

Review report

Final title: Knowledge, attitude and practice on cervical cancer screening and human papillomavirus vaccination among adolescent girls residing in a slum of Kolkata

Title at submission: Knowledge, attitude and practice on cervical cancer screening and human papilloma virus vaccination among adolescents residing in a slum of Kolkata

Submission date: 18-Nov-24
Revised submission: 16-Feb-25
Accepted: 17-Feb-25

Reviewer B: Md Foyjul Islam, ORCID: 0000-0001-6601-5772, COI: None

Overview

The manuscript provides valuable insights into the knowledge, attitudes, and practices (KAP) regarding cervical cancer screening and HPV vaccination among adolescent girls in a slum area of Kolkata. The study highlights significant gaps in knowledge and attitudes towards cervical cancer prevention, with particularly low uptake of screening and vaccination. However, some areas require further attention. The results section could benefit from a more detailed breakdown of data, particularly regarding the associations between sociodemographic factors and KAP. The conclusion should be more directly linked to the study's results, with explicit connections to data points such as the low HPV vaccination uptake and the strong correlation between education and favorable attitudes. The discussion could further elaborate on the barriers to HPV vaccination, considering cultural, logistical, or systemic factors. Additionally, the references should be updated to include more recent studies on HPV vaccination uptake and cervical cancer prevention in similar settings. While the sampling process is clear, including a flowchart to demonstrate participant selection and exclusion would improve transparency, and further explanation of the rationale for the cut-off values for favorable knowledge and attitude would add clarity. Overall, the manuscript presents important findings but requires revisions to better align conclusions with the data, enhance the discussion, and update the references.

1.	Comment	Does the abstract provide a complete and accurate description of the content of the article? = No Abstract Feedback: Background (Lines 30-31): The statement "Cervical cancer is an important public health concern and contributes to significant mortality" is vague. It is recommended to include specific statistics, such as the incidence, mortality rate, and rank of cervical cancer among Indian women, to provide a clearer picture of the disease's burden. Additionally, the rationale for conducting the study in a slum area should be elaborated. Highlighting the unique challenges faced by slum-dwelling adolescents (e.g., lack of access to healthcare, educational barriers, or high-risk behaviors) would strengthen the context. Methods: It is unclear how knowledge, attitude, and practice were quantified or categorized (e.g., thresholds for "inadequate knowledge" or "unfavorable attitude"). Details about the sampling methodology should also be provided briefly (e.g., random sampling, convenience sampling) to improve clarity. Results (Lines 42-44): The results section should include odds ratios (ORs) and confidence intervals (CIs) where applicable, particularly for the significant associations between the participants' and their mothers' educational status and KAP outcomes. This would provide a better understanding of the strength of these associations. Conclusion: The conclusion is not directly drawn from the results. It is overly generalized and lacks alignment with the findings. Revise the conclusion to reflect the specific outcomes of the study, such as the low levels of HPV vaccination and screening uptake, the significant role of educational status, and the need for targeted interventions to address these gaps. Additionally, ensure proper grammar and coherence throughout the conclusion. For example, phrases like "propensity for high-risk behaviour" and "eagerness for learning" could be more effectively connected to the study's findings.
	Response	The Background section has been corrected as suggested by the esteemed reviewer. The rationale portion has been modified as suggested. Page 5-6 Lines 115-116, 145-147 In Methods sections, score threshold and cut-off criteria have been modified as suggested. The sample size and sampling technique has been clarified as suggested. Page 6, lines 161-170, Page 6 Lines 170-175 The Results has now been included as suggested. Page 8 lines 231-240 The Conclusion of the Abstract is modified as suggested. Page 8 lines 287-297
2.	Comment	Is the rationale/justification for conducting the study clear? = No "Owing, perhaps, to various psychosocial pressures, adolescent females in slum communities tend to fall victim to multiple risk factors, thereby potentially forming a significant pool of future cervical carcinoma patients in the city." Suggestions: Be more specific about the risk factors and provide evidence or citations to strengthen this statement. Address why adolescent females in slums are particularly vulnerable.

	Response	We have modified as suggested.
3.	Comment	Are the methods described in sufficient detail so that the study could be reproduced? = No It was found that 389 adolescent girls satisfied the inclusion criteria. Among them, 227 study participants were selected through simple random sampling in the area. Adolescent girls who could not be contacted even after three attempts on separate days during non-school hours and those who refused to provide informed written consent were excluded. While you mention that 227 participants were selected by simple random sampling, it would be better to provide the proportion of those missing after three attempts. Additionally, a flowchart illustrating the selection process would enhance clarity. Furthermore, it would be helpful to explain the rationale for the cutoff values used for unfavourable knowledge and attitude, citing relevant references if available.
	Response	The Methods section is modified as suggested.
4.	Comment	Is the Discussion section critical and comprehensive about the main message of the manuscript? = No The Discussion lacks a critical and thorough analysis of the findings. It should delve deeper into the public health implications of inadequate knowledge, unfavorable attitudes, and low vaccine uptake. Consider comparing findings with previous studies in similar settings (line 184 onward). The emphasis should also be placed on the barriers identified and practical recommendations tailored to slum populations.
	Response	We have modified as suggested.
5.	Comment	Are the conclusions drawn supported by the results/ data? = No Suggestions for Improvement: Focus on Findings: Summarize the significant results, such as the factors strongly associated with knowledge, attitudes, and practices regarding cervical cancer and HPV vaccination. Link Recommendations to Results: Propose actionable steps that directly address the gaps or associations identified in the study. Avoid Unsupported Claims: Limit the conclusion to what is substantiated by the data and analysis. Avoid introducing new ideas or assumptions not discussed earlier. Be Specific: Highlight key findings like the role of education, vaccination coverage, and demographic influences, and explain their implications concisely.
	Response	The Conclusion section modified to be supported by the data.
6.	Comment	Are the references appropriate in number and up to date? = No Several references are outdated or lack recent data supporting HPV vaccination, screening, and health behaviour change interventions. For example, WHO's cervical cancer elimination initiative (2020) or recent regional studies on HPV vaccination barriers should be included to contextualize the findings and strengthen recommendations. Ensure references from the last five years are prioritized. reference 4,5,6 is outdated
	Response	We have removed the old references and added some new ones. References changed are 4,5,6
7.	Comment	Are statements of the manuscript supported by appropriate reference(s)? = No Give specific comments where required.
	Response	The statements of the manuscript are modified to be supported by the appropriate reference(s).

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

8.	Comment	The abstract needs improvement: The Methods hardly have any information about sampling and variable ascertainment. The conclusion is lengthy.
	Response	We have modified the abstract as suggested on page 3.
9.	Comment	Please replace it with a 50-60-word description of the key message. The journal's style will be different from January 2025.
	Response	Done as suggested on page 4.
10.	Comment	The sample size estimation is unclear. Data for all components of a cross-sectional survey have to be mentioned to justify the sample size estimation in. We have modified the sample size section on page 6 lines 160-165.
	Response	We have modified the sample size section on page 6 lines 160-165.
11.	Comment	The Methods section should have a small paragraph on the ethical concerns. The ethics approval given in the footnote should only include IRB approval information.
	Response	We have added a paragraph on the ethical concerns on page 7 lines 204-210.