

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Community-based newborn care utilization and associated factors in Geze Gofa rural district, south Ethiopia: a community-based cross-sectional study
AUTHORS	Gebremedhin, Tsegaye; Atnafu, Asmamaw; Dellie, Endalkachew

VERSION 1 – REVIEW

REVIEWER	Yoseph Merkeb Alamneh Debre Markos University, Ethiopia
REVIEW RETURNED	16-Mar-2020

GENERAL COMMENTS	<p>General Comments: The manuscript is well written; interesting writing style. However, it requires major revisions. For my detailed comments please see below:</p> <p>Specific Comments:</p> <p>1. Title: The title needs to be revised and made more appealing. The possible suggestion should be: “Community-based newborn care utilization and associated factors in Geze Gofa rural district, south Ethiopia: a community-based cross-sectional study”</p> <p>2. Abstract: This study's background didn't adequately support the need. Page 3, line 36–37: Why the factors associated with CBNC program utilization were not reported in the antepartum, intrapartum, and postpartum abstract sessions? Page 4, line 53: What are your standards for saying that the six-month recoil bias is short? What solutions should be taken to lower the bias in recoil?</p> <p>3. Introduction: The background of the study did not sufficiently support the need. This part is not correctly viewed as a good template for introducing the topic of the paper and illustrating the already current knowledge of the problem under study. That means, globally and nationally, it needs detailed explanations. In this section of your manuscript, you have to convince the reader why you want to undertake this research. What is the significance of research like this? There's a lot of similar research in different parts of the country, what gap did you identify to do your research? I propose that this section be revised to focus on the proper subject.</p> <p>4. Methods Please mention some of your predictor variables and all your outcome variables in the Method section. Page 6, line 92-93: Rewording. Study population: Here's an unclear description in the very long sentence. Check for clarity and for brevity. Use both shorter and clearer phrases.</p>
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	<p>Page 7, line 104: Why have you excluded the mothers who have lost their child? At what point if they lost whose baby you were excluding? Have you ruled out the mothers if they lost their baby after 2 months? Page 7, line 111: The total sample size is 403, but why did you only use 371 participants? Page 8, line 123; give the appropriate variable 'parity' category.</p> <p>5. Results Please put the prevalence in n (%) format and be consistent throughout the document. How percentages are reported remains inconsistent. No decimal places at times, 2 decimal places at the other times. Consider standardizing the whole to 1 decimal place. In Logistic Regression Analysis, how do you select a reference category? The "category" you choose as a reference will determine the way your results are inferred. So that your selection of references is not appropriate, and reconsider it.</p> <p>6. Discussion: It is very long and needs to be revised to save words and make it more attractive. The study's implications and benefits for society, health care organizations and policy-makers need to be elaborated. Throughout the text, this phrase or related phrases are frequently used: "..... due to ANC, institutional delivery and postnatal, continuum of maternal, newborn and child health services." First, I would not recommend the repetition of the same phrases. Secondly, I think you need to give much more detail on how these factors can influence your estimates ' differences. What you suggested that any of these factors may contribute to the study findings should be explained both why and how these factors could contribute and, if possible, provide references to support your argument.</p> <p>7. limitations: Please indicate all possible study limitations.</p> <p>8. Conclusion: This section has lost its focus and concludes with variables other than the main outcome.</p> <p>9. reference Avoid some of the outdated references and replace them with a recent one.</p>
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REVIEWER	Comfort Z. Olorunsaiye, Ph. D. Arcadia University, USA
REVIEW RETURNED	01-Apr-2020

GENERAL COMMENTS	<p>I would like to commend the authors for conceptualizing an important research study as this. I appreciate the opportunity to review this manuscript and to share my feedback on concerns and issues that need to be addressed.</p> <p>Overall, the manuscript is well-written and demonstrates a good amount of thoughtfulness on the part of the authors. However, this paper needs substantial editing in order to be readily understood by a diverse audience of readers.</p> <p>Introduction: 1. I believe the authors missed an important opportunity to highlight the significance of their research in the big picture of maternal, newborn and child health and wellbeing. Specifically, on page 6, lines 83-87, there is no reference to the knowledge gaps the authors seek to fill via this study. Also, they fail to discuss the</p>
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	<p>potential contributions of their findings to maternal, newborn and child health.</p> <p>Methods:</p> <p>2. Variables and measurement: Page 8 - variables and measurement: This section of the manuscript is poorly done. Variables are not described in enough detail for the study to be reproducible, and would need editing.</p> <p>a. Lines 119-126: there should be a description of how the exposure variables were defined and operationalized in the analysis. For example, how each of the variables listed? Were they treated as continuous variables, categorical variables, what are the categories, etc.?</p> <p>b. The description of the outcome variable should be improved. While it is clear that the main outcome variable is community-based newborn care program utilization, if the authors created a composite variable that included all or some of the service components listed from lines 128-132, or if they assessed each service component independently.</p> <p>c. The authors described several services that were, seemingly, not assessed in the analysis (e.g., newborn resuscitation, management and prevention of hypothermia, etc.). It is unclear why these were included in the section on variables and measurement if they were not analyzed. Therefore, it would be very helpful to clarify what specific services were included in the outcome measurement and how the outcome variable was created or operationalized.</p> <p>d. It is unclear why the variable "wealth index" was described alongside outcome variables. To my understanding, this was one of the exposure variables. This description should be moved to where other exposure variables are described, to improve the flow of information and coherence.</p> <p>3. Data collection tools and procedure: Page 9, lines 146-152:</p> <p>a. I expect to see a statement on ethical considerations and informed consent, unless if the journal requires these be provided only at the end of the paper?</p> <p>b. A statement should be included about the average duration of the interviews.</p> <p>Results</p> <p>4. Generally, the results section is very hard to read. While I commend the efforts of the authors to provide an in-depth description of their findings in the results narrative, the level of detail is too much and makes it difficult for the reader to keep track. Results should be pruned to highlight only key findings in each table.</p> <p>a. The table referenced in each subsection of the results should be clearly stated upfront, not at the end of the paragraph.</p> <p>b. Page 15, line 14: briefly state what is considered "early days after the birth."</p> <p>c. Page 15, lines 216-218: the statement is unclear and should be revised to aid understanding.</p> <p>d. Page 17, line 233: what do the authors mean by normal and overweight? If this is referring to the 2.5kg birth weight for normal birth weight, this should be stated and described in variables and measurements as well). Secondly, I would rather refer to babies born at above the 2.5kg reference weight as "above average weight" or "above 2.5kg", and not overweight as this could suggest a negative connotation.</p>
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	<p>Discussion</p> <p>5. Prior to triangulating their findings with others, I believe it would serve the reader well for the authors to briefly describe what the key findings in the first paragraph of the discussion (lines 275-277) mean. How do these coverage percentages compare to the national and regional averages? If there recent studies on these outcomes in the study area, how do the current findings compare to those?</p> <p>6. Page 22, lines 298-301: there is evidence suggesting that stronger and more resilient health systems may explain some of the discordance in the findings of the current study and others. This needs to be acknowledged in the discussion.</p> <p>7. Page 23, lines 313-314: I do not agree that sample size consideration is a plausible explanation in this regard. What was the sample size in the Egypt study compared to the current study? The results being compared to are percentages and not regression estimates.</p> <p>8. Page 24, lines 343-346 is unclear to me how distance to a health post could be a plausible explanation for lower odds of community-based newborn care among women who prefer to visit a hospital compared to health post. Hospitals should be farther away than health posts, yet these women would travel longer distances to a hospital. Moreover, the regression results do not support your explanation. There have to other more likely explanations, e.g., perceived quality of care. Since information was not collected on women's perception of the quality of care, I suggest the authors find other more plausible explanations from previous studies.</p> <p>9. What recommendations do the authors have for future studies? With the benefit of hindsight, what would they recommend future studies consider in this area of research?</p> <p>Conclusions and implications</p> <p>10. Page 25, lines 369-370: I do not see how constructing health facilities to nearby residents is a recommendation grounded in the study findings. From the results, distance is not a significant predictor of community-based newborn care program utilization, so why recommend constructing health facilities?</p>
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REVIEWER	Tina Slusher, MD University of Minnesota and Hennepin Healthcare, USA
REVIEW RETURNED	02-May-2020

GENERAL COMMENTS	<p>The findings of this study are important to distribute and could improve the approach to community based newborn care and follow-up and could impact the survival of neonates and many other countries especially in low and middle income countries. However the paper needs to be read and rewritten with the help of someone whose primary language is English if the author message is to be clearly presented, understood, and acted upon.</p> <p>Line 20 A randomly selected 371 recently delivered women ---- wording awkward---probably should read Three-hundred seventy-one recently delivered women were randomly selected</p> <p>Line 24 reword used to declare the associated factors-meaning not clear</p> <p>Lines 26-32. Awkwardly worded. See below as a suggestion</p> <p>Results: The findings show that the overall utilization of the CBNC program among recently delivered women and their newborns was</p>
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	<p>37.5% (95% CI: 32.6-42.6). Factors associated with utilization of CBNC program included :women who attended elementary school (AOR: 1.76, 95% CI: 1.01-3.07), college and above (AOR: 3.71, 95% CI: 1.12-12.24), farmer women (AOR: 0.35, 95% CI: 0.16-0.79), lowest wealth status (AOR: 3.76, 95% CI: 1.65-8.54) middle quantile of wealth status (AOR: 1.96, 95% CI: 1.01-3.76, and preference for visiting hospital if they faced any danger sign (AOR: 0.29, 95% CI: 0.11-0.78).</p> <p>Lines 34-37—Delete repeating exactly the same things you just said in the results. Instead focus on your message in the conclusion.</p> <p>Use of the community-based newborn care program in the study area was surprisingly low. In order to increase utilization and potentially improve outcomes of these neonates we need to increase awareness in the community.....</p> <p>Line 74. I think you mean--- while 86% did not receive postpartum</p> <p>Line 80 Delete But just say Two-thirds,,,,,</p> <p>Line 99 gave birth in the district in 2016-2017....</p> <p>Line 101 (September 1, 2016-February 28, 2017)</p> <p>Line 103 Delete but</p> <p>Line 104- babies, critically ill mothers, and mothers unable to respond to the interview..</p> <p>Line 109-111 must be reworded to clarify meaning</p> <p>Line 114 of mothers who gave birth in the last six months. The final study participants were selected.....</p> <p>Line 116-117 Don't think you need the sentence "Then having the name....</p> <p>Lines 151-152 supervisors checked the data.....</p> <p>Line 157 (5% of the sample size)</p> <p>Line 158 and has similar characteristics</p> <p>Lines 175-180. Religious preference for 46.4% and 7.5% of the women were Protestant and Muslim respectively; 42.5% attended elementary school while 5.9% attended college or above; 72.5% were housewives and 4.0% were government employees; and 67% were Gofa ethnicity. Additionally, the mean parity was 3.5 (SD ± 1.9) and approximately 30% and 14.6% were in the middle and rich wealth status respectively (Table 1).</p> <p>Line 189 women responded that there is a.....</p> <p>Line 191 delete were</p> <p>Line 201 delete were</p> <p>Line 217-218 13 (9.4%) have something other than ointment applied after the cord was cut. Also what kind of ointment was applied?</p> <p>Line 229 delete were</p> <p>Line 245-244 utilized the full of the community-based newborn care program while the rest had not received the full program</p> <p>Line 259 were 1.7 times more likely to utilize</p> <p>Line 260 were 3.7 times more likely to utilize. Continue similar wording change through line 269</p> <p>Line 276 components</p> <p>Line 282. A study in Ghana found that</p> <p>Line 284 while another study in Ghana showed</p> <p>Line 289 Delete Moreover</p> <p>Line 294 Out study. Results however were lower</p> <p>Line 362 as measured by</p> <p>Work on working throughout the Discussion</p> <p>Conclusion--- see comments in abstract conclusion.</p>
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	<p>The findings of this study are important to distribute and could improve the approach to community based newborn care and follow-up and could impact the survival of neonates and many other countries especially in low and middle income countries. However the paper needs to be read and rewritten with the help of someone whose primary language is English if the author message is to be clearly presented, understood, and acted upon. Line 20 A randomly selected 371 recently delivered women ---- wording awkward---probably should read Three-hundred seventy-one recently delivered women were randomly selected Line 24 reword used to declare the associated factors-meaning not clear</p> <p>Lines 26-32. Awkwardly worded. See below as a suggestion</p> <p>Results: The findings show that the overall utilization of the CBNC program among recently delivered women and their newborns was 37.5% (95% CI: 32.6-42.6). Factors associated with utilization of CBNC program included :women who attended elementary school (AOR: 1.76, 95% CI: 1.01-3.07), college and above (AOR: 3.71, 95% CI: 1.12-12.24), farmer women (AOR: 0.35, 95% CI: 0.16-0.79), lowest wealth status (AOR: 3.76, 95% CI: 1.65-8.54) middle quantile of wealth status (AOR: 1.96, 95% CI: 1.01-3.76, and preference for visiting hospital if they faced any danger sign (AOR: 0.29, 95% CI: 0.11-0.78).</p> <p>Lines 34-37—Delete repeating exactly the same things you just said in the results. Instead focus on your message in the conclusion.</p> <p>Use of the community-based newborn care program in the study area was surprisingly low. In order to increase utilization and potentially improve outcomes of these neonates we need to increase awareness in the community.....</p> <p>Line 74. I think you mean--- while 86% did not receive postpartum Line 80 Delete But just say Two-thirds,,,,, Line 99 gave birth in the district in 2016-2017.... Line 101 (September 1, 2016-February 28, 2017) Line 103 Delete but Line 104- babies, critically ill mothers, and mothers unable to respond to the interview..</p> <p>Line 109-111 must be reworded to clarify meaning Line 114 of mothers who gave birth in the last six months. The final study participants were selected..... Line 116-117 Don't think you need the sentence "Then having the name....</p> <p>Lines 151-152 supervisors checked the data..... Line 157 (5% of the sample size) Line 158 and has similar characteristics</p> <p>Lines 175-180. Religious preference for 46.4% and 7.5% of the women were Protestant and Muslim respectively; 42.5% attended elementary school while 5.9% attended college or above; 72.5% were housewives and 4.0% were government employees; and 67% were Gofa ethnicity. Additionally, the mean parity was 3.5 (SD ± 1.9) and approximately 30% and 14.6% were in the middle and rich wealth status respectively (Table 1). Line 189 women responded that there is a..... Line 191 delete were Line 201 delete were Line 217-218 13 (9.4%) have something other than ointment applied after the cord was cut. Also what kind of ointment was applied?</p>
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	<p>Line 229 delete were</p> <p>Line 245-244 utilized the full of the community-based newborn care program while the rest had not received the full program</p> <p>Line 259 were 1.7 times more likely to utilize</p> <p>Line 260 were 3.7 times more likely to utilize. Continue similar wording change through line 269</p> <p>Line 276 components</p> <p>Line 282. A study in Ghana found that</p> <p>Line 284 while another study in Ghana showed</p> <p>Line 289 Delete Moreover</p> <p>Line 294 Out study. Results however were lower</p> <p>Line 362 as measured by</p> <p>Work on working throughout the Discussion</p> <p>Conclusion--- see comments in abstract conclusion.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1 (Yoseph Merkeb Alamneh)

1. Title:

The title needs to be revised and made more appealing. The possible suggestion should be:

“Community-based newborn care utilization and associated factors in Geze Gofa rural district, south Ethiopia: a community-based cross-sectional study”

Authors response: Dear reviewer, thank you for your suggestion, and we have made the appropriate changes as recommended. Please see the clean version of the revised manuscript.

2. Abstract:

This study's background didn't adequately support the need.

Authors response: Thank you for your comments. The journal guideline does not have a background contents in the abstract section, but we have included background sentences that support the need for the study in the Abstract section. Please see on page 2, line 15-17 of the clean version of the revised manuscript.

Page 3, line 36–37: Why the factors associated with CBNC program utilization were not reported in the antepartum, intrapartum, and postpartum abstract sessions?

Authors response: Dear reviewer, thank you for your comments. The associated factors reported were done for the overall utilization of CBNC, which consists of all the three-period (antepartum, intrapartum, and postpartum). So, we have reported the factors associated with the utilization of CBNC.

Page 4, line 53: What are your standards for saying that the six-month recall bias is short? What solutions should be taken to lower the bias in recall?

Authors response: Thank you for your critical insights, but to say this, we have compared from other studies which used to assess the utilization of the services for the last one year and above. Few studies which were included in our background and discussion section were assessed the newborn care services utilization a year before retrospectively, and others survey used five years before, which was cited in the background and discussion. Besides, to overcome the recall bias;

1. We used a well-defined and clear research question to increase their understanding
2. We used a well trained and experienced data collectors
3. The interview took sufficient time for adequate recall of long-term memory

Please see the actions taken to minimize the limitations of the study on the main contents of the clean version of the revised manuscript on page 25, lines 379-386

3. Introduction:

The background of the study did not sufficiently support the need. This part is not correctly viewed as a good template for introducing the topic of the paper and illustrating the already current knowledge of the problem under study. That means, globally and nationally, it needs detailed explanations. In this section of your manuscript, you have to convince the reader why you want to undertake this research. What is the significance of research like this? There's a lot of similar research in different parts of the country, what gap did you identify to do your research? I propose that this section be revised to focus on the proper subject.

Authors response: Thank you for this comment. These details have been added to the introduction. Please see pages 5-7, line 54-106 of the clean version of the revised manuscript.

4. Methods

Please mention some of your predictor variables and all your outcome variables in the Method section.

Authors response: Thank you for your comments. We have mentioned the predictor variables with their response, and the outcome variable was defined clearly, please see on page 9-10, lines 157-165 of the clean version of the revised manuscript.

Page 6, line 92-93: Rewording. Study population: Here's an unclear description in the very long sentence. Check for clarity and for brevity. Use both shorter and clearer phrases.

Authors response: Thank you for your observation. We have revised it as per the comments; please see pages 7-8, lines 109-120 of the clean version of the revised manuscript.

Page 7, line 104: Why have you excluded the mothers who have lost their child? At what point if they lost whose baby you were excluding? Have you ruled out the mothers if they lost their baby after 2 months?

Authors response: Dear reviewer, thank you for your critical observation. We have excluded those mothers who lost their child before the age of two months because to assess the utilization of the full components of the program, the child/young infants-age must be two completed months. Accordingly, we have clearly stated the exclusion and inclusion criteria, kindly see page 8, lines 121-124 of the clean version of the revised manuscript.

Page 7, line 111: The total sample size is 403, but why did you only use 371 participants?

Authors response: Thank you for your comments. Initially, the calculated sample size was 403 using a single population proportion formula, but during the actual data collection, 371 mothers were responded to the interview, which makes the response rate 92.1%. The rest were non-respondents. The response rate was reported at the result section; please see on page 12, lines 211-212.

Page 8, line 123; give the appropriate variable 'parity' category.

Authors response: Thank you for your observation. We have revised the predictor variables. Please see page 10, line 162 of the clean version of the revised manuscript.

5. Results

Please put the prevalence in n (%) format and be consistent throughout the document. How percentages are reported remains inconsistent. No decimal places at times, 2 decimal places at the other times. Consider standardizing the whole to 1 decimal place.

Authors response: Thank you for your comments. We have revised it accordingly; please see the result sections of the clean version of the manuscript on pages 12-19, 208-291.

In Logistic Regression Analysis, how do you select a reference category? The "category" you choose as a reference will determine the way your results are inferred. So that your selection of references is not appropriate, and reconsider it.

Authors response: Thank you for your comments. You are right; the selection of the reference determines the results to infer. In our regression, we have used the most exposure category for the outcome variable as a reference category, except the ethnicity (used high frequency). Accordingly, to this we have done our regression; please see the regression table (Table 5) again on pages 19-21, of the clean version of the revised manuscript.

6. Discussion:

It is very long and needs to be revised to save words and make it more attractive. The study's implications and benefits for society, health care organizations and policy-makers need to be elaborated. Throughout the text, this phrase or related phrases are frequently used: "..... due to ANC, institutional delivery and postnatal, continuum of maternal, newborn and child health services." First, I would not recommend the repetition of the same phrases. Secondly, I think you need to give much more detail on how these factors can influence your estimates' differences. What you suggested that any of these factors may contribute to the study findings should be explained both why and how these factors could contribute and, if possible, provide references to support your argument.

Authors response: Thank you so much for your concern and the recommendations. We have addressed the issue; please see the clean version of the revised manuscript on pages 21-25, lines 297-377.

7. limitations:

Please indicate all possible study limitations.

Authors response: Thank you for your comments. We have revised the limitations; please see the clean version of the revised manuscript on page 25, lines 379-386.

8. Conclusion:

This section has lost its focus and concludes with variables other than the main outcome.

Authors response: Thank you so much for your observations. We have addressed the issue; see the clean version of the revised manuscript on page 25, lines 388-395.

9. reference

Avoid some of the outdated references and replace them with a recent one.

Authors response: Thank you for your observation. We have included the most recent references to strengthen the background and discussion section of our manuscript; please see the clean version of the revised manuscript.

Reviewer 2 (Comfort Z. Olorunsaiye, Ph. D.)

Introduction:

1. I believe the authors missed an important opportunity to highlight the significance of their research in the big picture of maternal, newborn and child health and wellbeing.

Specifically, on page 6, lines 83-87, there is no reference to the knowledge gaps the authors seek to fill via this study. Also, they fail to discuss the potential contributions of their findings to maternal, newborn and child health.

Authors response: Dear reviewer, thank you so much for your constructive comments. We have addressed the issue, please see the introduction section of the clean version of the manuscript on pages 5-7, lines 54-106.

Methods:

2. Variables and measurement: Page 8 - variables and measurement: This section of the manuscript

is poorly done. Variables are not described in enough detail for the study to be reproducible, and would need editing.

a. Lines 119-126: there should be a description of how the exposure variables were defined and operationalized in the analysis. For example, how each of the variables listed? Were they treated as continuous variables, categorical variables, what are the categories, etc.?

Authors response: Thank you for your comments. We have revised the variables and measurements section as per the comments and addressed it; please see the clean version of the revised manuscript on pages 8-10, lines 136-167.

b. The description of the outcome variable should be improved. While it is clear that the main outcome variable is community-based newborn care program utilization, if the authors created a composite variable that included all or some of the service components listed from lines 128- 132, or if they assessed each service component independently.

Authors response: Thank you so much for your comments. The outcome variable (community-based newborn care utilization) was measured using the composites of the five program components. Those components are early identification of pregnancy, receiving focused antenatal care (ANC), institutional delivery, postnatal care (PNC) for mother and child within two months of the postpartum period, and identification and management of sick newborns at community level up to the age of two months. Accordingly, if the mothers received all the five components of the program, we considered them as "utilized" the community-based newborn care program; otherwise as "not utilized". Besides, the definitions of each component were addressed in the variables and measurement section; please see the clean version on pages 8-9, lines 136-142.

c. The authors described several services that were, seemingly, not assessed in the analysis (e.g., newborn resuscitation, management and prevention of hypothermia, etc.). It is unclear why these were included in the section on variables and measurement if they were not analyzed. Therefore, it would be very helpful to clarify what specific services were included in the outcome measurement and how the outcome variable was created or operationalized.

Authors response: Dear reviewer, thank you for your comments. We have revised those variables and we put the clear definitions of the outcome variables and its components used to measure it. Please see the clean version of the revised manuscript on pages 8-9, lines 136-150.

d. It is unclear why the variable "wealth index" was described alongside outcome variables. To my understanding, this was one of the exposure variables. This description should be moved to where other exposure variables are described, to improve the flow of information and coherence.

Authors response: Thank you for your comments. We have removed it to the exposure variables as per the recommendations, please see the clean version of the revised manuscript on pages 9-10, lines 157-167.

3. Data collection tools and procedure: Page 9, lines 146-152:

a. I expect to see a statement on ethical considerations and informed consent, unless if the journal requires these be provided only at the end of the paper?

b. A statement should be included about the average duration of the interviews.

Authors response: Thank you for your critical comments. We have included a statement on ethical considerations and we informed consent. Please see the clean version of the revised manuscript on pages 11-12, lines 201-207.

Results

4. Generally, the results section is very hard to read. While I commend the efforts of the authors to provide an in-depth description of their findings in the results narrative, the level of detail is too much and makes it difficult for the reader to keep track. Results should be pruned to highlight only key findings in each table.

a. The table referenced in each subsection of the results should be clearly stated upfront, not at the end of the paragraph.

Authors response: Dear reviewer, thank you for your comments, we have revised the results and addressed the issue as per the suggestions. Besides, all tables referenced were stated upfront. Please see the results section on pages 12-19, lines 208-291 of the clean version of the revised manuscript.

b. Page 15, line 14: briefly state what is considered "early days after the birth."

Authors response: Thank you for your comments. Early days after the birth in our study was used to show the first seven days; please see the clean version of the revised manuscript on page 16, line 249.

c. Page 15, lines 216-218: the statement is unclear and should be revised to aid understanding.

Authors response: Dear reviewer, thank you for your suggestions. We have revised it; please see the clean version of the revised manuscript on page 16, lines 250-251

d. Page 17, line 233: what do the authors mean by normal and overweight? If this is referring to the 2.5kg birth weight for normal birth weight, this should be stated and described in variables and measurements as well).

Secondly, I would rather refer to babies born at above the 2.5kg reference weight as "above average weight" or "above 2.5kg", and not overweight as this could suggest a negative connotation.

Authors response: Dear reviewer, thank you for your comments. We have revised as per the suggestions and categorized the birth weight as;

1. Small: if the baby weighed below 2.5 kg,
2. Average: if the baby weighed 2.5-4.0 kg,
3. Large: if the baby weighed above 4.0 kg

Please see on page 9, lines 155-156 of the method section, and page 17, lines 264-265 of the result section on the clean version of the revised manuscript.

Discussion

5. Prior to triangulating their findings with others, I believe it would serve the reader well for the authors to briefly describe what the key findings in the first paragraph of the discussion (lines 275-277) mean. How do these coverage percentages compare to the national and regional averages? If there recent studies on these outcomes in the study area, how do the current findings compare to those?

Authors response: Thank you for your comments. We have revised as per your comments; please see the clean version of the revised manuscript on page 21-22, lines 297-323.

6. Page 22, lines 298-301: This needs to be acknowledged in the discussion.

Authors response: Thank you so much for your suggestion. The issue addressed, please see the clean version of the revised manuscript on page 22, lines 318-323.

7. Page 23, lines 313-314: I do not agree that sample size consideration is a plausible explanation in this regard. What was the sample size in the Egypt study compared to the current study? The results being compared to are percentages and not regression estimates.

Authors response: Dear reviewer, thank you so much for your constructive comments. You are right sample size is not a possible explanation, and we have addressed the issue. Please see the clean version of the revised manuscript on page 23, lines 335-338.

8. Page 24, lines 343-346 is unclear to me how distance to a health post could be a plausible explanation for lower odds of community-based newborn care among women who prefer to visit a hospital compared to health post. Hospitals should be farther away than health posts, yet these

women would travel longer distances to a hospital. Moreover, the regression results do not support your explanation. There have to be other more likely explanations, e.g., perceived quality of care. Since information was not collected on women's perception of the quality of care, I suggest the authors find other more plausible explanations from previous studies.

Authors response: Thank you for your observations. We have revised the issue and addressed it. Please see on pages 24-25, lines 367-377.

9. What recommendations do the authors have for future studies? With the benefit of hindsight, what would they recommend future studies consider in this area of research?

Authors response: Thank you for your comments. We have included the recommendations for further studies; please see the clean version of the revised manuscript on pages 25-26, lines 395-398.

Conclusions and implications

10. Page 25, lines 369-370: I do not see how constructing health facilities to nearby residents is a recommendation grounded in the study findings. From the results, distance is not a significant predictor of community-based newborn care program utilization, so why recommend constructing health facilities?

Authors response: Dear reviewer, thank you for your constructive comments. You are right constructing health facilities is not the correct recommendation; rather we want to recommend that availing/providing essential maternal and newborn care services at the community level (health posts), since the health posts were constructed nearby for the majority of the rural dwellers. As per your comments we have revised and addressed the issue for more clarity, please see page 25, lines 392-395.

Reviewer 3 (Tina Slusher, MD)

However, the paper needs to be read and rewritten with the help of someone whose primary language is English if the author message is to be clearly presented, understood, and acted upon.

Authors response: Dear reviewer, thank you so much for your observations. The manuscript was reviewed by fluent English editor to improve the English language and we have done extensively minor editing, manuscript text improvements, abbreviations consistency and punctuation. Please see the clean version of the revised manuscript.

Line 20 A randomly selected 371 recently delivered women ----wording awkward---probably should read Three-hundred seventy-one recently delivered women were randomly selected

Authors response: Thank you for your suggestion. We have addressed the issue; please see the clean version of the revised manuscript on page 2, lines 22-24.

Line 24 reword used to declare the associated factors-meaning not clear

Authors response: Thank you for your comments. We have addressed the issue; please see the clean version of the revised manuscript on page 2, lines 27-28.

Lines 26-32. Awkwardly worded. See below as a suggestion

Authors response: Thank you for your suggestions. We have addressed the issue.

Results: The findings show that the overall utilization of the CBNC program among recently delivered women and their newborns was 37.5% (95% CI: 32.6-42.6). Factors associated with utilization of CBNC program included :women who attended elementary school (AOR: 1.76, 95% CI: 1.01-3.07), college and above (AOR: 3.71, 95% CI: 1.12-12.24), farmer women (AOR: 0.35, 95% CI: 0.16-0.79), lowest wealth status (AOR: 3.76, 95% CI: 1.65-8.54) middle quantile of wealth status (AOR: 1.96, 95% CI: 1.01-3.76, and preference for visiting hospital if they faced any danger sign (AOR: 0.29, 95%

CI: 0.11-0.78).

Authors response: Thank you for your suggestions. We have revised it accordingly; please see the clean version of the revised manuscript on pages 2-3, lines 30-36.

Lines 34-37—Delete repeating exactly the same things you just said in the results. Instead focus on your message in the conclusion.

Use of the community-based newborn care program in the study area was surprisingly low. In order to increase utilization and potentially improve outcomes of these neonates we need to increase awareness in the community.....

Authors response: Thank you so much for your comments. We have addressed the issue; please see the clean version of the revised manuscript on page 3, lines 37-41.

Line 74. I think you mean--- while 86% did not receive postpartum

Authors response: Thank you for your comments. Yes, you are right, 86% did not receive postpartum; please see the clean version of the revised manuscript on page 6, line 90

Line 80 Delete But just say Two-thirds,,,,,

Authors response: Thank you. We have addressed the issue, see on page 5, lines 63-65

Line 99 gave birth in the district in 2016-2017....

Authors response: Thank you so much. We have addressed the issue on page 8, line 118 of the clean version of the revised manuscript.

Line 101 (September 1, 2016-February 28, 2017)

Authors response: Thank you so much. We have addressed the issue, please see on page 8, line 119 of the clean version of the revised manuscript.

Line 103 Delete but

Authors response: Thank you, we have removed it, see the on page 8, lines 122

Line 104- babies, critically ill mothers, and mothers unable to respond to the interview.

Response: Thank you for your comments. We have addressed the issue as per the suggestions, please see on page 8, lines 123-124 of the clean version of the revised manuscript.

Line 109-111 must be reworded to clarify meaning

Authors response: Thank you for your comment. We have reworded it for clarity, please see on page 8, lines 127-129 of the clean version of the revised manuscript.

Line 114 of mothers who gave birth in the last six months. The final study participants were selected....

Authors response: Thank you so much for the suggestions. We have addressed the issue accordingly. See page 8, lines 132-134 of the clean version of the revised manuscript.

Line 116-117 Don't think you need the sentence "Then having the name....

Authors response: Thank you for your concern, we have used the household number other than the name. Please see the clean version of the manuscript on page 8, line 134.

Lines 151-152 supervisors checked the data.....

Authors response: Thank you for your comments, and the issue is addressed. Please see page 10, lines 173-174.

Line 157 (5% of the sample size)

Authors response: Thank you, and the issue is addressed. Please see page 10, line 179

Line 158 and has similar characteristics

Authors response: Thank you for your suggestions and we have addressed accordingly. Please see on page 10, line 180.

Lines 175-180. Religious preference for 46.4% and 7.5% of the women were Protestant and Muslim respectively; 42.5% attended elementary school while 5.9% attended college or above; 72.5% were housewives and 4.0% were government employees; and 67% were Gofa ethnicity.

Additionally, the mean parity was 3.5 (SD \pm 1.9) and approximately 30% and 14.6% were in the middle and rich wealth status respectively (Table 1).

Authors response: Thank you so much for your suggestions and the issue was addressed accordingly. Kindly check it on page 12, lines 213-217.

Line 189 women responded that there is a.....

Authors response: Thank you so much. We have edited it, please see page 14, line 226.

Line 191 delete were

Authors response: Thank you. We have deleted it, please see on page 14, line 228.

Line 201 delete were

Authors response: Thank you for your suggestions. We have edited it, please see page 14, line 239.

Line 217-218 13 (9.4%) have something other than ointment applied after the cord was cut. Also, what kind of ointment was applied?

Authors response: Thank you for your comments. In our study "something other than ointment applied" refers to a locally available material like butter, dung, and others. We have included/define it, please see on page 16, line 251.

Line 229 delete were

Authors response: Thank you. We have deleted it, please see on page 17, line 261

Line 245-244 utilized the full of the community-based newborn care program while the rest had not received the full program

Authors response: Thank you for your suggestions. We have edited it, please see on page 18, line 274-275.

Line 259 were 1.7 times more likely to utilize

Authors response: Thank you for comments. We have edited it, please see on page 19, line 284

Line 260 were 3.7 times more likely to utilize. Continue similar wording change through line 269

Authors response: Thank you so much. We have edited all, please see on page 19, lines 283-291.

Line 276 components

Authors response: Thank you for your comments. We have edited it, please see on page 21, line 298

Line 282. A study in Ghana found that

Authors response: Thank you for your suggestions. We have edited it, please see page 21, line 303.

Line 284 while another study in Ghana showed

Authors response: Thank you. We have edited it, please see page 21, line 304

Line 289 Delete Moreover

Authors response: Thank you. We have edited it, please see page 21, line 305

Line 294 Out study. Results however were lower

Authors response: Thank you for your suggestions. We have edited it, please see page 22, line 316

Line 362 as measured by

Work on working throughout the Discussion

Authors response: Thank you so much for your observations. We have revised the discussion accordingly, please see page 21-25, lines 297-377

Conclusion--- see comments in abstract conclusion.

Authors response: Thank you for your suggestions. We have edited it, please see pages 25-26, lines 388-398

VERSION 2 – REVIEW

REVIEWER	Yoseph Merkeb Alamneh Debre Markos University, Ethiopia
REVIEW RETURNED	09-Jun-2020

GENERAL COMMENTS	Nearly all of the recommendations I provided in the first version were implemented by authors. I have only a few concerns about the discussion section; it's lacking in brevity. Finally, I invite you to consider this section and avoid repetition of words , phrases and comparisons (e.g. use different studies instead of more than twice using one study).
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REVIEWER	Comfort Z. Olorunsaiye, PhD Arcadia University, USA
REVIEW RETURNED	22-Jun-2020

GENERAL COMMENTS	he authors did a great job addressing my concerns and the manuscript is very much improved. I have no further comments.
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VERSION 2 – AUTHOR RESPONSE

Reviewer 1(Yoseph Merkeb Alamneh) comments

#1. Nearly all of the recommendations I provided in the first version were implemented by authors. I have only a few concerns about the discussion section; it's lacking in brevity. Finally, I invite you to consider this section and avoid repetition of words, phrases and comparisons (e.g. use different studies instead of more than twice using one study).

Author response: Dear reviewer, thank you very much for your comments which is very helpful for the improvement of our works and we have learnt a lot from the comments that you provided. We have addressed the issues on the discussion section as per the comments; please see the revised version of the manuscript on pages 21-24, lines 295-371.

Reviewer 2 (Comfort Z. Olorunsaiye, Ph. D.)

#1. He authors did a great job addressing my concerns and the manuscript is very much improved. I

have no further comments.

Author replay: Dear reviewer, would like to say thank you for reviewing our manuscript once again.