

Dear editor and reviewers,

Thank you very much for reviewing our manuscript. We appreciate your valuable comments. Incorporating your comments, we believe our revised manuscript has significant improvement over our first submission. The following is the point to point reply.

### Reviewer 1

Thank you reviewer 1 for your valuable and kind comments. Revision is done to include your comments.

- The authors of this manuscript aimed to review the latest data on prediabetes in children and strategies for screening and treatment. The paper is generally well and coherently organized but needs some adjustments to improve it.

Our reply: Thank you.

- The title may need to be changed to include more precisely the main ideas from this review, not just naming the prediabetes.

Our reply: Thank you. It is modified accordingly.

- The abstract must summarize the most important news regarding prediabetes, including screening and strategies presented in the paper. It should not only present the aim of the review.

Our reply: Thank you. It is modified accordingly.

- The keywords reflect, in general, the focus of the manuscript, but adding 1 or 2 words could narrow the field.

Our reply: Thank you. Another 2 words are added.

- The background and the importance of this field are presented very limited, and it could be improved to include more data and to justify the need for updating and looking for new data on this subject.

Our reply: Thank you for your comment. This section has been revised to improve the background, importance, and justification .

- Also, the methodology of searching the articles must be more detailed regarding the inclusion and exclusion of the papers, even though there is no systematic review. Maybe it would be better to add that this is a narrative review.

Our reply: Thank you. The inclusion and exclusion criteria are explicitly stated in the revision. The term narrative review is also added.

- The presentation of the leading new data follows a logical line from childhood obesity, type 2 diabetes, and prediabetes and then details the prevalence, screening, and strategies.

Our reply: Thank you.

- Regarding childhood obesity, this section needs to be improved. More than half of this is related to the COVID-19 situation. There should be presented data not only from COVID-19, as this could not be linked only to the pandemic.

Our reply: Thank you. Global obesity landscape before COVID is added for completeness.

- The subtitle “Management algorithms” may be changed as it could be misleading as it is followed by “Management of prediabetes.”

Our reply: Thank you. This subtitle is changed.

- There are no illustrations or tables. Adding an image or a table with a synthesis of the new data may bring value to the paper.

Our reply: Thank you. A figure is added to highlight the screening approach.

- The manuscript appropriately cites the latest, most essential references regarding prediabetes in children and adolescents. Regarding the methodology, as this is not a systematic review, the PRISMA 2009 Checklist should not be used. As the paper did not involve any human study, there is no need for an ethics statement. The manuscript is generally well and coherently organized with an accurate style and a good use of the English language and grammar. Still, some editing improvements are needed, and the abbreviated words should be consistent (see T2DM).

Our reply: Thank you.

## Reviewer 2

Thank you reviewer 2 for your valuable comments. Revision is done to include your comments.

In this opinion review, the authors provide an overview of the latest insights into prediabetes in children and adolescents and outline the direction of future research. 1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes 2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? Yes 3 Key Words. Do the key words reflect the focus of the manuscript? Yes 4 Background. Does the manuscript adequately describe the background, present status and significance of the study? Yes, with the corrections listed below. 5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? Yes, with the corrections listed below. 6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field? Yes 7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently? Yes, with the below mentioned amendments. 8 Illustrations and tables. Are the figures, diagrams, and tables sufficient, good quality and appropriately illustrative, with labeling of figures using arrows, asterisks, etc, and are the legends adequate and accurately reflective of the images/illustrations shown? This section of the paper requires major revisions. 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? N/A 10 Units. Does the manuscript meet the requirements of use of SI units? Not applicable 11 References. Does the manuscript appropriately cite the latest, important and authoritative references in the Introduction and Discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? Yes, with the corrections listed below. 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? Yes

- Specific comments: "prevalence of childhood obesity has increased exponentially in recent years as a consequence of novel coronavirus disease 2019 (COVID-19) pandemic" - I think this is an overstatement. It is indirectly true, but the true fact is that more children became obese due to sedentary lifestyles and poor dietary

patterns, lack of physical activity during the COVID-19 pandemic, but the pandemic did not prevent children to do indoor physical activity or eat healthy - this point needs to be explained

Our reply: Thank you. It is revised to include your points.

- "A literature search was conducted using PubMed, EMBASE, RCA, and Google Scholar databases. Search terms included "prediabetes", "dysglycemia", "abnormal glucose homeostasis", "children", and "adolescents". Articles published in English between January 2013 to March 2023 were considered with the exception of landmark studies or articles. Additional publications were also retrieved by snowballing": -

PubMed is not a database, the database is MEDLINE - you did employ hyperglycemia as a search term? dysglycemia definitely led to less relevant results?

Our reply: Thank you. Revision is done.

- Please propose an algorithm to diagnose/recognize prediabetes in children & adolescents as a figure.

Our reply: Thank you. An algorithm to aid diagnosing prediabetes is added as per your suggestion.

- How about MODY (maturity-onset diabetes of the young) and LADA (latent autoimmune diabetes in adults)? Should we screen adolescents early for these conditions as well? Are any of the reported cases linked to prediabetes secondary to other conditions, e.g., Cystic fibrosis. Hemochromatosis. Chronic pancreatitis. Polycystic ovary syndrome (PCOS) Cushing's syndrome. Pancreatic cancer. Glucagonoma. Pancreatectomy etc

Our reply: Thank you for your question. However, as stated in the literature search section, specific types of diabetes (such as MODY, LADA, various types of pancreatogenic diabetes, etc) are beyond the scope of this review. They probably warrant another review. Thank you for your understanding.

- Please explain all abbreviations on their first use - e.g. you did not explain BMI.

Our reply: Thank you. They are modified.

- The references are not formatted according to the journal's guidelines.

Our reply: Thank you. It's formatted with BPG publishing Endnote style now.

- The manuscript would require 1-2 tables and 1-2 figures (graphical abstract?) to increase its readability. Maybe design some trends in obesity/diabetes incidence, prevalence etc.

Our reply: Thank you. A figure is added outlining a screening approach.

- Overall the paper is suitable for publication following some moderate revisions.

Our reply: Thank you very much.