

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) 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 Open. The paper was subsequently accepted for publication at BMJ Open.

(This paper received three reviews from its previous journal but only two reviewers agreed to published their review.)

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Healthcare providers perspectives on use of the national guideline for family planning services in Amhara Region, Ethiopia: A qualitative study
<b>AUTHORS</b>	Tessema, Gizachew Assefa; Gomersall, Judith; Laurence, Caroline; Mahmood, Mohammad Afzal

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Katherine Tumlinson UNC-Chapel Hill, USA
<b>REVIEW RETURNED</b>	26-Apr-2018

<b>GENERAL COMMENTS</b>	<p>Apologies for any spelling and grammatical errors; rushing in an attempt to be timely!</p> <p>Overall: This is an excellent article and a pleasure to review. The authors have identified a critical concern in a prior study – sub-optimal utilization of national family planning guidelines by healthcare providers in Ethiopia. They then conducted a qualitative study to investigate provider perspectives to understand better the factors underpinning low usage of the guidelines. This is critical work for improving quality of care of FP service delivery in Ethiopia and represents a very thoughtful and applied approach by the authors. Below I have some minor suggestions that I believe would improve the article further and I encourage the authors to invest the time to make these small changes prior to publication. My most substantive suggestions refer to the Discussion section.</p> <p>Specific feedback:</p> <p>Abstract</p> <p>Lines 4-5: The authors state that the objective is “To explore heath providers’ views on barriers to and facilitators of family planning (FP) guidelines in FP services in Amhara Region, Ethiopia.” I would insert the words “use of” between “of” and “family planning (FP)” to aid greater clarity of meaning.</p> <p>Introduction</p> <p>Page 3; Lines 23-24: The authors state: “Studies conducted in Ethiopia and Kenya have shown that the availability of FP</p>
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guidelines were associated with quality of care in FP services.” I suggest clarifying this statement a little bit since, as written, it is not clear to the reader what the relationship is between the guidelines and quality of care. I’m assuming that those facilities that have guidelines available demonstrated a greater quality of care, but this is not clear from the authors statement.

Page 3; Last paragraph of introduction: Excellent framing of the motivation behind this study.

#### Methods

Arrival at final sample size: The 21 providers sampled – were these all of the providers who expressed willingness, were eligible, and consented to participate? Or did you have more than 21 who were willing and eligible but you reached data saturation before interviewing them all?

#### Results

Page 5; Lines 32-33: “a number of providers reported...” How many of the 21 participants reported this?

On pages 7 and 8 the same quote is used twice to demonstrate a very similar point (“There might be some healthcare providers that could not easily...”). Both sections seem to be discussing the problem of having only English versions of the guidelines. Can one of these be omitted to avoid redundancy?

Page 9; Lines 20-21: The ending of the following sentence did not make sense to me, perhaps some words are in the wrong order? “Some of the participants who had worked for many years in FP services continue to use their knowledge and experience rather than what is using guidelines.”

#### Discussion

Overall, the discussion does a great job of framing these results in the context of prior studies.

Page 15; In terms of the study limitations around generalizability of results: It’s true that this study is not representative of the whole nation or even the whole region (as we would expect from a qualitative study). However, this study does include a solid number of providers from urban Amhara - here is where it would be helpful to know if the authors reached data saturation. I’m wondering if the authors could argue that the challenges reported by their participants are likely to be even worse in the excluded rural areas where providers may have even more difficulty accessing the guidelines, have to travel longer distances carrying guidelines, and may be more limited in their proficiency of English. In which case, the results of this study may be biased in a conservative direction; in other words, a more representative sample of providers (including rural providers) might have resulted in greater emphasis of many of the challenges identified by participants in this study.

Discussion of provider motivation: Some of the results reported in this study point to the fact that providers sometimes KNOW they are supposed to do something (like refer to the guidelines) but they choose not to due to a "lack of commitment." There is some prior

literature about this gap between provider knowledge and provider action – it's called the Know-Do Gap. Manoj Mohanan published a paper on this topic:

<https://www.ncbi.nlm.nih.gov/pubmed/25686357> I think it would be really interesting to include a paragraph where you discuss your results in the context of these prior studies – such findings highlight the fact that traditional trainings – which focus solely on the technical information – may be unsuccessful unless they learn to incorporate messages designed to properly motivate and incentive providers to put forth the necessary effort. Additionally, it may be important to acknowledge that even those providers who read the guidelines may choose not to perform to a high standard of quality if they are not under constant supervision because of the low accountability in many facilities – especially rural public facilities. In which case, the presence and accessibility of guidelines may fall short of helping us to achieve the necessary improvements to quality of care. I would try and talk about this transparently – it doesn't diminish your findings but it does acknowledge that quality improvement is a complex challenge.

Page 15; third to last paragraph: I think the authors could go a lot further in terms of making specific recommendations for the Ethiopian MOH. This is perhaps the most important paragraph in the entire paper and possibly the only paragraph that will be read by MOH and other key public health stakeholders in Ethiopia so it should be really clear and explicit – almost like a recipe for action. (In fact, if BMJ could pull out key text for a text box, that would be ideal. Additionally, the authors could consider including more detailed recommendations in a short research brief to be sent to the MOH.) The authors clarify that the guidelines should be translated into local languages, more widely distributed, and supported by trainings that address provider motivation/beliefs/personal biases as well as better supervision around use. However, there are additional recommendations that could be included such as revising the guidelines to include more practical information (how to use each method, contraindications, side effects, etc.), more concise information so that the guidelines aren't quite so cumbersome to carry/transfer/share, better indexed content so that providers can find what they need to know more quickly, and more up to date information so that providers don't fear they are acting on outdated knowledge. When training providers, it should be emphasized that the guidelines are not just for use at the trainings but are actually a reference guide to be used continuously throughout their career. Trainings should do more to encourage/incentivize providers to use the guidelines and to address any shame the providers may feel about referring to the guidelines in front of the clients – it's not a short-coming but a strength to recognize that all of this information can't possibly be memorized and the guidelines are a helpful and necessary tool.

Concluding paragraph: I would revise the first sentence to be more concise – I had to read it several times to digest it. I would also add a sentence or two at the end with a really strong take-home message – the thing you most want your audience to remember from this article, i.e. your practical/applied recommendations for increasing utilization of national FP guidelines.

Overall - great work and an important study with an important contribution to the field of FP!

<b>REVIEWER</b>	<p>Joanna Cordero Consultant, Department of Reproductive Health and Research, World Health Organization, Switzerland</p> <p>Research and communications consultant working on topics related to community engagement and social accountability. My work includes gather health providers role and their perception of family planning and contraceptive service and information provision.</p>
<b>REVIEW RETURNED</b>	11-May-2018

<b>GENERAL COMMENTS</b>	<p>4. Methods: The authors provided detailed description of the methods. However, further information on the following issues could contribute to strengthening the methodology section:</p> <p>(i) Description of setting: Suggest to add information about why Amhara region was selected for this study and how it compares to other regions;</p> <p>(ii) Recruitment strategy: the authors have recruited direct FP providers, and management /supervisor level providers were not included. Additionally, in the discussion, they mention that further study should consider the perspective of these higher-level providers. The authors could justify this choice in the methods or discussion section. Also In table 2: would it be possible to add the number of years of experience of the participants</p> <p>(iii) Data collection: The authors could consider developing further why IDI methodology was chosen, and add discussion on saturation of data?</p> <p>(iv) Data analysis: More information needed regarding the lead investigator and others involved in the analysis with focus on their potential bias</p> <p>5. Research Ethics: Authors mention that participants consented to audio recording and demonstrated that sufficient information has been given to participants regarding the study but they need to mention explicitly whether participants signed ICF for participating in the study.</p> <p>8. References: The authors could consider including the latest WHO FP guideline - Medical eligibility criteria for contraceptive use, Fifth edition published in 2015</p> <p>10. Presentation of results: Five thematic categories were clearly defined. Each category is considered both as a facilitator and as a barrier. However, under theme 1: focusing on knowledge and access to the guidelines, some findings reported under this section do not clearly fit. Line 11-33, p7. Guidelines being out of date or lack of information on community misconceptions. These relate more to the quality of the guidelines (cultural appropriateness, relevance, up-to-date). Perhaps this could be better addressed as unexpected result if this was not considered originally. With regards to knowledge of guidelines, the authors could consider including a list of existing guidelines in the Ethiopian context and clear definition of what guidelines were considered (national family planning guidelines, FP considerations in health policies, local strategic frameworks, etc). Were health providers asked about which they had knowledge of.</p>
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	<p>The guidelines currently mentioned in the manuscript are out of date. This needs to be addressed in the discussion (Line 18-26, p 15)</p> <p>12. Study limitations: As mentioned, more information could be given regarding the lead investigator and others involved in the analysis with focus on their potential bias</p> <p>15. English: The level of writing is acceptable. However, a closer copy-editing is needed. For example, in the abstract, Line 4-5 and 43-45: "use" is missing from "family planning guidelines ... in family planning services".</p>
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## VERSION 1 – AUTHOR RESPONSE

Reviewer 1# Katherine Tumlinson

Overall: This is an excellent article and a pleasure to review. The authors have identified a critical concern in a prior study – sub-optimal utilization of national family planning guidelines by healthcare providers in Ethiopia. They then conducted a qualitative study to investigate provider perspectives to understand better the factors underpinning low usage of the guidelines. This is critical work for improving quality of care of FP service delivery in Ethiopia and represents a very thoughtful and applied approach by the authors. Below I have some minor suggestions that I believe would improve the article further and I encourage the authors to invest the time to make these small changes prior to publication. My most substantive suggestions refer to the Discussion section.

### Abstract

1. Lines 4-5: The authors state that the objective is “To explore health providers’ views on barriers to and facilitators of family planning (FP) guidelines in FP services in Amhara Region, Ethiopia.” I would insert the words “use of” between “of” and “family planning (FP)” to aid greater clarity of meaning.

Response: We have edited this sentence as “...barriers to and facilitators of use of family planning (FP) guidelines in FP services. See line 13.

### Introduction

2. Page 3; Lines 23-24: The authors state: “Studies conducted in Ethiopia and Kenya have shown that the availability of FP guidelines were associated with quality of care in FP services.” I suggest clarifying this statement a little bit since, as written, it is not clear to the reader what the relationship is between the guidelines and quality of care. I’m assuming that those facilities that have guidelines available demonstrated a greater quality of care, but this is not clear from the authors statement.

Response: Based on the suggestions, we have now revised the statement and incorporated additional descriptions in lines 55-59 as follows:

“Studies conducted in Ethiopia and Kenya have shown that the availability of FP guidelines was positively associated with quality of care in FP services.<sup>16 17</sup> For example, Stanback et al.<sup>17</sup> showed that when FP guidelines are properly distributed to FP services providing health facilities, they help improve healthcare providers sustained use of guidelines and thereby the quality of care in FP services.”

## Methods

3. Arrival at final sample size: The 21 providers sampled – were these all of the providers who expressed willingness, were eligible, and consented to participate? Or did you have more than 21 who were willing and eligible but you reached data saturation before interviewing them all?

Response: We have provided a statement about the sample size and recruitment of participants in lines 106 -110 as follows:

“While it was initially anticipated to include up to 15 study participants, recruitment of participants were conducted until saturation was achieved in that no new barrier or facilitator were identified. As a result, a total of 21 providers (18 female, 3 males) were interviewed.”

## Results

4. Page 5; Lines 32-33: “a number of providers reported...” How many of the 21 participants reported this?

Response: We have revised the statement to reflect the number of participants in line 160: “...three participants reported...”

5. On pages 7 and 8 the same quote is used twice to demonstrate a very similar point (“There might be some healthcare providers that could not easily...”). Both sections seem to be discussing the problem of having only English versions of the guidelines. Can one of these be omitted to avoid redundancy?

Response: Thanks for noticing this repetition. We have deleted the quote from page 8 (page 11 in revised manuscript).

6. Page 9; Lines 20-21: The ending of the following sentence did not make sense to me, perhaps some words are in the wrong order? “Some of the participants who had worked for many years in FP services continue to use their knowledge and experience rather than what is using guidelines.”

Response: Apologies for the typo error which has been corrected. This now reads: “Some of the participants who had worked for many years in FP services continue to rely on their knowledge and experience rather than referring to guidelines.” in lines 311-312

## Discussion

7. Page 15; In terms of the study limitations around generalizability of results: It's true that this study is not representative of the whole nation or even the whole region (as we would expect from a qualitative study). However, this study does include a solid number of providers from urban Amhara - here is where it would be helpful to know if the authors reached data saturation. I'm wondering if the authors could argue that the challenges reported by their participants are likely to be even worse in the excluded rural areas where providers may have even more difficulty accessing the guidelines, have to travel longer distances carrying guidelines, and may be more limited in their proficiency of English. In which case, the results of this study may be biased in a conservative direction; in other words, a more representative sample of providers (including rural providers) might have resulted in greater emphasis of many of the challenges identified by participants in this study.

Response: Thanks for the suggestions, we have revised our limitations as suggested. See the revised limitation in lines 505-513 as follows:

“...first, the study was conducted with participants from only urban health facilities in one geographic region of Ethiopia. Hence, as expected in qualitative studies, the results may not be representative to rural health facilities and other regions of Ethiopia. However, we continued interviewing until data saturation, and therefore the barriers and facilitating factors that we identified may be similar in other facilities, particularly within the Amhara region. In fact, as facilities being located in rural and remote areas pose additional challenges in terms of adequate human resource, training and access to resources such as guidelines, we believe that the barriers highlighted by the study participants in Amhara region may be even more pronounced in rural and remote areas.”

8. Discussion of provider motivation: Some of the results reported in this study point to the fact that providers sometimes KNOW they are supposed to do something (like refer to the guidelines) but they choose not to due to a "lack of commitment." There is some prior literature about this gap between provider knowledge and provider action – it's called the Know-Do Gap. Manoj Mohanan published a paper on this topic: <https://www.ncbi.nlm.nih.gov/pubmed/25686357> I think it would be really interesting to include a paragraph where you discuss your results in the context of these prior studies – such findings highlight the fact that traditional trainings – which focus solely on the technical information – may be unsuccessful unless they learn to incorporate messages designed to properly motivate and incentive providers to put forth the necessary effort. Additionally, it may be important to acknowledge that even those providers who read the guidelines may choose not to perform to a high standard of quality if they are not under constant supervision because of the low accountability in many facilities – especially rural public facilities. In which case, the presence and accessibility of guidelines may fall short of helping us to achieve the necessary improvements to quality of care. I would try and talk about this transparently – it doesn't diminish your findings but it does acknowledge that quality improvement is a complex challenge.

Response: Thanks for sharing this important literature and we have now provided additional descriptions to reflect how lack of provider's commitment could influence use of FP guidelines in lines 476-483 as follows: “This problem is probably partly due to a provider's lack of commitment to implement the best practice that they gained from trainings. A study conducted in rural India found a clear gap between what the providers 'know' about the standard practices to be provided/followed for patients and what they 'do' in their routine practice during the provision of a health services. 36 Therefore, this finding suggests that improving healthcare providers' use of FP guidelines require not only improvement in providers' knowledge and skills about the use of guidelines but also there need to be a regular supportive supervision and incentive mechanisms to motivate healthcare providers.”

9. Page 15; third to last paragraph: I think the authors could go a lot further in terms of making specific recommendations for the Ethiopian MOH. This is perhaps the most important paragraph in the entire paper and possibly the only paragraph that will be read by MOH and other key public health stakeholders in Ethiopia so it should be really clear and explicit – almost like a recipe for action. (In fact, if BMJ could pull out key text for a text box, that would be ideal. Additionally, the authors could consider including more detailed recommendations in a short research brief to be sent to the MOH.) The authors clarify that the guidelines should be translated into local languages, more widely distributed, and supported by trainings that address provider motivation/beliefs/personal biases as well as better supervision around use. However, there are additional recommendations that could be included such as revising the guidelines to include more practical information (how to use each method, contraindications, side effects, etc.), more concise information so that the guidelines aren't quite so cumbersome to carry/transfer/share, better indexed content so that providers can find what they need to know more quickly, and more up to date information so that providers don't fear they are acting on outdated knowledge. When training providers, it should be emphasized that the guidelines are not just for use at the trainings but are actually a reference guide to be used continuously throughout their career. Trainings should do more to encourage/incentivize providers to use the guidelines and to address any shame the providers may feel about referring to the guidelines in front

of the clients – it's not a short-coming but a strength to recognize that all of this information can't possibly be memorized and the guidelines are a helpful and necessary tool.

Response: Thank you for these particularly helpful suggestions. We have enhanced the implications section of the manuscript informed by your suggestions. See lines 527-549:

“While the Ethiopian government took an important initiative in developing FP guidelines, its utilisation could be improved by implementing the following steps. (1) The guidelines should be translated into the local language and ensure that they are distributed to health facilities. (2) Provision of additional training for health providers to improve their knowledge about the guidelines is required. The trainings should focus more on encouraging/incentivizing providers to use the guidelines and to build their confidence in referring to the guidelines in front of the clients. It should also be emphasised that the guidelines are not only to be used as a training material but also are actually a reference guide to be used continuously throughout their career. (3) Steps need to be taken to ensure that the guidelines are easily available, and that providers and managers have the time to participate in relevant trainings, as well as to deliver the standard and range of services set out in the guidelines. 4) The current national FP guidelines are out-of-date in terms of addressing new FP methods and technologies, so the government should consider revising the guidelines. During the guidelines revision, it could be important to include more practical information required by healthcare providers which includes how to use each FP method, advantages/disadvantages, contraindications, side effects, and common community misconceptions. It would also be useful for the guidelines to be more concise and simple to carry/transfer/share and have better indexed content so that providers can find what they need to know more quickly, and more up to date information so that providers do not fear they are acting on outdated knowledge. 5) It is also necessary to establish better systems for managers to provide effective monitoring and supervision of providers and to use the opportunity to check the availability guidelines in the facilities and if the providers are properly implementing the guidelines.”

10. Concluding paragraph: I would revise the first sentence to be more concise – I had to read it several times to digest it. I would also add a sentence or two at the end with a really strong take-home message – the thing you most want your audience to remember from this article, i.e. your practical/applied recommendations for increasing utilization of national FP guidelines.

Response: We have revised the first statement in the conclusion accordingly and it ready: “Provider perspectives confirmed that a range of barriers contribute to lack of use of guidelines in FP services in some health facilities in Ethiopia.” in lines 560-562. We have also included statements to reflect key messages in lines 568-572:

“While the Federal Ministry of Health of Ethiopia need to work on revising the current FP guidelines, strategies need to be designed to properly distribute these guidelines to health facilities. Future FP guidelines development need to focus on providing concise, easy to carry guidelines with a more practical information for healthcare providers.”

Reviewer 2 # Joanna Cordero

Competing Interests: Research and communications consultant working on topics related to community engagement and social accountability. My work includes gather health providers role and their perception of family planning and contraceptive service and information provision.

1. Methods: The authors provided detailed description of the methods. However, further information on the following issues could contribute to strengthening the methodology section:



1.1. Description of setting: Suggest to add information about why Amhara region was selected for this study and how it compares to other regions;

Response: This study is part of the big project aimed to assess the determinants of quality of care in FP services in Ethiopia. As we indicated in the motivation of the study, availability of guidelines were positively associated with quality of care in FP services in Ethiopia. Hence, this study conducted in Amhara region, the second largest region in Ethiopia. We have revised the study setting in lines 82-87 of the manuscript as follows:

“The study was conducted in two big cities- Bahir Dar city and Gondar city- located in Amhara region, Northwest Ethiopia between April and June 2017. Study participants were recruited from nine health facilities including two hospitals, five health centres, and two health posts. The Amhara region is the second largest of the 11 administration areas in Ethiopia, with a population of approximately 21 million, 23% of Ethiopia’s total population.<sup>23</sup>”

1.2. Recruitment strategy: the authors have recruited direct FP providers, and management /supervisor level providers were not included. Additionally, in the discussion, they mention that further study should consider the perspective of these higher-level providers. The authors could justify this choice in the methods or discussion section.

Response: We have now added statements in the methods and discussion sections. We included direct FP providers as they are the intended users of FP guidelines and interviewing these providers can help to explore the direct/real experiences of providers on barriers and facilitators of use of FP guidelines. See lines 105-106:

“This helped to explore the direct/real experiences of factors affecting health providers working in using FP guidelines in FP services.”

Moreover, as some of the barriers identified in the study such as lack of managerial support and training, we included recommendation on further study to explore the views of the health managers on these factors in the policy and research implication section in lines 553-555:

“While some of the barriers identified in this study such as lack of managerial support and training could be better explored by including health managers, further study targeting health managers is recommended to provide additional insight on these factors.”

1.3. Also In table 2: would it be possible to add the number of years of experience of the participants

Response: We have included years of work experiences of study participants in Table 2 in line 722.

1.4. Data collection: The authors could consider developing further why IDI methodology was chosen, and add discussion on saturation of data?

Response: We employed IDI methodology as it allows exploring individual/personal experiences/views on the barriers and facilitators of use of FP guidelines. See lines 113-116:

“In-depth interviews was used as this approach allows exploring individual experiences/views/perceptions of health providers working in the provision of FP services. Unlike the focus group discussion, the findings in the in-depth interviews are not influenced by the views of other participants. <sup>25</sup>” As the first reviewer also commented on the level of saturation, we addressed this in the revised manuscript (see lines 106-110):

1.5. Data analysis: More information needed regarding the lead investigator and others involved in the analysis with focus on their potential bias

Response: We included a statements describing the investigators in the research in lines 129-136:

“GAT is a reproductive health researcher who has been working in family planning research in Ethiopia. His knowledge about the local culture, values, and context of the study setting enhanced the research in terms of making probing questions during the interviews and appropriate interpretation of the data and identifying the barriers/facilitators. JSG has knowledge of the context surrounding guidelines utilisation and health care delivery in resource-limited African settings which assist with appropriate interpretation of the data collected. COL and MAM are also well-experienced in qualitative research and this helped in data analysis and interpretation of the findings”

We have also addressed the potential bias associated with the investigators in the discussion section in lines 513-520:

“Second, while the lead author (GAT) has been working in FP research in Ethiopia, there might be a potential bias in the research. However, the lead author was careful not to impose his own perspectives about barriers/ facilitators of FP guidelines use during data collection and analysis. The use of a single transcriber and translator limited our ability to conduct a quality assurance of transcript translations. As the co-authors, JSG, COL, AMM, have no experience in Ethiopia and they have little or no bias in the research. They were also careful not to impose their own perspectives about barriers/ facilitators of FP guidelines use during data collection and analysis.”

2. Research Ethics: Authors mention that participants consented to audio recording and demonstrated that sufficient information has been given to participants regarding the study but they need to mention explicitly whether participants signed ICF for participating in the study.

Response: We have now described that informed consent was signed before the start of the interviews. See lines 146-148: “Those study participants who expressed willingness to participate in the study were provided with written informed consents before the start of the interviews.”

3. References: The authors could consider including the latest WHO FP guideline - Medical eligibility criteria for contraceptive use, Fifth edition published in 2015

Response: The reference suggested by the reviewer has already been used in the introduction section in the earlier the manuscript. See Ref.19.

4. Presentation of results: Five thematic categories were clearly defined. Each category is considered both as a facilitator and as a barrier. However, under theme 1: focusing on knowledge and access to the guidelines, some findings reported under this section do not clearly fit. Line 11-33, p7. Guidelines being out of date or lack of information on community misconceptions. These relate more to the quality of the guidelines (cultural appropriateness, relevance, up-to-date). Perhaps this could be better addressed as unexpected result if this was not considered originally.

Response: Thanks for this important suggestion and we have created a new category of theme – quality of the guidelines – to present the barriers related to that the current FP guidelines being out-of-data and unable to provide information about common community misconceptions. As we also believe that the barriers related to the scope of the guidelines can best fit to this newly developed theme, we have moved the descriptions and quotes related to scope of the guidelines. See lines 275-299.

5. With regards to knowledge of guidelines, the authors could consider including a list of existing guidelines in the Ethiopian context and clear definition of what guidelines were considered (national

family planning guidelines, FP considerations in health policies, local strategic frameworks, etc). Were health providers asked about which they had knowledge of.

Response: During the interviews, participants were provided clear and explicit information about which guidelines they were being asked about (namely the national guidelines). We included Table 1 in the manuscript to address the issue that is being raised.

6. The guidelines currently mentioned in the manuscript are out of date. This needs to be addressed in the discussion (Line 18-26, p 15)

Response: We appreciate this important suggestion and we have included statements addressing the need to provide up-to-date FP guidelines. In the revised version of the manuscript, we included a number of policy implications to address the barriers of FP guidelines use in FP services, which included a need to consider guidelines revisions and provide up-to-date guidelines FP for providers. In this regard, we addressed the concern you have raised accordingly. See lines 538-546:

“The current national FP guidelines are out-of-date in terms of addressing new FP methods and technologies, so the government should consider revising this guidelines. During guidelines revision, it could be important to include more practical information required by healthcare providers which includes how to use each FP method, advantages/disadvantages, contraindications, side effects, and common community misconceptions. It would also be useful for the guidelines to be more concise and simple to carry/transfer/share and have better indexed content so that providers can find what they need to know more quickly, and more up to date information so that providers do not fear they are acting on outdated knowledge.”

7. Study limitations: As mentioned, more information could be given regarding the lead investigator and others involved in the analysis with focus on their potential bias

Response: As described earlier in our response in the methods section for #1.5, we have included descriptions about the investigators in the data analysis section and the potential bias related to the investigators in the discussion section. See above.

8. English: The level of writing is acceptable. However, a closer copy-editing is needed. For example, in the abstract, Line 4-5 and 43-45: "use" is missing from "family planning guidelines ... in family planning services".

Response: Corrected and thorough copy-editing has been done

#### VERSION 2 – REVIEW

<b>REVIEWER</b>	Katherine Tumlinson UNC Chapel Hill
<b>REVIEW RETURNED</b>	13-Jul-2018

<b>GENERAL COMMENTS</b>	<p>I am very satisfied by the author responses to all reviewer comments. The authors have done a great job of responding to all reviewer feedback. I offer some minor (but important) copy-edits to a few of the responses/additions, in the attached file. Once these very minor changes are confirmed, I recommend this manuscript for publication.</p> <p>The reviewer provided a marked copy with additional comments. Please contact the publisher for full details.</p>
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<b>REVIEWER</b>	Joanna Cordero Consultant, Department of Reproductive Health and Research, World Health Organization  Research and communications consultant working on topics related to community engagement and social accountability. My work includes gathering health providers role and their perception of family planning and contraceptive service and information provision.
<b>REVIEW RETURNED</b>	25-Jul-2018

<b>GENERAL COMMENTS</b>	L147-148 “Those study participants who expressed willingness to participate in the study were provided with written informed consents before the start of the interviews.” – The wording is weirdly ambiguous. Was informed consent obtained or not? Perhaps word as “ Informed consent was obtained from each health provider individually who expressed willingness to participate before the interview started” Theme 2, starting L275: I think adding this theme made the results better structured. However, it seems that it has been written a bit hastily and there are a few minor grammatical errors that seeped in. The intro sentence needs to be clearer (L276-279). Table 1: Though it is good that the authors have added a table to summarize the guidelines, it is not very clear to me. The table seem to give information about one guideline: who developed it, the intended user and objectives. Does this mean that there is only one guideline in existence and this is the one the health providers were asked about? Perhaps giving the exact reference of that one guideline on top of the table will be helpful. Additional copy editing needed.
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## VERSION 2 – AUTHOR RESPONSE

Reviewer: 1 Katherine Tumlinson  
Institution and Country: UNC Chapel Hill, USA

I am very satisfied by the author responses to all reviewer comments. The authors have done a great job of responding to all reviewer feedback. I offer some minor (but important) copy-edits to a few of the responses/additions, in the attached file. Once these very minor changes are confirmed, I recommend this manuscript for publication.

Response: Thanks reviewer for your kind words and for copy-edits and we have incorporated your feedback accordingly. We have also made a thorough copy-edits throughout the revised manuscript.

Reviewer: 2 Joanna Cordero  
Institution and Country: Consultant, Department of Reproductive Health and Research, World Health Organization

1. L147-148 “Those study participants who expressed willingness to participate in the study were provided with written informed consents before the start of the interviews.” – The wording is weirdly ambiguous. Was informed consent obtained or not? Perhaps word as “Informed consent was obtained from each health provider individually who expressed willingness to participate before the interview started”

Response: We have revised the statement to avoid confusion. See lines 146-147: "Informed written consent was obtained from each study participant before the start of the interviews."

2. Theme 2, starting L275: I think adding this theme made the results better structured. However, it seems that it has been written a bit hastily and there are a few minor grammatical errors that seeped in. The intro sentence needs to be clearer (L276-279).

Response: We have now revised the section that introduces the theme. In lines 252-253, it reads: "Another theme arising from the interviews related to the scope of the guideline, content and currency which the FP information contained."

3. Table 1: Though it is good that the authors have added a table to summarize the guidelines, it is not very clear to me. The table seem to give information about one guideline: who developed it, the intended user and objectives. Does this mean that there is only one guideline in existence and this is the one the health providers were asked about? Perhaps giving the exact reference of that one guideline on top of the table will be helpful.

Response: In the current study, we considered one guideline, "National guideline for family planning services in Ethiopia", as it is the only available family planning guideline to guide family planning services delivery in Ethiopia. We have revised the manuscript accordingly, including the heading and content of table 1. We have also included citations for the table 1 heading.

4. Additional copy editing needed.

Response: we have done a thorough copy-editing throughout the manuscript.

#### VERSION 3 – REVIEW

<b>REVIEWER</b>	Joanna Cordero Consultant, Department of Reproductive Health and Research, World Health Organization, Switzerland  Currently conducting research in family planning.
<b>REVIEW RETURNED</b>	10-Oct-2018
<b>GENERAL COMMENTS</b>	The previous comments have been addressed satisfactorily. Many thanks to the authors.