

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Translating the Symptom Screening in Pediatrics Tool (SSPedi) into North American Spanish and Among Spanish-speaking Children Receiving Cancer Treatments, Evaluating Understandability and Cultural Relevance in a Multiple-Phase Descriptive Study
AUTHORS	Plenert, Erin; Grimes, Allison; Sugalski, Aaron; Langevin, Anne-Marie; Nieto, Dominica; Salaverria, Carmen; Gomez, Sergio; Gonzalez, Gisela; D'Angelo, Gisela; Dupuis, Lee; Sung, Lillian

VERSION 1 – REVIEW

REVIEWER	Lei Cheng Fudan University, School of Nursing, China
REVIEW RETURNED	07-Mar-2020

GENERAL COMMENTS	<p>Thank you for the opportunity to review this manuscript. This manuscript described the translation process of the Symptom Screening in Pediatrics Tool (SSPedi) into North American Spanish and Among Spanish speaking Children Receiving Cancer Treatments. Overall, it is clearly written. However, I could not find much innovation from this study. It seems to me that the authors only described the translation process and findings were not so clear and clinically informative. I suggest the authors revise providing more insights from this perspective.</p> <p>My comments are listed below.</p> <ol style="list-style-type: none">1. Introduction: more information on why translation in Spanish is needed, e.g., the cultural implications, the possible differences from cultural and linguistic perspectives.2. Method: please describe how to summarize the qualitative data.3. Outcome: may need to insert the final Spanish version, and summarize the details of the interviews.4. Discussion: further discussions about the outcomes and implications are needed.
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REVIEWER	Christina Signorelli Kids Cancer Centre, Sydney Children's Hospital, Australia. School of Women's and Children's Health, UNSW Sydney, Australia.
REVIEW RETURNED	30-Mar-2020

GENERAL COMMENTS	<p>The authors present a phased study on the translation of a newly developed pediatric symptom screening tool (SSPedi) for children with cancer and HSCT from English to Spanish, and subsequent evaluation of the tool's comprehension, interpretation and cultural relevance. Overall the manuscript is well written however I have suggested some minor areas for improvement or clarification.</p> <p>ABSTRACT</p>
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Overall the abstract offers a succinct summary for the protocol, including generally sufficient detail about the methodology. Some minor suggestions:
Page 3, line 18-19: It is not clear how the appropriateness of the translated measure for North American and Argentinian Spanish would be established, and the results simply state that this report will not focus on the latter presumably because the authors deemed it inappropriate for Argentinian Spanish. More transparency is needed in these sections.
Page 3, Line 26-31: 'Primary and Secondary Outcome Measures' – suggest noting the measure used for the self-reported understability outcome.
Page 3, line 43: The results indicated that the “north American version of the Spanish SSPedi was considered satisfactory based on self reported difficulty with...” is possibly better suited to the “Conclusion” section instead.

STRENGTHS AND LIMITATIONS

The strengths and limitations section would be more meaningful if the authors use a full sentence to more coherently elaborate on each bullet point.

INTRODUCTION

The introduction offers a detailed summary of the SSPedi measure, including previous evaluation of the psychometric properties of the developed tool. However, the introduction lacks essential detail on the relevant literature, the gap this study attempts to fill and therefore the importance of this research is not conveyed to the reader. Whilst I appreciate that this is a phased study, and the group have previously published findings on the development and psychometric testing of this tool, the lack of rationale and significance of this study somewhat undermines its value as a standalone paper. The authors may wish to briefly elaborate on the supporting literature (i.e. what symptoms are commonly experienced, their prevalence, their potential impact in the target cohort), and why current frameworks for symptomatic screening inadequately address symptom presentations in paediatric cancer patients. More specifically:

Page 5, line 5 – To clarify, consider adding examples and/or prevalence of “prevalent and severely bothersome symptoms” to highlight the necessity of this tool

Page 5, line 7 – Suggest elaborating on the importance of active symptom screening and reporting – ie why would this optimise symptom control (early identification, harm minimisation...)

Page 5, line 15-16: – It would be informative to include examples of a few of the 15 symptoms included in the tool

METHODS

The methods are suitable for the research questions, however there a few areas requiring clarity or further detail. The authors also need to more clearly identify the studies' primary and secondary outcomes and how they are measured.

Suggest also adding sections specifically detailing participant eligibility and any exclusion criteria, as well as methods of identifying eligible participants and recruiting them. There is some detail regarding these that is currently integrated throughout however the details are sparse.

Other minor suggestions for improvement:

Page 6, line 16-18: As noted for the abstract, it is not clear how the appropriateness of the Spanish version for North America and

	<p>Argentina was determined. Page 7, Line 9-10 – The authors mention the translation of the synonym list. Suggest also including this in the appendix and/or including examples here.</p> <p>RESULTS Page 10, line 27: The authors state that they “identified 38 children and enrolled 20” but there is no of the number or reasons for exclusion, or if participants declined. Suggest adding reasons here or adding detail to Figure 1. Page 10, lines 14-24: The following should be moved to the methods, particularly the recruiting sites: “With Spanish-speaking investigators and translators from the United States, Canada and Argentina, we identified that at least two versions of Spanish will be required, namely one appropriate for North America and one appropriate for Argentina. Only the North American version is presented in this manuscript; the Argentinian version will be reported separately. Thus, enrollment sites for this report were The Hospital for Sick Children, Toronto, Canada and University of Texas Health Sciences Center San Antonio, San Antonio, United States.” Page 11, Line 42-44 – How was the SSPedi considered satisfactory and appropriate for utilisation? According to the guidelines in Appendix 1, items are considered satisfactory if no more than one child in the last ten reports difficulty understanding the item or demonstrates that they incorrectly understand it. However, according to Table 2, there are 2 instances in the first cohort (“Mouth sores” and “Tingly or numb hands or feet”) where more than one child had difficulty understanding these items, therefore soliciting changes to the instrument. Please clarify. Page 15, line 3-4: “The strengths of this study were conduct of the translation according to internationally recognized standards and evaluation in two countries.” Suggest adding references to these standards, if available.</p> <p>DISCUSSION Page 12-13 – There is little to no engagement with other relevant literature in the discussion. For example, the authors could draw on the literature to substantiate their claims on why concepts such as “changes in body and face look”, “tingly or numb hands or feet”, “Feel more or less hungry than usual” and “constipation” – may be difficult to understand for children, rather than speculating this is the case rather than potentially related to cultural factors and its translation. Page 13 – There are additional study strengths listed in the “Strengths and weaknesses” section of the paper on page 4, which are not addressed in the discussion of the paper and could be elaborated on. Page 13 – The conclusion is perhaps too simplistic and could better relate back to the primary and secondary outcomes of the study, and is also an important opportunity to highlight the significance of the study.</p> <p>TABLES/FIGURES Suggest adding percentages to Table 1. It would be interesting to also add the synonym list to the Appendix, as noted earlier.</p>
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REVIEWER	Lauri Linder University of Utah, USA
REVIEW RETURNED	05-Apr-2020

<p>GENERAL COMMENTS</p>	<ul style="list-style-type: none"> • The methods suggest that the Spanish version of the SSPedi will be evaluated by children in North America and Argentina and indicate that the authors first determined whether one Spanish version would be appropriate for North America and Argentina. The results, however, emphasize evaluation only Spanish-speaking children currently residing in North America. The results make mention that an Argentinian version will be described in a separate paper, but do not provide the basis for identifying how the team determined that two instruments were necessary. Perhaps one larger vs. two smaller papers might be appropriate. • The results indicate that no child reported that it was hard or very hard to complete the Spanish SSPedi. It is unclear whether the data actively support its ease of use. In other words, the authors seem to infer that a lack of reported difficulty implies an endorsement of ease of use. Given that a 5-point Likert scale was used, it would be useful to also see how many endorsed the tool and individual items as “easy” or “very easy.” Neutral responses could provide further guidance regarding item refinement. • The small sample size is concerning, particularly in that the distribution of children from different Spanish-speaking groups was not evenly distributed, and two of the participants spoke South American Spanish, which was not the target of this particular study as previously stated. The basis for selecting two sample sizes of 10 is not articulated in the text of the manuscript. • Referencing further development of the SSPedi for use in Argentina and other Spanish-speaking countries is relevant. My recommendation is to remove reference to this as part of the specific purpose of this study, given that this work was not completed.
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VERSION 1 – AUTHOR RESPONSE

Reviewer #1:

1. Thank you for the opportunity to review this manuscript. This manuscript described the translation process of the Symptom Screening in Pediatrics Tool (SSPedi) into North American Spanish and Among Spanish speaking Children Receiving Cancer Treatments. Overall, it is clearly written. However, I could not find much innovation from this study. It seems to me that the authors only described the translation process and findings were not so clear and clinically informative. I suggest the authors revise providing more insights from this perspective.

Response: Thank you for these comments. We agree that translation in itself is not a novel concept. However, we believe that translation of instruments is an important step toward reducing disparities in medicine. We think this is an important concept to highlight and thus, have added the following to the Discussion:

“Many patient-reported outcomes incorporated into oncology clinical trials are only validated in English,(1) leading to potential disparities in clinical trial participation. Consequently, translation into non-English languages should be a priority.”

We have also added many other requested edits that we hope will result in the revised manuscript being more clinically informative.

2. Introduction: more information on why translation in Spanish is needed, e.g., the cultural implications, the possible differences from cultural and linguistic perspectives.

Response: We agree and have added the following to the Introduction:

“We initially chose to focus translation on Spanish as it is a common first language of children in the United States.(2) The process of translation to Spanish must consider both cultural and linguistic perspectives.(3)”

3. Method: please describe how to summarize the qualitative data.

Response: Most of the analyses were quantitative; the only qualitative data related to the assessment of cultural relevance. The following were added to the Methods to better describe how this was evaluated:

“These data were evaluated by the Toronto rater and dichotomized into issues with cultural relevance identified vs. not identified.”

4. Outcome: may need to insert the final Spanish version, and summarize the details of the interviews.

Response: We agree. The final Spanish version is presented as Figure 2 and the results of the interviews are summarized in Table 2 and the text.

5. Discussion: further discussions about the outcomes and implications are needed.

Response: We have added the following to further elaborate on outcomes and implications:

“Given known disparities based upon race, ethnicity and language,(4, 5) development of such a tool may be an important step toward reducing disparities in terms of both clinical trial enrollment and routine clinical care. Future efforts could evaluate barriers to utilization of the translated tool as well as translating SSPedi to other Spanish-speaking populations.”

Reviewer #2:

6. The authors present a phased study on the translation of a newly developed pediatric symptom screening tool (SSPedi) for children with cancer and HSCT from English to Spanish, and subsequent evaluation of the tool's comprehension, interpretation and cultural relevance. Overall the manuscript is well written however I have suggested some minor areas for improvement or clarification.

Response: Thank you very much for these kind comments. We hope our edits address your helpful suggestions.

7. ABSTRACT: Overall the abstract offers a succinct summary for the protocol, including generally sufficient detail about the methodology. Some minor suggestions: Page 3, line 18-19: It is not clear how the appropriateness of the translated measure for North American and Argentinian Spanish would be established, and the results simply state that this report will not focus on the latter presumably because the authors deemed it inappropriate for Argentinian Spanish. More transparency is needed in these sections.

Response: Thank you for the opportunity to elaborate on this point. We have addressed it by adding

the following to the Abstract and Methods:

“The first step was to determine whether one Spanish version would be appropriate for both North America and Argentina by identification of a single translation that would be acceptable and understood in both regions”

And further, we have added the following to the Results:

“More specifically, the local investigators and translators determined that for some symptoms, the language that would be commonly used and well understood in one region would not be commonly used or well understood in the other region. In addition, they identified regional differences in terms of grammatical structure and the use of voseo conjugation.”

8. Page 3, Line 26-31: ‘Primary and Secondary Outcome Measures’ – suggest noting the measure used for the self-reported understability outcome.

Response: This information was added as follows:

“Children self-reported difficulty with understanding using a 5-point Likert scale while cognitive interviews identified incorrect understanding of SSPedi items using a 4-point Likert scale. Cultural relevance was assessed qualitatively.”

9. Page 3, line 43: The results indicated that the “north American version of the Spanish SSPedi was considered satisfactory based on self reported difficulty with....” is possibly better suited to the “Conclusion” section instead.

Response: We agree and have moved this sentence as suggested.

10. STRENGTHS AND LIMITATIONS: The strengths and limitations section would be more meaningful if the authors use a full sentence to more coherently elaborate on each bullet point.

Response: We agree and have modified this section as follows:

- Multi-center conduct is a strength as it improves generalizability of the study.
- Multiple approaches to assessing understandability is a strength as it improves robustness and validity of the findings.
- Use of external adjudicators is a strength as it improves reliability of the results.
- The study is limited by conduct in only two countries (and no testing in Mexico); this version of SSPedi may not be well-understood in other countries.

11. INTRODUCTION: The introduction offers a detailed summary of the SSPedi measure, including previous evaluation of the psychometric properties of the developed tool. However, the introduction lacks essential detail on the relevant literature, the gap this study attempts to fill and therefore the importance of this research is not conveyed to the reader. Whilst I appreciate that this is a phased study, and the group have previously published findings on the development and psychometric testing of this tool, the lack of rationale and significance of this study somewhat undermines its value as a standalone paper. The authors may wish to briefly elaborate on the supporting literature (i.e. what symptoms are commonly experienced, their prevalence, their potential impact in the target cohort), and why current frameworks for symptomatic screening inadequately address symptom presentations in paediatric cancer patients.

Response: Thank you for the opportunity add this information to the manuscript. We have added the

following to the Background to address these important points:

“Common symptoms experienced include pain, nausea and fatigue.(6) More recent studies have also highlighted the prevalence of changes in hunger and taste as bothersome symptoms in this population.(7-10) Symptoms are important because there is strong correlation between increasing symptom burden and worse quality of life.(11)”

And

“In prior research, we identified the lack of appropriate symptom screening measures for children with cancer based upon length, content validity or appropriateness(12)....”

12. Page 5, line 5 – To clarify, consider adding examples and/or prevalence of “prevalent and severely bothersome symptoms” to highlight the necessity of this tool

Response: Please see response to Comment #11.

13. Page 5, line 7 – Suggest elaborating on the importance of active symptom screening and reporting – ie why would this optimise symptom control (early identification, harm minimisation...)

Response: We agree and have added the following:

“Active symptom screening may identify symptoms early, improve communication of the extent of bother to the healthcare team and increase earlier and more consistent management strategies.”

14. Page 5, line 15-16: – It would be informative to include examples of a few of the 15 symptoms included in the tool

Response: We agree and have added the following:

“These symptoms are disappointed or sad, scared or worried, cranky or angry, problems thinking, body or face changes, tiredness, mouth sores, headache, other pain, tingling or numbness, throwing up, hunger changes, taste changes, constipation and diarrhea.”

15. METHODS: The methods are suitable for the research questions, however there a few areas requiring clarity or further detail. The authors also need to more clearly identify the studies' primary and secondary outcomes and how they are measured. Suggest also adding sections specifically detailing participant eligibility and any exclusion criteria, as well as methods of identifying eligible participants and recruiting them. There is some detail regarding these that is currently integrated throughout however the details are sparse.

Response: We agree that this manuscript is different than a typical trial given the phased nature of the work. In order to address these concerns, we have added the following sub-headings:

“Overview”, “Eligibility Criteria” and “Procedures”.

Further, we have added a separate section as follows to more clearly identify the primary and secondary outcomes and how they are measured:

“Primary and Secondary Outcome Measures: Children self-reported difficulty with understanding using a 5-point Likert scale while cognitive interviews identified incorrect understanding of SSPedi items using a 4-point Likert scale. Cultural relevance was assessed qualitatively.”

16. Page 6, line 16-18: As noted for the abstract, it is not clear how the appropriateness of the Spanish version for North America and Argentina was determined.

Response: Please see response to Comment #7.

17. Page 7, Line 9-10 – The authors mention the translation of the synonym list. Suggest also including this in the appendix and/or including examples here.

Response: We have added the following to the Methods to address this comment:
“An example of synonyms for “te sientes decepcionado” included “te sientes desilusionado”, “desencantado” and “fastidiado”.”

18. RESULTS. Page 10, line 27: The authors state that they “identified 38 children and enrolled 20” but there is no of the number or reasons for exclusion, or if participants declined. Suggest adding reasons here or adding detail to Figure 1.

Response: Thank you for this comment. Figure 1 currently details that of the 18 that were excluded, 16 did not meet inclusion criteria and 2 declined to participate. Please let us know whether you wish further edits to this figure.

19. Page 10, lines 14-24: The following should be moved to the methods, particularly the recruiting sites: “With Spanish-speaking investigators and translators from the United States, Canada and Argentina, we identified that at least two versions of Spanish will be required, namely one appropriate for North America and one appropriate for Argentina. Only the North American version is presented in this manuscript; the Argentinian version will be reported separately. Thus, enrollment sites for this report were The Hospital for Sick Children, Toronto, Canada and University of Texas Health Sciences Center San Antonio, San Antonio, United States.”

Response: This section was moved to the Methods as recommended by the Reviewer.

20. Page 11, Line 42-44 – How was the SSPedi considered satisfactory and appropriate for utilisation? According to the guidelines in Appendix 1, items are considered satisfactory if no more than one child in the last ten reports difficulty understanding the item or demonstrates that they incorrectly understand it. However, according to Table 2, there are 2 instances in the first cohort (“Mouth sores” and “Tingly or numb hands or feet”) where more than one child had difficulty understanding these items, therefore soliciting changes to the instrument. Please clarify.

Response: Thank you for the question. Items were considered satisfactory if no more than one child in the last 10 reported that the item was hard to understand or were incorrect in their understanding of the item. The Reviewer is correct that among the first 10 participants, 2 children found mouth sores and tingly or numb hands or feet hard to understand and therefore, the translation was not considered satisfactory after the first 10 were enrolled, leading to enrolling of another 10 participants. Among the last 10 participants (Cohort 2, last two columns of Table 2), criteria were met to consider SSPedi satisfactory and appropriate for utilization. To make this more clear, we have added the following to the Results:

“It shows that after enrolling the first 10 participants, two participants found two items (mouth sores and tingly or numb hands or feet) hard to understand and therefore, criteria were not met to consider that version satisfactory.”

21. Page 15, line 3-4: “The strengths of this study were conduct of the translation according to

internationally recognized standards and evaluation in two countries.” Suggest adding references to these standards, if available.

Response: The reference was added.

22. DISCUSSION Page 12-13 – There is little to no engagement with other relevant literature in the discussion. For example, the authors could draw on the literature to substantiate their claims on why concepts such as “changes in body and face look”, “tingly or numb hands or feet”, “Feel more or less hungry than usual” and “constipation” – may be difficult to understand for children, rather than speculating this is the case rather than potentially related to cultural factors and its translation.

Response: In order to address this comment, we have added the following to the Discussion:

“...that these are more difficult concepts for children in general to understand, particularly if respondents had no previous experience with the symptom. This hypothesis is supported by the absence or limited number of self-reported instruments for at least peripheral neuropathy among pediatric cancer patients.(13)”

From our own work, we know that English-speaking children have difficulty understanding these four symptoms as described. To the best of our knowledge, this issue has not been evaluated in other research.

23. Page 13 – There are additional study strengths listed in the “Strengths and weaknesses” section of the paper on page 4, which are not addressed in the discussion of the paper and could be elaborated on.

Response: We thank the Reviewer for identifying this opportunity to emphasize these points and have added the following to address the comment:

“Other strengths include its multi-center conduct to improve generalizability, multiple approaches to assessing understandability to improve validity and use of external adjudicators to improve reliability.”

24. Page 13 – The conclusion is perhaps too simplistic and could better relate back to the primary and secondary outcomes of the study, and is also an important opportunity to highlight the significance of the study.

Response: We agree and modified the Conclusions as follows:

“In summary, we translated and finalized Spanish SSPedi appropriate for use in North America based upon self-reported difficulty with understanding and adjudicated incorrect understanding of different aspects of SSPedi and cultural relevance. This work is important as translation of patient-reported outcomes to non-English languages may reduce disparities in clinical trial enrollment and cancer care delivery. Future research will translate and evaluate SSPedi for use in Argentina and other Spanish-speaking countries.”

25. TABLES/FIGURES: Suggest adding percentages to Table 1.

Response: This has been done.

26. It would be interesting to also add the synonym list to the Appendix, as noted earlier.

Response: Please see response to Comment # 17.

Reviewer #3:

27. The methods suggest that the Spanish version of the SSPedi will be evaluated by children in North America and Argentina and indicate that the authors first determined whether one Spanish version would be appropriate for North America and Argentina. The results, however, emphasize evaluation only Spanish-speaking children currently residing in North America. The results make mention that an Argentinian version will be described in a separate paper, but do not provide the basis for identifying how the team determined that two instruments were necessary. Perhaps one larger vs. two smaller papers might be appropriate.

Response: Please see Response to Comment #7 to see how this important comment was addressed. We initially considered developing one manuscript for both versions but found that there was too much content for this approach as essentially all Results would need to be duplicated.

28. The results indicate that no child reported that it was hard or very hard to complete the Spanish SSPedi. It is unclear whether the data actively support its ease of use. In other words, the authors seem to infer that a lack of reported difficulty implies an endorsement of ease of use. Given that a 5-point Likert scale was used, it would be useful to also see how many endorsed the tool and individual items as “easy” or “very easy.” Neutral responses could provide further guidance regarding item refinement.

Response: This is an important point. All through the SSPedi program, we have used “hard” or “very hard” to adjudicate difficulty with understanding. Throughout the manuscript, we refer to whether items are hard to understand rather than making claims about whether items are easy to understand. We think it is important to be consistent in our approach throughout the entire program. However, in order to address this point, we have added the following to the limitations:

“In addition, throughout the SSPedi program, ease or difficulty in understanding has focused on the number of children describing an item as hard or very hard to understand. Focusing on those who find an item neither easy nor hard to understand could lead to different results.”

29. The small sample size is concerning, particularly in that the distribution of children from different Spanish-speaking groups was not evenly distributed, and two of the participants spoke South American Spanish, which was not the target of this particular study as previously stated. The basis for selecting two sample sizes of 10 is not articulated in the text of the manuscript.

Response: We appreciate this question and the importance of justifying the sample size. This justification was included in the Methods as follows:

“Sample size was based upon the suggestion that seven to 10 interviews are sufficient to determine understandability of an item.(14)”

30. Referencing further development of the SSPedi for use in Argentina and other Spanish-speaking countries is relevant. My recommendation is to remove reference to this as part of the specific purpose of this study, given that this work was not completed.

Response: We agree that referencing further developing of the SSPedi for use in Argentina and other Spanish-speaking countries is relevant. We do not believe we can remove reference to this aspect as this was the approach taken and we wanted to be transparent about our Methods. However, we would be happy to remove it if this is the Editor’s preferences.

References

1. Grant SR, Noticewala SS, Mainwaring W, et al. Non-English language validation of patient-reported outcome measures in cancer clinical trials. *Support Care Cancer*. 2020;28(6):2503-5. doi:10.1007/s00520-020-05399-9
2. Gonzalez-Barrera A, Lopez M. Spanish is the most spoken non-English language in U.S. homes, even among non-Hispanics Washington, D.C.: Pew Research Center; 2013 [updated 20Jan2020]. [Available from: <https://www.pewresearch.org/fact-tank/2013/08/13/spanish-is-the-most-spoken-non-english-language-in-u-s-homes-even-among-non-hispanics/>.]
3. Yang L. Treatment of cultural differences in translation. *Studies in Literature and Language*. 2014;8(1):39-42. doi:10.3968/j.sll.1923156320140801.2941
4. Bhatia S. Disparities in cancer outcomes: lessons learned from children with cancer. *Pediatr Blood Cancer*. 2011;56(6):994-1002. doi:10.1002/pbc.23078
5. Vega WA, Rodriguez MA, Gruskin E. Health disparities in the Latino population. *Epidemiol Rev*. 2009;31:99-112. doi:10.1093/epirev/mxp008
6. Baggott C, Dodd M, Kennedy C, et al. Changes in children's reports of symptom occurrence and severity during a course of myelosuppressive chemotherapy. *J Pediatr Oncol Nurs*. 2010;27(6):307-15. doi:10.1177/1043454210377619
7. Loves R, Plenert E, Tomlinson V, et al. Changes in hunger among pediatric patients with cancer and hematopoietic stem cell transplantation recipients. *Support Care Cancer*. 2020. doi:10.1007/s00520-020-05425-w
8. Loves R, Plenert E, Tomlinson V, et al. Changes in taste among pediatric patients with cancer and hematopoietic stem cell transplantation recipients. *Qual Life Res*. 2019;28(11):2941-9. doi:10.1007/s11136-019-02242-5
9. Loves R, Tomlinson D, Baggott C, et al. Taste changes in children with cancer and hematopoietic stem cell transplant recipients. *Support Care Cancer*. 2019;27(6):2247-54. doi:10.1007/s00520-018-4509-2
10. Johnston DL, Hyslop S, Tomlinson D, et al. Describing symptoms using the Symptom Screening in Pediatrics Tool in hospitalized children with cancer and hematopoietic stem cell transplant recipients. *Cancer Med*. 2018;7(5):1750-5. doi:10.1002/cam4.1433
11. Dupuis LL, Johnston DL, Baggott C, et al. Validation of the Symptom Screening in Pediatrics Tool in Children Receiving Cancer Treatments. *J Natl Cancer Inst*. 2018;110(6):661-8. doi:10.1093/jnci/djx250
12. Dupuis LL, Ethier MC, Tomlinson D, et al. A systematic review of symptom assessment scales in children with cancer. *BMC Cancer*. 2012;12:430. doi:10.1186/1471-2407-12-430
13. Johnston DL, Sung L, Stark D, et al. A systematic review of patient-reported outcome measures of neuropathy in children, adolescents and young adults. *Support Care Cancer*. 2016;24(9):3723-8. doi:10.1007/s00520-016-3199-x
14. Willis G, editor. *Cognitive Interviewing: A Tool for Improving Questionnaire Design*: Sage Publications; 2009.

VERSION 2 – REVIEW

REVIEWER	Lei Cheng School of Nursing, Fudan University
REVIEW RETURNED	18-Jun-2020
GENERAL COMMENTS	The revised version is quite satisfying. I do not have further comments.
REVIEWER	Christina Signorelli

	Sydney Children's Hospital; UNSW Sydney
REVIEW RETURNED	29-May-2020

GENERAL COMMENTS	I am satisfied that the authors have adequately addressed the reviewers' comments and made appropriate changes to the manuscript where relevant.
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REVIEWER	Lauri Linder University of Utah United States of America
REVIEW RETURNED	05-Jun-2020

GENERAL COMMENTS	<p>Some of the phrasing in the abstract is a little awkward to read. The current phrasing in the methods section suggests that you created a single version for use in both settings. Phrasing in the Primary and Secondary Outcomes Measures section might be more clear with separate sentences for each aspect that was measured.</p> <p>While the authors have worked to explain why a separate Argentinian Spanish version would be relevant, it remains unclear as to why Argentina was singled out from other Central and South American countries. I see that the sample for this study included a broader range of Spanish-speaking patients representing Mexico, Central America, and South America as well as "others." Given the attention to Argentinian Spanish as being distinct, I am unclear as to the rationale for including a rather small heterogeneous group of Spanish speaking children for this project.</p> <p>In speaking of the informed consent process, many would argue that parents don't truly provide informed consent on behalf of their children but rather are providing written permission for the child's participation in a study. Please also indicate whether children provided written or verbal assent for their own participation, knowing that expectations can vary across institutions. Were Spanish versions of parent permission/child assent forms used?</p> <p>Please explain what is meant by voseo conjugation.</p> <p>The examples of the Spanish synonyms are helpful. Please consider including an English translation in parentheses as well to further illustrate these terms.</p> <p>As with the abstract, please delineate the primary and secondary outcome measures more clearly with clear sentences for each aspect measured and that a member of the research team was applying the rating scale while listening to the cognitive interviews.</p> <p>The procedure section is difficult to follow as it combines aspects of the measures used in the study along with the procedural steps and aspects of data management and analysis. Consider how these aspects might be more clearly delineated.</p> <p>When indicating that you reported items that were hard/very hard to understand or completely incorrect/partially incorrect, what additional was taken? Perhaps work to rephrase in language that suggests actions beyond reporting – identified for review/revision by the team. Additional organization this section may help improve the overall clarity for the presentation as well.</p> <p>Results – Consider including the statement that the North American</p>
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	<p>Spanish SSPedi was considered satisfactory after enrolling 20 participants later in the manuscript. It feels a little out of place when reading an overall summary of participant characteristics. An alternate could be to include the statement after describing the general characteristics. Please also address refusals and reasons for declining participation. Were any of the 38 individuals deemed as eligible not approached for participation?</p>
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VERSION 2 – AUTHOR RESPONSE

Reviewer 1:

1. Some of the phrasing in the abstract is a little awkward to read. The current phrasing in the methods section suggests that you created a single version for use in both settings. Phrasing in the Primary and Secondary Outcomes Measures section might be more clear with separate sentences for each aspect that was measured.

Response: To address this comment, we re-worded the abstract as follows:

“The first step was to determine whether one Spanish version would be appropriate for both North America and Argentina. Once this decision was made, forward and backward translations were performed.”

And

“Children self-reported difficulty with understanding using a 5-point Likert scale. Cognitive interviews identified incorrect understanding of SSPedi items using a 4-point Likert scale.”

2. While the authors have worked to explain why a separate Argentinian Spanish version would be relevant, it remains unclear as to why Argentina was singled out from other Central and South American countries. I see that the sample for this study included a broader range of Spanish-speaking patients representing Mexico, Central America, and South America as well as “others.” Given the attention to Argentinian Spanish as being distinct, I am unclear as to the rationale for including a rather small heterogeneous group of Spanish speaking children for this project.

Response: We believe that the following in the Discussion addresses this concern:

“Some could argue that North American Spanish is not a distinct form of Spanish as it reflects the Spanish spoken in several different originating countries. However, a study conducted in the United States or Canada is unlikely to use multiple versions of Spanish. Thus, creating a North America Spanish version addresses a practical clinical and research need in these geographic locations.”

In terms of the Argentinian version, we have added the following related to other Central American countries:

“It is possible that the Argentinian version would be appropriate for other countries where voseo conjugation is prominent, such as several countries in Central America. However, we cannot be sure without explicit evaluation of the Argentinian version in those countries.”

3. In speaking of the informed consent process, many would argue that parents don't truly provide

informed consent on behalf of their children but rather are providing written permission for the child's participation in a study. Please also indicate whether children provided written or verbal assent for their own participation, knowing that expectations can vary across institutions. Were Spanish versions of parent permission/child assent forms used?

Response: To address this comment, we have modified this section as follows:

"Written informed consent and verbal assent was obtained from all study participants or guardians (in the case of children providing assent). Both Spanish and English consent/assent forms were available."

The point about parents providing written permission for the child's participation is well taken, but as parents providing informed consent on behalf of their child is the typical approach for description, we have not modified the language.

4. Please explain what is meant by voseo conjugation.

Response: We have added the following to the Methods to address this request:

"Voseo is the use of vos as a second-person singular pronoun, instead of or alongside tu. In some countries such as Argentina, vos is the written and spoken standard. It can also be found in more casual speech in many other parts of Central and South America."

5. The examples of the Spanish synonyms are helpful. Please consider including an English translation in parentheses as well to further illustrate these terms.

Response: This was added as follows:

"Examples of synonyms for "te sientes decepcionado" (you feel disappointed) included "te sientes desilusionado" (you feel disillusioned) and "desencantado" (disenchanted)."

6. As with the abstract, please delineate the primary and secondary outcome measures more clearly with clear sentences for each aspect measured and that a member of the research team was applying the rating scale while listening to the cognitive interviews.

Response: This change was made as described in response to Comment #1. How the outcomes were measured are described under the Procedures heading.

7. The procedure section is difficult to follow as it combines aspects of the measures used in the study along with the procedural steps and aspects of data management and analysis. Consider how these aspects might be more clearly delineated.

Response: We added the following to try and improve understandability:

"We evaluated four aspects, namely ease or difficulty with understanding as reported by the child, correct or incorrect understanding as evaluated by two raters, cultural relevance and missing items."

We also created a new sub-header to try and better delineate these sections as follows:

"Evaluation of Responses and Sample Size Justification"

8. When indicating that you reported items that were hard/very hard to understand or completely

incorrect/partially incorrect, what additional was taken? Perhaps work to rephrase in language that suggests actions beyond reporting – identified for review/revision by the team. Additional organization this section may help improve the overall clarity for the presentation as well.

Response: The steps taken in this scenario were as follows; these are included in the text:

“Changes made were additions to the synonym list only, based on alternative words given by children during the interview process. No changes to the instrument itself were required.”

In other words, we did not need to rephrase any of the instrument.

9. Results – Consider including the statement that the North American Spanish SSPedi was considered satisfactory after enrolling 20 participants later in the manuscript. It feels a little out of place when reading an overall summary of participant characteristics. An alternate could be to include the statement after describing the general characteristics.

Response: We have moved this sentence to following the description of the general characteristics as suggested.

10. Please also address refusals and reasons for declining participation. Were any of the 38 individuals deemed as eligible not approached for participation?

Response: Figure 1 describes that 16 of the 38 patients were not eligible. Of the two patients that declined participation, we did not include reason for their decision as some IRBs consider this question inappropriate and potentially coercive.

VERSION 3 – REVIEW

REVIEWER	Lauri Linder University of Utah USA
REVIEW RETURNED	30-Aug-2020

GENERAL COMMENTS	<p>The authors have continued to make revisions to improve the clarity of this paper. While most comments have been addressed, others have been addressed only minimally.</p> <p>In the abstract, perhaps more clearly delineate which were the primary and which were the secondary outcome measures. When you speak of “difficulty with understanding” are you speaking of children’s self-reported difficulty in understanding the items included on the scale? Please be clear. The abstract also does not provide an indication of the methods used to determine the need for a second Argentinian version.</p> <p>While the authors have worked to explain why a separate Argentinian Spanish version would be relevant, the authors still have not provided the basis as to why Argentina was singled out from other Central and South American countries. Given that the team determined that a separate version for Argentina was appropriate and that the voseo conjugation is common among other parts of Central and South America, it is unclear why children from Central and South America were included as participants in this study.</p>
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	<p>Thank you for providing the translation examples. This helps add additional perspective.</p> <p>When describing the primary and secondary outcome measures in the body of the manuscript, please be clear in delineating which were primary and secondary. As with the abstract, please be clear in the methods section when relating what was that you were measuring as difficult to understand.</p>
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VERSION 3 – AUTHOR RESPONSE

Reviewer #3:

1. The authors have continued to make revisions to improve the clarity of this paper. While most comments have been addressed, others have been addressed only minimally. In the abstract, perhaps more clearly delineate which were the primary and which were the secondary outcome measures. When you speak of “difficulty with understanding” are you speaking of children’s self-reported difficulty in understanding the items included on the scale? Please be clear.

Response: Many thanks for these kind comments. Please see the following edit made to the Abstract and Methods to address this comment.

“Primary outcome was child self-reported difficulty with understanding of the entire instrument and each symptom using a 5-point Likert scale. Secondary outcomes were incorrect understanding of SSPedi items identified by cognitive interviews with the children using a 4-point Likert scale and cultural relevance, which was assessed qualitatively.”

2. The abstract also does not provide an indication of the methods used to determine the need for a second Argentinian version.

Response: To address this comment, we have added the following to the Abstract:

“This report focuses on North American Spanish as a separate version will be required for Argentinian Spanish SSPedi based on different common vocabulary and grammatical structure.”

3. While the authors have worked to explain why a separate Argentinian Spanish version would be relevant, the authors still have not provided the basis as to why Argentina was singled out from other Central and South American countries. Given that the team determined that a separate version for Argentina was appropriate and that the voseo conjugation is common among other parts of Central and South America, it is unclear why children from Central and South America were included as participants in this study.

Response: We agree that this is an interesting question. Site location for research studies is often based upon professional relationships and previous collaborations; this was the case in this situation. Since Argentina is not included in this manuscript, we believe this information is better situated in a manuscript describing the Argentinean version of SSPedi. However, we are happy to add a sentence if this is the Editor’s preference.

The other question is why we included patients living in North America who identified their Spanish type as Central or South American. Living in North American is likely to change a respondent’s ability to understand an instrument based upon environment and education. We agree that the comment is important and have addressed it with this paragraph in the Discussion.

“Some could argue that North American Spanish is not a distinct form of Spanish as it reflects the Spanish spoken in several different originating countries. However, a study conducted in the United States or Canada is unlikely to use multiple versions of Spanish. Thus, creating a North America Spanish version addresses a practical clinical and research need in these geographic locations.”

4. Thank you for providing the translation examples. This helps add additional perspective.

Response: You are welcome and we are glad this was helpful.

5. When describing the primary and secondary outcome measures in the body of the manuscript, please be clear in delineating which were primary and secondary. As with the abstract, please be clear in the methods section when relating what was that you were measuring as difficult to understand.

Response: Please see response to Comment # 1 to see how this comment was addressed.

VERSION 4 – REVIEW

REVIEWER	Lauri Linder University of Utah; USA
REVIEW RETURNED	16-Oct-2020

GENERAL COMMENTS	My concerns largely remain the same. While the authors have provided a detailed description of the process used to develop the North American Spanish version of the SSPedi, I remain unclear as to the rationale for including 4 children (20%) of the sample who are from areas (Central & South America) where voseo conjugation is prominent. This is not addressed in the inclusion/exclusion criteria and is not addressed in the discussion. If these children are able to understand and use the North American version easily, how does this support the necessity of an Argentinian version? If an Argentinian version is necessary, how was the inclusion of children whose Spanish is likely to align more with that spoken in Argentina justified?
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VERSION 4 – AUTHOR RESPONSE

Reviewer #3:

1. My concerns largely remain the same. While the authors have provided a detailed description of the process used to develop the North American Spanish version of the SSPedi, I remain unclear as to the rationale for including 4 children (20%) of the sample who are from areas (Central & South America) where voseo conjugation is prominent. This is not addressed in the inclusion/exclusion criteria and is not addressed in the discussion. If these children are able to understand and use the North American version easily, how does this support the necessity of an Argentinian version? If an Argentinian version is necessary, how was the inclusion of children whose Spanish is likely to align more with that spoken in Argentina justified?

Response: We thank the Reviewer for the kind consideration of our manuscript and the suggestion for improvement. We agree that it is important to highlight that all children in North America who speak

Spanish have a version of Spanish that originated outside of North America. More specifically, Spanish-speaking children in North America are a heterogeneous group representing different regions of the world. However, it is also important to emphasize that upon moving to North America, it is likely that there is acculturation in how Spanish is understood. We have addressed this issue in the following addition to the Discussion:

“To emphasize this point, four children identified their Spanish type as Central or South American. However, regardless of Spanish type of origin, there is likely to be changes in how Spanish is understood and used upon moving to North America.”

And this statement in the Discussion:

“In addition, a study conducted in the United States or Canada is unlikely to use multiple versions of Spanish. Thus, creating a North America Spanish version addresses a practical clinical and research need in these geographic locations.”