PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

This paper was submitted to a another journal from BMJ but declined for publication following peer review. The authors addressed the reviewers' comments and submitted the revised paper to BMJ Paediatrics Open. The paper was subsequently accepted for publication at BMJ Paediatrics Open.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Perspectives of adolescents on decision-making about participation
	in a biobank study: a pilot study
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VERSION 1 - REVIEW

REVIEWER	Prows, Cindy
	Cincinnati Children's Hospital Medical Center
	Competing interests: None to declare
REVIEW RETURNED	29-Jun-2017

GENERAL COMMENTS There are many aspects of this paper that are incongruent and cause this reviewer concern. The items below need to be clarified, fixed or additional information provided before a final recommendation can made. The title focuses on perspectives of adolescents' decision making about participation in clinical research. However, only 8 adolescents were interviewed about the decision to participate in a biobank, which is not a fair representation of the broader "clinical research". The authors state that they are reporting a pilot study (pg4, line 7). A pilot study is used when determining if a planned approach for a larger scale study is feasible. There is no mention of this project being used to inform a specific planned larger study. Instead, participants were recruited from an ongoing study during a limited time frame. The medical ethical committee deemed the project exempt from ethical approval, suggesting the committee did not deem it human subjects' research but perhaps a quality improvement project? It is unclear if only 10 participants enrolled in the biobank from February 2016 – May 2016 or if only 10 of (##?) who enrolled in the biobank agreed to answer questions about the biobank study information they received (standard or novel). It is odd that 6 received the novel research information form and only 2 received the standard research information form. When did randomization occur and how was it done? How many of each type of RIF was distributed? From what I can understand from the manuscript, the novel visual/textual research information form was the primary tool being tested (Aim 1 and description starting on page 5, line 3) but the last

statement in the conclusion is about the decision assessment tool. The description of the decision assessment tool (section 2.4) suggests it was simply the data collection tool that consisted of interview probes to elicit qualitative data and some survey items developed by the team. I looked for the actual content in a table or box or supplemental file but these did not exist within the manuscript nor on ManuscriptCentral. The actual tool or at least a table of all the items should be included especially as the authors seem to be suggesting it would be useful for other studies and possibly clinical settings. However, this suggestion is based on findings from 8 adolescents who felt the decision making process was "short and straightforward" (pg 7, line 10) and the purpose of the project was not to test the validity or reliability of the tool.

- a. I did review the figures of the pie charts demonstrating 2 participants' actual and desired role in decision making. I think the pie chart drawing technique is an intriguing method to elicit conversation about actual and desired shared decision making. As the authors note, it was previously described in a paper by Dr. Lipstein et al (Ref #32 in the manuscript).
- 5. Results in the abstract state, "All adolescents unequivocally expressed the desire to be autonomously involved in decision making..." Yet section 3.7 indicates adolescents were involved in the decision making process but not autonomous and only 3 indicated they wanted their share in the decision making to be different, none of whom said they wanted to make the decision autonomously.

VERSION 1 – AUTHOR RESPONSE

Response to the reviewers:

1. The title focuses on perspectives of adolescents' decision making about participation in clinical research. However, only 8 adolescents were interviewed about the decision to participate in a biobank, which is not a fair representation of the broader "clinical research".

Response: we agree with the reviewer that the title might not be specific enough and have therefore replaced the words 'clinical research' with 'a biobank study'.

2. The authors state that they are reporting a pilot study (pg4, line 7). A pilot study is used when determining if a planned approach for a larger scale study is feasible. There is no mention of this project being used to inform a specific planned larger study. Instead, participants were recruited from an ongoing study during a limited time frame.

Response: Indeed there is no mention in this paper as to what end we decided to perform a pilot study instead of a full research study. We aimed to perform a pilot first in order to assess the initial feasibility of using the decision assessment tool when studying or discussing adolescent's perspectives. We intend to follow up this study with further research on the perspectives of minors in clinical research, with the use of this tool. In order to clarify this, we have adapted the description of the aim of our study in the manuscript.

The medical ethical committee deemed the project exempt from ethical approval, suggesting the committee did not deem it human subjects' research but perhaps a quality improvement project?

Response: According to the medical ethical committee, this study did not fall within the scope of the Dutch law on medical research in humans. This does not mean that it is not human subjects' research, but that the burden and risks for participants was deemed by the committee so low that by law a "lighter" review and oversight regime can be followed. We were not clear about that in the manuscript. Official ethical approval was obtained (within Dutch Law requirements) and informed consent was asked for all participants. We have clarified this in the manuscript.

It is unclear if only 10 participants enrolled in the biobank from February 2016 – May 2016 or if only 10 of (##?) who enrolled in the biobank agreed to answer questions about the biobank study information they received (standard or novel).

Response: We agree with the reviewer that the current wording is unclear. We have therefore adapted the sentence to clarify that the 10 participants agreed to participate in our study.

3. It is odd that 6 received the novel research information form and only 2 received the standard research information form. When did randomization occur and how was it done? How many of each type of RIF was distributed?

Response: the two types of RIFs were distributed in alternating weeks, as discussed in the method section. Ideally, this would have led to an even distribution among participants in our study. However, consent was obtained after distribution of the RIFs, and as it appears, only 2 patients who had received the standard information consented to participate, and 6 patients who received the novel information consented. Possibly, the RIF type might affect the decision to consent, but due to the small sample size, no conclusions can be drawn. It is however also probable that the uneven distribution is just an unfortunate result of the small sample size of our study, which we have now added to the text in the paragraph on information use in the results section.

4. From what I can understand from the manuscript, the novel visual/textual research information form was the primary tool being tested (Aim 1 and descriptionstarting on page 5, line 3) but the last statement in the conclusion is about the decision assessment tool. The description of the decision assessment tool (section 2.4) suggests it was simply the data collection tool that consisted of interview probes to elicit qualitative data and some survey items developed by the team. I looked for the actual content in a table or box or supplemental file but these did not exist within the manuscript nor on ManuscriptCentral. The actual tool or at least a table of all the items should be included especially as the authors seem to be suggesting it would be useful for other studies and possibly clinical settings. However, this suggestion is based on findings from 8 adolescents who felt the decision making process was "short and straightforward" (pg 7, line 10) and the purpose of the project was not to test the validity or reliability of the tool.

Response: to the reviewer: We agree with the reviewer that we could make the description and discussion of the aims of our manuscript clearer and more to the point. To this end, we have included the following adaptations:

- The purpose of this paper was indeed not to test validity or reliability of the tool, but to perform an initial pilot study to gain insight in using the combination of the various subparts that were previously studied individually by others and to assess the initial feasibility of this tool in a medical research-setting (as opposed to treatment setting). We do suggest that the tool might be used in further research, as the multiple items in the tool were previously demonstrated to be useful in practice, and our findings so far suggest that the combined tool can be very useful to elicit conversation in a research context as well. Therefore, we are convinced that the tool can be useful for further research, but indeed have provided a cautionary remark in the limitations section that the tool needs further validation and optimization. We have now also added this remark to the paragraph on the evaluation of the tool in the discussion section.
- Indeed one of our aims was to study the information material, but it was not the primary tool being tested. The numbering of the aims of the paper is restructured, demonstrating more emphasis on our aims of gaining insight in adolescents' perspectives and the tool as a method to gain these insights.

- To reduce the emphasis on information supply as a main aim, the first sentence of the paragraph on information material, in the method section, was adapted.
 - We have added the decision assessment tool in a table in the paper, as although the tool consists mainly of items that were published before by others, we agree with the reviewer that it is helpful to the reader to present the tool in this manuscript as well.

a. I did review the figures of the pie charts demonstrating 2 participants' actual and desired role in decision making. I think the pie chart drawing technique is an intriguing method to elicit conversation about actual and desired shared decision making. As the authors note, it was previously described in a paper by Dr. Lipstein et al (Ref #32 in the manuscript).

Response: we agree with the reviewer that this simple technique can be a very effective method to support conversation and would therefore enjoy sharing our experiences to inspire other researchers to use this method.

5. Results in the abstract state, "All adolescents unequivocally expressed the desire to be autonomously involved in decision making..." Yet section 3.7 indicates adolescents were involved in the decision making process but not autonomous and only 3 indicated they wanted their share in the decision making to be different, none of whom said they wanted to make the decision autonomously.

Response: We intended to point out that the adolescents want to play a real role (as opposed to e.g. tokenism) in the decision-making. However, as we do not want to confuse the reader, we have deleted the word 'autonomous' from the abstract.

Editor's Comments to Author:

Delete the first sentence from the title and add a pilot study

Delete the numerous subheadings throughout the paper

p6 use mean not average

p7 do not use % for n=8!

Response: We have altered the text accordingly. However, the remark on not using percentages for n=8 must have been due to misunderstanding – the percentages reflects the size of the role that the adolescents desire to have; to avoid this misunderstanding we have added the word 'size' in this paragraph.

Attach the RIF (both versions) in English as supplementary files

Response: We have now provided translated experts of both RIFs as supplementary files. Due to studyspecific sensitive information in the RIFs, we were unable to provide the entire documents. However, excerpts from both documents should provide the reader with insights in the nature and design of the distributed information material.

Add the decision assessment tool to the paper

Please note we need you to address all of these points to consider your pilot study as an original research aticle as opposed to a research letter, which we do not publish.