

Review report

Final title: [Patterns of maternal healthcare use among the urban poor of Bangladesh: A cross-sectional survey](#)  
Title at submission: Patterns of public and private maternal healthcare use among the urban poor of Bangladesh: cross-sectional survey  
Submission date: 4 Sep 2024  
Revised submission: 21 Feb 2025  
Accepted: 21 Feb 2025

Reviewer F: Pramita Shrestha, ORCID: [00000-0003-4039-5118](#)

<b>Overview</b> This study investigates maternal healthcare utilization among women living in urban slums in Dhaka and Gazipur, Bangladesh, using a cross-sectional survey. Findings show low uptake of essential maternal services, with significant geographical and educational disparities. While 40% of women had four ANC check-ups, 58% delivered with skilled attendants, and 57% received PNC within two days, many women relied on private delivery care, resulting in high out-of-pocket costs. The study highlights the need for improved access to affordable, high-quality maternal healthcare, addressing women's awareness, decision-making, and service availability to reduce barriers, particularly in Gazipur.	
1. Comment	Is the title appropriate? Yes the author should mention "A" before cross-sectional survey
Response	As per suggestion added "A" before cross-sectional survey in title.
2. Comment	Does the abstract provide a complete and accurate description of the content of the article? Yes The abstract could clarify the term "ANC" and "PNC" by expanding them at first use for broader accessibility.
Response	As per suggestion the term "ANC" and "PNC" has been expanded in line numbers 37-38.
3. Comment	A more detailed explanation of the study's limitations and the specific statistical methods used could add transparency and depth.
Response	As per suggestion, statistical methods has been added in line numbers 33-35. We have not added limitations in the abstract but rather in the Discussion section.
4. Comment	The geographical findings (e.g., low access in Gazipur) could be better elaborated to highlight the implications for interventions.
Response	As per suggestion, geographical findings has been added in line numbers 40-41.
5. Comment	Are the study objective(s) clearly stated and logical? No Need elaboration in the objective statements, may be following SPECIFIC pattern will be more informative
Response	As per suggestion, study objective has been modified in line number 100-102.
6. Comment	Is the rationale/justification for conducting the study clear? No Limited Focus on Private Sector Reliance; the introduction briefly touches upon the patchy provision of government health services in urban areas but could benefit from further elaboration on the systemic issues (e.g., resource allocation, policy implementation) that may hinder access to affordable care; The connection between the study objectives and the rationale is somewhat implicit. Strengthening the link between the identified gaps in knowledge and the research objectives would make the rationale clearer.
Response	Thank you for the suggestion. However, we have now updated the study title and objective as per "reviewer G" suggestion. In this manuscript we put more focus on exploration of in general maternal health care service uptake instead of focusing on service uptake from public and private facilities.
7. Comment	Are the methods described in sufficient detail so that the study could be reproduced? Yes Sampling Process: Clarify how the random sample was selected from the HDSS population and if any stratification or clustering methods were used in the sampling process.
Response	As per suggestion, study sample selection has been modified in line numbers 113-115.
8. Comment	Outcome Definitions: Provide more detail on how the content of ANC visits was assessed (e.g., key aspects such as blood pressure measurement, iron supplementation, counseling).
Response	As per suggestion, how the content of ANC visits was assessed has been added in line number 126-128.
9. Comment	Potential Confounding Factors: Elaborate on how potential confounders were handled in the analysis, including whether multivariable models were used to control for confounding factors.
Response	As per suggestion statistical analysis has been updated mentioning of multivariate analysis in line number 141-145.
10. Comment	Satisfaction Measures: Provide information on the development or validation of the satisfaction measures used in the survey.
Response	Thank you for the suggestion. However, we have now updated the study title and objective as per "reviewer G". In this manuscript we put more focus on exploration of in general maternal health care service uptake instead of focusing on service satisfaction from UPHC. This portions now have been excluded from the manuscript.

11. **Comment** Data Cleaning and Analysis: Include more specific details about how missing data, outliers, or inconsistencies were handled, such as if imputations were used or cases were excluded.  
**Response** As per suggestion, how inconsistencies were handled has been added in line number 119-120.
12. **Comment** Are statistics used appropriately and described fully?  
Yes Mention descriptive statistics; mention about reliability and validity of the data.  
**Response** As per suggestion, mentioned descriptive statistics; mentioned about reliability and validity of the data in line number 140-141.
13. **Comment** Is the Discussion section critical and comprehensive about the main message of the manuscript?
  - While recall bias is acknowledged, the discussion could provide more detail on how this may have affected specific outcomes or questions, particularly given the retrospective nature of data collection. Suggestions for how to mitigate recall bias in future studies could also be beneficial
  - The discussion highlights the inability to establish causal relationships due to the cross-sectional design. It would be helpful to include more discussion on potential strategies to overcome this limitation
  - The discussion could expand on how sub group analysis affects the robustness of the findings and explore alternative methods, such as stratified sampling, to ensure more reliable results for smaller sub-groups**Response** Thank you for the suggestion. However, due to world limit in this manuscript we put more focus on exploration of in general maternal health care service uptake.
14. **Comment** Are the conclusions drawn supported by the results/ data?  
Yes The conclusion mentions several factors, but more specific examples or data points could be used to elaborate on how these factors were identified in the study  
**Response** As per suggestion, we have updated result section and also modified conclusion section.
15. **Comment** Are the references appropriate in number and up-to-date?  
No Revise references  
**Response** As per suggestion, we have added three more references ref#15, ref#19, ref#20.
16. **Comment** Is the standard of English acceptable for publication?  
No Need proof reading before publication  
**Response** As per suggestion we have edited and corrected some subject verb agreement error in the manuscript.

**Reviewer G:** Mst. Khaleda Akter, ORCID: [0000-0001-8857-1649](https://orcid.org/0000-0001-8857-1649)

#### Overview

The manuscript was developed based on a cross-sectional study which was conducted in Dhaka North, Dhaka South and Gazipur city corporations from 12 to 26 April 2022 where icddr,b was operating a high-quality Health and Demographic surveillance system (HDSS). The target sample size was 641 but study assessed maternal healthcare utilization among 635 women in Dhaka North, Dhaka South, and Gazipur using a cross-sectional survey. Key findings show that only 40% received four ANC visits, 58% had skilled birth attendants, and 57% accessed timely postnatal care. Service uptake was particularly low among uneducated women, and access disparities were notable in Gazipur.

1. **Comment** Is the title appropriate?  
No The manuscript talks more about maternal health care use among urban poor in Bangladesh and patterns of public vs private maternal healthcare services is merely differentiated. Therefore, authors could think of more appropriate title that reflects the findings/analysis  
**Response** Thank you for the suggestion. We have now put more focus on exploration of in general maternal health care service uptake. Hence updated the title and objective.
2. **Comment** Does the abstract provide a complete and accurate description of the content of the article?  
No Line No. 30-33: The author could mention about sample size and study duration to make it complete.  
**Response** As per suggestion, we have now mentioned about sample size and study duration in line numbers 32-22.
3. **Comment** Are the methods described in sufficient detail so that the study could be reproduced?  
No There was no information about ethics of data collection i.e. type of consent obtained.  
**Response** As per suggestion, we have now added Ethical consideration section in line numbers 134-137.
4. **Comment** Line 130-131: Could you please explain in details how inconsistencies were dealt?  
**Response** As per suggestion, how inconsistencies were handled has been added in line number 119-120.
5. **Comment** Line 133-155: The authors may refer to standard questionnaire if they adapted any for this Survey.  
**Response** As per suggestion, reference to standard questionnaire which have been adapted for this Survey has been added in line number 122-124.
6. **Comment** Are statistics used appropriately and described fully?  
No Line 175- 222: findings on antenatal care during last pregnancy, place and mode of delivery, post-natal care during last pregnancy were not presented in any tables. Authors need to include the analysis in as a table.  
**Response** Thanks to the reviewer for the suggestion. The percentages are presented in text and in the last row of Table 1 and Table 3. However, due to bindings couldn't add separate table to present the percentages.
7. **Comment** Line 207-208: Table No.2 does not have the providers information rather it contains different analysis on ANC.  
**Response** As per suggestion corrected the error.

8. **Comment** Line 224-229: Please refer to the table number for findings presented on factors influencing access to maternal healthcare.  
**Response** As per suggestion referred the respective tables in line number 181, 188 and 197
9. **Comment** Are the table(s) and figure(s) clear and appropriate to address the objective(s)?  
No 'n' is missing in table 2, 3, and 4.  
Line 458-459: Please mention the number of the participants took ANC  
Line 461-463: Please mention number of delivery took place in different facilities  
Line 465-467: Please mention the number of women who took PNC  
**Response** Thank you for the suggestions. As per suggestion in Table 1, 2 and 3 (the first table has been removed, so the table number are now changed) we have mentioned the number of the participants took ANC, number of delivery took place in different facilities and the number of women who took PNC
10. **Comment** Are the number of table(s) and/or figure(s) are appropriate for the manuscript?  
Numbers could be decreased  
**Response** As per suggestion 1 table has been excluded.
11. **Comment** As per suggestion 1 table has been excluded.  
No The authors may consider to include comparison with regional data, and public health implication of this study. For example, comparison with urban slum of neighboring countries such as India, Nepal etc. and how this study findings could be useful for researcher, policy makers and service providers.  
**Response** Thank you for the suggestion. Regional comparison of neighbouring countries maternal healthcare service uptake in urban slums is now mentioned in line number 214-218. To address the reviewer comment we have update study objective "to generate evidence to inform policy and programmes."
12. **Comment** Is the standard of English acceptable for publication?  
No Need minor language editing specially subject-verb agreement in few places  
**Response** As per suggestion we have edited and corrected some subject verb agreement error in the manuscript.

**Editor:** M Mostafa Zaman, ORCID: [0000-0002-1736-1342](https://orcid.org/0000-0002-1736-1342)

1. **Comment** Please replace the Highlights with a "Key message". It should be in descriptive terms not exceeding 60 words.  
**Response** As per suggestion we have replaced the Highlights with a "Key message" in line numbers 69-73
2. **Comment** Introduction: Write the objective in one sentence; avoid bullet points.  
**Response** As per suggestion we have updated the study objective in line number 100-102
3. **Comment** Analysis: All analyses are univariate. Multivariate analysis is necessary for the conclusion to be valid.  
**Response** Thank you for the suggestion. We have now fitted three logistic regression models respectively for accessing Any ANC,  $\geq 4$  ANC and uptaking PNC in 42 days. Please see the changes in Table 1 and Table 3.
4. **Comment** Analysis for Table 4 is not understandable. What are the variables of the mXn contingency table (column and row) for the chi-square test?  
**Response** Table 3 (former Table 4) was mXn contingency table for "women receiving any postnatal care within 42 days of delivery (column)" and "socio-demographic characteristics, indicators of healthcare decision-making and service use (row)". Percentages are presented for women receiving any postnatal care within 42 days of delivery within same category of women (row percentage).
5. **Comment** We recommend to make the manuscript brief (1500 words) and 3 tables max.  
**Response** Thank you for the suggestion. I have shortened the manuscript brief from 3000 to 1767. Below this, the storytelling of the manuscript and the study focus will be hampered. Furthermore, as per the suggestion, we have reduced Table 1. Now there are only 3 tables in the manuscript.