Author’s response to reviews

Title: Nutrition education and cooking workshops for families of children with cancer: a feasibility study

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Author’s response to reviews:

Reviewer reports:

Marla Reicks (Reviewer 1):

Overall, the use of the evaluation model for public health interventions was a positive approach to accomplish the aims of the paper. The methods and results were confusing, as important information was missing or not well described. The discussion section was well-done and provided good insights into the findings. The manuscript had numerous grammatical errors and needs to be proofread carefully. Word choice needs to be considered throughout to correct terminology.

Author’s response:

We thank the Reviewer for her encouragements. She will find below the point-by-point response to her comments and the corresponding modifications to the manuscript.

Comment: Abstract - needs clarification
Lines 34-35: Need to clarify the type of data collected from the variety of participants, for example, did the families complete surveys and questionnaires and the facilitator completed field notes and activity reports?

Author’s response:

The sentence was modified:

-Abstract, line 55: ‘‘We collected qualitative and quantitative using field notes and activity reports completed by the registered dietician facilitator; surveys and questionnaires fulfilled by the workshop participants and by the families enrolled in the VIE study. Field notes were used to collect only qualitative data.’’

Comment: What data collection methods were used to collect qualitative data and how many total individuals participated?

Author’s response:

The tools used for data collection had not been detailed in the abstract because of word limit (350 words) required by the journal. However, we have added a sentence to clarify the methods used for data collection:

-Abstract, line 55: “We collected qualitative and quantitative using field notes and activity reports completed by the registered dietician facilitator; surveys and questionnaires fulfilled by the workshop participants and by the families enrolled in the VIE study. Field notes were used to collect only qualitative data.”

Moreover, the number of people surveyed and of participants was specified in the abstract.

-Abstract, line 58: “Survey respondents (n=26) were mostly mothers (n=19, 73%). Children’s mean age was 7.80 (± 4.99) years and the mean time since diagnosis was 7.98 (± 0.81) months. Qualitative data were codified using hybrid content analysis. The first deductive analysis was based on the Steckler &amp; Linnan concepts. Subthemes were then identified inductively. Quantitative data were presented with descriptive statistics.

Results: Workshop attendance was low (17 participants over 1 year) and 71% of the planned workshops were cancelled due to lack of participants.”

Comment: Does family mean parent and child together or something else? How old were the children involved? Who was the facilitator in terms of background or training?

Author’s response:
In our study, the term “family” describes the family unit surrounding the child. Mainly, it refers to the child and/or his parents. This description was added to the Methods section of the manuscript.

-Page 6, line 134: “In this study, the term ‘‘family’’ describes the family unit surrounding the child and refers mainly to the child and/or his parents.”

As described in Table 4, the children of the survey respondents were aged 7.80 (±4.99) years old. We added this in the abstract:

-Abstract, line 58: “Survey respondents (n=26) were mostly mothers (n=19, 73%). Children’s mean age was 7.80 (± 4.99) years and the mean time since diagnosis was 7.98 (± 0.81) months.”

The background of the facilitator was specified in the abstract.

-Abstract, line 55: “We collected qualitative and quantitative using field notes and activity reports completed by the registered dietician facilitator; surveys and questionnaires fulfilled by the workshop participants and by the families enrolled in the VIE study.”

Comment: Line 40: For results, need more information about what the 71% refers to.

Author’s response:

We have clarified this information:

-Abstract, line 63: “Workshop attendance was low (17 participants over 1 year) and 71% of the planned workshops were cancelled due to lack of participants.”

Comment: Lines 46-47: For conclusions, suggesting web-based video as a promising avenue was not based on results reported in the abstract. Table 5 indicates online videos were preferred, but this was not included in the abstract results section.

Author’s response:

We thank the Reviewer for her comment. We have modified the sentence to ensure that the conclusions were based on the results reported.

-Abstract, line 69: “Conclusions: Despite high interest, workshops delivered in a face-to-face format were poorly feasible in our sample population. This supports the needs to develop and adapt educational programs in pediatric oncology using strategies and delivery formats that address the major barriers for participation encountered by families.”

Comment: Introduction - supports the aims, good description of rationale
Author’s response:

We thank the Reviewer for this positive comment.

Comment: Methods - appropriate but the description is confusing in certain areas.

Line 93 - how were workshops validated? Typically evaluation instruments are validated rather than instruction. Could use other terminology.

Author’s response:

We agree with the Reviewer that the wrong terminology was used. Accordingly, we have replaced the word “validated” by “approved”:

Page 5, line 116: “Briefly, the workshops were developed and approved following an 8-step iterative process, including a review of the literature and consultations with a steering committee.”

Comment: Lines 106-107 - does the term families include at least a parent and child, or could parents or children attend separately?

Author’s response:

While the content of the workshops was mainly targeting parents and caregivers, children and adolescents were welcomed to assist. As stated above, the term “family” describes the family unit surrounding the child. Mainly, it refers to the child and/or his parents. This description was added to the Methods section of the manuscript.

Page 6, line 133: “In this study, the term “family” describes the family unit surrounding the child, and refers mainly to the child and/or his parents.”

Comment: Lines 109-111 - Need to better describe what is meant by field notes. Here it seems that parents completed the field notes, while in Table 1, it seems that facilitators completed the field notes.

Author’s response:

The fieldnotes were completed by the facilitator. This was clarified in the Methods section:

Page 8, line 157: “Field notes. The facilitator inquired a convenience sample of parents on their opinion about the workshops during promotional tours in the Division of Hematology-Oncology. No formal interview guide was used. After discussing with the participants, the dietician
facilitator used fieldnotes to summarize their feedback. The facilitator did not record the number of families approached.”

Comment: Table 1 - suggest adding another column to identify who was responsible for completing each tool, also missing the observation checklist in this table.

Author’s response:

As suggested, a column and an observation checklist were added to Table 1 (page 7, line 152)).

Table 1. Data collected with the different tools for evaluation during the implementation process

<table>
<thead>
<tr>
<th>Tools</th>
<th>Data collected</th>
<th>Responsible for completing the tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant questionnaire</td>
<td>1. Participant’s relationship with patient</td>
<td>Workshop participants</td>
</tr>
<tr>
<td></td>
<td>2. Perception of knowledge acquisition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Perceived utility of the recipes and advices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Recommendations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Additional comments</td>
<td></td>
</tr>
<tr>
<td>Activity report</td>
<td>1. Identification of the facilitators</td>
<td>Registered dietician facilitator</td>
</tr>
<tr>
<td></td>
<td>2. Identification of the theme presented</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Time and duration of the workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Number of participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Divulgation of the nutritional messages as planned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Challenges and facilitators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Facilitator’s perception of participants’ interest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Questions from participants</td>
<td></td>
</tr>
</tbody>
</table>
9. Proposed modifications to workshop delivery and content
10. Obstacles related to language
11. Number of participant questionnaires completed and flyers distributed
12. Time required by participant(s) to complete the questionnaire and questions related its completion

Field notes
1. Notes from the facilitator during activity promotion
   Registered dietician facilitator

Families present in the Division of Hematology-Oncology

Appreciation survey
1. Participant’s relationship with patient
   Families enrolled in the VIE study
2. Awareness of the workshops and how they learned about it
3. Best time for assisting to workshop
4. Food tasting as an incentive for participation
5. Reason for not attending a workshop
6. Preferred approach to disseminate nutritional information
7. Perceived utility of the workshop content
8. Other comments

Comment: Lines 130-131: Reference 24 refers to Contenko's 2002 review of nutrition education evaluation, but doesn't provide information about how the participant questionnaire was tested for any type of validity or reliability.

Author’s response:

Reference 24 refers to an article that was published by our team describing the protocol for implementation of the workshops as well as the development of the curriculum.
The participant questionnaires were used to assess study feasibility only and were not validated.

Page 8, line 165: methods: “The participant questionnaires were only used to assess study feasibility and thus were not validated.”

This was added to the Limitations section of the study:

Page 23, line 477: “The use of a validated questionnaire would have increased results intervalidity of results.”

Comment: Line 162 - need to explain what the total of 45 workshops were based on in terms of schedule or time period, for example, one per week for 10 months?

Author’s response:

The workshops were scheduled once a week, every week, during a one-year period, except during the Christmas Holidays (2 weeks) and during the facilitator’s personal vacations (3 weeks) or absences for attending conferences (2 weeks); ergo a total of 45 scheduled workshops.

We added this information in the Methods section.

Page 7, line 148: “The workshops were scheduled once a week, every week, during a one-year period, except during the Christmas Holidays (2 weeks) and during the facilitator’s personal vacations (3 weeks) or absences for attending conferences (2 weeks); therefore a total of 45 workshops were scheduled.”

Comments:

Line 169 - how were 26/31 families enrolled when there were only 17 participants, what does it mean to be enrolled?

and

Tables 4 and 5 - how could 26 respond regarding appreciation if only 17 attended workshops?

Author’s response:
We agree that this statement is confusing. In the Methods section, we have added a description of the study participants. A Figure was also added to improve clarity (Figure 1).

Page 6, line 132: "Participants. Participants of the workshops included families recruited as part of the VIE study, as well as other families visiting the Division of Hematology-Oncology. In this study, the term ‘family’ describes the family unit surrounding the child, and refers mainly to the child and/or his parents. Workshop participation was voluntary. Families enrolled in the VIE study were surveyed to sought their appreciation, perceived relevance and utility of the themes, and of the workshop schedule. Field notes were collected from a convenience sample comprised of families present in the common areas of the outpatient and inpatient clinics. This included families enrolled, or not, in the VIE study as well as workshop participants and non-participants. Figure 1 illustrates the study participants and the tools used for data collection.”

Figure 1:

Comment: Lines 271 and 388 - what does "animation" mean in this context? Consider another word choice.

Author’s response:

The word animation was replaced by delivery in 3 sentences:

Page 16, line 317: “Fidelity. Four themes have emerged related to fidelity of the implementation process: 1) workshop delivery; 2) recipes; 3) minimization of the burden related to participation and; 4) impact of low participation.”

Page: 16, line 321: “The facilitator described some difficulties related to the message delivery in the absence of the chef. They principally referred to coordinating the delivery of nutritional messages with the recipe demonstration.’

Page 21, line 435: “Low attendance mostly impacted the delivery of the workshops rather than the content.”

Comment: Lines 290-291 - how did the participants know what knowledge was related to each key message?

Author’s response:

For each workshop, a questionnaire has been developed to assess satisfaction, perception of utility and perception of knowledge acquisition. For each workshop, 2 to 3 key messages were delivered and, in the questionnaire, the questions related to perception of knowledge acquisition were in line with each key message. For example, for the key message “Proteins are essential for tissue growth and repair and to support immune system function”, the corresponding question was “I have learn that “Proteins have an important role in tissue growth during cancer
For clarification, this was added in the Methods section:

Page 8, line 167: "Briefly, for each workshop, 2 to 3 key messages were delivered and the questions related to perception of knowledge acquisition were in line with each key message. For example, for the key message ‘‘Proteins are essential for tissue growth and repair and to support immune system function’’, the corresponding question was ‘‘I have learned that proteins have an important role in tissue growth during cancer treatments”. The response options were ‘‘I agree; I disagree; I agree more or less; I already knew this information’’.

Comment: Discussion - this section was well-done with insightful comments based on the findings.

Author’s response:

We thank the Reviewer for this positive comment.

Comments: Word choice throughout.

Participants attend workshops rather than "assist to a workshop"

Line 114 - collect vs collection

Table 1 - divulgence vs delivery

Line 152 - codification vs coding

Lines 218-219 - non-divulged vs description of the key messages that were not delivered

Line 249 - lack of time is a factor, not a characteristic

Line 312 - exposure rather than exposition

Author’s response:

We thank the Reviewer for the thorough revision. All the mistakes were corrected and we have thoroughly revised the manuscript for English language.

Comment: Line 125 - compatibilized - not sure what this means

Author’s response:
The word has been changed for “recorded”:

Page 8, line 160: “The facilitator did not record the number of families approached.”

Comment: Lines 413-423 - need to consider the small sample size as a limitation
Author’s response:

This limit was added to the Discussion section:

Page 22, line 463: “Our study has some limitations. The majority of participants to the workshops and the VIE study expressed a high level of interest in nutrition, which may not be representative of all families, a well-documented bias of any nutritional intervention. Moreover, given the small sample size, the study representativeness is limited. Also, the facilitator was involved in data collection and analysis, which could potentially introduce bias. […]”

Joya Chandra (Reviewer 2):

This feasibility study describes the barriers and difficulties associated with a hospital based intervention for diet modification in pediatric cancer patients. Very few studies have documented these types of programs in the literature, therefore this manuscript will represent an important contribution to the field. Several aspects of the study, however, require additional explanation or clarification. Importantly, the conclusions must be tempered because of the limited scope and size of the study population.

Specific suggestions are:

Comment: Abstract - Conclusions must be adjusted to reflect the current study rather than making recommendations for all of pediatric oncology. The conclusions should expand some of the results, and currently the results and conclusions portions of the abstract are disconnected and conclusions are prematurely asserted.

Author’s response:

We thank the Reviewer for this relevant comment. Accordingly, in the abstract, the conclusions were modified:

Abstract, line 69: “Conclusions: Despite high interest, workshops delivered in a face-to-face format were poorly feasible in our sample population. This supports the needs to develop and adapt educational programs in pediatric oncology using strategies and delivery formats that address the major barriers for participation encountered by families.”
Comment: Background Line 56 - Statement that "Children are disposed to like fat and savory foods..." does not capture whether this is exacerbated by treatment, or whether these are the types of foods that are offered, or whether these foods are consistent with diet in all children regardless of whether they are undergoing treatment.

Author’s response:

We agree with the Reviewer that this statement needs clarification:

Page 4, line 80: “It has been reported that children undergoing cancer treatment often experience changes in their food preferences towards fat and savory foods [2, 4, 5]. Parents have stated that their child’s cravings and pickiness are very difficult challenges to manage and that they rarely know which strategies are best to use during these stages [1].”

Comment: Methods section requires additional information. Were any recordings of interviews made? How was primary data cleaned or collated?

Author’s response:

Since the interviews were informal, they, unfortunately, have not been recorded. This was added in the Methods section and as a study limitation:

-Page 6, line 145: “The questions addressed in the tools used to evaluate the implementation process are detailed in Table 1. Discussions with participants were not recorded. The implementation of the workshops occurred on a 12-month period (March 2018 to March 2019).”

-Page 23, line 472: “In this study, survey administration and discussions with families (field notes) were not recorded and no formal interviews were performed. This could introduce recall bias that was minimized by the facilitator taking notes during the discussion.”

Primary qualitative data were deconstructed into 1-2 sentences as described in the Methods section (analysis). The text was slightly modified to improve clarity:

Page 9, line 181: “After deconstructing the primary data into 1-2 sentences, all of the sentences were revised for clarity and to verify that the context of the answer or note was taken into account. The sentences were numbered and were classified per collection methods in an Excel spreadsheet. Using a deductive analysis, the sentences were classified into themes. For the deductive analysis, 453 segments were codified based on the components of the Steckler and Linnan framework [24].”

Comment: What were the actual interview questions?

Author’s response:
We agree that this has to be clarified. In fact, the facilitator collected parents’ insights and opinions during the workshop promotional tours and there were no formal interviews per se. This procedure was clarified in the Methods section. The lack of formal interviews was added as a study limitation.

Page 8, line 156: Field notes. The facilitator inquired a convenience sample of parents on their opinion about the workshops during promotional tours in the Division of Hematology-Oncology. No formal interview guide was used. After discussing with the participants, the dietician facilitator used fieldnotes to summarize their feedback. The facilitator did not record the number of families approached.

Page 23, line 471: “In this study, survey administration and discussions with families (field notes) were not recorded and no formal interviews were performed. This could introduce recall bias that was minimized by the facilitator taking notes during the discussion.”

Comment: Other data that should be included are numbers of patients approached in order to recruit the 17 participants.

Author’s response:

Unfortunately, we did not collect this information. This was clarified in the text:

Page 12, line 230: “Seventy-three percent (73%) of the families interviewed were aware of the workshops (Table 5). The facilitator visited the families enrolled in the VIE study to promote the workshop of the week. Families attending the common areas were also approached. The total number of families approached during the promotion tours was not documented.’’

It was also added in the study Limitations:

Page 23, line 476: “Also, documenting the number of persons approached for field notes would have allowed a better understanding of the study population.”

Comment: Results section should clarify the diagnoses for the patient population studied. Were the patients outpatients or inpatients? The age of the patients must also be more carefully described. Is it correct that the same intervention was used in infants up to 18 yo patients?

Author’s response:

Unfortunately, we did not collect data on children’s diagnoses because questionnaires were administered anonymously. The age of patients was available for the families responding to the appreciation survey, in other words, the families enrolled in the VIE study.

Patients could be either outpatients or inpatients. This was clarified in the text:
Page 6, line 124: “Workshops were independent from each other and included information related to the prevention of foodborne infections for immunocompromised patients. The workshops took place two floors below the inpatient ward of the SJUHC Hematology-Oncology Division. Families could attend the workshops either when the child was hospitalized or was an outpatient.”

While the content of the workshops was mainly targeting parents and caregivers, children and adolescents were welcomed to assist. We clarified how the activities was adapted in the case of a presence of a child.

Page 5, line 118: “The workshops consisted in weekly culinary demonstrations coupled with nutritional key messages and were destined to parents of children with cancer and their relatives. Patients and siblings were also invited to participate. Activities such as drawing and puzzles were planned for young children.”

Comment: The time frame of the workshops (i.e. Fall of 2105- Sprint of 2017) should also be mentioned.

Author’s response:

The time frame of the workshop delivery was added to the Results section:

Page 10, line 206: “Over the 12-month implementation period (March 2018 to March 2019), 7 of the workshops delivered (69%) were held with only the facilitator, without the chef (Table 3).”

Comment: Line 232 - "Difficulties related to the physical location" are cited - please clarify where the classes were delivered relative to where the patients were being treated in terms that are understandable by the readership.

Author’s response:

This statement was clarified:

Page 15, line 279: “During the promotional tour, one mother and one nurse reported that it would be more convenient if the workshops would take place on the floor where patients are hospitalized, rather than on the floor where the activity was planned (2 floors below)(citation)”

We also clarified the physical location of the workshops in the Methods section:

Page 5, line 118: “The workshops consisted in weekly culinary demonstrations coupled with nutritional key messages and were destined to parents of children with cancer and their relatives. Patients and siblings were also invited to participate. Activities such as drawing and puzzles were planned for young children. Workshops were delivered by a registered dietician, the
principal facilitator, and accompanied with a chef. They addressed themes related to nutrition and childhood cancer and to healthy eating. Workshops were independent from each other and included information related to the prevention of foodborne infections for immunocompromised patients. The workshops took place two floors below the inpatient ward of the SJUHC Hematology-Oncology Division. Families could attend the workshops either when the child was hospitalized or was an outpatient.”

Comment: Line 413 - additional limitations of the study must be cited related to population, format, facilities

Author’s response:

We added study limitations addressing recall bias and sample size:

Page 22, line 464: “Moreover, given the small sample size, the study representativeness is limited.”

Page 23, line 471: “In this study, survey administration and discussions with families (field notes) were not recorded and no formal interviews were performed. This could introduce recall bias that was minimized by the facilitator taking notes during the discussion.”

Page 23, line 476: “Also, documenting the number of persons approached for field notes would have allowed a better understanding of the study population”

Page 23, line 475: The use of a validated questionnaire would have increased inter-validity of results”

Comment: Line 430 - here as well as in the abstract, the authors allude to video capsules but there is no data presented on what components will be featured in the videos based on the workshops delivered.

Author’s response:

We thank the Reviewer for her comment. We have modified the sentence to ensure that the conclusions were based on the study results. We also modified sentence in the discussion describing videos as a promising avenue as revealed by our process evaluation.

-Abstract, line 69: “Conclusions: Despite high interest, workshops delivered in a face-to-face format were poorly feasible in our sample population. This supports the needs to develop and adapt educational programs in pediatric oncology using strategies and delivery formats that address the major barriers for participation encountered by families.”

Page 22, line 453, discussion section: “Accordingly, we propose that the efficacy of web-based initiatives, such as videos, should be tested in this population. For example, a video program was
found effective for education in populations of parents with premature infants[47], but has been tested yet in childhood cancer. Similarly, based on a review of the literature, one of the recommendations issued by Rodgers et al. was that “written material, short verbal discussions, and audio recordings of the diagnostic discussion be used to provide education to pediatric patients newly diagnosed with cancer and to their parents and siblings’[46].”

In the future, assessing the impact of web-based educational programs on knowledge acquisition, food intake and culinary competency would provide a measure of its efficacy.”

Page 23, line 480, Conclusion section: “This study presents the feasibility of nutrition education and cooking workshops in pediatric oncology, a population that his confronted to complex emotional and organizational challenges. Because the reach was low, we could not conclude on the efficacy of the workshops to increase the perception of knowledge acquisition. However, the process evaluation allowed us to document the need for families to access reliable nutritional information when it is relevant for them. Therefore, there is a need to develop strategies and delivery formats that address the major barriers for participation encountered by this population.”

Comment: Figure 1 is not particularly informative. A figure representing patients approached versus recruited would be helpful.

Author’s response:

As mentioned above, this information was, unfortunately, not collected. However, we agree that the description of the participants might be confusing. Therefore, we have added a description of the study participants included in our study (Figure 1).

Page 6, line 132: "Participants. Participants of the workshops included families recruited as part of the VIE study, as well as other families visiting the Division of Hematology-Oncology. In this study, the term ‘family’ describes the family unit surrounding the child, and refers mainly to the child and/or his parents. Workshop participation was voluntary. Families enrolled in the VIE study were surveyed to sought their appreciation, perceived relevance and utility of the themes, and of the workshop schedule. Field notes were collected from a convenience sample comprised of families present in the common areas of the outpatient and inpatient clinics. This included families enrolled, or not, in the VIE study as well as workshop participants and non-participants. Figure 1 illustrates the study participants and the tools used for data collection.”

Figure 1: