

Dear Reviewers,

Thank you for carefully evaluating our manuscript. We acknowledge the Reviewer's comments and suggestions. We have revised our paper accordingly and feel that your comments helped clarify and improve our paper. Please find our response to reviewer's specific comments below.

Please find the marked copy of the manuscript at the end of the letter.

Reviewer #1 Comments:

This is an interesting and well written manuscript. However, I have some comments that may add to the overall quality of the Manuscript.

Comment 1. Materials and methods Survey subtitle – maybe sampling and ethics would be more appropriate, please revise

Response: Done

Comment 2. Questionnaire Please provide information about the survey, i.e. what sources of information were questioned, define J-elita etc.

Response: Thank you for your comment. The paragraph was re-written as follows:

The questionnaire used in the survey consisted of the IBD-KID instrument; the 23 items asking about general knowledge (2), IBD course (6), risk factors (4), therapeutic modes and adverse effects of treatment (11). Scoring of the questionnaire was one point for each correct answer with no negative marking. Demographic characteristics of patients and parents and membership of the Polish patient Crohn's & Ulcerative Colitis Association J-elita were also collected.

Comment 3. Table 1. Please provide number of patients/parents relative to CD or UC

Response: This information was added as an annotation below Table 1.

Comment 4. IBD-KID scores – please provide range for knowledge scores

Response: Scoring of the questionnaire was one point for each correct answer with no negative marking. This statement was added to the Questionnaire paragraph.

Comment 5. You state that CD patients-parent had greater knowledge scores. Could be this related to treatment also? Please provide number of patients on immunosuppressant treatment etc. relative to CD or UC

Response: The information on the use of therapeutic modalities in patients with CD and UC was added to Table 1.

Comment 6. Conclusion Parents of patients treated with immunosuppressive agents showed higher disease-specific knowledge. This is quite interesting. One would expect that greater knowledge may

lead to better disease management but according to the discussion and conclusion this is not the case. I advise on expanding the discussion section about this issue.

Response: According the Reviewer suggestion we expanded the Discussion section about this interesting issue.

Reviewer #2 Comments:

This is a relatively large prospective survey based intervention looking at the determinants of IBD-specific knowledge among pediatric patients and their parents using a previously validated index (IBD-KID). Specific attention was paid to this being a Polish Study, and it is unclear if this is a completely novel study or rather extrapolating prior findings to a Polish population, as the discussion states the results are similar to other cohorts using this instrument. The strengths are the relatively large size, the use of a hierarchical multivariate model to assess predictors of knowledge.

Major Points:

Comment 1. The introduction should reference the original version of the IBD-KID survey and highlight its validation through citations.

Response: Thank you. The paragraph was re-written.

Comment 2. The methods should explain the possible range of scores of the IBD-KID instrument. You report values of 10-12 but I cannot determine what this means in terms of poor, fair, or good knowledge without more context. I am left to assume that higher scores indicate higher knowledge, but this should be defined.

Response: Thank you. We added to the Questionnaire paragraph the following: “Scoring of the questionnaire was one point for each correct answer with no negative marking; the maximum score was 23 points.” We hope that is more clear now.

Comment 3. The full survey should be included as a supplemental table or figure

Response: Thank you. English version of IBD-KID is available at https://cdn-links.lww.com/permalink/mpg/a/mpg_2013_10_11_otley_135_sdc1.pdf
We added that information to Questionnaire paragraph.

Comment 4. Please describe J-Elita a bit more. I assume it is a Polish Crohn's and Colitis Patient Organization, but do not know if this is a pediatric or general IBD organization and for readers not from Poland it lacks context.

Response: According the Reviewer suggestion we explained in Questionnaire paragraph: “Demographic characteristics of patients and parents and membership of the Polish patient Crohn's & Ulcerative Colitis Association J-elita were also collected.”

J-elita is a Polish patient association of adults and children diagnosed with IBD. J-elita is a member of The European Federation of Crohn's & Ulcerative Colitis Associations (EFCCA). J-elita aims to raise awareness about IBD and improve the life of the over 2600 people living with IBD in Poland.

Comment 5. Tables 2 and 3 are dense and hard to interpret. Perhaps you can move Models 1 and 2 to supplementary tables and just present the final model (3) which might be easier to interpret.

Response: The full models of hierarchical regression are now in Supplementary file (Table 2 SF and 3 SF). In the main text, only final model 3 was shown (Table 2 and 3). Relevant changes in the text when referring to the specific models were also introduced. The Authors complied with the Reviewer's suggestion hoping that other readers will also find these modification as more easier to interpret.

Comment 6. Please move Table 2 SF to a main table and reformat with capitalization of text in cells and possibly A and B tables to make it easier to look at patients data and parents data discretely

Response: As suggested by the Reviewer, Table 2 SF is now in the main body of the manuscript as Table 2 with two part a) and b). If the Reviewer allow, the Authors would prefer to avoid capitalization of the text in a table to avoid inconsistency in formatting in relation to other tables.

Minor Points:

Comment 1. Please reformat the tables. At least the first words of each cell should be capitalized

Response: Done

Comment 2. The layout of the tables is very confusing and dense. These should be simplified and reformatted

Response: The changes to initial tables 2 SF, 2 and 3 have been introduced according to the Reviewer's suggestion. Authors believe that keeping the information as it is now in updated version of tables (2 a), b), 3, 4, 2 SF and 3 SF) is vital for understanding the results of the analysis based on regression modelling.

Comment 3. Discussion: "The pattern of knowledge SEEMS TO RESEMBLE that found in other countries" is weakly worded. Please rephrase. This also implies this study is reproducing the use of IBD-KID in other countries, leading back to my comment in the first sentence that is the point of this study to study the instrument in Poland or to increase the validity by using a larger cohort?

Response: Thank you. The sentence is rephrased.

When we started our study, the only published study that used IBD-KID was study by Haaland et al.¹ performed in Canada. The aim of our study was to assess the disease-related knowledge of pediatric patients with IBD and their parents in Poland, in country with lower income per person and different health system than in Canada.

¹ Haaland D, Day AS, Otley A. Development and validation of a pediatric IBD knowledge inventory device: the IBD-KID. J Pediatr Gastroenterol Nutr. 2014 Mar;58(3):313-9.

Reviewer #3 Comments:

In the original article of Kowalska-Duplaga et al. the authors aimed to asses the IBD-specific knowledge of children patients and their parents in Poland. The study is very interesting and very important, since they identified gaps in IBD-related knowledge (such as steroid side effects, role of

surgical treatment, dietary restrictions, risk of the use of herbal medicines). The study highlights the importance of educating and caring for both patients and their parents in childhood IBD in order for the therapy to be effective and for the complications and long-term effects of the disease to be recognized, treated and understood in a timely manner. The use of the IBD-KID questionnaire -though the first version- is appropriate, the used statistical methods are all adequate. The results are clear, well explained. The tables are quite complicated for the first sight, but contains all the crucial information to help the understanding the results.

Minor suggestion: maybe a graphical visualization (if possible) may help to better understand the complexity of the results. I suggest to accept the manuscript for publication in WJG.

Response: Thank you very much. We hope that it is more clear now.

As in the result of the implementation of the changes suggested by another reviewer, we have moved the table form Supplementary File to the main body of the manuscript and this resulted in further increasing its volume. We thought that to avoid further expanding the main body of the manuscript, we will add the plots showing the regression coefficients and 95% confidence intervals as a forest plot-like graphs for univariate regression models to the supplementary files (please see Figure 1 SF, and Figure 2 SF). We hope they provide a quick view for interested readers how initial association between the patient's and parent's IBD-KID scores and independent variables look graphically.

Thank you for your valuable comments. We hope that the final effect is satisfying.

Yours,

Aleksandra Banaszkiewicz, MD PhD