Supplementary Material for:

Barassi F, Grealish A. Validity of the Edinburgh Postnatal Depression Scale for screening pregnant and postpartum adolescents: a systematic review. *Aust J Adv Nurs.* 39(2):65-75. Available from: https://doi.org/10.37464/2020.392.446

Appendix A: Quality Assessment of Diagnostic Accuracy Studies (QUADAS) results

Section/topic	#	PRISMA-DTA for Abstracts Checklist item	Location
TITLE and PURPOSE			
Title	1	Identify the report as a systematic review (+/- meta-analysis) of diagnostic test accuracy (DTA) studies.	Title
Objectives	2	Indicate the research question, including components such as participants, index test, and target conditions.	*'Objective'* section of abstract
METHODS			
Eligibility criteria	3	Include study characteristics used as criteria for eligibility.	*'Study design and methods'* section of abstract
Information sources	4	List the key databases searched and the search dates.	*'Study design and methods'* section of abstract
Risk of bias & applicability	5	Indicate the methods of assessing risk of bias and applicability.	*'Study design and methods'* section of abstract
Synthesis of results	A1	Indicate the methods for the data synthesis.	*'Study design and methods'* section of abstract
RESULTS			
Included studies	6	Indicate the number and type of included studies and the participants and relevant characteristics of the studies (including the reference standard).	*'Results'* section of abstract
Synthesis of results	7	Include the results for the analysis of diagnostic accuracy, preferably indicating the number of studies and participants. Describe test accuracy including variability; if meta-analysis was done, include summary results and confidence intervals.	*'Results'* section of abstract
DISCUSSION			
Strengths and limitations	9	Provide a brief summary of the strengths and limitations of the evidence	*'Discussion'* and *'Conclusion'* sections of abstract
Interpretation	10	Provide a general interpretation of the results and the important implications.	*'Discussion'* and *'Conclusion'* sections of abstract

OTHER			
Funding	11	Indicate the primary source of funding for the review.	N/A
Registration	12	Provide the registration number and the registry name	N/A

Section/topic	#	PRISMA-DTA for main report Checklist Item	Location
TITLE / ABSTRACT			
Title	1	Identify the report as a systematic review (+/- meta-analysis) of diagnostic test accuracy (DTA) studies.	Title
Abstract	2	Abstract: See PRISMA-DTA for abstracts.	Abstract prepared against PRISMA-DTA abstract checklist
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	Penultimate paragraph in the *'Introduction'*
Clinical role of index test	D1	State the scientific and clinical background, including the intended use and clinical role of the index test, and if applicable, the rationale for minimally acceptable test accuracy (or minimum difference in accuracy for comparative design).	Final paragraph in the *'Introduction'*
Objectives	4	Provide an explicit statement of question(s) being addressed in terms of participants, index test(s), and target condition(s).	Bullet point objectives at the end of the *'Introduction'*
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	Opening paragraph in the *'Methods'* section
Eligibility criteria	6	Specify study characteristics (participants, setting, index test(s), reference standard(s), target condition(s), and study design) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	*'Inclusion criteria and study selection'* sub-section in *'Methods'*
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	*'Search strategy'* sub-section in *'Methods'*
Search	8	Present full search strategies for all electronic databases and other sources searched, including any limits used, such that they could be repeated.	*'Search strategy'* sub-section in *'Methods'* and Table 1

Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	*'Inclusion criteria and study selection'* sub-section in *'Methods'*
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	*'Data extraction and analysis'* sub-section in *'Methods'*
Definitions for data extraction	11	Provide definitions used in data extraction and classifications of target condition(s), index test(s), reference standard(s) and other characteristics (e.g. study design, clinical setting).	*'Data extraction and analysis'* sub-section in *'Methods'*
Risk of bias and applicability	12	Describe methods used for assessing risk of bias in individual studies and concerns regarding the applicability to the review question.	*'Quality appraisal'* sub-section in *'Methods'*
Diagnostic accuracy measures	13	State the principal diagnostic accuracy measure(s) reported (e.g. sensitivity, specificity) and state the unit of assessment (e.g. per-patient, per-lesion).	*'Data extraction and analysis'* sub-section in *'Methods'*
Synthesis of results	14	Describe methods of handling data, combining results of studies and describing variability between studies. This could include, but is not limited to: a) handling of multiple definitions of target condition. b) handling of multiple thresholds of test positivity, c) handling multiple index test readers, d) handling of indeterminate test results, e) grouping and comparing tests, f) handling of different reference standards	*'Data extraction and analysis'* sub-section in *'Methods'*
Meta-analysis	D2	Report the statistical methods used for meta-analyses, if performed.	N/A
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	N/A
RESULTS			
Study selection	17	Provide numbers of studies screened, assessed for eligibility, included in the review (and included in meta-analysis, if applicable) with reasons for exclusions at each stage, ideally with a flow diagram.	Figure 1 and the *'Search outcomes'* sub-section in *'Methods'*
Study characteristics	18	For each included study provide citations and present key characteristics including: a) participant characteristics (presentation, prior testing), b) clinical setting, c) study design, d) target condition definition, e) index test, f) reference standard, g) sample size, h) funding sources	Table 2 and the *'Study characteristics'* sub-section in *'Methods'*
Risk of bias and applicability	19	Present evaluation of risk of bias and concerns regarding applicability for each study.	Table 3 and the *'Quality of studies'* sub-section in *'Methods'*
Results of individual studies	20	For each analysis in each study (e.g. unique combination of index test, reference standard, and positivity threshold) report 2x2 data (TP, FP, FN, TN) with estimates of diagnostic accuracy and confidence intervals, ideally with a forest or receiver operator characteristic (ROC) plot.	*'Review findings'* sub-section in *'Results'*

Synthesis of results	21	Describe test accuracy, including variability; if meta-analysis was done, include results and confidence intervals.	Paragraphs three and four in *'Discussion'*
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression; analysis of index test: failure rates, proportion of inconclusive results, adverse events).	N/A
DISCUSSION			
Summary of evidence	24	Summarise the main findings including the strength of evidence.	Paragraphs three and four in *'Discussion'*
Limitations	25	Discuss limitations from included studies (e.g. risk of bias and concerns regarding applicability) and from the review process (e.g. incomplete retrieval of identified research).	*'Limitations'* sub-section in *'Discussion'*
Conclusions	26	Provide a general interpretation of the results in the context of other evidence. Discuss implications for future research and clinical practice (e.g. the intended use and clinical role of the index test).	*'Discussion', 'Conclusion'* and *'Implications for research, policy and practice'* sub-sections
FUNDING			
Funding	27	For the systematic review, describe the sources of funding and other support and the role of the funders.	No funding to declare

Appendix B: Quality Assessment of Diagnostic Accuracy Studies (QUADAS)

results

Each item includes instructions for how they should be coded and provides space for both a description and judgement of each item assessed.

- Description = succinct statement of the stated facts in a study upon which a judgement is based
- Judgement = 'Yes', 'No', 'Unclear' or 'N/A'

1. Alvarado-Esquivel et al. (2014)

1. Was the spectrum of patients representative of the patients who will receive the test in practice? (representative spectrum)

Instructions

There are two key considerations:

- Was the right patient group recruited to address the review question?
- Was the method of sampling likely to yield a representative sample?

Description

Teenage pregnant women were recruited to test EPDS validity among adolescents i.e. the right patient group. Random selection of 120 women attending routine prenatal consultations across a 12-month period. Therefore likely to yield a representative sample.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

2. Is the reference standard/comparison test likely to classify the target condition correctly? (acceptable reference standard)

Instructions

- Was an acceptable and validated reference standard used for the assessment and diagnosis of depression?

Description

DSM-IV assessment undertaken by a psychiatrist.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

3. Is the time period between reference standard/comparison test and index test short enough to be reasonably sure that the target condition did not change between the two tests? (acceptable delay between tests)

Instructions

Ideally the results of the index test and the reference standard are collected on the same patients at the same time. If this is not possible and a delay ensues, misclassification due to spontaneous recovery, benefit from treatment, progression to a more advanced stage of disease, or occurrence of new disease may occur.

Description

DSM-IV and EPDS assessments were conducted on the same day.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

4. Did the whole sample or a random selection of the sample, receive verification using the intended reference standard/comparison test? (partial verification avoided)

Instructions

Did all or a selection of participants receive the intended reference standard?

Description

All participants received a DSM-IV reference standard assessment.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

5. Did patients receive the same reference standard/comparison test irrespective of the index test result? (differential verification avoided)

Instructions

The issue here is whether one diagnostic reference standard was used in each study or did different participants receive different reference standard assessments (in a single study).

Description

Only one diagnostic reference standard was used (DSM-IV)

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

6. Was the reference standard/comparison test independent of the index test (i.e. the index test did not form part of the reference standard)? (incorporation avoided)

Instructions

The question is asking whether the results of the index text (EPDS) were used to help establish the reference standard (diagnosis), or was the latter independent of the former.

Description

The reference standard assessment was independent of the index assessment and the latter did not inform the former.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

7. Were the reference standard/comparison test results interpreted without knowledge of the results of the index test? (index test results blinded)

Instructions

Items 7 and 8 are similar to the issue of 'blinded outcome assessment' in intervention studies. Interpretation of the results of the index test may be influenced by knowledge of the results of the reference standard and vice versa. So, was the reference standard completed without knowledge of the EPDS result and vice versa?

Description

The assessing psychiatrist was blinded to EPDS scores.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

8. Were the index test results interpreted without knowledge of the results of the reference standard/comparison test? (reference standard results blinded)

Instructions

As above for Item 7.

Description

It is not clear from the paper whether any of the reference standard assessments were conducted before the EPDS, or whether participants completing the EPDS were aware of their DSM-IV assessment result/interpretation.

Judgement

Yes	No	Unclear	N/A
			☐

☐ ☐ ☑

9. Were the same clinical data available when test results were interpreted as would be available when the test is used in practice? (relevant clinical information)

Instructions

The availability or absence of relevant patient information such as age, gender, presence and severity of symptoms, and other test results when the index test is undertaken (by a clinician or someone other than the patient) may affect its performance. If relevant, was the patient data available at the time of EPDS completion also available in routine practice?

Description

The sample was recruited from routine prenatal consultations. The patient information available when completing the tools is therefore equivalent to that available in routine practice.

Judgement

Yes No Unclear N/A

☑ ☐ ☐ ☐

10. Were uninterpretable/ intermediate test results reported? (uninterpretable results reported)

Instructions

Diagnostic tests may report uninterpretable results for some patients, or call results uncertain, indeterminate or intermediate. This can happen with both index tests and reference standards. Were there any such results and were they reported? (If there were no uninterpretable results to report this item should be scored as 'yes')

Description

There were no uninterpretable results to report.

Judgement

Yes No Unclear N/A

☑ ☐ ☐ ☐

11. Were withdrawals from the study explained? (withdrawals explained)

Instructions

Withdrawals occur when patients drop out from the study before the results of either or both of the index test and reference standard are known. This is a possibility if either test includes a degree of follow-up, but is unlikely to occur in cross-sectional studies.

Description

No withdrawals once recruited.

Judgement

Yes No Unclear N/A

☑ **2. ☐gsdon☐al (200☐**

---

1. Was the spectrum of patients representative of the patients who will receive the test in practice? (representative spectrum)

Instructions

There are two key considerations:

- Was the right patient group recruited to address the review question?
- Was the method of sampling likely to yield a representative sample?

Description

Adolescent mothers 4-6 weeks postpartum were recruited to test EPDS validity i.e. the right patient group. However, we do not know how they were sampled except that they were recruited from three service settings and there were no significant demographic/descriptive differences in the samples recruited from each site. Whether a random, consecutive or other sampling method was used is not known, nor whether each sample was representative of the women who attend each service.

Judgement

Yes No Unclear N/A

☐ ☐ ☑ ☐

2. Is the reference standard/comparison test likely to classify the target condition correctly? (acceptable reference standard)

Instructions

- Was an acceptable and validated reference standard used for the assessment and diagnosis of depression?

Description

Did not use a reference standard but compared the EPDS to a validated tool (CES-D).

Judgement

Yes No Unclear N/A

☑ ☐ ☐ ☐

3. Is the time period between reference standard/comparison test and index test short enough to be reasonably sure that the target condition did not change between the two tests? (acceptable delay between tests)

Instructions

Ideally the results of the index test and the reference standard are collected on the same patients at the same time. If this is not possible and a delay ensues, misclassification due to spontaneous recovery, benefit from treatment, progression to a more advanced stage of disease, or occurrence of new disease may occur.

Description

Time between EPDS and CES-D completion is not specified.

Judgement

Yes	No	Unclear	N/A
☐	☐	☑	☐

4. Did the whole sample or a random selection of the sample, receive verification using the intended reference standard/comparison test? (partial verification avoided)

Instructions

Did all or a selection of participants receive the intended reference standard?

Description

CES-D used rather than a reference standard but it is not specified whether all participants completed both instruments.

Judgement

Yes	No	Unclear	N/A
☐	☐	☑	☐

5. Did patients receive the same reference standard/comparison test irrespective of the index test result? (differential verification avoided)

Instructions

The issue here is whether one diagnostic reference standard was used in each study or did different participants receive different reference standard assessments (in a single study).

Description

Only one comparative instrument used (CES-D).

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

6. Was the reference standard/comparison test independent of the index test (i.e. the index test did not form part of the reference standard)? (incorporation avoided)

Instructions

The question is asking whether the results of the index text (EPDS) were used to help establish the reference standard (diagnosis), or was the latter independent of the former.

Description

Although no reference standard was used, the EPDS and CES-D are independent instruments and one was not used to establish results for the other.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

7. Were the reference standard/comparison test results interpreted without knowledge of the results of the index test? (index test results blinded)

Instructions

Items 7 and 8 are similar to the issue of 'blinded outcome assessment' in intervention studies. Interpretation of the results of the index test may be influenced by knowledge of the results of the reference standard and vice versa. So, was the reference standard completed without knowledge of the EPDS result and vice versa?

Description

Insufficient information provided to know whether the EPDS and CES-D were self-completed or administered by a clinician, and if completed by a clinician, whether they knew the results of one before administering the other.

Judgement

Yes	No	Unclear	N/A
☐	☐	☑	☐

8. Were the index test results interpreted without knowledge of the results of the reference standard/comparison test? (reference standard results blinded)

Instructions

As above for Item 7.

Description

As above for Item 7.

Judgement

Yes	No	Unclear	N/A
☐	☐	☑	☐

9. Were the same clinical data available when test results were interpreted as would be available when the test is used in practice? (relevant clinical information)

Instructions

The availability or absence of relevant patient information such as age, gender, presence and severity of symptoms, and other test results when the index test is undertaken (by a clinician or someone other than the patient) may affect its performance. If relevant, was the patient data available at the time of EPDS completion also available in routine practice?

Description

The sample was recruited from three service settings. The patient information available when completing the tools is therefore equivalent to that available in routine practice.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

10. Were uninterpretable/ intermediate test results reported? (uninterpretable results reported)

Instructions

Diagnostic tests may report uninterpretable results for some patients, or call results uncertain, indeterminate or intermediate. This can happen with both index tests and reference standards. Were there any such results and were they reported? (If there were no uninterpretable results to report this item should be scored as 'yes')

Description

No uninterpretable results to report.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

11. Were withdrawals from the study explained? (withdrawals explained)

Instructions

Withdrawals occur when patients drop out from the study before the results of either or both of the index test and reference standard are known. This is a possibility if either test includes a degree of follow-up, but is unlikely to occur in cross-sectional studies.

Description

No withdrawals once recruited.

Judgement

Yes	No	Unclear	N/A
			☐

☑ ☐ ☐

3. Logsdon and Myers (2010)

---

1. Was the spectrum of patients representative of the patients who will receive the test in practice? (representative spectrum)

Instructions

There are two key considerations:

- Was the right patient group recruited to address the review question?
- Was the method of sampling likely to yield a representative sample?

Description

Adolescent mothers 4-6 weeks postpartum were recruited to establish whether the EPDS or CES-D 20 and 30 were more efficient at predicting major depressive disorder i.e. the right patient group. However, we do not know how they were sampled except that they were recruited from a teen parenting programme. Whether a random, consecutive or other sampling method was used is not known, nor whether the sample was representative of the women who attend the service.

Judgement

Yes No Unclear N/A

☐ ☐ ☑ ☐

2. Is the reference standard/comparison test likely to classify the target condition correctly? (acceptable reference standard)

Instructions

- Was an acceptable and validated reference standard used for the assessment and diagnosis of depression?

Description

KSADS-PL assessment undertaken by a mental health clinical nurse specialist or a psychologist.

Judgement

Yes No Unclear N/A

☑ ☐ ☐ ☐

3. Is the time period between reference standard/comparison test and index test short enough to be reasonably sure that the target condition did not change between the two tests? (acceptable delay between tests)

Instructions

Ideally the results of the index test and the reference standard are collected on the same patients at the same time. If this is not possible and a delay ensues, misclassification due to spontaneous recovery, benefit from treatment, progression to a more advanced stage of disease, or occurrence of new disease may occur.

Description

Three index tests and the reference standard assessment were completed on the same day.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

4. Did the whole sample or a random selection of the sample, receive verification using the intended reference standard/comparison test? (partial verification avoided)

Instructions

Did all or a selection of participants receive the intended reference standard?

Description

All reported participants received the reference standard assessment.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

5. Did patients receive the same reference standard/comparison test irrespective of the index test result? (differential verification avoided)

Instructions

The issue here is whether one diagnostic reference standard was used in each study or did different participants receive different reference standard assessments (in a single study).

Description

Only one reference standard was used.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

6. Was the reference standard/comparison test independent of the index test (i.e. the index test did not form part of the reference standard)? (incorporation avoided)

Instructions

The question is asking whether the results of the index text (EPDS) were used to help establish the reference standard (diagnosis), or was the latter independent of the former.

Description

The reference standard assessment was independent of the index tests.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

7. Were the reference standard/comparison test results interpreted without knowledge of the results of the index test? (index test results blinded)

Instructions

Items 7 and 8 are similar to the issue of 'blinded outcome assessment' in intervention studies. Interpretation of the results of the index test may be influenced by knowledge of the results of the reference standard and vice versa. So, was the reference standard completed without knowledge of the EPDS result and vice versa?

Description

The clinical nurse specialist and psychologist who conducted the reference standard assessments were blind to index test results and the study's aim.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

8. Were the index test results interpreted without knowledge of the results of the reference standard/comparison test? (reference standard results blinded)

Instructions

As above for Item 7.

Description

All index tests were completed in advance of and independently from the reference standard.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

9. Were the same clinical data available when test results were interpreted as would be available when the test is used in practice? (relevant clinical information)

Instructions

The availability or absence of relevant patient information such as age, gender, presence and severity of symptoms, and other test results when the index test is undertaken (by a clinician or someone other than the patient) may affect its performance. If relevant, was the patient data available at the time of EPDS completion also available in routine practice?

Description

The sample was recruited from a service setting. The patient information available when completing the tools is therefore equivalent to that available in routine practice.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

10. Were uninterpretable/ intermediate test results reported? (uninterpretable results reported)

Instructions

Diagnostic tests may report uninterpretable results for some patients, or call results uncertain, indeterminate or intermediate. This can happen with both index tests and reference standards. Were there any such results and were they reported? (If there were no uninterpretable results to report this item should be scored as ‘yes’)

Description

No uninterpretable results.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

11. Were withdrawals from the study explained? (withdrawals explained)

Instructions

Withdrawals occur when patients drop out from the study before the results of either or both of the index test and reference standard are known. This is a possibility if either test includes a degree of follow-up, but is unlikely to occur in cross-sectional studies.

Description

No withdrawals reported once recruited.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

4. Martins et al (2015)

---

1. Was the spectrum of patients representative of the patients who will receive the test in practice? (representative spectrum)

Instructions

There are two key considerations:

- Was the right patient group recruited to address the review question?
- Was the method of sampling likely to yield a representative sample?

Description

Pregnant adolescents were recruited i.e. the right patient group. The intended sample was a census of all who met eligibility criteria during the study period in 47 primary care units and 3 obstetric units (n=871). However, 43 (5%) refused to participate and a further 11 were removed from the study because they had not completed all scales. We do not know if the final sample of 807 and the 54 who refused or were removed significantly differed in any ways. However, we consider a >90% census to likely yield a representative sample.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

2. Is the reference standard/comparison test likely to classify the target condition correctly? (acceptable reference standard)

Instructions

- Was an acceptable and validated reference standard used for the assessment and diagnosis of depression?

Description

Mini International Neuropsychiatric Interview (MINI) used for the diagnosis of gestational depression. Only those participants with a ‘major depressive episode’ as defined by the MINI were classified as depressed.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

3. Is the time period between reference standard/comparison test and index test short enough to be reasonably sure that the target condition did not change between the two tests? (acceptable delay between tests)

Instructions

Ideally the results of the index test and the reference standard are collected on the same patients at the same time. If this is not possible and a delay ensues, misclassification due to spontaneous recovery, benefit from treatment, progression to a more advanced stage of disease, or occurrence of new disease may occur.

Description

All instruments completed in a single household visit for each participant.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

4. Did the whole sample or a random selection of the sample, receive verification using the intended reference standard/comparison test? (partial verification avoided)

Instructions

Did all or a selection of participants receive the intended reference standard?

Description

The whole sample received the MINI reference standard assessment.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

5. Did patients receive the same reference standard/comparison test irrespective of the index test result? (differential verification avoided)

Instructions

The issue here is whether one diagnostic reference standard was used in each study or did different participants receive different reference standard assessments (in a single study).

Description

Only the MINI diagnostic reference standard was used, which all participants received.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

6. Was the reference standard/comparison test independent of the index test (i.e. the index test did not form part of the reference standard/comparison test)? (incorporation avoided)

Instructions

The question is asking whether the results of the index text (EPDS) were used to help establish the reference standard (diagnosis), or was the latter independent of the former.

Description

The reference standard and index tests were independent and the latter were not used to help establish the reference standard.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

7. Were the reference standard/comparison test results interpreted without knowledge of the results of the index test? (index test results blinded)

Instructions

Items 7 and 8 are similar to the issue of 'blinded outcome assessment' in intervention studies. Interpretation of the results of the index test may be influenced by knowledge of the results of the reference standard and vice versa. So, was the reference standard completed without knowledge of the EPDS result and vice versa?

Description

MINI conducted by a trained psychologist who was blind to the index tests results.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

8. Were the index test results interpreted without knowledge of the results of the reference standard/comparison test? (reference standard results blinded)

Instructions

As above for Item 7.

Description

The sequence of instrument completion is not clear. Although the EPDS was self-completed we do not know whether participants knew the results of their MINI assessment before completing the EPDS.

Judgement

Yes	No	Unclear	N/A
☐	☐	☐	☐

☐ ☐ ☑

9. Were the same clinical data available when test results were interpreted as would be available when the test is used in practice? (relevant clinical information)

Instructions

The availability or absence of relevant patient information such as age, gender, presence and severity of symptoms, and other test results when the index test is undertaken (by a clinician or someone other than the patient) may affect its performance. If relevant, was the patient data available at the time of EPDS completion also available in routine practice?

Description

This was a cross sectional survey of women who were attending primary care units and obstetric clinics. The same clinical information would therefore have been available to this study as in clinical practice.

Judgement

Yes No Unclear N/A

☑ ☐ ☐ ☐

10. Were uninterpretable/ intermediate test results reported? (uninterpretable results reported)

Instructions

Diagnostic tests may report uninterpretable results for some patients, or call results uncertain, indeterminate or intermediate. This can happen with both index tests and reference standards. Were there any such results and were they reported? (If there were no uninterpretable results to report this item should be scored as ‘yes’)

Description

No uninterpretable results to report.

Judgement

Yes No Unclear N/A

☑ ☐ ☐ ☐

11. Were withdrawals from the study explained? (withdrawals explained)

Instructions

Withdrawals occur when patients drop out from the study before the results of either or both of the index test and reference standard are known. This is a possibility if either test includes a degree of follow-up, but is unlikely to occur in cross-sectional studies.

Description

Eleven withdrawals were made once the study had started because they had not completed all instruments.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

5. Venkatesh et al (2014)

---

1. Was the spectrum of patients representative of the patients who will receive the test in practice? (representative spectrum)

Instructions

There are two key considerations:

- Was the right patient group recruited to address the review question?
- Was the method of sampling likely to yield a representative sample?

Description

Adolescent mothers recruited to determine EPDS validity i.e. the right patient group. The participants represented both the experimental and control groups from an RCT that tested an interpersonal intervention to prevent postpartum depression. We do not know how participants were originally recruited to the RCT, how many refused, dropped-out etc. We do know that because the intervention was a prevention program, potential participants of the RCT with a psychiatric disorder including depression, and those currently receiving mental health care, were excluded. However, we do not know how many were excluded or their characteristics beyond a current psychiatric problem and cannot therefore be certain if the sample was representative.

Judgement

Yes	No	Unclear	N/A
☐	☐	☑	☐

2. Is the reference standard/comparison test likely to classify the target condition correctly? (acceptable reference standard)

Instructions

- Was an acceptable and validated reference standard used for the assessment and diagnosis of depression?

Description

Structured Clinical Interview for DSM-IV Childhood Disorders (KID-SCID) was used.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

3. Is the time period between reference standard/comparison test and index test short enough to be reasonably sure that the target condition did not change between the two tests? (acceptable delay between tests)

Instructions

Ideally the results of the index test and the reference standard are collected on the same patients at the same time. If this is not possible and a delay ensues, misclassification due to spontaneous recovery, benefit from treatment, progression to a more advanced stage of disease, or occurrence of new disease may occur.

Description

KID-SCID and EPDS delivered at the same study visit on three occasions (6 weeks, 3 and 6b months)

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

4. Did the whole sample or a random selection of the sample, receive verification using the intended reference standard/comparison test? (partial verification avoided)

Instructions

Did all or a selection of participants receive the intended reference standard?

Description

All participants received a KID-SCID reference standard assessment.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

5. Did patients receive the same reference standard/comparison test irrespective of the index test result? (differential verification avoided)

Instructions

The issue here is whether one diagnostic reference standard was used in each study or did different participants receive different reference standard assessments (in a single study).

Description

All participants received the same reference standard assessment.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

6. Was the reference standard/comparison test independent of the index test (i.e. the index test did not form part of the reference standard/comparison test)? (incorporation avoided)

Instructions

The question is asking whether the results of the index text (EPDS) were used to help establish the reference standard (diagnosis), or was the latter independent of the former.

Description

The KID-SCID is independent of the EPDS.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

7. Were the reference standard/comparison test results interpreted without knowledge of the results of the index test? (index test results blinded)

Instructions

Items 7 and 8 are similar to the issue of 'blinded outcome assessment' in intervention studies. Interpretation of the results of the index test may be influenced by knowledge of the results of the reference standard and vice versa. So, was the reference standard completed without knowledge of the EPDS result and vice versa?

Description

This is unclear. The research assistants were blinded to study group assignment in the RCT but we do not know if they were blinded to index test results prior to completing the KID-SCID.

Judgement

Yes	No	Unclear	N/A
☐	☐	☑	☐

8. Were the index test results interpreted without knowledge of the results of the reference standard/comparison test? (reference standard results blinded)

Instructions

As above for Item 7.

Description

As above for item 7: we do not know if blinded to KID-SCID results prior to EPDS completion.

Judgement

Yes	No	Unclear	N/A
☐	☐	☑	☐

9. Were the same clinical data available when test results were interpreted as would be available when the test is used in practice? (relevant clinical information)

Instructions

The availability or absence of relevant patient information such as age, gender, presence and severity of symptoms, and other test results when the index test is undertaken (by a clinician or someone other than the patient) may affect its performance. If relevant, was the patient data available at the time of EPDS completion also available in routine practice?

Description

Participants were recruited from an urban prenatal clinic in which patient data is available as part of routine practice.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

10. Were uninterpretable/ intermediate test results reported? (uninterpretable results reported)

Instructions

Diagnostic tests may report uninterpretable results for some patients, or call results uncertain, indeterminate or intermediate. This can happen with both index tests and reference standards. Were there any such results and were they reported? (If there were no uninterpretable results to report this item should be scored as ‘yes’)

Description

No uninterpretable results to report.

Judgement

Yes	No	Unclear	N/A
☑	☐	☐	☐

11. Were withdrawals from the study explained? (withdrawals explained)

Instructions

Withdrawals occur when patients drop out from the study before the results of either or both of the index test and reference standard are known. This is a possibility if either test includes a degree of follow-up, but is unlikely to occur in cross-sectional studies.

Description

Withdrawals are evident in the data e.g. 106 women received 289 study visits. If all 106 women had received the 6 week, 3 and 6 month assessments, then the study visits should have totalled 318. No explanation provided for the withdrawals.

Judgement

Yes	No	Unclear	N/A
☐	☑	☐	☐