

Evaluating the Implementation and Effectiveness of Competency-Based Education in Sudanese Dental Curricula: A Comparative Analysis of Curriculum Models

Detailed Interview Guide for Semi-Structured Interviews

The following interview questions were developed based on an extensive literature review and expert input. They aim to explore participants' views on the implementation and effectiveness of competency-based education (CBE) in dental curricula, addressing four major domains:

Domain I: Curriculum Design and Implementation

1. General Structure and Design

- Can you describe the overall structure of your institution's dental curriculum?
- In what ways does the current curriculum reflect the principles of competency-based education?

2. Strengths and Weaknesses

- What do you consider to be the key strengths of your curriculum in preparing students for clinical practice?
- What aspects of the curriculum do you believe require improvement to better meet the demands of modern dental practice?
- How well do you think the curriculum aligns with the intended learning outcomes and competencies?

3. Curricular Fit for Purpose

- Do you feel that the curriculum adequately prepares students for real-world clinical challenges? Please explain.
- Are there any specific courses or modules that you feel are particularly effective or ineffective? Why?

Domain II: Clinical Training and Practice

1. Balance Between Theory and Practice

- How is hands-on clinical training integrated with theoretical instruction in your curriculum?
- Do you feel that there is an appropriate balance between classroom-based learning and practical clinical experience? Provide examples.

2. Effectiveness of Clinical Training

- In your experience, which components of clinical training have been most effective in enhancing student competencies?

- Are there elements within the clinical training portion that you believe could be improved? If so, how?

3. Integration and Application

- How do the theoretical components of the curriculum translate into clinical practice according to your observations?
- Can you describe any instances where the integration between what is taught in theory and the practical application was particularly successful or needs reconsideration?

Domain III: Interdisciplinary Collaboration and Communication

1. Promotion of Interdisciplinary Learning

- How does your curriculum foster interdisciplinary collaboration among different dental specialties or with other healthcare disciplines?
- Have you observed any benefits or challenges arising from cross-disciplinary learning initiatives?

2. Development of Communication Skills

- In what ways are communication and interpersonal skills emphasized within the curriculum?
- Can you provide examples of activities or assignments that specifically target the development of effective communication skills?

3. Areas for Improvement

- Do you think there are missed opportunities for enhancing interdisciplinary learning or communication within the curriculum? Please elaborate.

Domain IV: Innovations in Dental Education

1. Comparison of Educational Approaches

- How would you compare the current competency-based education approach with traditional teaching methods in dentistry?
- What are the perceived benefits and drawbacks of the competency-based model as you see them?

2. Impact of Innovations

- What innovative teaching methods or technologies have been introduced into your curriculum, and what impact have they had on student learning?
- How have these innovations changed the way students prepare for clinical practice?

3. Professional Readiness

- In your opinion, how has the adoption of CBE influenced the overall professional readiness of dental graduates?
- Are there innovative practices or approaches that you believe should be further implemented to enhance educational outcomes and clinical preparedness?

General and Closing Questions

- What specific changes or enhancements would you propose to optimize the current curriculum for better competency development?
- Do you have any additional comments or suggestions regarding the integration of competency-based education in dental curricula?

This interview guide was pilot-tested with a small group of participants, and necessary revisions were made to improve clarity and relevance. The full interview topic guide is provided as supplementary material for transparency and reproducibility.