Author's response to reviews

Title: Adapting ethical guidelines for adolescent health research with street-connected children and youth in low- and middle-income countries: A case study from western Kenya

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Author's response to reviews: see over
Dear Editor,

We are writing this letter to address the reviewer comments concerning the submitted manuscript: ‘Ethical approaches to research with street children and youth in low- and middle-income countries’ We would like to thank the Reviewers for their valuable comments. This letter addresses the comments numerically point by point to accompany the attached revised manuscript. The comments of the reviewers are italicized followed by the corresponding response from the authors.

Reviewer 1: Solina Richter

1. The ethical consideration and application of ‘western’ ethical principles within the context of a low socioeconomic country need much more attention.

   The International Ethical Guidelines for Biomedical Research Involving Human Subjects developed by the Council for International Organizations of Medical Sciences (CIOMS) in collaboration with the World Health Organization provides consensus-driven international guidelines for the ethical conduct of research. The Ethical Research Involving Children (ERIC) project also provides comprehensive guidelines for undertaking research with children and youth internationally. We believe that together these guidelines provide a universal framework for the basis of ethical considerations and are applicable to research being conducted in low- and middle-income countries to safeguard participants.

   Discussing in detail the applicability of western ethical principals to other countries and specifically, low- and middle-income settings may be beyond the scope of this paper. We acknowledge that ‘western’ ethical principals need to be adapted to local sociocultural contexts and we have cited peer-reviewed literature in the introduction that discusses these issues in the following line of text and have added text on the core universal ethical principals:

   Ethical conduct of research activities within LMIC are beset by an additional set of social, cultural, and economic issues affecting informed consent and assent, community participation, standards of care, and equity [1–3]. Together, these pose significant challenges related to SCCY’s involvement in research and result in an understudied and underserved population [8, 9]. However, research is essential to advance the health and human dignity of SCCY, and to develop solutions to issues relevant to their complex physical and psychosocial health and lives is of paramount importance. The core universal ethical principals of beneficence, non-maleficence, justice and respect for persons [10] provide an important framework to guide the conduct of ethical research with this vulnerable population in low- and middle-income settings.
We believe that it is important to adapt universal principals to the local culture and socioeconomic context when conducting ethical research and that we discuss this extensively throughout our paper.

2. I question if they have consulted their different ethics review boards for their inputs and legal advice. I do appreciate that they used community forum to influence their decision making but this the Ethics review board found that legally and ethically acceptable.

All studies went through ethical review at multiple institutions that provided feedback and comments on the proposed research and ethical principals in relation to conducting research with this vulnerable population. All studies were approved by local and international institutional research ethics boards and were deemed legally and ethically acceptable. This information is provided in the Method Section describing the three studies.

Additionally, three of the authors on this paper are members of Institutional Research Ethics Committees. Dr. Ayuku is a member of he Moi University IRB and the co-PI on a cross-cultural bioethics capacity building program between Moi University and Indiana University. Dr. Ott is a member of the Indiana University IRB with expertise in ethics and adolescent research. Dr. Naanyu is a member of the National Bioethics Committee for the Government of Kenya. These investigators have been extremely involved in the research projects involving street-connected children and youth in Eldoret, and contributed significantly to this manuscript.

4. What is the main learnings that you will advise another researcher to do if they attempt a study with a similar population and in a similar context? Can you transfer the new knowledge on the process followed to another context?

We have made a number of changes in the Discussion sub-section Key Recommendations to provide advice for conducting research with street-connected youth in a similar setting. We believe the processes we used and the issues we highlight are applicable to other contexts, however they need to reflect the cultural and socioeconomic situation in that setting and should be adapted accordingly.

5. Pg 7. Line 207 - I would like to know more the DCO ensure protection? Who’s welfare do they protect?

The District Children’s Officer (DCO) in Kenya is the de facto guardian of these children and youth connected to the street. The DCO works in the County Children’s Office. This office is governs child protection in the region and in theory, the DCO’s position is to protect vulnerable children in need within the county area he/she is assigned. However, in practice, children do fall through the cracks, particularly street children. In working within the local social and cultural context of Kenya, it is important to work with local policy makers and stakeholders as part of the process of conducting ethical research in this setting.

At times the DCO has minimal contact with street-connected children and youth in our setting, and the children and youth themselves don’t always view their office favourably. In this case, this is why we also consulted external stakeholders such as drop-in centres, other community-based organizations, and the street community, regarding children’s participation in research activities, to get a broader perspective. In general, there is a need to strengthen the child protection systems in Kenya and their
policies in relation to street-connected children and youth.

Details regarding the difficulties and limitations with the DCO safeguarding children and giving consent for their participation in research are now discussed in a new sub-section Informed Consent, Difficulties.

6. Pg 7. Line 209 - Who was the community members and what gave them the right to give permission on behalf of the SCCY

Community members are residents living within the locations that mabaraza were conducted with Chiefs and sub-chiefs. Additionally, we sought out organizations working with street children, such as drop-in centres and those providing outreach services for their input and permission to conduct the studies within their communities. These community members are residents of the Locations that the barazas were hosted in, some such as Langas, are home to many of the children and youth that are found on the streets in Eldoret, a peri-urban slum. Therefore they are aware of these young people on their streets, and presumably in some cases, are relations of these children. They did not provide consent for the children and youth to participate; they provided broad informal community consent for the research activities to occur and input into the issues associated with conducting research with children in their communities. This process ensured we were being ethically responsive to the sociocultural context in which the research was occurring.

We have added the following text to clarify who are community members:

“We conducted mabaraza with community members whom were living in these locations, SCCY, and street youth leaders to discuss the proposed studies, gather input, and seek community approval.”

7. Pg 9. Line 240-41 - How did it inform your decision making related to the three studies? What sociocultural values was taken into consideration.

In all three studies it meant we had to work closely with the communities and follow traditional mechanisms to gain community entry and approval for research activities to occur and for children to participate. Often decisions in settings such as western Kenya, are made within communal meetings such as the baraza and therefore hosting community meetings to gain this “informal” community consent to gain entry, conduct the research, and to hear the community’s inputs regarding children’s participation in research respects the local sociocultural values and processes. Through these meetings with community members, community-based organizations and government officials, it became clear that in most cases the community felt that children and youth connected to the streets could make a decision regarding their participation in research on their own (ie. Give their own consent or assent) as they were functioning on their own on the streets without a parent or guardian. However, to safeguard their rights within the context it led to the involvement of the District Children’s Officer to act as the de facto guardian of children from the streets.

8. Pg 9. Line 246 - Was legal minor status of the youth considered at all. It this even possible within the context of the country in which the study was conducted

Those under 18 are considered minors in Kenya and are legally unable to consent for themselves to participation in research. However, in the case of our
research, we sought waivers of parental/guardian consent for study 1 and study 2, as they were minimal risk and would not have been able to be carried out if we had to get parental consent due to the topics under study. IREC and the IRB granted these waivers and these studies were conducted accordingly.

9. Pg 9. Line 259-60 - Who has signed the waiver? Who was the guardian?

The waiver was granted by the IREC and IRBs. In this case, no specific person signs the waiver, it is granted by the ethical institutions. In the case of Study 3, the DCO acted as the de facto guardian providing individual informed consent for each participant.

10. Pg 10. Line 265 - Can you expand on this; how was it important? Maybe add examples from the different studies.

We have added the following additional text to address this question:

“Mabaraza identified the community’s perception of street children’s capacity to provide informed consent and many felt street children could consent for themselves; however, community involvement, the DCO providing legal consent, and the child’s age were important considerations for consenting [33]. Ensuring the community is informed and accepts that the research is going to be carried out was considered to be the first step in seeking informed consent for children to participate in research. Children older than 10 years were considered competent to make a decision regarding their participation in research.”

11. Pg 10. Line 266 - Can you add examples of the stakeholders. What gave them the authority to approve the study?

Stakeholders include community-based organizations serving street children, such as drop-in centres and the Uasin Gishu District Children’s Forum. This Forum consists of service providers, advocates for children, children’s home directors, and government officials. The members are leaders within their communities and seeking their informal approval and informing them of the research, gathering their input and disseminating information to them, provides an additional safeguard to the children they work closely with and whose lives they are trying to protect and ameliorate. Seeking their informal approval respects the traditional social and cultural context in Kenya. There is no formal authority given them to approve the study.

We have clarified the community-based approval in the following text:

“Community-based approval for the studies was obtained from residents participating in mabaraza, CBO’s providing services to SCCY and the UG Children’s Forum.”


The DCO is considered by the community as the de facto guardian of children and youth on the streets in Kenya. It is legal of the DCO to sign on behalf of the child. Children and youth provided assent or dissent in all three studies. If the child or youth did not want to participate their wishes were respected. The DCO provided individual consent for participants only in Study 3. Youth over the age of 18 provided their own
informed consent in Study 2.

13. Pg 11. Line 293 - Repetition - add examples –

It is unclear to what the reviewer is referring to.

14. Pg 11. Line 303 - How did you manage this?

We assessed all cases on a case-by-case basis and took the appropriate measures that are available within the country and reflect the best option for care and reporting when appropriate to safeguard the rights of the child. As explained in the approaches section:

“In situations where SCCY reported abuse or required psychosocial assistance, regardless of participation, an onsite psychologist assessed the individual and referred them to the best available standard of care. We established a protocol that included addressing each case on an individual basis, providing psychological support, reporting to authorities when appropriate, and ensuring that SCCY received any needed medical care while protecting their privacy.”

15. Pg 11. Line 308 - Can you add some notes on the time commitment to build trust

We have added the following text in relation to this comment:

“This process occurred over several weeks prior to commencing research and was ongoing throughout the duration of the studies.”


Yes, we believe the Society of Adolescent Health Guidelines for Adolescent Health Research is responsive to safeguarding children and youth irrespective of country of origin. These guidelines provide a universal framework for the basis of ethical considerations in relation to adolescent health research and are applicable to research being conducted in low- and middle-income countries to safeguard participants.

17. Pg 13. Line 348 - Is it cultural appropriate or context appropriate?? I wonder if it is not more context appropriate?

“Items such as the pens and paper while well received, were not necessarily suitable as SCCY often have no place to store these items safely. Providing culturally appropriate compensation such as tea and bread and compensation for travel to the clinic site were successful.”

Pens and paper were not context appropriate. However, tea and bread in Kenya is extremely culturally appropriate. Tea is offered whenever you visit someone in Kenya. Contextually it is also appropriate for street-connected children and youth to receive tea and bread as compensation as it provides a basic non-coercive level of compensation. We have moved this to the new sub-section Vulnerability to Coercion & Responsibility to Project, Difficulties with the following text:

“Difficulties: Determining an appropriate form of compensation for research participation
is challenging. It requires careful consideration of difficult the context and environment in which SCCY live as well as their substance use. In Study 3, items such as the pens and paper while well received, were not necessarily suitable as SCCY often have no place to store these items safely. Providing compensation such as tea and bread and monetary compensation for travel to the clinic site were deemed suitable and not coercive in our context.”

18. Pg 17. Line 456-59 – Fix reference

We have now fixed this reference.

Reviewer 2: Bambonyé Manassé

1. Yes. However, the title states “ethical approach ....”, when in the research, it is about “we created procedures to address SCCY’s vulnerabilities related to research participation within the local context”. What we have in this paper are ethical procedures followed to adapt to the contexts of street children

   We have altered our title to better reflect the content of adapting existing ethical guidelines for research with this vulnerable population. The title now reads: “Adapting Adolescent Health Ethical Guidelines for Research with street-connected children and youth in low- and middle-income countries, a case study from western Kenya.”

Discretionary Revisions:

2. Obviously, each situation remains unique in its nature and solutions generated each time should not be taken as recipe to be applied everywhere. For example, if a researcher is convinced that a child will be beaten by parents at night because he did not bring back home enough money, I would suggest to give money instead of coffee or tea.

   We agree with the reviewer’s comments regarding the different types of street children and various reasons for their street-involvement. However, we don’t think it is feasible to give different forms of compensation to different children/youth depending on their circumstances for street-involvement.

Second discretionary revisions:

3. When you observe younger street children, you discover that they engage in activities in small groups of 2, 3 or 4. It could be a way for self protection or not feeling vulnerable. Based on that, an adult researcher could interact with younger street children in small groups of 1 to 5 children prior to meeting a child in individual interview. In fact many children have had negative experiences with adults, others are fearful to be punished or to be sent back home by their tutors or by the institution caseworker because they could say something they should not tell to a researcher. A researcher should then take in consideration such contexts of fear, when deciding to let a tutor or a member of an institutional staff participate in an interview between the adult researcher and the child.

   We believe conducting extensive street outreach and working with the local youth and leaders establishes relationship that facilitates not fearing any type of disclosure. All
members of the research team should be trained in specifically conducting research with vulnerable children and be sensitive to the children’s needs.

**Reviewer 3: Anselm Crombach**

Major Compulsory Revisions

1.) **Title:** As the authors report experiences of their work in Kenya, I would suggest including this information into the title. For example, adding “– using the example of Kenya”.

   We have altered our title to better reflect the content of adapting existing ethical guidelines for research with this vulnerable population and the context of the research examples from Kenya. The title now reads: “Adapting adolescent health ethical guidelines for research with street-connected children and youth in low- and middle-income countries, a case study from western Kenya.”

2.) **Abstract:**
   The authors describe in the result section of the abstract using non-monetary compensation. However, within the “Ethical consideration & solution” section they discuss the issue of monetary compensation considering different aspects. Hence I would suggest either deleting the “non-monetary compensation” from the abstract or using a more cautious language. For example, “To address issues related to coercion and access to care, we evaluated different strategies: we worked to reduce...”. Overall the language could be more cautious within the abstract and difficulties with the implemented strategies could be discussed.

   We have omitted the words non-monetary compensation from the abstract.

3.) **Method section:**
   Ethical considerations depend often on cultural and social norms. Hence identifying ethical issues that need to be addressed most likely depend on declarations, literature and opinions of experts. As the focus of this article are ethical approaches, a methodological description how and by whom the different areas of interest and considerations were identified would strengthen the method section. Furthermore, outlining the different areas of interest (e.g., Community participation & equitable recruitment) within the result section would allow the readers to better understand the structure of the following section “Ethical considerations & solutions”.

   We have added a description to our methods section as to how and by whom the different areas of interest and consideration came to our attention in the following text:

   **Identifying Ethical Considerations**
   The Society of Adolescent Health Guidelines for Adolescent Health Research and the international ERIC project [4, 5] provide comprehensive guidelines for conducting ethical research with children and youth. These guidelines provide a universal framework for the basis of ethical considerations in relation to adolescent health research and are applicable to research being conducted in LMIC to safeguard participants. We utilized these guidelines to identify and guide ethical considerations in relation to research with SCCY in
4.) Ethical considerations & solutions:
This section of the article replaces the result section of common research articles. The authors outline different “ethical considerations” for specific areas of interest and are presenting the “solutions” they have developed conducting research in Kenya. As this article is limited to their experiences within a specific setting, I would suggest using a more cautious language. Instead of “solutions” I would suggest the word “approach”.

Thank you for this comment. We have replaced the word solution with approaches within this section.

5.) Ethical considerations & solutions:
As this article is presented as a research paper, I think it might be particularly interesting how the different “solutions” worked out within the specific contexts and what problems the researchers had to deal with. I would suggest to restructure the whole section “Ethical considerations & solutions” to provide the readers with the opportunities to get insight into the experiences of the researchers. In addition to the subsections “Ethical considerations” and “approaches”, I would suggest adding a subsection “Acceptance & Difficulties” for each area of interest, in which the authors could summarize their experiences and difficulties. Restructuring the whole section would require of course a modification of the current subsections. For example, the sentence about monetary reimbursements, page 11, lines 293 – 295, would need to be included in the new subsection. Furthermore, I would be interested how additional offerings of sanitary supplies to female participants were perceived and accepted by both, female and male participants.

We have extensively restructured the Results and Discussion section with these recommendations. We have now added a “Difficulties” sub-heading for each ethical consideration. Additionally, we have altered our Discussion section to focus more on the Key Recommendations for research with street-connected children and youth in low-and middle-income countries to address these valuable comments.

6.) Ethical considerations & solutions, page 7 & page 10:
The authors mention the involvement of street youth leaders within mabaraza and informed consent procedures. From my experience with street children in Burundi, they are often organized in groups and the group members take care of each other. Nevertheless, the group leaders often favor children who pay them either with money or by performing duties. I would be interested how the researchers addressed this issue of “corruption” and ensured that the group leaders would not prevent some children from
participation because they did not belong to their favorites and/or that they would push children belonging to their group to participate within a study.

We did not have issues directly related to participation in research that we know of with the leaders interfering with participation. However, we are aware that there are a great number of issues in the “bases/barracks” between leaders, older youth and younger children on the streets that involve the payment of “dues” as we’ve recently published in Wachira et al. (2015). Due to our close and trusting relationship with the street community and even the leaders themselves who come to our clinic for care and assistance, it is unlikely they enacted any punitive action or favoritism towards any child or youth for participation.

7.) Ethical considerations & solutions, Informed consent, page 10:
I would be interested in some additional information about the suggested informed consent procedure. I agree that a general permission is necessary from the DCO or a similar institution, and even an individual permission can be obtained, as he seems to be their legal representative in Kenya. Nevertheless, in some LMIC with weak institutional structures such permissions might be given for official reasons and/or personal interests instead of being inspired by genuine care for the street children. I also agree that some collaboration with the street youth leaders is necessary. However, I am not sure the street youth leader has the right to give permission for the individual children because those might feel oppressed by him. Instead of defining the street youth leader as their guardian figure, I experienced that letting them choose a community member they trust as a guardian/witness of their participation might be more appropriate.

We agree, and this may be the case in Kenya as well, that permission is given for official reasons and not inspired by genuine care for the street children. However, within the socio-cultural and political context, this is a necessary step in conducting research that is acceptable to the community within this region. It may not be generalizable to other low- and middle-income settings, but represents an important step in gaining approval from local authorities. We have discussed this in our sub-section Informed Consent, Difficulties, as well as in the Key Recommendations.

We are not considering street youth leaders as guardians in the case of informed consent. In this situation it is informal community consent to gain entry and conduct research within this tight-knit community. The youth leaders in no way provide a formal consent for children and youth to participate. It is their overarching consent to the researchers entering into their bases, to interact with the children and youth who are part of their group, and that they are agreeable and working with us in a participatory manner to ensure that the children are understanding the process of engaging in research and that we work together.

We agree that allowing a child/youth to choose a community member whom they trust as a guardian/witness of their participation may be appropriate and have added this suggestion.

8.) Ethical considerations & solutions, Vulnerability of coercion & responsibility to protect, page 10 - 12:
Compensating street children for their time is an important and yet difficult aspect. The reimbursement in form of small monetary amounts or food most likely helps the children to ensure their daily income even though they do not have the opportunity to work the
whole day. However, the reimbursement has to be adequate and useful to the street children without profiting from their precarious living conditions. I would be interested in how the street children perceived the non-monetary compensations such as the 2 pens and the workbook? Did they really need those or did they sell them after the participation?

We address the issue with 2 pens and a workbook in the new Informed Consent “Difficulties” section.

Small monetary amounts might be more appropriate in the latter case. I acknowledge that reimbursements might have coercive effects on street children if they profit from their needs. Nevertheless, we sometimes need to trust that street children might get interested in research activities and are not forced to participate by adequate reimbursements, just like participants in high-income countries. A non-conditional service such as access to medical care or other services is desirable. However, it requires resources and being very well connected. While NGO’s and research facilities of high-income countries in cooperation with local institutions might provide such services, local research facilities and students might lack the necessary financial resources. Nevertheless, local institutions and students should engage in research with street children because they have a much better cultural and social understanding of the situation of street children within their own country. As long as e.g., psychology students of local universities respect certain essential ethical considerations, such as transparent informed consent procedures and ethical permissions from local institutions, their research activities should be encouraged instead of being hampered by requirements they are not able to fulfill. Prohibiting their research would be an example of creating another barrier for the inclusion in research of vulnerable populations in LMIC’s.

We agree with this insightful comment. However, even in the most constrained settings, we feel it is feasible to partner with local organizations where they exist, in some capacity to assist the youth. We recommend that investigators assess within the local context what organizations and services are available before commencing any research project to determine if there is an opportunity to collaborate and build a relationship with these organizations. In cases where there isn’t or there are no services available, we agree that research should not be prohibitive and that research activities should be encouraged.

We also agree that small monetary compensation for time and travel is not coercive based on the amounts of money that street children earn on a daily basis in our setting[6] and that compensating them for this is adequate. We have added to this discussion of approaches in the Vulnerability to coercion section.

Reporting human rights violations is a very delicate issue in LMIC’s that often lack the required infrastructure to deal with such cases, particularly as street children report many cases of victimizations by police forces. The lack of institutions providing psychosocial assistance for street children in LMIC’s or the overstraining need they encounter might interfere with a successful transfer of these children to appropriate institutions. I would be interested about the experiences of the authors in Kenya.

We agree that reporting human rights violations is a delicate issue, especially when the system in place to protect them is inadequately developed and in cases with
police forces. In our setting, in situations where SCCY reported abuse or required psychosocial assistance, regardless of participation, an onsite psychologist assessed the individual and referred them to the best available standard of care. We established a protocol that included addressing each case on an individual basis, providing psychological support, reporting to authorities when appropriate, and ensuring that SCCY received any needed medical care while protecting their privacy.

We have made the following recommendations in our Discussion, Key Recommendations section:

Third, in situations where children report abuses and rights violations, we recommend the investigators follow the core ethical principal of non-maleficence and assess each situation on a case-by-case basis. First, when appropriate, available, and when authorities did not perpetrate violations, investigators should follow the local procedures to report the case through the child protection system. Second, human rights violations should be documented for advocacy purposes and brought to the attention of international human rights organizations. Third, researchers should ensure that the participant receives the local standard of care. Fourth, we recommend that the research team include a social worker and psychologist when conducting research with this vulnerable population. Lastly, establishing partnerships with local hospitals and care providers, when feasible, can ensure that the participant can be referred for additional care, such as specialized facilities for sexual and gender-based violence.

9.) Discussion:
I would suggest including some parts of the discussion within the previous section because I think they describe the evaluation of successful and ineffective strategies.

We have now included difficulties within our previous section and restructured the discussion based on your valuable comments.

Furthermore, I would broaden the focal point of the discussion and include the following issues:

1.) Ethical considerations do not only concern research institutions but to some extend also concern activities of NGO's. Evaluating processes of NGO's include presenting case studies, sometimes even without disguising the individual's identity. To which extend the ethical requirements would also be appropriate to these NGO's?

We agree that ethical considerations extend beyond research and into care and service provisions with street-connected children and youth. While we believe it is valuable and important, it is beyond the scope of this manuscript to address requirements for NGO's and other care environments.

2.) I outlined in the previous section (8.)) of my review that not all research institutions might be able to fulfill the solutions described. Discussing the recommendations keeping the different local and international research institutions in mind might strengthen the article.

We have revised our Key Recommendations section, which takes into consideration that not all local and international research institutions will be able to fulfill
all of the approaches we discuss and have made recommendations that are not required in all settings but that we believe investigators should consider.

3.) While the ethical considerations are very important, they can also become another barrier hampering e.g., local research projects with street children.

We agree, however we believe that ethical guidelines should be adhered to as this population is particularly vulnerable and adapted for the setting in order to safeguard the children in the research process.

4.) Are there any suggestions how to address referrals of street children who want to report abusive experiences or need psychological assistance within systems lacking the necessary infrastructure to properly assist them.

Within resource-constrained settings we realize that systems may be minimal. However, we believe the research team should have a social worker and a psychologist available whom can provide care when the system lacks the infrastructure to support them. It would be unethical to not address children and youth in psychological distress and we believe that when undertaking research with this population, the research team should ensure that they are able to ethically conduct the research and provide support to their participants.

5.) What minimum requirements NGO’s have to adhere to, that they are considered as key stakeholder having the authority to provide informal consent? How does the informal consent differ from a professional exchange and a simple information procedure?

We think the minimum requirement is that the NGO’s/CBO’s be working with and providing services and support to SCCY in this setting. Informal consent is an exchange of information, it may be a verbal agreement between the research team and the local NGO/CBO or it may also be a written informal approval between the team and organization. We think this will depend on the local context and what is deemed appropriate.

6.) What are the major limitations of the article? To what extend the conclusions can be generalized to other countries?

Major limitations of this article are that we situate our approaches within the socioeconomic and cultural context of Kenya. However, we believe that our ethical considerations and approaches provide an important starting point for any researcher to use as a framework for ethical research with street-connected children and youth within low- and middle-income settings. While our exact approaches may not the applicable in other countries, our new Key Recommendations setting provides suggestions that can be adapted and applied in any setting.

10.) Discussion, page 12:
The authors write: “In evaluating our processes, we identified successful and ineffective strategies as well as key recommendations to guide the development of ethical research practices with SCCY in LMIC." The authors are referring to an evaluation of their ethical procedures. I would suggest describing their evaluation approach and methods in detail within the method section to allow the reader a
profound insight how they identified successful and ineffective strategies. Furthermore, I want to highlight once more the need to restructure the previous section “Ethical considerations & solutions” because I did not realize which “solution” they identified as ineffective strategy.

We have altered our results and discussion extensively based on your insightful feedback.

11.) Discussion, page 13, first paragraph: I would appreciate a specification whom the authors describe as CBO’s?

We have now provided an explanation of CBO’s within the Ethical Considerations, Approaches, and Difficulties section with the following text: ‘CBO’s provide drop-in and support services to SCCY and are locally run by community members.’

12.) Discussion, page 14, first paragraph: The authors describe their challenges to implement a research protocol that addresses also human right violations without an adequately developed child protection system. Do you have any recommendations?

We have now discussed this within the ‘Difficulties’ as well as the Key Recommendations section of the Discussion. Our recommendation is as follows:

Third, in situations where children report abuses and rights violations, we recommend the investigators follow the core ethical principal of non-maleficence and assess each situation on a case-by-case basis. First, when appropriate, available, and when authorities did not perpetrate violations, investigators should follow the local procedures to report the case through the child protection system. Second, human rights violations should be documented for advocacy purposes and brought to the attention of international human rights organizations. Third, researchers should ensure that the participant receives the local standard of care. Fourth, we recommend that the research team include a social worker and psychologist when conducting research with this vulnerable population. Lastly, establishing partnerships with local hospitals and care providers, when feasible, can ensure that the participant can be referred for additional care, such as specialized facilities for sexual and gender-based violence.

Minor Essential Revisions
1.) Method section: The tables are not numbered correctly. Within the text table 1 is labeled as table 2 and vice versa. Furthermore, I would suggest deleting table 2 (that includes the information about the participants) and including the information within the text.

We have omitted the table that includes information about participants and included this information in text as suggested. We have relabeled the tables appropriately.
We hope we have adequately addressed your comments regarding this manuscript. We welcome additional comments and criticism that will assist us in disseminating this important information.

Sincerely,

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