




CASP Checklist: 12 questions to help you make sense of a **Diagnostic Test study**

How to use this appraisal tool: Three broad issues need to be considered when appraising a trial:

-  Are the results of the study valid? (Section A)
-  What are the results? (Section B)
-  Will the results help locally? (Section C)

The 12 questions on the following pages are designed to help you think about these issues systematically. The first three questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Diagnostic Test Study) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

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Paper for appraisal and reference:

Section A: Are the results of the trial valid?

1. Was there a clear question for the study to address?

Yes

Can't Tell

No

HINT: A question should include Information about

- the population
- the test
- the setting
- the outcomes

Comments:	<p>P: 1114 participantes de trabajadores de la salud en la región oeste de nueva york. Los excluidos fueron los que no reportaron síntomas o no tenían resultado de pruebas de laboratorio (153), por lo que el total de pacientes fue de 961.</p> <p>I: síntomas (fiebre, fatiga, tos seca, anorexia, mialgias, disnea, tos con flema, odinofagia, diarrea, anosmia/ageusia) con el gold estándar (PCR)</p> <p>C: Relacionar síntomas con la prueba de COVID-19 PCR positiva.</p> <p>O: Mientras mayor síntomas presentes mayor la probabilidad de presentar la prueba de PCR positiva.</p>
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2. Was there a comparison with an appropriate reference standard?

Yes

Can't Tell

No

HINT: Is this reference test(s) the best available indicator in the circumstances

Comments:	<p>Los síntomas (se compararon con los resultados positivos de la prueba de PCR para COVID-19.</p>
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Is it worth continuing?

3. Did all patients get the diagnostic test and reference standard?

Yes

Can't Tell

No

- HINT: Consider
- were both received regardless of the results of the test of interest
 - check the 2x2 table (verification bias)

Comments:	A todos los pacientes se realizó RT-PCR para confirmar el diagnóstico. Se puede calcular la probabilidad pretest y posttest de todos los síntomas.
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4. Could the results of the test have been influenced by the results of the reference standard?

Yes

Can't Tell

No

- HINT: Consider
- was there blinding
 - were the tests performed independently
 - review bias

Comments:	Se preguntaron los síntomas que presentaban antes de dar tomar el RT-PCR por lo que no hubo sesgos.
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5. Is the disease status of the tested population clearly described?

Yes

Can't Tell

No

- HINT: Consider
- presenting symptoms
 - disease stage of severity
 - co-morbidity
 - differential diagnoses (spectrum bias)

Comments:	La población es formada por trabajadores de la salud en la región oeste de nueva york, no especifica tabla demográfica de estos pacientes. Se mencionan los síntomas ya que esto es lo que se mide como diagnóstico.
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6. Were the methods for performing the test described in sufficient detail?

Yes

Can't Tell

No

HINT: Consider
• was a protocol followed

Comments:	No especifica un protocolo especifico debido que los síntomas se obtuvieron al preguntar a los pacientes si presentaban o no. Ya que habla de síntomas y no de una prueba diagnostico como serología, laboratorio, no hay tanto una validación de prueba. Se usó el likelihood ratio era criterio de inclusión para cada síntoma.
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Section B: What are the results?

7. What are the results?

HINT: Consider
• are the sensitivity and specificity and/or likelihood ratios presented

• are the results presented in such a way that we can work them out

Comments:	La sensibilidad, especificidad, VPP, VPN, y likehood ratio se calcula de cada síntoma demostrando que por si solo cada síntoma no repretnta valor, al momento que se unen 2 o 3 síntomas la sensibilidad aumenta. (Tabla 4) El área bajo la curva con dos o mas síntomas llega hasta 0.75 mostrandonos que la asociación de síntomas es mas efectiva que valorar síntomas individualmente.
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8. How sure are we about the results?
Consequences and cost of alternatives performed?

HINT: Consider
• could they have occurred by chance
• are there confidence limits
• what are they

Comments:	Se usan intervalos de confianza con todas las medidas estadísticas. La muestra es relativamente grande ya que se toma 916 trabajadores de la salud.
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Section C: Will the results help locally?

Consider whether you are primarily interested in the impact on a population or individual level

9. Can the results be applied to your patients/the population of interest?

Yes

Can't Tell

No

HINT: Do you think your patients/population are so different from those in the study that the results cannot be applied, such as age, sex, ethnicity and spectrum bias

Comments:	Se puede aplicar en el ámbito de trabajadores de la salud, ya que es esencial identificar quienes son los que probablemente van a tener COVID-19 positivo para evitar que trabajen y haya contagios intrahospitalarios. Es importante saber que no especifican edad, etnia, ni sexo de los trabajadores de salud.
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10. Can the test be applied to your patient or population of interest?

Yes

Can't Tell

No

HINT: Consider

- resources and opportunity costs
- level and availability of expertise required to interpret the tests
- current practice and availability of

services

Comments:	Es beneficioso usar la sintomatología para determinar una alta sospecha y de esta manera tomar medidas en aquellos trabajadores de la salud que lo requieran. Actualmente no se ha realizado adquisición de suficientes pruebas por lo que se limitan a realizar las pruebas a pacientes con síntomas, en el país se podría usar para dar prioridad a los que por síntomas tienen alta sospecha de estar con COVID-19.
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11. Were all outcomes important to the individual or population considered?

Yes

Can't Tell

No

HINT: Consider

- will the knowledge of the test result improve patient wellbeing
- will the knowledge of the test result lead to a change in patient management

Comments:	Es beneficioso ya que no se requiere dinero pero una adecuada anamnesis de los pacientes para poder determinar si tiene o no mayor sospecha.
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12. What would be the impact of using this test on your patients/population?

Comments:	<p>El impacto en la población ecuatoriana es importante debido que hay ocasiones que se realizan pruebas sin criterios aun teniendo escases de las pruebas. Si se usan criterios para determinar quien debe realizarse la prueba RT-PCR sería de mayor utilidad y menor gasto para el estado.</p>
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