Reviewers’ comments below:

Reviewer one.

Reviewer comments

We appreciate the authors for very relevant topic in LMIC context. The factors underlying the delays at various levels are really important to plan targeted interventions at the community and systems level.

General comments: This manuscript though handles a relevant topic, conveys lack of clarity of concepts among authors. They start off by title which is clear to state the scope of the article. The title conveys the community level factors and other system level factors till patient reaches the first point of contact with the healthcare system. However later in the aim, methods and results this clarity is lost.

Response:

Detailed comments are as follows

Background: The authors build the context well on burden and problem statement yet treatment delays provider delays and diagnostic delays are used interchangeable which is not the case. Suggest using the concept of first two delays of the three-delay model in case data on further delays is available.

Response: We used the reference of previous relevant study for defining delays. Maghous A, et al. Factors influencing diagnosis delay of advanced breast cancer in Moroccan women. BMC cancer 2016; 16: 356.

The aim: “*This study aims to fill that gap by investigating the socio-economic determinants and both patient- and provider-mediated factors affecting diagnostic delays in Bangladesh*.”

Diagnostic delay is defined as the time interval between first point of contact with healthcare system till confirm diagnosis is established. Which will include the time taken for advising biopsy, conducting it and availability of report. The provider delay will need to include these components after the patient has reported to any healthcare center or worker.

The manuscript fails to identify this.

Response: We used the reference of previous relevant study for defining delays. Maghous A, et al. Factors influencing diagnosis delay of advanced breast cancer in Moroccan women. BMC cancer 2016; 16: 356.

Methods: The tool used is highly inadequate to calculate the provider level delays.

It has only one “date field” q.#13 . \*\*When did you first realize the problem with your breast?\*\*

    - Date field and

Q17 : . \*\*When did you visit the doctor after realizing the problem? (in days)\*\*

    - Integer ( no date stamping)

 Response: Resolve

These two questions only address the presentation delay up to the point of contact with health system. The rest of the questions address the presentation delays ( The new term for patient delays is presentation delay as it does not imply blaming the patient).The manuscript addresses presentation delays only and not diagnostic delays as the title suggests.

Response: We included it in questionnaire.

20. \*\*When did you receive the final diagnosis or begin treatment after your initial medical consultation? \*\*

- Date field

Definitions of provider delay/ system level delay and Total delay  is mentioned in methods but not measured at all, or at least the information is not provided in the manuscript. No details of how the delays are measured ( hospital log books, dates of available reports ).

Response: In lines 143-148. We resolved this issue.

Information related to symptoms or first medical visit or diagnosis has been filled from patient medical records. For patients unable to provide specific dates, they were asked to indicate a month or a range of months and the year. If a single month was indicated, the date was estimated as the 15th; for a month range, the midpoint between the 15th of those months was used. If only the year was provided, the date was coded as June 30th of that year. Cancer staging was analyzed by the oncologist based on available health records. Out of 355 cases, determining the cancer stages was not possible due to inadequate medical records.

Support for 0.2 as significant p values is not provided

Response: In lines 180-183 we write several lines to support it.

It is crucial to understand that a very small p-value does not prove the null hypothesis or the alternative. Furthermore, the p-value by itself cannot reveal the magnitude or significance of the group differences. Even with large sample sizes or extremely accurate measurements, differences that are not clinically meaningful may be reflected in statistically significant results (1).

Results:

Figure 1 shows diagnostic delay whereas till here there is no mention of this word. This adds to the conceptual confusion between diagnostic delay, treatment delay, provider delay and system delay that authors have. table 3, 5   and supplementary table 3 has no methods to show how this was arrived at

Response: Resolve this issue.

Overall comments:

The title and aim do not match the methods to collect relevant data to address

the aim and methods do not adequately inform how results were arrived at.

Response: Resolved

These are major lapses in conceptual understanding of delays and gaps in methods.

Response: we added some lines to resolve this confusion.

Data were collected on factors associated with patient delays, such as believing the problem would resolve on its own, fear of cancer diagnosis and/or treatment, financial constraints, competing life priorities, embarrassment about breast examinations, negligence or carelessness, etc. Additionally, system-related delays included appointment delays, misinterpreted mammography, difficulty arranging transport, lack of information, etc.

Dear Dr Hossain,  
  
Your manuscript "Understanding Delays in Breast Cancer Diagnosis: Insights from Bangladesh" has now been assessed. If there are any reviewer comments on your manuscript, you can find them at the end of this email.  
  
Regrettably, your manuscript has been rejected for publication in BMC Cancer as major concerns have been raised.  
  
Thank you for the opportunity to review your work. I'm sorry that we cannot be more positive on this occasion and hope you will not be deterred from submitting future work to BMC Cancer.  
  
Kind regards,  
  
Chiara Cilibrasi  
Editor  
BMC Cancer

Reviewer Comments:  
  
Reviewer 1  
Kindly look through definitions of various delays as given by three delay model.

Response: We used the reference of previous relevant study for defining delays. Maghous A, et al. Factors influencing diagnosis delay of advanced breast cancer in Moroccan women. BMC cancer 2016; 16: 356.

Reviewer 2  
I propose a slight change in the title, I think it would be better if it were like this: ``Understanding Delays in Breast Cancer Diagnosis in Bangladesh´´

Response: Done

Reviewer 3  
Reviewer’s Comments  
I have reviewed the manuscript titled “Understanding Delays in Breast Cancer Diagnosis: Insights from Bangladesh” submitted to ‘BMC Public Health’ Journal. I read the manuscript very carefully and recommended major revisions which are as follows:

Comments:  
Background:  
1.      Last paragraph in page 3 needs proper citation (In Bangladesh, breast cancer represents a significant health disparity. According to the 2020 GLOBOCAN report, breast cancer is the leading cause of cancer deaths among women, responsible for 6.2% of all cancer-related fatalities and accounting for 19% of all female cancer cases.)

Response: Done

2.      More literary support should be incorporated in the ‘Background’ of the study regarding the socioeconomic determinants of the delays in breast cancer diagnosis in the context of Bangladesh and other developing countries.

Response: Done

3.      The justification of this study has been poorly presented in the ‘Background’ of the study.

Response: Done

Methods:  
4.      In the ‘Questionnaire’ sub-point, the authors reported that ‘We adapted a structured questionnaire from previous studies [5,16], which is included as an additional file’, please include a supplementary file or table number and cite it in the manuscript.

Response: We removed “which is included as an additional file”.

5.      How did the authors collect data using questionnaire from the respondents who were illiterate? The authors in the ‘Ethics approval’ point of the manuscript mentioned that ‘For illiterate adult patients unable to provide informed consent, an appropriate representative (such as a relative accompanying the patient) provided informed consent on their behalf’. The authors should clarify it.

Response: Done

6.      The authors should revise this sentence as it is in future tense ‘The data collected will be used to analyze associations between these variables and delays in diagnosis, offering insights into factors contributing to late-stage detection and their potential impact on treatment outcomes’.

Response: Resolved.

7.      The authors mentioned that ‘The questionnaire was finalized for data collection after piloting it with five patients’. However, it is important to report whether the sample for piloting had been incorporated in the final analysis or not.

Response: Resolved

8.      The authors mentioned that interviews were conducted by the undergraduate students, so it is better to state which year undergraduate students conducted the interviews.

Response: Done

9.      The authors did not mention the period and procedure of data collection in the sub-point ‘Data collection’.

Response: Done

10.     Additionally, there is no information about the sampling in the method section.

Response: Done

Discussion:  
11.     Use full stop after the sentence in the 2nd paragraph of page 10 (This cultural barrier is evident in our study, where 44.6% of participants reported embarrassment as a reason for delay).

Response: Done

12.     In the ‘Discussion’ section, more literary support should be provided form both developing and developed country context when comparing this study findings with existing literature. Moreover, the justification of each finding of this study should incorporate more extensively

Response:

Limitation of the study:  
13.     The authors should incorporate the strengths of the study along with the limitations of this study under the heading of ‘Strengths and limitation of the study’.

Response:

Conclusion:  
14.     The authors should summarize the conclusion and write the conclusion in a paragraph. It is better to focus on the key findings of this study at first and then highlight the recommendations.

Response:

Abbreviations:  
15.     The authors should capitalize N in the elaboration of NGOs (Non-governmental organizations).

Response:

Data availability:  
16.     In the ‘Data availability’ the authors should mention whether the dataset is reposited or not. If not, the authors should reposit the dataset in the recognized data repository e.g. Harvard Dataverse and so on and please add the link of the data repository and cite it in the data availability statement which is required.

Response:

References:  
17.     Add DOI of the included references where possible following the Journal’s guideline.

Response:

18.     Please follow the proper formatting in referencing.

Response:

 STORBE:  
19.     The authors mentioned in the ‘Method’ point of the STORBE checklist that study setting was presented in page no. 5 but there is no information about setting in page no. 5 instead setting is presented in page no 4. Similarly, in the ‘Participants’ point, the authors did not mention any information about participants selection procedure in the manuscript. So, the authors should revise the manuscript following the STORBE guideline and carefully report in the STORBE checklist align with the manuscript.

Response:

Reviewer 4  
Thanks to the authors for addressing my questions

...