Understanding Open and Reproducible Science

03 Quality criteria for good research: challenge solutions (Question 1)

The PRECHECK checklist

Title of preprint: Efficacy and Safety of Ivermectin for Treatment and prophylaxis of COVID-19 Pandemic (Elgazzar et el.)

Reviewer: Eva Furrer

1. Research question

Is the research question/aim stated?

Yes

Notes:
RQ well stated in the title and abstract: to evaluate the anti-parasitic medication efficacy "Ivermectin" plus standard care in the treatment of mild/moderate and severely ill cases with COVID 19 infection, as well as prophylaxis of health care and/ or household contacts.

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2. Study type

Is the study type mentioned in the title, abstract, introduction, or methods?

Yes

Notes:
RCT

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3. Transparency

a. Is a protocol, study plan, or registration of the study at hand mentioned?

Maybe

b. Is data sharing mentioned? Mentioning any reasons against sharing also counts. Mentioning only that data will be shared "upon request" does not count.

No

c. Is materials sharing mentioned? Mentioning any reasons against sharing also counts. Mentioning only that materials will be shared "upon request" does not count.

No

d. Does the article contain an ethics approval statement (e.g., approval granted by institution, or no approval required)?

Yes

e. Have conflicts of interest been declared? Declaring that there were none also counts.

Yes

Notes:

a. There are protocols mentioned but those are clinical protocols not study protocols
b. Data sharing mentioned but "data master sheet are available on reasonable request from the corresponding author from the following link: https://filetransfer.io/data-package/qGiU0mw6#link
c. No code sharing mentioned.
d. Ethics approval: An approval from the Research Ethics Committee at Faculty of Medicine, Benha with approval number, that can however not be accessed!
e. The authors declare no CoI

Let's dig deeper

Notes:
a. clinicaltrials.gov preregistration accessible. However: first posted on clinicaltrials.gov on December 16 2020; while the preprint was uploaded to researchsquare on 13. of November. maybe not trustworthy.
b. Data not accessible. To access the link, the author(s) have to be contacted.

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4. Limitations

Are the limitations of the study addressed in the discussion/conclusion section?

No

Notes:

Let's dig deeper

Check for potential biases yourself. Here are some examples of potential sources of bias.

Notes:

1. Study Sample - 600 individuals but divided into six groups. One of the groups includes contacts of patients... not meaningful for their purpose / or comparable

2. Control group - they had three control groups without ivermectin treatment, however two of those control groups got hydroxychloroquin

3. Randomisation - block randomisation (6 groups)

4. Blinding - double blind RCT

Title of preprint: Epidemiology and Transmission of COVID-19 in Shenzhen China: Analysis of 391 cases and 1,286 of their close contacts

Reviewer:

1. Research question

Is the research question/aim stated?

Yes

Notes: RQ stated in abstract: they analyse the 391 SARS-CoV-2 cases and their 1286 close contacts to understand the epidemiology and transmission of Covid-19.

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2. Study type

Is the study type mentioned in the title, abstract, introduction, or methods?

No

Let's dig deeper

Not explicitly stated; they are using surveillance data, e.g. observational study

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3. Transparency

a. Is a protocol, study plan, or registration of the study at hand mentioned?

Yes

b. Is data sharing mentioned? Mentioning any reasons against sharing also counts. Mentioning only that data will be shared "upon request" does not count.

Yes

c. Is materials sharing mentioned? Mentioning any reasons against sharing also counts. Mentioning only that materials will be shared "upon request" does not count.

No

d. Does the article contain an ethics approval statement (e.g., approval granted by institution, or no approval required)?

Yes

e. Have conflicts of interest been declared? Declaring that there were none also counts.

Yes

Notes:

a. A protocol is mentioned, but none is referenced. The data used originated from the Shenzhen Center for Disease Control and Prevention (who uses a protocol ?). Supplementary Text S1 explains data collection more in detail.

b. Data sharing mentioned on preprint server, with reason why not able to share. They further explain that they are working on making the data available.

c. No code sharing is mentioned.

d. There is an ethics statement which mentions discussions with John Hopkins determining that the work is not human subject research.

e. The authors declare not CoI.

Let's dig deeper

Notes:

a. None of the mentioned protocols are accessible; e.g. no number etc.

b. Data not accessible, but they mention a valid reason.

c.
d. Ethics approval not accessible, since they did not provide a number or similar.
e.

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4. Limitations

Are the limitations of the study addressed in the discussion/conclusion section?

Yes

Notes: The discussion section mentions that the work has numerous limitations (noise and inconsistency in definitions; impossible to identify every contact; some asymptotic cases may be missed)

Let's dig deeper

Check for potential biases yourself. Here are some examples of potential sources of bias.

Notes:
1. Study sample - already stated in the title 391 cases and 1286 close controls.
2. Control group - surveillance data, so not applicable
3. Randomisation - Not applicable
4. Blinding - not applicable