## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Knowledge and attitudes among Lebanese pregnant women and women seeking fertility treatment during the COVID-19 outbreak: a cross-sectional survey
AUTHORS	El Taha, Lina; Beyrouthy, Christine; Tamim, Hani; Ghazeeri, Ghina

## **VERSION 1 – REVIEW**

Simopoulou, Mara

REVIEWER

KEVIEWEK	National and Kapodistrian University of Athens
REVIEW RETURNED	11-Nov-2021
REVIEW RETORNED	11-N0V-2021
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GENERAL COMMENTS	This is a well written article presenting an important topic
	regarding the attitudes of pregnant women during the COVID-19
	pandemic. The clarity of presentation consists of one of its strong
	points, along with the easy interpretation of the information
	provided. I would like to congratulate the authors for their work.
REVIEWER	Tippett, Anna
	University of Hertfordshire, Hertfordshire Law School
REVIEW RETURNED	12-Nov-2021
GENERAL COMMENTS	This is a pertinent and timely topic and the researchers have done
	a good job of raising a number of important matters. The results
	and corresponding discussion are presented comprehensively but
	there are issues with sentence structure throughout that need
	addressing. I have outlined these page by page below.
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Although the vaccine programme is briefly mentioned, more
	discussion in this area would benefit the paper. The lack of uptake
	of the vaccine by pregnant women globally is currently a pressing
	area of concern and the article has seemingly overlooked the
	importance of this. There is also no discussion on how COVID-19
	has impacted those seeking or undergoing fertility treatment.
	The state of the s
	Overall, this is an interesting paper, but it warrants a little more
	analysis in places.
	Page 3
	Lines 13 and 30 – consider changing 'attitude' to 'attitudes' (this
	will likely need to be revised throughout the paper).
	Line 39 – consider changing 'indicating' to 'indicated'.
	Line 51 – consider changing 'highlight' to 'highlights'.
	Page 4
	Key words should be in alphabetical order.
	1 - V

Line 21 – 'The study's design was susceptible to reporting, desirability bias' – consider rewording for clarity.

Line 29 – The sentence should begin with 'The...'

Line 29 – 'Human race has relentlessly suffered only to conquer innumerable epidemics throughout history.' – This is a rather bold opening statement. In what way/s has the human race relentlessly suffered?

Line 53 – 'leading to spectrum of illness...' – Do you mean to say, 'leading to a spectrum of illnesses'?

Page 5

Line 20 – 'especially considering finding of...' – do you mean to say, 'especially considering the finding of...'?

Lines 31-32 – 'major concerns regarding possibility of...' – do you mean to say, 'major concerns regarding the possibility of...'? Line 35 – 'Coronavirus' is spelt as 'corona virus' which is not the standard across the paper.

Line 48 – 'has echoed fear in every human encounter and disrupted social harmony' – this sounds rather emotive. Consider removing the 'echoed fear in every human encounter' statement. Page 6

Lines 13-14 – 'vaccination campaigns is contingent of knowledge and awareness level of the public' – do you mean to say, 'vaccination campaigns are contingent of the knowledge and awareness...'?

Line 25 – capital 'D' for design to ensure consistency.

Line 28 – 'over two month period' – do you mean 'over a two month period'?

Line 38 – 'electronic' should have a capital E.

Line 49 – the sentence is missing 'the' ('of the COVID-19 pandemic').

Lines 47-55 – 'Considering the noticeable decline in number of patients physically presenting to clinics since the onset of COVID-19 pandemic, administering our questionnaire in paper form would have introduced major selection bias to our collected data, limited representativeness of our targeted population apart from violating recommended health care measures designed to limit COVID-19 disease spread' – recommend rewording for clarity.

Lines 3-4 – Would an online survey really have failed to include women of low socioeconomic status and lower educational background? Evidence is required to support this claim.

Lines 7-14: - 'our study was devised utilizing telehealth to minimize in-person interactions embracing published American Society for Reproductive medicine (ASRM) Patient Management and Clinical Recommendations during the Coronavirus (COVID-19) Pandemic published on March17, 2020' – contains repetition of words. This sentence could be more clearly structured.

Line 43 – 'scored 0' – do you mean to say, 'scored from 0...'? Lines 54-56 – 'The fourth section assessed the participant's attitude towards COVID-19 infection during pregnancy using a five-point Likert scale. Whereby respondents...' – consider restructuring these sentences for clarity.

Page 8

Page 7

Lines 8-9 – 'Questions where higher scores indicated more negative attitude were flipped to preserve directionality across questions' – this requires greater detail. What do you mean by questions were 'flipped' and how was this decision reached? Page 10

Line 5 – 'in light of the Lebanon's economic crisis' – delete the word 'the' in this sentence.

Line 25 – The sentence should begin 'The majority...'.

Line 30 – Why 'remarkably'?

Line 56 – 'during COVID-19 pandemic'. Do you mean, 'during the COVID-19 pandemic'?

Line 56 – The word 'remarkably' is used again; consider rephrasing.

Page 11

Line 44 – Ministry of Health should be appropriately capitalised. A reference would also prove useful here.

Page 12

Line 18 – Do you mean 'mass' as opposed to 'massive'?

Line 33 – 'partly a reflection of role of'. Do you mean, 'partly a reflection of the role of...'?

Line 55 – do you mean 'unravelling' as opposed to 'unrevealing'? Page 13

Lines 10-14 – you have mentioned the vaccine campaign here, but only briefly. More explanation is required as to how your data emphasises the importance of 'tailoring platforms'.

Lines 48-53 – 'Though our data comes almost a year since the first documented COVID-19 case in Lebanon and does not address causation, however it aims...'. Remove the word 'however'. Page 14

Line 3 – 'might be instrumental to the success of COVID-19 vaccination and consequently eradication of covid-19'. Should read '...and consequently the eradication...'. Also, COVID-19 should be capitalised for continuity throughout the paper. Lines 5-7 – 'The main conclusion of our paper is not new, yet a year has elapsed since the onset of the COVID-19 pandemic and we are not yet corona-free'. I would avoid saying that your main conclusion is 'not new' as you have argued otherwise throughout. Lines 12-14 – 'If we want to reach a solution, the public knowledge including that of vulnerable populations, attitudes and practices showed be in alignment.' I assume you mean 'should be in alignment'?

## **VERSION 1 – AUTHOR RESPONSE**

Reviewer #1 (Dr. Mara Simopoulou, National and Kapodistrian University of Athens):

This is a well written article presenting an important topic regarding the attitudes of pregnant women during the COVID-19 pandemic. The clarity of presentation consists of one of its strong points, along with the easy interpretation of the information provided. I would like to congratulate the authors for their work.

Author response:

Thank you for this positive feedback.

Reviewer #2 (Dr. Anna Tippett, University of Hertfordshire):

This is a pertinent and timely topic and the researchers have done a good job of raising a number of important matters. The results and corresponding discussion are presented comprehensively but there are issues with sentence structure throughout that need addressing. I have outlined these page by page below.

Author response:

We would like to thank you for your vigilance in reviewing our manuscript. Your comments have been truly helpful in improving our paper. We also asked a native English speaking colleague to review our paper after incorporating the suggested modifications.

Reviewer #2.1

Page 3 Lines 13 and 30 – consider changing 'attitude' to 'attitudes' (this will likely need to be revised throughout the paper).

Author response:

Revised and adjusted accordingly.

Reviewer #2.2

Page 3 Line 39 – consider changing 'indicating' to 'indicated'.

Author response:

Revised and adjusted accordingly.

Reviewer #2.3

Page 3 Line 51 – consider changing 'highlight' to 'highlights'.

Author response:

Revised and adjusted accordingly.

Reviewer #2.4

Page 4 Key words should be in alphabetical order.

Author response:

Done.

Reviewer #2.5

Page 4 Line 21 – 'The study's design was susceptible to reporting, desirability bias' – consider rewording for clarity.

Author response:

We reworded into a clearer statement.

Reviewer #2.6

Page 4 Line 29 - The sentence should begin with 'The...'

Author response:

Yes.

Reviewer #2.7

Page 4 Line 29 – 'Human race has relentlessly suffered only to conquer innumerable epidemics throughout history.' – This is a rather bold opening statement. In what way/s has the human race relentlessly suffered?

Author response:

The plague, polio, yellow fever, flu, Ebola, SARS... these are some of the epidemics that have hit civilizations throughout history. Although such disease outbreaks still threaten humanity, we no longer face the same dire consequences that our ancestors did especially with advances in epidemiology. Covid-19 is with no doubt the newest pandemic to threaten human race, challenge its health care system and impact its socioeconomic standing.

We have revised our opening statement to make it less bold yet appeal to and catch the interest of our readers.

Reviewer #2.8

Page 4 Line 53 – 'leading to spectrum of illness...' – Do you mean to say, 'leading to a spectrum of illnesses'?

Author response:

Yes.

Reviewer #2.9

Page 5 Line 20 - 'especially considering finding of...' - do you mean to say, 'especially considering the finding of...'? discovery

Author response:

Yes, we reworded our statement to make it clearer

Reviewer #2.10

Page 5 Lines 31-32 – 'major concerns regarding possibility of...' – do you mean to say, 'major concerns regarding the possibility of...'?

Author response:

Yes, adjusted accordingly.

Reviewer #2.11

Page 5 Line 35 – 'Coronavirus' is spelt as 'corona virus' which is not the standard across the paper.

Author response:

The spelling of Coronavirus was revised to follow the standard across the paper.

Reviewer #2.12

Page 5 Line 48 – 'has echoed fear in every human encounter and disrupted social harmony' – this sounds rather emotive. Consider removing the 'echoed fear in every human encounter' statement.

Author response:

We removed it.

Reviewer #2.13

Page 6 Lines 13-14 – 'vaccination campaigns is contingent of knowledge and awareness level of the public' – do you mean to say, 'vaccination campaigns are contingent of the knowledge and awareness...'?

Author response:

Yes, adjusted accordingly.

Reviewer #2.14

Page 6 Line 25 – capital 'D' for design to ensure consistency.

Author response:

Amended.

Reviewer #2.15

Page 6 Line 28 - 'over two month period' - do you mean 'over a two month period'?

Author response:

Yes, adjusted accordingly.

Reviewer #2.16

Page 6 Line 38 - 'electronic' should have a capital E.

Author response:

Amended.

Reviewer #2.17

Page 6 Line 49 – the sentence is missing 'the' ('of the COVID-19 pandemic').

Author response:

Revised.

Reviewer #2.18

Page 6 Lines 47-55 – 'Considering the noticeable decline in number of patients physically presenting to clinics since the onset of COVID-19 pandemic, administering our questionnaire in paper form would have introduced major selection bias to our collected data, limited representativeness of our targeted population apart from violating recommended health care measures designed to limit COVID-19 disease spread' – recommend rewording for clarity.

Author response:

We rephrased it for clarity while still maintaining the intended meaning.

Reviewer #2.19

Page 7 Lines 3-4 – Would an online survey really have failed to include women of low socioeconomic status and lower educational background? Evidence is required to support this claim. Search for available evidence and cite it

Author response:

Unfortunately, this is the current situation in Lebanon whereby large parts of the country has limited internet connectivity. This is even worsened with Lebanon's economic crisis. Although there is no available direct citation from the literature showing limited connectivity in areas of low socioeconomic

status in Lebanon however this can be extrapolated from pertinent evidence on internet connectivity in the region and the economic burden. Added to the manuscript.

Reviewer #2.20

Page 7 Lines 7-14: - 'our study was devised utilizing telehealth to minimize in-person interactions embracing published American Society for Reproductive medicine (ASRM) Patient Management and Clinical Recommendations during the Coronavirus (COVID-19) Pandemic published on March17, 2020' – contains repetition of words. This sentence could be more clearly structured.

Author response:

Edited.

Reviewer #2.21

Page 7 Line 43 – 'scored 0' – do you mean to say, 'scored from 0...'?

Author response:

Yes.

Reviewer #2.22

Page 7 Lines 54-56 – 'The fourth section assessed the participant's attitude towards COVID-19 infection during pregnancy using a five-point Likert scale. Whereby respondents...' – consider restructuring these sentences for clarity.

Author response:

Adjusted.

Reviewer #2.23

Page 8 Lines 8-9 – 'Questions where higher scores indicated more negative attitude were flipped to preserve directionality across questions' – this requires greater detail. What do you mean by questions were 'flipped' and how was this decision reached?

Author response:

We elected to remove this statement from our manuscript to avoid readers' confusion. However to address our reviewer's concern: this was done for purposes of correlating positive attitude with knowledge scores. The scores for attitude questions where higher scores reflected negative attitude were flipped to maintain directionality (this is made clearer with the added supplemental file of our questionnaire)

Reviewer #2.24

Page 10 Line 5 – 'in light of the Lebanon's economic crisis' – delete the word 'the' in this sentence.

Author response:

Deleted.

Reviewer #2.25

Page 10 Line 25 – The sentence should begin 'The majority...'.

Author response:

Revised accordingly.

Reviewer #2.26

Page 10 Line 30 - Why 'remarkably'?

Author response:

We revised this statement.

Reviewer #2.27

Page 10 Line 56 – 'during COVID-19 pandemic'. Do you mean, 'during the COVID-19 pandemic'?

Author response: Yes

Reviewer #2.28

Page 10 Line 56 – The word 'remarkably' is used again; consider rephrasing.

Author response:

Rephrased.

Reviewer #2.29

Page 11 Line 44 – Ministry of Health should be appropriately capitalised. A reference would also prove useful here.

Author response:

Amended and the reference to the Lebanese Ministry of Public Health has been added (it includes all issued policies adopted in Lebanon regarding COVID-19).

Reviewer #2.30

Page 12 Line 18 – Do you mean 'mass' as opposed to 'massive'?

Author response:

We meant mass; corrected in manuscript.

Reviewer #2.30

Page 12 Line 33 – 'partly a reflection of role of'. Do you mean, 'partly a reflection of the role of...'? Author response:

Yes.

Reviewer #2.31

Page 12 Line 55 - do you mean 'unravelling' as opposed to 'unrevealing'?

Author response:

We rectified the spelling mistake. The intended word was unraveling.

Reviewer #2.32

Page 13 Lines 10-14 – you have mentioned the vaccine campaign here, but only briefly. More explanation is required as to how your data emphasises the importance of 'tailoring platforms'. Author response:

We believe adding more details would make our discussion wordy. By understanding gaps in a populations' knowledge, one can better address them and implement new policies in fighting the pandemic. This has been addressed subsequently in our paper.

Reviewer #2.33

Page 13 Lines 48-53 – 'Though our data comes almost a year since the first documented COVID-19 case in Lebanon and does not address causation, however it aims...'. Remove the word 'however'. Author response:

Revised.

Reviewer #2.34

Page 14 Line 3 – 'might be instrumental to the success of COVID-19 vaccination and consequently eradication of covid-19'. Should read '…and consequently the eradication…'. Also, COVID-19 should be capitalised for continuity throughout the paper.

Author response:

Revised and adjusted accordingly.

Reviewer #2.35

Page 14 Lines 5-7 – 'The main conclusion of our paper is not new, yet a year has elapsed since the onset of the COVID-19 pandemic and we are not yet corona-free'. I would avoid saying that your main conclusion is 'not new' as you have argued otherwise throughout.

Author response:

We agree with this and have revised it accordingly.

Reviewer #2.36

Lines 12-14 – 'If we want to reach a solution, the public knowledge including that of vulnerable populations, attitudes and practices showed be in alignment.' I assume you mean 'should be in alignment'?

Author response:

Yes

Reviewer #2.37

There is also no discussion on how COVID-19 has impacted those seeking or undergoing fertility treatment.

Author response:

While we agree that this is a pressing area of concern, however it is beyond the scope of our discussion and would be unjust to briefly touch upon it without detailed elaboration. One limitation of our study is the lack of a statistically powered investigation of the impact of COVID-19 on those

seeking or undergoing fertility treatment during suspension of treatment and the wait for it to resume. We believe the reviewer has done an outstanding tackling of this in Life on pause: An analysis of UKfertility patients' coping mechanisms after the cancellation of fertility treatment due to COVID-19. Reference: Tippett A. Life on pause: An analysis of UK fertility patients' coping mechanisms after the cancellation of fertility treatment due to COVID-19. *Journal of Health Psychology* 2021:1359105321999711.