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6th January 2021

Editorial Team
World Journal of Diabetes

Dear Dr Colleague

Re: World Journal of Diabetes Manuscript No: 61144 – Covid-19 and diabetes: disease of racial, social and glucose intolerance

Thank you for your recent message regarding this manuscript. I am grateful to the reviewers for their comments, which I feel have significantly improved the manuscript.

Please find attached a revision, with a point by point response to reviewers and editorial comments. I hope you feel the paper is now suitable for publication in *WJD*.

Yours sincerely

Tahseen A Chowdhury MD, FRCP
CONSULTANT PHYSICIAN

World Journal of Diabetes Manuscript No: 61144 – Covid-19 and diabetes: disease of racial, social and glucose intolerance

Response to reviewers comments

Reviewer #1:

Specific Comments to Authors: The article by Dr. Chowdhury entitled “DIABETES AND COVID-19: DISEASES OF RACIAL, SOCIAL AND GLUCOSE INTOLERANCE” is a nice and well-written opinion review highlighting that poor outcomes associated with COVID-19 and T2D share similar risk factors, which primarily depend on ethnicity, socioeconomic status, cultural factors, and social-racial inequalities, particularly in UK. Health inequality is suggested as the common factor in all the aforementioned risk factors, and potential health policy interventions aimed to reduce health inequality and rates of diabetes increase are also proposed by the Author. I only have minor comments and suggestions:

1. -“but not less fatal” -“ Latest estimates suggest there are 425 million people living with the condition, most of whom have Type 2 diabetes (T2D) This number is estimated to rise by 50% by the year 2045.”: amend this paragraph according to this reference (to be quoted: PMID: 31518657); “The global diabetes prevalence in 2019 is estimated to be 9.3% (463 million people), rising to 10.2% (578 million) by 2030 and 10.9% (700 million) by 2045.”

Changed as suggested (page 3, para 1, line 8) and reference 4. This is, however, likely to be less than 50% of the deaths due to diabetes in 2020 - the condition caused 4.2 million deaths worldwide in 2019 [3], illustrating the fact that the diabetes pandemic has been perhaps more slow burning, but no less fatal. The global diabetes prevalence in 2019 was estimated to be 9.3% (463 million people), rising to 10.2% (578 million) by 2030 and 10.9% (700 million) by 2045 [4 - PMID: 31518657].

2. -“ of 2-2.5x”: times higher? Do not use “x”;

Changed as suggested (page 3, para 3, line 5: 2-2.5 times greater), and (page 3, para 3, line 12: 2 times).

3. even in the following text. -“ As discussed below, diabetes is commoner amongst more socially deprived cohorts in the UK, and non-White ethnicities are over-represented amongst socially deprived groups in the UK.”: please, provide a reference for this sentence.

Referenced (page 4, para 2, line 7), reference 18. Clift AK, Coupland CAC, Keogh RH, Diaz-Ordaz K, Williamson E, Harrison EM, Hayward A, Hemingway H, Horby P, Mehta N, Benger J, Khunti K, Spiegelhalter D, Sheikh A, Valabhji J, Lyons RA, Robson J, Semple MG, Kee F, Johnson P, Jebb S, Williams T, Hippisley-Cox J. Living risk prediction algorithm (QCOVID) for risk of hospital admission and mortality from coronavirus 19 in adults: national derivation and validation cohort study. BMJ. 2020 Oct 20;371:m3731. [PMID: 33082154 doi: 10.1136/bmj.m3731.]

4. -Always refer to SARS-CoV-2 instead of the generic term “coronavirus”

Changed as suggested throughout manuscript.

5. -“ White European children of lower socioeconomic status have poorer metabolic indices whilst” -amend:

Sentence rephrased to make more clear (page 5, para 1, line 12). European children of lower socioeconomic status had poorer metabolic indices, whereas among South Asian children, socioeconomic status did not appear to affect metabolic indices

6. “ a hazard ration for”: “a hazard ratio for” -amend:

Corrected (page 5, para 3, line 3). hazard ratio

7. “, with a death rate of 128.3 deaths per 100,000 population in most deprived areas – more than double that of least deprived areas, where it was 58.8 deaths per 100,000...”

Corrected (page 5, para 3, line 5). with a death rate of 128.3 deaths per 100 000 population in most deprived areas – more than double that of least deprived areas, where the death rate was 58.8 deaths per 100 000

8. -“ were uniquely at risk for severity of”: “were uniquely at risk for increased severity of”

Changed as suggested (page 5, para 4, line 2). As the COVID-19 pandemic progressed, emerging data showed that people with diabetes and hypertension were uniquely at risk for increased severity of SARS-CoV-2 infection.

9. -“ CVD”: “cardiovascular disease”; then, abbreviate if you repeat the term in the text –

Changed as suggested (page 6, para 2, line 7). cardiovascular disease (CVD)

10. HbA1c: "59 mmol/mol" corresponds to 7.5%
Corrected (page 6, para 3, line 7). >59 mmol/mol (7.5%)
11. -" glucoses >10.0 mmol/L": what does the Author mean? Glucose variability or mean blood glucose values during in-hospital stay? Please, clarify
Changed to "capillary blood glucoses..." (page 6, para 3, line 11 and 12). ... well-controlled blood glucose in hospital (capillary blood glucoses 3.9 to 10.0 mmol/L) was associated with lower mortality compared to individuals with poorly controlled glycaemia (capillary blood glucoses frequently >10.0 mmol/L)
12. -" focussed": "focused"
Corrected (page 7, para 4, line 1).
13. - "Human pancreatic tissue widely expresses ACE-2..."_ Quote also this recently published paper PMID: 33281748
Reference added (page 7, para 3, line 4), reference 49.
14. -" SARS-CoV-2 spike protein"
Corrected (page 7, para 4, line 2). SARS-CoV-2
15. -" that adverse outcomes with associated with COVID-19": "that adverse outcomes associated with COVID-19"
Corrected (page 7, para 6, line 1).
16. -"– there is certainly no vaccine on the horizon for T2D!": I would be more cautious in making that statement (PMID: 32131431)
Sentence removed.
17. -" The only way to tackle the diabetes pandemic is to tackle health and social inequalities which lead to great disparities in health between ethnic and socio-economic groups.": here, and in the abstract, Author should rephrase outlining that this is certainly one of the most important and crucial ways, although not the "only" way
Wording changed in abstract and final paragraph (page 8, para 3, line 2).

Reviewer #2:

Specific Comments to Authors: Having read the Review considerately, I am very appreciative of the type of work presented. The review submitted by Tahseen A. Chowdhury and co-author describes the risk factors in COVID-19 and diabetes. Although it is a concise review, it remains relative comprehensive and informative. However, the reviewer has the following concerns or suggestions to be addressed:

1. The abstract should be more clarified with current status, purpose and what are the main advanced knowledge or information

Abstract wording changed to reflect above.

2. There have been some reviews about the relationship of diabetes and COVID-19. What is the novelty of this review?

Abstract wording changed to mention that this review focuses on the fact that diabetes and COVID-19 have similar risk factors for adverse outcomes.

3. Page 3, lines 33-34 the author proposed “Many theories have been proposed”, However, there is only one theory mentioned, and please describe the purpose of the theory in details.

Line “many theories have been proposed” has been deleted.

4. Page 4, lines 1-5. References are missing

Reference 14 describes the theory. I have referenced again at the end of the paragraph

5. Page4, line12-14.the author write “As discussed below, diabetes is commoner amongst more socially deprived cohorts in the UK, and non-White ethnicities are over-represented amongst socially deprived groups in the UK”, however, COVID-19 was discussed below.

I have referenced this and removed “As discussed below”.

6. Page 4, lines 26-37. References are missing

References added.

7. Page 5, lines 31. “with a death rate of he 128.3 deaths per 100 000 population in most deprived areas”, some spelling errors.

Corrected.

8. The authors should conclude the review in the end.

Concluding remarks added.

9. It is better to list a table describing the Risk factors for developing diabetes and adverse outcomes of COVID-19.

Box 1 listing risk factors added.

Reviewer #3:

Specific Comments to Authors: Very interesting reflection! Perhaps the tremendous socioeconomic impact of covid and a potential increase of inequality may increase the prevalence of diabetes in the following years. I think there are two semantic errors:

1. Page 7, 5th paragraph, 1st line: first "with" should be omitted.

Removed

2. Box 1, point 7 "in schools": repeated term.

Corrected

LANGUAGE QUALITY

Please resolve all language issues in the manuscript based on the peer review report. Please be sure to have a native-English speaker edit the manuscript for grammar, sentence structure, word usage, spelling, capitalization, punctuation, format, and general readability, so that the manuscript's language will meet our direct publishing needs.

All language reviewed and errors corrected.

EDITORIAL OFFICE'S COMMENTS

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) *Science editor*: 1 Scientific quality: The manuscript describes an opinion review of diabetes and COVID-19: diseases of racial, social and glucose intolerance. The topic is within the scope of the WJD. (1) Classification: Grade A, Grade C and Grade D; (2) Summary of the Peer-Review Report: The authors found that diabetes and COVID-19 are both global pandemics which cause more severe disease in people of non-White ethnicity and lower socioeconomic status.

Improving social justice and reducing health inequalities will reduce the risk of both conditions considerably. Although it is a concise review, it remains relative comprehensive and informative; and (3) Format: There is 1 table. A total of 52 references are cited, including 24 references published in the last 3 years. There are no self-citations. 2 Language evaluation: Classification: Grade B, Grade A and Grade B. 3 Academic norms and rules: Please provide the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement. No academic misconduct was found in the CrossCheck detection and Bing search. 4 Supplementary comments: This is an invited manuscript. The topic has not previously been published in the WJD. The corresponding author has not published articles in the BPG. 5 Issues raised: (1) I found no "Author contribution" section. Please provide the author contributions. 6 Re-Review: Required. 7 Recommendation: Conditionally accepted.

Author contribution section added.

Round-2:

The authors should mark the revisions in the revived version. There is no line number or page number in the manuscript.

I am really confused by the comments below. I submitted the revised article as per your website with the attached revision with changes in red, please a letter covering point by point changes. Please see above. Thank you!

Round-3:

The manuscript has been revised accordingly. Have a good day.