

February 6th, 2023

Dear Editor,

Please find enclosed the revised manuscript in Word format (file name "Revised manuscript").

Title: Prevalence of type 2 diabetes mellitus in the pediatric population of a third-level care hospital in Mexico City, 2013-2018

Authors: Jorge Mario Molina-Díaz, Blanca Estela Vargas-Terrez, Patricia Guadalupe Medina-Bravo, Antonia Martínez-Ambrosio, América Liliana Miranda-Lora, Miguel Klünder-Klünder

Name of Journal: World Journal of Diabetes

ESPS Manuscript NO: 76551

Manuscript Type: Observational Study

Thank you very much for your kind e-mail, which gave us the possibility to revise our manuscript.

We emended the paper according to the reviewers' comments. We hope this revision will make our manuscript better to be accepted in your journal.

Each comment has been answered accordingly in the manuscript and each text that has been altered was highlighted red in the revised manuscript.

We hope that the revised version will fulfill the requirements for publication in the World

Journal of Diabetes

Thank you very much.

Reply to editorial comments:

Reviewer #1

Scientific Quality: **Grade B (Very good)**

Language Quality: **Grade B: Minor language polishing**

Conclusion: **Accept (High priority)**

Specific Comments to Authors:

Interesting longitudinal pilot study whose results deserve to be published. Good analysis of the results with a discussion that would deserve to give more details on the possible reasons for the increase of type 2 diabetes between the two study periods in relation to the socio-economic level of the subjects explored.

Answer

Regarding Socioeconomic Status (SES), the 2013 group had a higher percentage of upper-lower and lower-middle SES levels, with 21.3% and 34% respectively, and a lesser percentage of patients with low SES. In the 2018 group, there was a significant increase of 26.9% in subjects with low and upper-lower SES compared to 2013, with the difference being statistically significant ($P = 0.023$).

Reviewer #2

Scientific Quality: **Grade C (Good)**

Language Quality: **Grade B: Minor language polishing**

Conclusion: **Minor revision**

Specific Comments to Authors:

This manuscript was an engaging and informative read! The authors have presented the increasing incidence of T2DM in pediatric population really well. Also, the abstracts clearly reflects the work described in the manuscript. However, there are few things which I would like to highlight: 1. The methodology doesn't contain any exclusion criteria - Can you define the eligibility criteria more clearly? 2. Results are well written, you just need to mention the number of participants at each stage of your study. 3. As this research addresses a rising issue, in what way do you think this will help the clinicians in their clinical practice - please mention that. 4. What do you think are the limitations of your study?

Answer

Dear reviewer, thank you very much for your questions.

1. Included, were children and adolescents from 8-17, who had the clinical and biochemical phenotype (obesity, acanthosis nigricans, insulin resistance) and a diagnostic C-peptide ≥ 0.45 ng/dL. Patients whose relatives presented with diabetes at an age younger than 25 years, leading to the suspicion of maturity onset diabetes of the young, were ruled out. In addition, study patients did not have a history of autoimmune disease or treatment that could alter glucose metabolism such as glucocorticoids or immunomodulators.
2. A total of 151 patients with T2DM were included in the study: 47 patients from 2013, and 104 patients from 2018.
3. Primary contact physicians in their daily practice should consider that T2DM can present in children, and that it is related to the presence of overweight/obesity. Therefore, early screening is important in these types of patients who also present with a phenotype of insulin resistance, low birth weight, and a family history of diabetes.
4. One of the main limitations of the study is its design, which, due to its cross-sectional nature, can imply association but not causation. As such, the study design does not allow for a specific explanation as to how some variables may affect the prevalence of diabetes in the pediatric population. Also, the determination of pancreatic antibodies could not be performed in all patients, which could be a parameter to try to exclude patients with type 1 diabetes; although it is worth mentioning that a percentage between 20%-30% of patients with T2DM have positive pancreatic antibodies.

Thank you for considering the review.
Sincerely

Jorge Mario Molina-Díaz, PhD
Department of child Endocrinology
Universidad Nacional Autónoma de México
Hospital Infantil de México Federico Gómez,
Dr. Márquez 162, Doctores, Cuauhtemoc,
06720, Mexico City, Mexico
mail: dereck79@live.com.mx; tel. +52 (55) 52289917.