Supplementary material 1:

Search terms used for final search on 31 October 2019

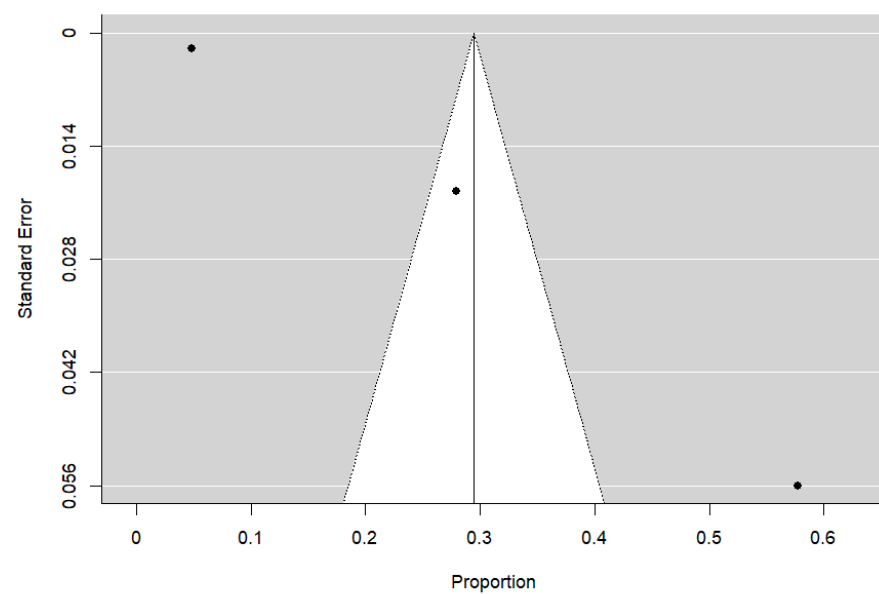| Searches	Search terms	Medline	Cinahl	PubMed	Scopus
#1	TI (Anxiety OR anxiety symptom OR anxiety disorder OR generalized anxiety disorder OR Panic disorder OR panic attack OR agoraphobia OR phobia OR specific phobia OR specific phobic disorder OR medication-induced anxiety disorder OR medical condition induced anxiety disorder OR social anxiety disorder) OR AB (Anxiety OR anxiety symptom OR anxiety disorder OR generalized anxiety disorder OR Panic disorder OR panic attack OR agoraphobia OR phobia OR specific phobia OR specific phobic disorder OR medication-induced anxiety disorder OR medical condition induced anxiety disorder OR social anxiety disorder)	92,909	32,660	187,021	847
#2	TI Prevalence OR AB prevalence	322,205	82,725	588,878	1,973,259
#3	TI (gestational diabetes OR gdm OR gestational diabetes mellitus OR diabetes in pregnancy) OR AB (gestational diabetes OR gdm OR gestational diabetes mellitus OR diabetes in pregnancy)	7,504	2,450	14,854	39,416
#4	#1 AND #2 AND #3	7	4	15	1

Supplementary material 2:

Sensitivity analysis for prevalence of anxiety among gestational diabetes mellitus patients.

Studies	Estimate	Lower bound	Upper bound	Std. error	P-value
Overall	0.295	0.069	0.520	0.115	0.011
- Beka et al., 2018	0.424	0.132	0.715	0.149	0.004
- Egan et al., 2017	0.163	-0.064	0.390	0.116	0.159
- Lee et al., 2019	0.310	-0.209	0.828	0.264	0.242

Supplementary material 3:

Funnel plot of studies evaluating prevalence of anxiety among gestational diabetes mellitus patients.

Supplementary material 4: Report of STROBE checklist for Beka et al., 2018.

	Item No	STROBE Statement—Checklist of items that should be included in reports of *cohort studies*	Grade
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	1
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	1
Objectives	3	State specific objectives, including any prespecified hypotheses	1
Methods			
Study design	4	Present key elements of study design early in the paper	0
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	1
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	1
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed	1
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	1
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one	*1*

		group		
Bias	9	Describe any efforts to address potential sources of bias		0
Study size	10	Explain how the study size was arrived at		0
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why		1
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding		1
		(*b*) Describe any methods used to examine subgroups and interactions		1
		(*c*) Explain how missing data were addressed		0
		(*d*) If applicable, explain how loss to follow-up was addressed		1
		(*e*) Describe any sensitivity analyses		0
Results				
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed		1
		(b) Give reasons for non-participation at each stage		1
		(c) Consider use of a flow diagram		1
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders		1
		(b) Indicate number of participants with missing data for each variable of interest		0

		(c) Summarise follow-up time (eg, average and total amount)	1
Outcome data	15*	Report numbers of outcome events or summary measures over time	1
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	1
		(*b*) Report category boundaries when continuous variables were categorized	1
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	0
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	0
Discussion			
Key results	18	Summarise key results with reference to study objectives	1
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	1
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	1
Generalisability	21	Discuss the generalisability (external validity) of the study results	1
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if	1

		applicable, for the original study on which the present article is based	
Total score		=26/34*22	18.1

Note: * score "0" was given if the criteria was absence in the article, score "1" was given if the criteria was presence in the article.

Supplementary material 5: Report of STROBE checklist for Egan et al., 2017

	Item No	STROBE Statement—Checklist of items that should be included in reports of *cohort studies*	Grade
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	1
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	1
Objectives	3	State specific objectives, including any prespecified hypotheses	1
Methods			
Study design	4	Present key elements of study design early in the paper	0
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	1
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	1
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed	1
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	1
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one	*1*

			group	
Bias	9		Describe any efforts to address potential sources of bias	0
Study size	10		Explain how the study size was arrived at	1
Quantitative variables	11		Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	1
Statistical methods	12		(*a*) Describe all statistical methods, including those used to control for confounding	1
			(*b*) Describe any methods used to examine subgroups and interactions	0
			(*c*) Explain how missing data were addressed	0
			(*d*) If applicable, explain how loss to follow-up was addressed	0
			(*e*) Describe any sensitivity analyses	0
Results				
Participants	13*		(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	0
			(b) Give reasons for non-participation at each stage	0
			(c) Consider use of a flow diagram	0
Descriptive data	14*		(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	1
			(b) Indicate number of participants with missing data for each variable of interest	1

		(c) Summarise follow-up time (eg, average and total amount)	0
Outcome data	15*	Report numbers of outcome events or summary measures over time	1
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	0
		(*b*) Report category boundaries when continuous variables were categorized	1
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	0
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	0
Discussion			
Key results	18	Summarise key results with reference to study objectives	1
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	1
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	1
Generalisability	21	Discuss the generalisability (external validity) of the study results	1
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if	1

		applicable, for the original study on which the present article is based	
Total score		= 21/34*22	13.6

Note: * score "0" was given if the criteria was absence in the article, score "1" was given if the criteria was presence in the article.

Supplementary material 6: Report of STROBE checklist for Lee et al., 2019

	Item No	STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*	Grade*
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	1
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	1
Objectives	3	State specific objectives, including any prespecified hypotheses	1
Methods			
Study design	4	Present key elements of study design early in the paper	1
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	1
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants	1
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	1
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	1
Bias	9	Describe any efforts to address potential sources of bias	0

Study size	10	Explain how the study size was arrived at	1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	1
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	1
		(*b*) Describe any methods used to examine subgroups and interactions	1
		(*c*) Explain how missing data were addressed	0
		(*d*) If applicable, describe analytical methods taking account of sampling strategy	0
		(*e*) Describe any sensitivity analyses	0
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	1
		(b) Give reasons for non-participation at each stage	0
		(c) Consider use of a flow diagram	0
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	1
		(b) Indicate number of participants with missing data for each variable of interest	0
Outcome data	15*	Report numbers of outcome events or summary measures	1
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and	1

		their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	
		(*b*) Report category boundaries when continuous variables were categorized	1
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	0
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	0
Discussion			
Key results	18	Summarise key results with reference to study objectives	1
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	1
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	1
Generalisability	21	Discuss the generalisability (external validity) of the study results	1
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	1
Overall score		23/32*22	15.1

Note: * score "0" was given if the criteria was absence in the article, score "1" was given if the criteria was presence in the article.