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SURAT TUGAS

Nomor: F10/444/B.12/VII/2022

Yang bertanda tangan di bawah ini Pimpinan Fakultas Kesehatan Masyarakat Universitas Ahmad Dahlan, dengan ini menugaskan kepada:

Nama : Solikhah S.KM., M.Kes., Dr.PH
NIP/NIY : 60050527
Jabatan : Dosen Prodi S2 Kesehatan Masyarakat

Untuk : Menjadi *reviewer* Jurnal Internasional Bereputasi

No.	Nama Jurnal	Judul Artikel	Penerbit
1	BMC Cancer SJR: 1.134	<i>Socio-economic and regional variation in breast and cervical cancer screening among Indian women: A study from National Family Health Survey, 2019-2021</i>	Springer Nature

Demikian surat tugas ini dibuat kepada yang bersangkutan untuk dilaksanakan dengan penuh rasa tanggung jawab, dan melaporkan kepada pimpinan setelah selesai melaksanakan tugas.

Yogyakarta, 23 Dzulhijjah 1443 H
23 Juli 2022 M



Dekan

Lina Handayani, S.KM., M.Kes., Ph.D
NIY. 60030447

Tembusan:
Kaprosdi Magister Kesmas

BMC Cancer: Invitation from Dr Hildreth to review a manuscript

1 message

BMC Cancer <do-not-reply@springernature.com>
To: solikhah@ikm.uad.ac.id

Sun, Jul 24, 2022 at 7:25 PM

****The contents of this email are confidential.****

Ref: Submission ID a5a2d89f-d37e-4e2e-8af0-9e541e9386f8

Dear Dr Solikhah,

BMC Cancer has received a manuscript that I'd like to invite you to review, as you have published related work yourself. You'll find the details appended underneath this email.

Please accept or decline the manuscript using the link below. Should you choose to decline, you'll be given the option to recommend alternative reviewers, which would be greatly appreciated.

Kind regards,

Eason Hildreth
Editorial Board Member
BMC Cancer

To accept or decline the manuscript, please use this link:
<https://reviewer-feedback.nature.com/review-invitation/a4fe525d-1561-4204-b79b-2bdd4e971165>

If you wish to contact us about the manuscript, please email bmccancer@biomedcentral.com.

Submission details

Authors:

Soumendu Sen, Pijush Kanti Khan, Tabassum Wadasadawala, Sanjay K Mohanty

Title:

"Socio-economic and regional variation in breast and cervical cancer screening among Indian women: A study from National Family Health Survey, 2019-2021."

Abstract:

Background

In India, the disease burden due to cancer is growing and disproportionately higher among women. Breast and cervical cancer accounts for over two-fifths of all cancer; largely among women in the working age group. Early screening and treatment can reduce the burden of cancer in the population. In this context, this study aims to examine the socio-economic and geographical variation of breast and cervical screening among Indian women.

Data and methods

We used unit level data of 724,115 women from the most recent nationally representative National Family Health Survey of India (NFHS-5), 2019-2021. Screening of breast and cervical cancer screening are two dependent variables. A set of demographic, socio-economic and risk factors associated with breast and cervical cancer screening were used. Descriptive statistics, Poisson regression, Concentration Index (CI) and Concentration Curve (CC) were used in the analysis.

Findings

The screening for breast and cervical cancer was 600 and 1344 per 100,000 women respectively. The screening of both breast and cervical cancer was lower among poorer women. younger age low education, male headed households, rural women and have no health insurance. The concentration index was 0.206 for breast cancer and 0.160 for cervical cancer screening. The concentration curve for socio-economic inequality in breast and cervical

screening is pro-rich. Women with higher education levels [IRR:1.42, 95% CI:1.3-1.55], belong to female headed households [IRR: 1.09; 95% CI: 1.03-1.15], and age 40-49 years [IRR: 2.35; 95% CI: 2.2-2.5] have higher odds of undergoing screening. The multivariate result confirms that women from southern and western regions are more likely to undergo a screening test for any of the two cancers.

Conclusion

The overall screening of cancer is low in India. It is lower among poor, younger and less educated women. Providing knowledge on self-education and self-awareness could be the key strategy for reducing the cancer burden in India.

To accept or decline the manuscript, please use this link:

<https://reviewer-feedback.nature.com/review-invitation/a4fe525d-1561-4204-b79b-2bdd4e971165>

Reviewing for BMC Cancer

BMC Cancer is committed to providing a rapid and fair review process. So, if you decide to accept the manuscript, we would hope to receive your report within 10 days.

We operate a transparent peer review process, which means we will publish your report with the article under an Open Access Creative Commons CC-BY 4.0 License. For even greater transparency, you can opt to have your name included on your review. You will be given this option when you submit your report.

The editorial board and publishing team of BMC Cancer are not able to anticipate all potential competing interests, so we ask you to draw our attention to anything that might affect your review, and to decline submissions where it may be hard to remain objective.

If you review this manuscript you will be eligible for a 15% discount on one article processing charge for a manuscript submitted to one of the subject-specific journals in the BMC series (<http://www.biomedcentral.com/p/the-bmc-series-journals#journalist>) or BMC Research Notes. This must be claimed on submission of the manuscript and is available for one year from completion of your review. Only one discount can be claimed on a submitted manuscript and cannot be combined with any other discounts.

If you would prefer us not to contact you in the future, please let us know by emailing bmccancer@biomedcentral.com.

BMC Cancer: Thank you for your review on "Socio-economic and regional variation in breast and cervical cancer screening among Indian women: A study from National Family Health Survey, 2019-2021."

2 messages

BMC Cancer <bmccancer@biomedcentral.com>
To: solikhah@ikm.uad.ac.id

Sun, Aug 7, 2022 at 8:18 PM

Ref: "Socio-economic and regional variation in breast and cervical cancer screening among Indian women: A study from National Family Health Survey, 2019-2021."

Dear Dr Solikhah Solikhah,

Thank you for submitting your report to BMC Cancer. We greatly value the time and effort you put into reviewing the manuscript.

We've attached a copy of the report for your reference. You can also use this email to verify your review activity with third party websites, such as Publons.

Thanks again for your review; we'll email you the decision on the manuscript as soon as it is made. Meanwhile, we hope that we can continue to benefit from your expertise in the future.

Kind regards,

Peer Review Advisors
BMC Cancer

 **Your review report for BMC Cancer.pdf**
58K

SOLIKHAH SOLIKHAH <solikhah@ikm.uad.ac.id>
To: reviews@publons.com

Sun, Aug 7, 2022 at 8:37 PM

Begin forwarded message:

[Quoted text hidden]

 **Your review report for BMC Cancer.pdf**
58K

BMC Cancer: Decision on "Socio-economic and regional variation in breast and cervical cancer screening among Indian women: A study from National Family Health Survey, 2019-2021."

1 message

BMC Cancer <do-not-reply@springernature.com>

Tue, Aug 16, 2022 at 6:03 PM

To: solikhah@ikm.uad.ac.id

Dear Dr Solikhah,

Thank you for your help with the manuscript, "Socio-economic and regional variation in breast and cervical cancer screening among Indian women: A study from National Family Health Survey, 2019-2021.", which you recently reviewed for BMC Cancer.

For your records, the decision on this manuscript, based partly on your input, was: Revise. Any comments to authors have been appended below.

We greatly appreciate your assistance and participation in the review process for BMC Cancer and hope that we can continue to benefit from your expertise on future submissions.

Kind regards,
Peer Review Advisors
BMC Cancer

Reviewer 1

I enjoyed reading this paper on cervical and breast cancer screening in India using a very large population sample from a survey. This paper is nicely written and has sufficient details about the work was done. I have a few minor and major comments.

Minor

The authors may want to spill out the IRR. The authors also mentioned the Odds ratio, but I do not see any numbers in the abstract.

Major:

The only major concern I have is the survey design. The study only includes women aged 15-49. While that might be sufficient to draw conclusion on NCDs risk factors at a population level, cancer screening is slightly different. Women usually do not get invited for breast cancer screening before age 40, and they continue to get invited until the age of 70 or 75 in some countries. Therefore, this study only captures a very small fraction of the population eligible for screening (40-49) and assesses screening uptake in women who might not be eligible for any screening (below 39 maybe)(ineligible population).

While the authors did mention this as a limitation, I think it is a major limitation, and therefore the paper needs to be revised to reflect the fact that this is a study on a small fraction of the population who were eligible for screening, not on the entire population. This also needs to be mentioned explicitly in this study's title and abstract.

In general, the authors might also explain the situation of cancer screening in India regarding cost, coverage, and availability.

I think the paper will be an excellent addition to the literature if revised.

Reviewer 2

1. Regarding the outcome of this manuscript, could it explain how to select participants, what inclusion and exclusion criteria for selecting the sample, and if one household has several women then how to select participants in this house?

2. Author should also explain how to measure the outcome in this manuscript and what kind of instrument to use in screening for both breast and cervical cancer.
3. In line 126 about classifying the wealth index into five criteria, it should be described how to measure in this criteria, any standard in this country?
4. The sample in the abstract is 724,115 women; however, the sample size in the result is different; which one is true? this is inconsistent data from participants
5. in conclusion, the author explains about lack of awareness, associated stigma and taboo and other socio-economic factors; however the author doesn't describe the result and how to measure it in the methodology

Reviewer 3

Overall

1. This study uses a very large cohort of nearly $\frac{3}{4}$ million women aged 15-49 years from India to examine the socio-economic and geographical variation of breast and cervical screening among Indian women. Its main limitations are that there is no information about screening among women aged 50 years and over, nor is the discussion specifically focussed on younger women. Both of these limitations are important given the much higher incidence of both breast and cervical cancer among older women in India (source Cancer Today, IARC)
2. The manuscript could do with some English grammatical checking to improve the clarity of the text.

Title

3. Please make clear that the cohort relates to women aged 15-49 years only.

Abstract

4. Please elaborate on the statistical methodology – particularly the Poisson regression.
5. It is not clear what the Concentration Index and Concentration Curves refer to. While you cannot provide full details in the abstract, the readers should get some understanding of what these measures refer to.
6. Please make clear that the cohort relates to women aged 15-49 years only.
7. Please make clear whether the screening statistics are rates or counts (e.g. the screening [rate?] for breast.....]. Please make clear when results are unadjusted, and when they are adjusted for other variables.
8. Does “higher odds of reporting screening” refer to having both types of screening, or at least one?

Introduction

9. I would suggest focussing the first paragraph on the cancer burden in India, particularly the burden due to breast and cervical cancer
10. Second paragraph – please indicate whether the referenced studies are from India, or overseas? If overseas, would they be generalisable to India?
11. Third paragraph – the authors note that prevalence is higher among women, but then quote incidence statistics. Also, to reinforce the higher burden among women, it would seem prudent to quote incidence statistics (rates) for men and women.
12. Fourth paragraph – the authors note that one of the reasons for lower cancer incidence in India is the lower cancer screening. Is this true for cervical cancer, for which cervical screening is designed to detect precancerous lesions, thus reducing cervical cancer incidence?
13. Suggest change “overcome the rate of lower screening” to “increase the currently low screening participation”.

Data and Methods

14. Can you clarify whether the NFHS-5 covered all the geographical areas of India? Can the results be generalised to the whole population of India?
15. By considering “ever screened”, it would include women who might have only had a screen 10 years ago – were there any data about more recent screening activity, or could you assess the impact of time since the last screening activity?
16. Can you provide references to support the choice of independent variables?
17. Was the wealth index based on individual-level variables? Were there any variables based on the area-level characteristics, such as access to medical services, or the urban/rural split?
18. Did you include an offset terms in the Poisson model to model the rates?
19. Were separate models run for breast and cervical screening?
20. Did you include all the independent variables in the model? Was any model building process carried out?

Results

21. Table 1- were there any missing data for any of the variables? If so, how were these handled in the analysis?

22. As per the abstract, please clarify in the text whether you are reporting rates or counts. For example "the screening of breast cancer was" needs to be reworded to highlight what the measure is.
23. The authors include results for screening for either breast or cervical cancer – however could they also include those who screened for breast and cervical cancer?
24. Table 3 – can the authors provide some context of where these states are – either by including a labelled map in Supplementary files, or by grouping the states into the same regions used in Table 4?
25. Table 5 – please use same number of decimal points for IRR. Please include "1.00" for the reference category. Please note in the table and accompanying text whether the IRR are adjusted estimates or not.
26. Tables 1-5 – please note in the Titles that the cohort only contains women aged 15-49 years.

Discussion

27. Please include a reference for the first sentence, which is very subjective.
28. The first paragraph of a Discussion typically summarises the key results/messages from the analyses, highlighting what is novel.
29. That the cohort only relates to women aged 15-49 is a substantial limitation, since the incidence of breast and cervical cancer increase with age. In addition, in many countries, population-based mammogram screening for breast cancer is only recommended for women aged 50 years and over, so the implications of these results for India are unclear in this broader context.
30. The discussion needs to focus on the cancer burden among women aged under 50 years of age, including any cancer statistics such as incidence and prevalence, as well as international comparisons, since the results cannot be generalised to all women.

Reviewer 4

The paper addresses screening coverage for Cervical and breast cancer for India at ages 15-49. These age ranges are not relevant to current screening recommendations issued by WHO. It is unclear what India's recommendations are but I doubt they would be very different to those of WHO.

Reviewer 5

Reviewer's Report

Title: Socio-economic and regional variation in breast and cervical cancer screening among Indian women. A study from National Family Health Survey, 2019-2021.

Version: 1 Date: 8 August 2022

Reviewer: Natalie Gil

This is an interesting and important study which makes good use of a large and nationally representative dataset.

The study examines socio-economic and regional variation in breast and cervical screening in India with a view to mapping target areas and improving uptake among vulnerable groups. The study uses data from a large nationally representative Health Survey which is conducted by a Population Health Sciences Institute, in coordination with the national government. The main findings are that there is lower breast and cervical screening uptake than in other developing nations, with high regional variation. The regions with higher socio-economic inequality have lower uptake. There are both economic and age gradients in screening uptake across India, in that younger and poorer women are less likely to be screened. Breast screening uptake is also lower than cervical screening uptake.

The authors conclude that a national screening programme is needed.

Abstract:

The conclusion does not match the conclusion in the paper, where the main recommendation is for a high-quality national cancer screening programme for women.

Background:

The background provides useful and well-referenced statistics on the global and national cancer burden, argues towards the relevance of the research, and states the aim of the paper clearly.

Line 74, is the word 'trip' needed here?

Current screening guidelines and programmes in India would be useful additional information.

Methods:

Good explanation of the survey and its data. Clear justification and explanation of the chosen measures. The statistical package and version used for analysis could be stated.

Results:

Screening found to be higher among married women but also a higher probability of screening uptake among female-led households. What is the reason for this discrepancy in findings?
Screening is associated with urban living in this report but prior research using data from an earlier wave of the NFHS (2015-16) found rural dwelling to be associated with higher uptake in breast and cervical screening (<https://bmcwomenshealth.biomedcentral.com/articles/10.1186/s12905-020-01083-6>) .
Can the authors suggest a reason for the change in findings?

Discussion:

Line 256-260, consider moving this to background as it is not really explaining the information in results.
Line 257, there is mention of introduction of national screening and awareness programmes here, but no prior information in the paper about who they target, (age/gender) or for which cancers.
Line 261, the authors state that breast cancer is easier to diagnose, easier than what? Please clarify.
Can the authors offer any explanation as to why older age is associated with higher uptake in screening? Again, clarification on any available screening programmes in India could help to put findings into context.

Limitations:

Could be stated that study relies on self-reported data as opposed to official health/medical records and as such is subject to self-reporting biases and usual errors.

Conclusion:

Line 314-315, consider rephrasing for clarity.
Overall, the conclusions drawn are well-supported by the findings of the paper.

Transparent Peer Review

As part of our transparent peer review process, we will publish the reviewer reports with papers that are accepted for publication. Your report will be published anonymously unless you opted to include your name when you submitted it.