

REVIEWER'S REPORT

Manuscript No.: IJAR-53432

Date: 18/08/2025

Title: Bridging The Gap -A Focus Group Study OnNeed For Transformation In DentalAmalgam Usage AsA Part Of Dental Curriculum

Recommendation:

Accept as it is

Accept after minor revision...Yes.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality	•			
Techn. Quality		•		
Clarity	•			
Significance	•			

Reviewer Name: Dr. Sireesha Kuruganti

Date: 18/08/2025

Reviewer's Comment for Publication.

(To be published with the manuscript in the journal)

The reviewer is requested to provide a brief comment (3-4 lines) highlighting the significance, strengths, or key insights of the manuscript. This comment will be Displayed in the journal publication alongside with the reviewers name.

This is a timely and relevant study that addresses a critical issue in dental education: the continued use of dental amalgam in the curriculum despite growing environmental and health concerns. The use of a qualitative, focus group methodology is appropriate for exploring the diverse perspectives of stakeholders. The manuscript is well-structured and provides valuable insights

Detailed Reviewer's Report

In-Depth Manuscript Review Report

Manuscript Title: Bridging The Gap - A Focus Group Study On Need For Transformation In Dental Amalgam Usage As A Part Of Dental Curriculum

Overall Impression:

This is a timely and relevant study that addresses a critical issue in dental education: the continued use of dental amalgam in the curriculum despite growing environmental and health concerns. The use of a qualitative, focus group methodology is appropriate for exploring the diverse perspectives of stakeholders. The manuscript is well-structured and provides valuable insights. However, it could be strengthened by addressing certain areas in its methodology, results presentation, and discussion.

Detailed Section-by-Section Review

Abstract (Lines 5-35)

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* Strengths: The abstract provides a clear and concise summary of the study's background, methods, results, and conclusions. It effectively communicates the core message of the paper.

* Areas for Improvement: No major issues noted.

1. Introduction (Lines 52-69)

* Strengths: The introduction successfully establishes the context by identifying dental caries as a widespread disease (Lines 52-53) and dental amalgam as a long-standing treatment material (Line 56). It clearly outlines the problem by highlighting the health and environmental risks associated with the mercury in amalgam (Lines 57-69). This provides a strong rationale for the study's objective to "remould the usage of dental amalgam in dental curriculum" (Line 69).

* Areas for Improvement: The introduction is effective, but could perhaps be enhanced by briefly mentioning the global shift or debate (e.g., Minamata Convention) from the outset to frame the study within a larger international context.

2. Materials and Methods (Lines 74-135)

* Strengths: The choice of a focus group discussion is well-suited for this exploratory research (Line 74). The authors clearly state that they received ethical approval (Lines 75-76). The process of inviting and informing participants is well-described (Lines 79-84).

* Areas for Improvement:

* Line 77: The term "mixed purposeful sampling" is used, but the specific strategy behind the selection of the 15 participants is not fully elaborated. The authors could clarify why these specific roles (academics, students, patients, etc.) were chosen and how they contribute to the study's goals.

* Lines 88, 133-134: The data analysis is described as "thematic analysis" and "inductive analysis using qualitative content analysis". These terms are sometimes used interchangeably but can have different nuances. It would strengthen the manuscript to briefly define the specific approach to thematic analysis that was used (e.g., Braun and Clarke's six-phase framework).

* Line 89: It is excellent that the analyzed data was sent to a participant for validation ("member checking"). However, the manuscript would benefit from more detail on how this feedback was incorporated into the final conclusions.

3. Results and Discussion (Lines 138-270)

* Strengths: The results are organized under clear thematic headings (Lines 143-148), which aids in readability. The study successfully captures a range of opinions, from the practical benefits of amalgam, such as durability and cost-effectiveness (Line 20), to the preference for aesthetic composite restorations (Line 20, 204). The inclusion of student perspectives on the difficulty of finding patients for amalgam fillings is a crucial real-world finding (Lines 200-202).

* Areas for Improvement:

* Blending of Results and External Information: In some sections, the direct results from the focus group are blended with general knowledge, which can be confusing. For example, the description of Minamata disease (Line 180) is presented as a general fact rather than a point raised by a participant. It should be made clearer what the participants said versus what is background information.

* Lack of Direct Quotations: The results section summarizes the participants' views but lacks direct quotations. Including a few powerful, anonymous quotes for each theme would add authenticity and depth to the findings, allowing the reader to hear the voice of the participants directly.

* Line 213-214: The statement that discussion regarding mercury emission "takes back seat and is done just once a year" is a significant finding. This could be emphasized more as a key evidence point for the need for curricular reform.

* Line 249-251: The observation that students are "not particularly cautious" and that their practices expose non-teaching staff is a critical safety issue that warrants more prominence.

3.4 Discussion (Lines 272-341)

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* **Strengths:** This section effectively links the study's findings to the broader context of DCI regulations (Lines 273-277) and patient preferences (Lines 285-292). The historical overview of the "amalgam controversy" (Lines 298-303) and the summary of international bans (Lines 305-309) are informative.

* **Areas for Improvement:**

* **Connecting to Own Findings:** While the discussion is comprehensive, it could more explicitly and repeatedly connect the external literature and historical facts back to the specific findings from this focus group. For example, when discussing the international ban on amalgam (Lines 305-309), the authors could directly link this to their participants' divided opinions on a ban (Lines 235-237).

* **Lack of a Limitations Section:** The manuscript does not include a dedicated limitations section. This is a crucial component of any research paper. The authors should acknowledge potential limitations, such as the small sample size, the study being conducted at a single institution (which may limit generalizability), and the potential for dominant voices to influence the focus group discussion.

Conclusions (Lines 355-361)

* **Strengths:** The conclusion logically follows from the results and discussion, reiterating the gap between teaching and practice. The proposed reforms, such as reducing but not eliminating amalgam and introducing composites earlier, are practical and well-supported by the study's findings.

* **Areas for Improvement:** No major issues noted.

Final Recommendation

This manuscript is a valuable contribution to the field of dental education. It highlights a clear need for curriculum reform based on qualitative evidence from a range of stakeholders.

Recommendation: Accept with Minor Revisions.

The manuscript is fundamentally sound, but addressing the suggested points—particularly by adding a limitations section, clarifying the methodology, and incorporating direct participant quotes in the results—would significantly enhance its clarity, rigor, and impact.