	JURNAL INTERNATIONAL BERPUTASI TERAKREDITASI Q3
JUDUL ARTIKEL	Behavioral Problems among Type 1 Diabetes Mellitus Children with Good and Poor Metabolic Control During COVID-19 Pandemic
JURNAL	Journal of Comprehensive Pediatrics
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Surabaya, 7 Agustus 2023

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- **Journal:** Journal of Comprehensive Pediatrics
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- **Manuscript Title:** METABOLIC CONTROL AND BEHAVIORAL PROBLEMS AMONG CHILDREN WITH TYPE 1 DIABETES MELLITUS DURING COVID-19 PANDEMIC
- **Revision:** [0]

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Manuscript Full Title: METABOLIC CONTROL AND BEHAVIORAL PROBLEMS AMONG CHILDREN WITH TYPE 1 DIABETES MELLITUS DURING COVID-19 PANDEMIC;
Revision: 0

Abstract [Required]:

Background: Children with Type-1 Diabetes Mellitus (T1DM) often experience emotional and behavioral problems such as anxiety and depression. ~~Social restrictions during the COVID-19 pandemic caused social restrictions~~ and limited access to healthcare facilities ~~as it could~~ worsen metabolic control. Poor metabolic control may lead to increased risk of behavioural problems. Objectives: This study ~~aims to analyze the~~ behavioral problems and metabolic control among children with T1DM during the COVID-19 pandemic. Methods: Cross-sectional study was conducted in January-August 2021 in the Endocrine Outpatient Clinic of General Hospital Dr. Soetomo Surabaya. Type-1-DM children who fulfilled the inclusion criteria were divided into two groups based on metabolic control, including ~~good (HbA1C≤8) and poor (HbA1C>8).~~ The Pediatric Symptom Checklist-17 (PSC-17) was used as a screening tool with the domain Internalizing Problems (IP), Externalizing Problems (EP), and Attention Problems (AP). The data were analyzed using Pearson and Spearman test with Statistical Product and Service Solution (SPSS) version 18.0. Results: This study consisted of 27 subjects with 17 boys and 10 girls, aged 13.63 ± 3.85 years old. From all subjects, only 8 subjects had good metabolic control during COVID-19 pandemic~~. There are 33.3% of participants had behavioral problems (14.8% IP; 18.5% EP).~~ The frequency of IP and EP in the good metabolic control group was 12.5%; 37.5%, while in the poor was 15.8%; 10.5%. There was no significant difference between the PSC-17 score and HbA1C in IP and EP groups. Conclusions: The frequency of EP was higher in good metabolic control, and the frequency of IP was higher among poor metabolic control.

Keywords: Diabetes,Children,Behavioral problems,Metabolic control

Conflict of Interests: There is no conflict of interest in this study.

Ethical Approval: 0246/KEPK/VIII/2021

Funding/Support: During this study, no financial or spiritual support was received from any party that could affect the results of this study.

Data Reproducibility: The dataset presented in the study is available on request from the corresponding author during submission or after publication. The data are not publicly

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ORIGINAL ARTICLE

METABOLIC CONTROL AND BEHAVIORAL PROBLEMS AMONG CHILDREN WITH TYPE 1 DIABETES MELLITUS DURING COVID-19 PANDEMIC

ABSTRACT

Background: Children with Type-1 Diabetes Mellitus (T1DM) often experience emotional and behavioral problems such as anxiety and depression. Social restrictions during the COVID-19 pandemic caused social restrictions and limited access to healthcare facilities as it could worsen metabolic control. Poor metabolic control may lead to increased risk of behavioural problems.

Objectives: This study aims to ~~analyze~~ the behavioral problems and metabolic control among children with T1DM during the COVID-19 pandemic.

Methods: ~~Cross-sectional study was conducted in January-August~~ 2021 in the Endocrine Outpatient Clinic of General Hospital Dr. Soetomo Surabaya. ~~Type-1-DM children~~ who fulfilled the inclusion criteria were divided into two groups based on metabolic control, including good (HbA1C≤8) and poor (HbA1C>8). The Pediatric Symptom Checklist-17 (PSC-17) was used as a screening tool with the domain Internalizing Problems (IP), Externalizing Problems (EP), and Attention Problems (AP). The data were analyzed using Pearson and Spearman test with *Statistical Product and Service Solution (SPSS) version 18.0.*

Results: This study consisted of 27 subjects with 17 boys and 10 girls, aged 13.63 ± 3.85 years old. From all subjects, only 8 subjects had good metabolic control during COVID-19 pandemic. There are 33.3% of participants had behavioral problems (14.8% IP; 18.5% EP). The frequency of IP and EP in the good metabolic control group was 12.5%; 37.5%, while in the poor was 15.8%; 10.5%. There was no significant difference between the PSC-17 score and HbA1C in IP and EP groups.

Conclusions: The frequency of EP was higher in good metabolic control, and the frequency of IP was higher among poor metabolic control.

Keywords: Metabolic control, Behavioral problems, Children, Diabetes

BACKGROUND

Children with diabetes mellitus frequently had emotional and behavioral problems (1,2). ~~There was an increased rate of behavioral problems such as anxiety problems (1) and depression (3) in a group of T1DM children compared to a matched control.~~ Globally, ~~the government~~ imposed social restrictions during the COVID-19 pandemic. On the other hand, this policy also limits health facilities' access, creating fear of going to hospitals in patients' families that may influence the metabolic control in T1DM patients (4). Poor metabolic control is a risk factor for behavioral problems and increased risk for complications (5-7) and mortality (8). The impacts of social restrictions during the COVID-19 pandemic towards behavioural problems and metabolic control in T1DM children are still controversial.

~~Globally, the incidence of T1DM is increasing, and it is anticipated that over 90,000 children are diagnosed with T1DM annually (9). In 2018, there were 1,220 children and adolescents with T1DM reported in Indonesia (10). During 2000-2010, T1DM incidence in Indonesia increased sevenfold from 3.88 to 28.19 per 100 million population (11).~~

Type 1 diabetes mellitus patients require regular insulin injections and continuous blood sugar monitoring during life. The ~~long-life treatment may~~ cause negative emotions induced maladaptive behavior and lead to behavioral and functional problems and risk for suicide attempts (1,12-15). However, poor metabolic control indicates poor compliance, so it is a risk factor for behavioral disorders (16). The correlation between behavioral problems towards

metabolic control is still controversial (17,18). Therefore, it is necessary to analyze the behavioral problems and metabolic control during the COVID-19 pandemic.

METHODS

This research was a cross-sectional study conducted in the endocrine outpatient clinic of General Hospital Dr. Soetomo, Surabaya, from January to August 2021. The ethics board of General Hospital Dr. Soetomo Surabaya issued ethical approval number 0246/KEPK/VIII/2021 and performed under the Helsinki Declaration. The inclusion criteria were T1DM patients aged 4-17 years, routinely controlled at Pediatric Endocrinology Outpatient Clinic, and parents assigned informed consent for participation. Patients who had life-threatening conditions and were hospitalized in Pediatric Intensive Care Unit were excluded. Patient's age, gender, and level of HbA1C were evaluated. Behavioral problems were assessed using an Indonesian version of the *Pediatric Symptom Checklist 17* (PSC-17) questionnaire by the subject's parents. The PSC-17 questionnaire was sent via google-form and guided by the research team via phone or zoom meetings. Inform consent was sent by short messages to the subject's parents, then printed out, signed, and returned to the author.

PSC-17 is a 17-question short screening questionnaire that helps identify and assess changes in children's emotional and behavioral problems. The Indonesian version of this questionnaire has high reliability (α=0.821) (19). Each answer will be given a score (0-2) according to the following question to make a total score, suspect behavioral problems if the sum of internalizing values ≥5, externalizing ≥7, attention values ≥7 and if the total score of PSC-17 was ≥ 15 (19,20).

In this study, T1DM patients were categorized into two groups, patients with good metabolic control (HbA1C>8) and poor metabolic control (HbA1C≤8) (18,19). Glycosylated hemoglobin (HbA1C) reflects the average level of glucose for the last 5-8 weeks and indicators of metabolic control in diabetic patients (ADA).

Statistical analysis

Collected data were analyzed using *Statistical Product and Service Solution (SPSS) version 18.0.* Descriptive data were presented as mean ± SD, while the number of cases and percentages were shown for categorical data. Categorial variables were calculated using Pearson or Spearman analysis based on a normality test with a 95% confidence level and P-value ≤ 0.05.

RESULTS

Twenty-seven children with T1DM consist of 17 boys and 10 girls, 13.63 ± 3.85 years old. The baseline characteristics of T1DM patients are presented in Table 1. The average duration of illness was 5.41 years, and the average HbA1c in our study was 10.29 ± 2.39%. The average HbA1C level among Asian children was 9.1% (21). The average of C-peptide in our study was 0.01 ng/ml, compared to the normal limits of 0.9-1.8 ng/ml. Specifically, a c-peptide level below 0.5 ng/ml is related to T1DM (22)

Nine out of 27 participants had abnormal PSC-17 scores (≥ 15), and 18 out of 27 participants were within the normal score range (<15). The average level of HbA1c from the abnormal score group of PSC-17 was 9.43 ± 3.52 %, while in the normal score group of PSC-17, the level of HbA1c was 10.4 ± 2.31 %. There is no association between behavioral problems with duration of illness (p = 0.91) and age (p = 0.37).

Table 2 shows the correlation between behavioral problems and metabolic control. Four out of 27 participants (14.8%) have internalizing problems, five out of 27 participants (18.5%) have externalizing problems, and none have attention problems. A comparison between the PSC-17 scores and HbA1C level showed no significant difference in internalizing or externalizing behavioral problems (p=1.00 and p=0.14).

DISCUSSION

This study showed that during the COVID-19 pandemic, 33.3% of children with T1DM had behavioral problems (externalizing problems 18.5% and internalizing problems 14.8%). This result is in accordance with the previous study in 2009, before the COVID-19 pandemic, where the rate of behavioral problems was assessed in T1DM patients aged 17-19 years; the rate of behavioral problems was 33.3% of the participant, more than three times higher than the control group (9.7%) (18). A recent study found no changes in psychosocial function such as anxiety, depressive symptoms, anger, or behavioral difficulties between the diabetic group (n = 132) and the healthy group (n = 131) over three years (3). Yet, the diabetic group showed a greater decline in social acceptance and a higher rise in disturbed eating behavior. However, the study about behavioral problems in children with T1DM during COVID-19 Pandemic is limited.

Several studies have found that internalizing problems such as anxiety (23) and depressive mood (23,24) were significantly higher in T1DM groups compared to the control groups (18). This is contrary to our study's findings, suggesting that out of 27 participants, the most common behavioral problems were externalizing. Among participants with good metabolic control, the frequency of externalizing problems was higher than internalizing problems. It was shown that during COVID-19 pandemic, children T1DM with good metabolic control tended to have externalizing problems. This result contradicts the previous study that stated externalizing behavioral problems were found in poorer glycemic control (25). The presence of externalizing behavioral problems is associated with four domains: the aspect of the child, sociocultural factors, parenting and caregiving experiences and peer-group experiences (26). And children's peer experiences in school are essential factors in the development of the externalizing problem. Thus, during the COVID-19 pandemic, school activities were limited, children's peer experiences were not conducted, limited access to medical services, and people had to stay home; all of these reasons seemed to be associated with the presence of externalizing problems in this study.

A longitudinal study by Butwicka et al. stated that children with T1DM had a 3x greater risk factor for behavioral problems than healthy children, especially with families with a history of psychiatric disorders. It was also observed that children T1DM with behavioral problems had suicide attempts 1.7x higher than children with T1DM who did not have comorbid (HR 1.7; 95%; CI 1.4-2.0) (1). The study by Bernstein et al. stated that the prevalence of mental disorders in children with T1DM was as follows: 31.9% had anxiety disorders, 19.1% had behavioral problems, and 14.2% had mood disorders in the adolescent population (27). Several other studies have identified a relationship between T1DM and various psychosocial conditions, including anxiety disorders, eating disorders, behavioral disorders and mood disorders, and depression (27). These behavioral problems were common in T1DM children and negatively impacted disease management and metabolic control.

Another large population study based on Danish National Patient Register (NPR) found the highest risk of psychiatric comorbidity among T1DM children diagnosed at age 10 to 14 years and with five years duration of diabetes (28,29). This study also suggests that T1DM children with behavioral disorders had higher mean age than children with non-behavioral disorders. Several studies found that behavioral problems (25,29,30) and higher stress levels (30,31) affect the course of the illness and the level of metabolic control. Thus, several studies did not find a significant correlation between the level of metabolic control and behavioral problems (18,32). In our study, we did not find any significant association between the level of control metabolic and behavioral problems, nor the association between behavioral problems with duration of illness and age.

Our study found that during the COVID-19 pandemic, the mean HbA1C value was 10.29 ± 2,39%. The previous study in Dr. Soetomo showed that during the first year of the

COVID-19 pandemic, the mean HbA1c was 10.06 ± 2.49%, while pre-lockdown was 9.20 ± 1.86% (14). It was shown that during COVID-19, the metabolic control among children with T1DM worsened. The worsening of metabolic control due to the condition during the lockdown, such as the caregivers being afraid to take their children to the hospital, limited transportation, and limited health care. This reason negatively impacts metabolic control in patients with diabetes, especially T1DM, who are on insulin therapy. This is in accordance with the previous study during the COVID-19 pandemic that reported the impact on glycemic control among 52 patients with T1DM was 19 (36.5%) had hyperglycemic episodes; among them, 4 (7.7%) landed into DKA (Diabetic Ketoacidosis). Eight out of 19 patients had hyperglycemia were not getting insulin injections during the lockdown due to nonavailability (5). Mean HbA1C of pre-lockdown and lockdown phases was 8.8 ±1.3% and 10 ± 1.5% respectively, and the difference was statistically significant ($p<0.001$) (5). But another study in Italy revealed that metabolic control of adolescents with T1DM did not worsen during the restrictions due to COVID-19 pandemics, and improved in those who continued physical activity during the quarantine (33).

Another study that estimated the effects of the COVID-19 pandemic on the treatment of 7000 T1DM children from Sweden's national database (SWEDIABKIDS) found that the proportion of patients with good metabolic control has remained the same in 2019 and 2020 (34). These all because Sweden has an active treatment of T1DM with low mean HbA1C on a national level compared to other countries, including telemedicine treatment as the alternative combination to regular visits when physical distancing during the pandemic was needed (33). But in this study, telemedicine was not a routine alternative treatment to preserve the quality of care for T1DM. Therefore, there is a tendency for T1DM patients to have higher metabolic control during the COVID-19 Pandemic.

This study's limitations were no measured behavioral problems during the pre-lockdown phase. We cannot compare behavioral problems during the pre-lockdown and lockdown phases. However, we believe this study is valuable for further research and caring for patients with T1DM.

CONCLUSION

During the COVID-19 pandemic among children with T1DM, 33.3% had behavioral problems. It was found that the frequency of EP was higher among children with good metabolic control, and the frequency of IP was higher among children with poor metabolic control. There was worsened metabolic control but we found no correlation between behavioral problems and metabolic control.

FUNDING/SUPPORT

During this study, no financial or spiritual support was received from any party that could affect the results of this study.

DECLARATION OF INTERESTS

There is no conflict of interest in this study.

ACKNOWLEDGEMENTS

The authors thank to the patients who participated in the study and the endocrine teams of Dr. Soetomo for the support.

193 **FIGURES AND TABLES**

194 Table 1. Demographic Characteristics of patients with T1DM

Characteristic	**N (%)**	**Mean ± SD**
Age (Years old):	27 (100)	13.63 ±3.85
<8	3 (11.1)	-
8-13	8 (29.6)	-
≥13	16 (59.3)	-
Gender:		
Boy	17 (63)	-
Girl	10 (37)	-
Duration of illness (year)	27 (100)	5.41 ± 3.62
HbA1C (%)	27 (100)	10.29 ±2.39
Caregivers' education:		
Elementary	0	-
Junior high school	5 (18.5)	-
Senior high school	16 (59.3)	-
High school	6 (22.2)	-
PSC-17 Score	27 (100)	8.70 (±4.75)
<15	18 (66.7)	-
≥15	9 (33.3)	-

195 SD, Standard Deviation; HbA1C, Haemoglobin A1C; PSC-17, Pediatric Symptom Checklist-
196 17; T1DM, Type 1 Diabetes Mellitus

Table 2. Correlation between behavioral problems and metabolic control

Behavioral Problems (Psc-17 Score)		HbA1C Level		P-value
		≤8 (n=8)	>8 (n=19)	
Internalizing	≥5	1/8(12.5%)	3/19(25.8%)	1.00
	<5	7/8(87.5%)	16/19(84.2%)	
Externalizing	≥7	3/8(37.5%)	2/19(10.5%)	0.14
	<7	5/8(62.5%)	17/19(89.5%)	

HbA1C, Haemoglobin A1C; PSC-17, Pediatric Symptom Checklist 17

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Thank you for your review. We already revised our manuscript based on your suggestion. We made changes in our background, methods, results, discussion, and conclusion.

Reviewer 2:

Dear editor in chief,

I read the revisions and I appreciate it.

With regards,

Setila Dalili

Reviewer 3:

Comments to the Author:

I reviewed this manuscript, again.

The great effort in improving the manuscript is highly appreciated. However, there are rooms for further improvement which the authors should consider. The following points are of concern and minor suggestions are marked in the following. Several important questions were asked, especially in the method & discussion section, but no precise answer was given. pl answer point to point and marked those, clearly.

Abstract:

1- This section needs revision. the frequency of IP, EP and AP was reported in two study groups (good and poor) and but the statistical differences of variables is not analyzed.

Thank you for the comment. We already made changes in the abstract.

3- Conclusion was not justified. According to finding of your study, “There was no significant difference of behavior problems between the good and poor metabolic control groups”. You said “The frequency of EP was higher among children with good metabolic control, and the frequency of IP was higher among children with poor metabolic control.” But I did not see statistical analysis and p value about it. Pl firstly analysis these variable and if it was significant then express in conclusions (in abstract and in main text)

Thank you for the comment. We already made changes on our conclusion section in the abstract and main text.

Background:

4- Many studies have been done in this regard. Why the authors decided to conduct this study again? Which new question does the findings of this study answer? What is novelty of this study? Pl mentions these tips, point to point.

Thank you for the comment. We already adding the answer on our background. The novelty of this manuscript was this research was done during the COVID-19 pandemic that influence many aspects of life, including the behavioural of T1DM children. And studies about behavioural problems among T1DM children was still limited.

5- What is the role of COVID19?

We already mention in the background section. Thank you.

Methods:

6- Number of eligible participants should be expressed in this section.

Thank you for the comment. We already adding number of eligible subjects on paragraph 2 in the methods section.

7- Inclusion and exclusion criteria were incomplete. Pl organizes those.

Thank you for the comment. We already completing the inclusion and exclusion criteria on paragraph 2 in the methods section.

8- How did you calculate the sample size? Which formula? Explain it. What was power of study? It seem that the number of participants were not enough.

Thank you for the comment. We already revised our manuscript regarding these issues on paragraph 2 in the methods section.

9- There are many confounding factors in the studies about" behavioral problems" such as family income, parents' history of emotional disorders, history of psychological drugs consumption and any factors that compromised the behavioral status and so on. How did you include the confounding factors in the results? Clearly define all potential confounders and effect modifiers. Give diagnostic criteria, if applicable.

Thank you for the comment. Most of the subjects was using assurance from the government, therefore we generalize there is no cofounding factors regarding the family income. Subjects also had a regular drug test on their school.

Results:

10- Table 2 was incomplete. The 95% confidence level with lower and upper limits was not seen. Pl completes it.

Thank you for the comment. We already completing table 2 based on your suggestion.

Discussion:

11- The recommendation was not seen. The recommendation should be mentioned in the last paragraph of discussion and in last paragraph any gap, question, hypothesis or comment should be declared (not utilize separate subheading). In recommendation part, it is suggested to express that use the guidelines in this situation. For example the authors note: [several symptoms and signs are used to proper the behavioral problems diagnosis. In addition, physicians should be known that the lack of attention to these symptoms and signs it lead to adverse events such as suicide. The best way to proper diagnosis about this issue is using guidelines and behavioral check lists. Furthermore, practical guidelines and check lists may be helping to physician's insight on correct management, as in the accurate antibiotic using]. You should be mentioned to this valuable and new article about using check list and guide lines in your references: [A Survey of Pediatricians' Views and Practices Regarding Parents' Request for Prescribing Antibiotics: A Qualitative Study. Arch Pediatr Infect Dis. 2019 July; 7(3):e91217. doi: 10.5812/pedinfect.91217.]

Thank you for the comment. We already adding our recommendation in last paragraph of discussion.

Conclusion:

12- You said "The frequency of EP was higher among children with good metabolic control, and the frequency of IP was higher among children with poor metabolic control." But I did not see statistical analysis and p value about it. Pl firstly analysis these variable and if it was significant then express in the conclusion (in abstract and in main text).

Thank you for the comment. We already made changes on our conclusion section in the abstract and main text.

References:

13- The references no 15 & 21 were incomplete.

Thank you for the comment. We already made change the references

Gmail **UNIT KERJA ENDOKRIN ANAK <endokrin.ilmiah@gmail.com>**

Fwd: ACTION: ID 131806 Needs Major Revision; rev [1]

1 pesan

nur rochmah <nur-r@fk.unair.ac.id> 6 Agustus 2023 pukul 12.52
Kepada: Unit Kerja Endokrin Anak <endokrin.ilmiah@gmail.com>

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Dari: <no-reply@brieflands.com>
Date: Rab, 9 Nov 2022 17.54
Subject: ACTION: ID 131806 Needs Major Revision; rev [1]
To: <nur-r@fk.unair.ac.id>

- **Journal:** Journal of Comprehensive Pediatrics
- **Manuscript ID:** 131806
- **Manuscript Title:** BEHAVIORAL PROBLEMS AMONG TYPE 1 DIABETES MELLITUS CHILDREN WITH GOOD AND POOR METABOLIC CONTROL DURING COVID-19 PANDEMIC
- **Revision:** [1]

Dear Dr. Nur Rochmah,

Thanks for submitting your valuable manuscript to the journal. As a result of this, we would like to inform you that the review of your manuscript is finished, and based on the editorial decision, you need to do a "**Major Revision**" on your manuscript. Even though this manuscript has enough quality to enter the review process, it needs some significant **(major) revisions** in some points of view.

How to Submit Revision?

Below you may find those comments. Please read them and answer them one by one. The **corresponding author** needs to prepare replies as below:

1. In a word file, reply to all comments one by one (reply to reviewer)
2. In the word file of your manuscript, reply and apply all comments as marked or highlighted lines/paragraphs.

Instruction https://brieflands.com/journals/journal-of-comprehensive-pediatrics/knowledgebase/display/resubmit-manuscript.html

> Reviewers' Comments:

Reviewer 1:
dear author.
the reviewed DOC file you sent HAS NOT CHANGED according to previous comments. 35 comments sent you previously in reviewed PDF file. please check the attached PDF file again and correct indicated parts.
with thanks
Reviewer 2:
Dear editor in chief,

I read the revisions and I appreciate it.
With regards,
Setila Dalili
Reviewer 3:
Comments to the Author:
I reviewed this manuscript, again.
The great effort in improving the manuscript is highly appreciated. However, there are rooms for further improvement which the authors should consider. The following points are of concern and minor suggestions are marked in the following. Several important questions were asked, especially in the method & discussion section, but no precise answer was given. pl answer point to point and marked those, clearly.
Abstract:
1- This section needs revision. the frequency of IP, EP and AP was reported in two study groups (good and poor) and but the statistical differences of variables is not analyzed.
3- Conclusion was not justified. According to finding of your study, "There was no significant difference of behavior problems between the good and poor metabolic control groups". You said "The frequency of EP was higher among children with good metabolic control, and the frequency of IP was higher among children with poor metabolic control." But I did not see statistical analysis and p value about it. Pl firstly analysis these variable and if it was significant then express in conclusions (in abstract and in main text)
Background:
4- Many studies have been done in this regard. Why the authors decided to conduct this study again? Which new question does the findings of this study answer? What is novelty of this study? Pl mentions these tips, point to point.
5- What is the role of COVID19?
Methods:
6- Number of eligible participants should be expressed in this section.
7- Inclusion and exclusion criteria were incomplete. Pl organizes those.
8- How did you calculate the sample size? Which formula? Explain it. What was power of study? It seem that the number of participants were not enough.
9- There are many confounding factors in the studies about" behavioral problems" such as family income, parents' history of emotional disorders, history of psychological drugs consumption and any factors that compromised the behavioral status and so on. How did you include the confounding factors in the results? Clearly define all potential confounders and effect modifiers. Give diagnostic criteria, if applicable.
Results:
10- Table 2 was incomplete. The 95% confidence level with lower and upper limits was not seen. Pl completes it.
Discussion:
11- The recommendation was not seen. The recommendation should be mentioned in the last paragraph of discussion and in last paragraph any gap, question, hypothesis or comment should be declared (not utilize separate subheading). In recommendation part, it is suggested to express that use the guidelines in this situation. For example the authors note: [several symptoms and signs are used to proper the behavioral problems diagnosis. In addition, physicians should be known that the lack of attention to these symptoms and signs it lead to adverse events such as suicide. The best way to proper diagnosis about this issue is using guidelines and behavioral check lists. Furthermore, practical guidelines and check lists may be helping to physician's insight on correct management, as in the accurate antibiotic using]. You should be mentioned to this valuable and new article about using check list and guide lines in your references: [A Survey of Pediatricians' Views and Practices Regarding Parents' Request for Prescribing Antibiotics: A Qualitative Study. Arch Pediatr Infect Dis. 2019 July; 7(3):e91217. doi: 10.5812/pedinfect.91217.]
Conclusion:
12- You said "The frequency of EP was higher among children with good metabolic control, and the frequency of IP was higher among children with poor metabolic control." But I did not see statistical analysis and p value about it. Pl firstly analysis these variable and if it was significant then express in the conclusion (in abstract and in main text)
References:
13- The references no 15 & 21 were incomplete.
thank you

> Associate Editor's Comments:

Associate Editor 1:
Dear EIC,
Reviewers have not satisfied by revised file. Manuscript still needs revision.

> EIC Decision:

Dear Author,
Your manuscript still has errors. Please reply to comments and revise the manuscript accurately.

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Fwd: ACTION: ID 131806 Needs Major Revision; rev [0]

1 pesan

nur rochmah <nur-r@fk.unair.ac.id> 6 Agustus 2023 pukul 12.53
Kepada: Unit Kerja Endokrin Anak <endokrin.ilmiah@gmail.com>

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Dari: <no-reply@brieflands.com>
Date: Rab, 19 Okt 2022 21.34
Subject: ACTION: ID 131806 Needs Major Revision; rev [0]
To: <nur-r@fk.unair.ac.id>

- **Journal:** Journal of Comprehensive Pediatrics
- **Manuscript ID:** 131806
- **Manuscript Title:** METABOLIC CONTROL AND BEHAVIORAL PROBLEMS AMONG CHILDREN WITH TYPE 1 DIABETES MELLITUS DURING COVID-19 PANDEMIC
- **Revision:** [0]

Dear Dr. Nur Rochmah,

Thanks for submitting your valuable manuscript to the journal. As a result of this, we would like to inform you that the review of your manuscript is finished, and based on the editorial decision, you need to do a "**Major Revision**" on your manuscript. Even though this manuscript has enough quality to enter the review process, it needs some significant **(major) revisions** in some points of view.

How to Submit Revision?

Below you may find those comments. Please read them and answer them one by one. The **corresponding author** needs to prepare replies as below:

1. In a word file, reply to all comments one by one (reply to reviewer)
2. In the word file of your manuscript, reply and apply all comments as marked or highlighted lines/paragraphs.

Instruction https://brieflands.com/journals/journal-of-comprehensive-pediatrics/knowledgebase/display/resubmit-manuscript.html

> Reviewers' Comments:

Reviewer 1:
thanks for your efforts.
this manuscripts needs a total review by a naive English. the method of study,results and discussion parts should be completed according to scientific foundations.
Reviewer 2:
COMMENTS FOR AUTHORS:
Thank you for presenting this manuscript. But I have many questions about this presentation. The main drawback in this study was seen in results and conclusion section that need revision, totally.

1- Title needs revision according to aim and finding of study.
For example: BEHAVIORAL PROBLEMS AMONG CHILDREN WITH GOOD (HbA1C≤8) and POOR (HbA1C>8) METABOLIC CONTROL TYPE 1 DIABETES MELLITUS
Abstract:
2- The results section was not well-organized. This section need revision.
Firstly, the frequency of IP, EP and AP should be reported in two study groups (good HbA1C≤8) and poor (HbA1C>8) and then statistical differences of variables is analyzed.
3- Conclusion was not justified. According to finding of your study, It seems that Poor metabolic control was not a risk factor for behavioral problems. You said: The average level of HbA1c from the abnormal score group of PSC-17 was 9.43 ± 3.52 %, while in the normal score group of PSC-17, the level of HbA1c was 10.4 ± 2.31 %. There is no association between behavioral problems with level of HbA1c.
Background:
4- Paragraph 2 was not related to study. PI deletes it.
5- Many studies have been done in this regard. Why the authors decided to conduct this study again? Which new question does the findings of this study answer? What is novelty of this study? PI mentions these tips, point to point.
Methods:
6- Number of eligible participants should be expressed in this section.
7- Inclusion and exclusion criteria were incomplete. PI organizes those.
8- How did you calculate the sample size? Which formula? Explain it. What was power of study? It seem that the number of participants were not enough.
9- There are many confounding factors in the studies about" behavioral problems" such as family income, parents' history of emotional disorders, history of psychological drugs consumption and any factors that compromised the behavioral status and so on. How did you include the confounding factors in the results? Clearly define all potential confounders and effect modifiers. Give diagnostic criteria, if applicable.
Results:
10- The results of attention values were not seen. PI notes it.
11- The 95% confidence level with lower and upper limits was not seen. PI completes it.
12- Table 2 was incomplete.
Discussion:
13- This section was so week. In the discussion part you should write the main(s) finding(s) and specially (novelty) at first and then allude to other studies. [According to table 2, there is no association between behavioral problems with level of HbA1c].
14- It concentrates on the new and important aspects of the study and the achieve conclusions. The differences and advantages of this study should be compared and mention with other studied.
15- The recommendation were not seen. The recommendation should be mentioned in the last paragraph of discussion and in last paragraph any gap, question, hypothesis or comment should be declared (not utilize separate subheading). In recommendation part, it is suggested to express that use the guidelines in this situation. For example the authors note: [several symptoms and signs are used to proper the behavioral problems diagnosis. In addition, physicians should be known that the lack of attention to these symptoms and signs it lead to advers events such as suicide. The best way to proper diagnosis about this issue is using guidelines and behavioral check lists. Furthermore, practical guidelines and check lists may be helping to physician's insight on correct management, as in the accurate antibiotic using]. You should be mentioned to this valuable and new article about using check list and guide lines in your references: [A Survey of Pediatricians' Views and Practices Regarding Parents' Request for Prescribing Antibiotics: A Qualitative Study. Arch Pediatr Infect Dis. 2019 July; 7(3):e91217. doi: 10.5812/pedinfect.91217.]
Conclusion:
15- It needs revision, totally. Conclusion was not justified. According to finding of your study, it seems that Poor metabolic control was not a risk factor for behavioral problems.
References:
16- The most (30-40%) of references were too old. There have been only a few new references. References need renewal.

thank you
Reviewer 3:
Thank you for choosing me to review this article. .
What is the purpose of this research and how will it help health care workers in the future? Please write at the end of the introduction.
Please Write the reference of good and bad control of diabetes based on Hba1c

How is the validity of the questionnaire checked.

Why was EP and IP frequency in good metabolic control and poor metabolic control respectively .Please explain more about the reason

---

> Associate Editor's Comments:

Associate Editor 1:
Dear EIC.
The manuscript have fundamental errors and needs major revision.

> EIC Decision:

Dear Author,
Please reply to reviewers comments and revise the manuscript based on comments.

> Uploaded Files by Reviewers/Associate Editor/ or EIC: Below, you can find the list of files attached by reviewers or associate editor or EIC during the review process (if any).

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Kepada: Unit Kerja Endokrin Anak <endokrin.ilmiah@gmail.com>

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Date: Min, 27 Nov 2022 20.40
Subject: Congratulations! Article ID 131806 is Accepted!
To: <nur-r@fk.unair.ac.id>

- **Journal:** Journal of Comprehensive Pediatrics
- **Manuscript ID:** 131806
- **Manuscript Title:** BEHAVIORAL PROBLEMS AMONG TYPE 1 DIABETES MELLITUS CHILDREN WITH GOOD AND POOR METABOLIC CONTROL DURING COVID-19 PANDEMIC
- **Revision:** [2]

Congratulations on your accepted article!

Dear Dr. Nur Rochmah,

We are pleased to inform you that the article mentioned above has been **Accepted** for publication in the journal. We recognize you choose where to submit your research, and we thank you for trusting us. As an expert in the field, you are best placed to explain why your article is exciting or impactful to a broader audience. Find out how you can help your paper get the visibility it deserves:

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[Kutipan teks disembunyikan]