y
2021	Shirazi	Y	Y	NR	Y	Y	N	N	N	N	Y	Y	N	Y	Y	NA	NA	Y
Total “Yes”		20	20	13	16	20	5	8	13	14	18	20	2	16	20	1	3	16
<i>Male fertility outcome</i>																		
1988	Baker	Y	Y	NR	Y	Y	N	N	Y	N	Y	Y	N	Y	Y	NA	NA	N
2014	Hollingworth	Y	N	NR	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	NA	NA	Y
2020	Lam	Y	Y	NR	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	NA	Y	N

Total “Yes”	3	2	0	3	3	1	1	3	1	3	3	0	3	3	0	1	1
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^aQuality of included studies was assessed using the National Institutes of Health Study Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies (<http://www.nhlbi.nih.gov/health-pro/guidelines/in-develop/cardiovascular-risk-reduction/tools/cohort>). **Q1:** Was the research question or objective in this paper clearly stated?; **Q2:** Was the study population clearly specified and defined?; **Q3:** Was the participation rate of eligible persons at least 50%?; **Q4a:** Were all subjects selected or recruited from the same or similar populations (including the same time period)?; **Q4b:** Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?; **Q5:** Was a sample size justification, power description, or variance and effect estimates provided?; **Q6:** Were the exposures of interest measured prior to the outcomes being measured?; **Q7:** Was the timeframe sufficient so that one could reasonably expect to see an association between the exposure and outcome if it existed?; **Q8:** For exposures that can vary in amount or level, did the study examine different levels of the exposure as it related to the outcome?; **Q9a:** Were the exposure measures clearly defined?; **Q9b:** Were the exposure measures implemented consistently across all study participants?; **Q10:** Was the exposure assessed more than once over time?; **Q11a:** Were the outcome measures clearly defined?; **Q11b:** Were the outcome measures implemented consistently across all study participants?; **Q12:** Were the outcome assessors blinded to the exposure status of participants?; **Q13:** Was loss to follow-up after baseline 20% or less?; **Q14:** Were potential confounding variables measured and adjusted statistically for their impact on the relationship between the exposure and outcome? Y, yes; N, No; NR, not reported; NA, not applicable.

^bStudy enrolled two groups of women into an observational study: a subfertile group referred after an infertility consultation and a pregnant group attending their first prenatal appointment. The authors described the study as a “prospective comparative study with two groups”. We evaluated the quality based on the cohort study assessment.