

## INTRODUCTION

Oral pathology is the specialty of dentistry and pathology which deals with the nature, identification and management of diseases affecting the oral and maxillofacial regions.

Histopathology is an important aspect of learning oral pathology for undergraduate dental students. The practical sessions provide students with intuitive perceptions of the pathology under microscopy. Histopathology is an important aspect of learning oral pathology for

However, due to conceptual difficulty, tedious learning and allegedly irrelevant to their future clinical or professional activities, some students lack the motivation to actively participate in the histopathology practical course.

In routine practice we lack an interactive and fun learning environment, a shortcoming exemplified when there are more number of students and limited resources.

So an attempt to introduce case based learning (CBL) could create an active learning environment which would help develop interest in students that would build critical thinking and problem solving skills needed for their professional practice in the future.

## OBJECTIVES

To assess case based learning as an effective alternative method in teaching oral pathology.

To analyze the perception of students towards case based learning as an alternative method

## MATERIALS & METHODS

Cross sectional study

Undergraduate third year dental students (total 59 students)

Faculties from other departments and medical schools were invited as observers

## TOOLS FOR ASSESSMENT

1. Case design (Oral Cancer)
2. Video recording (6.51 minutes)
3. Pre and post test questionnaire
4. Mock Modified Essay Question (MEQ)
5. Facilitators response towards CBL
6. Students feedback towards CBL
7. Students assessment by facilitators

## RESULTS

- Of the total 59 students, 58 gave consent
- Of the CBL group students, 24 were boys and 6 girls, similarly among 28 conventional group students 17 were girls and 11 boys
- Mean scores after students assessment by facilitators, were  $58.7 \pm 5.28$ ;  $58.8 \pm 4.56$  and  $63.6 \pm 4.5$  respectively by facilitators A, B and C, respectively

Mean score comparison of MEQ test

Groups	Total Marks	Mean score $\pm$ SD	p value
CBL	20	15.21 $\pm$ 1.81	0.0001
Conventional	20	9.75 $\pm$ 2.93	

Facilitators response towards CBL

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Students were motivated to learn oral pathology by CBL	2	1	-	-	-
CBL helped to reinforce concepts taught in class (SIS)	2	1	-	-	-
CBL is a good method to practice integration of knowledge and skill	3	-	-	-	-
The emphasis on clinical concept was detrimental to learning pathology for the students	-	-	-	1	2
CBL improved students desire and skill in teaching themselves of new materials through self-directed learning	3	-	-	-	-
The case content was appropriate	1	2	-	-	-
The degree of detail and difficulty of cases were appropriate	-	3	-	-	-
The CBL session was interesting and challenging	1	2	-	-	-
I was satisfied with CBL approach of teaching- learning	3	-	-	-	-
I was comfortable with the CBL system of teaching-learning	2	1	-	-	-
CBL is time consuming and hinders the normal speed of the classes	-	1	-	1	1

Overall students feedback towards CBL

Students perceived professional benefits	Strongly Agree	Mod. Agree	Neutral
CBL stimulated my desire to learn	15	15	-
I feel confident to apply basic sciences and oral pathology concepts to solve clinical cases	14	13	3
CBL is good method to practice integration of knowledge and skill	24	6	-
CBL improved my clinical reasoning ability	14	16	-
I was motivated to learn oral pathology by CBL	6	22	2
The emphasis on clinical concept was detrimental to learn oral pathology	8	20	2
The CBL helped to reinforce concepts taught in class	17	13	-
CBL promoted self-directed learning skills	14	16	-
CBL has increased my self-confidence and attitude towards learning	13	13	4
CBL is better than traditional teaching method	24	6	-
Students perceived communication benefit			
I understand what makes small groups operate effectively	18	12	-
I am confident in my ability to contribute effectively to the team	17	12	1
I am confident in discussing my ideas with my teammates	14	15	1
I am confident in sharing my ideas with my facilitators	13	16	1
Students perceived personal benefit			
My participation in this course was personally enjoyable	17	12	1
My participation in this course positively impacted my personal relationships	8	16	6
My participation in this course positively impacted my professional relationships	15	13	2

## CONCLUSION

Case Based Learning (CBL) system has been feasible and well accepted by the students.

The output has been satisfactory and accepted by other faculties.

Preparation and designing cases, case selection was a challenge.

Only a single session of case series was applied, multiple exposure would provide better results

