# Introduction of Mini-Clinical Evaluation Exercise (CEX) in the Subject of Oral Pathology & Microbiology for B.D.S. Student (Learner/Intern)

# Manisha S. Ahire (Sardar)

#### Abstract

Assessing the performance of students & interns in the clinical setup is important but challenging. Performance assessment is not done well in most instances as it requires multiple sampling overtime. In-training assessments done at the end of a term introduce a 'halo effect'. Most of these problems can be over come by the Mini-CEX.

So for this reason gradual introduction & implementations of different learning aids specifically Mini-CEX should be there form preclinics and clinics in order to improve education standard. In present study the learners (interns) performance was seen to be satisfactory. They perceived Mini-CEX positively with few good & important suggestions.

Keywords: Intern/Learner; Mini-Cex; Feedback.

#### Introduction

One good way to conceptualize the assessment of a clinical competence is use to Miller's pyramid, the model which provides a framework for assessment methods from'knows' to 'know how' to 'shows' and to 'does'. Mini- CEX(Clinical Valuation Exercise) assesses the learner at higher levels of Miller's pyramid [1].

Mini-CEXwas first introduced the AmericanBoard of internal medicine in 1995 for the assessment of post-graduates[2].

It is a formative assessment tool designed to provide feedback on skills essential for good medical care by observing an actual clinical encounter. In its original format, mini-CEX assessed the learner on the seven core skills: medical interviewing, physical examination, professionalism, clinical judgment, counseling organization and efficiency and overall clinical competence.

The form used for recording the results in generic

**Author's Affiliation:** Dept. of Oral Pathology & Microbiology, Government Dental College & Hospital, Mumbai -1, Maharashtra, India.

Reprints Requests: Manisha S. Ahire (Sardar), Dept. of Oral Pathology & Microbiology, Government Dental College & Hospital, Near Chhatrapati Shivaji Terminus Area, Fort, Mumbai, Maharashtra 400001.

E-mail: manisha\_sardar@rediffmail.com

so that it would be applicable in most patient situations (Mini-CEX rating Form). The form also records the satisfaction of both the learner as well as the faculty member with the process of mini-CEX [1].

In dept. of oral pathology when patient comes in the OPD, for any type of oral or dental pathology, detail clinical examination of oral and extra oral findings is very important which is called case history taking/data gathering. On this findings diagnosis is confirmed on the basis of clinicpathological findings.

Context of the Study:

The mini-CEX is avaluable tool to evaluate clinical performance. It requires direct observation of a resident engaged in a clinical encounter, rating of performance in a set of competencies, and a feedback session immediately afterwards [1].

The mini-CEX, is valuation of clinical skills. Previous work has shown the mni-CEX method is reliable and possesses construct validity. The mini-CEX is a potentially powerful tool to provide high-quality, interactive feedback that could contribute to improvement in trainees' clinical skills. Direct observation of clinical skill is a critical first step in helping trainees to improve their clinical skills. The mini-CEX provides a reliable, structured format for performing direct observation [3].

So idea of introduction of mini-CEXformat for interns case history recording came to my mind when actual direction observation assessment

\"snapshot"trainee-patient interaction is possible with specific feedback of their performance so I had undertaken present study.

# Materials and Methods

The study was conducted in the Dept.of Oral & Maxillofacial Pathology & Microbiology, GDC&H, Mumbai in the 3months duration from March-June 2015. All interns who were posted in above mentioned duration were asked to volunteer for the study if interested. Before starting mini-cex exercise, power pointer interactive group discussion were conducted

with each batch of interns based on dental communication checklist (DCCC) in order to improve students communication skills as a part of mini-CEX [2] after that different components of mini-CEX form were explained to interns & then the following skills were rated on Mini-Cex rating form: medical interviewing, physical examination, professionalism /humanistic qualities, counseling, clinical judgment, organization/efficiency and overall clinical competence. Ratings were on a nine-point scale, where 1-3 signified unsatisfactory performance;4-6satisfactory performance; and 7-9 superior performance. The evaluator graded the encounters as "met expectation", "borderline" or "did not meet expectation. Each mini-CEX was min 20 minutes [4].

## Feedback Form for Intem/Learner

<ol> <li>Whether mini cex is l</li> </ol>	hel:	pful?
---	------	-------

2. How much is the importance of oraganised for mate of mini cex?

$$0$$
---1---2---3---4---5--6---7----8----9----10

3. Whether the different component of case taking were understood?

4. If yes rank it

5. How much is the improvement in under standing importance of communication skills in clinical performance?

6. How much is the improvement in organized skill of learner?

$$0$$
---1---2---3---4---5--6---7----8----9----10

7. How much do you think you have gained knowledge about case history taking?

8. Will you be able to take case history according to mini cex format confidentely after this exercise?

9. If yes then ,rank your clinical competence

10. How important is to get evaluators response after mini cex?

11. Any suggestions about this exercise?

Procedure:-(Total 18 mini-CEX&18 feedback)

This study comprised of OPD patients of various complexity ranging from low to high were considered for mini-CEX. The interns examined the patients. Each encounter was observed by evaluator for various competencies of mini-CEX form. After each clinical encounter evaluator gave feedback then each intern were asked to fill feedback form using Likert's scale questions & narrative suggestion if any. Institutional ethics communities clearance was obtained.

#### Results

In the present study mini-CEX rating performance of the interns were satisfactory in seven different competencies expect first competency (medical interwing skill) showed 50% satisfactory &50% unsatisfactory performance.

Evaluators satisfaction with mini-CEX was marginal satisfactory whereas learner/interns feedback regarding the mini-CEX was also positive ranging from 7-9 Liket's scale.

They felt the overall exercise were very helpful to get a specific feedback of their performance. They experienced improved confidence in concluding clinical diagnosis, improvement in communication skills and increased trust from patient's side.

The following suggestion were obtained

- To introduce mini-CEX in preclinics,
- 2. Mini-CEX must be emphasized in academics,
- Each clinical encounter should carried out in mini-CEX format,
- 4. Feedback of patient should considered.

#### Discussion

The mini-CEX combines the 'prove' and 'improve' function of assessment, by not only grading the performance of the learner, but also offering them a development feedback based on direct observation. It has been found to be effective for assessing medical students [5,6].

The mini-CEX, is a valuation of clinical skills. Previous work has shown the mni-CEX method is reliable and possesses construct validity. Because the mini-CEX involves the direct observation of clinical skills, faculty have a significant opportunity to provide meaningful real time feedback to trainees. In present study the learners (interns) performance was

seen to be satisfactory. They perceived mini-CEX positively with few good & important suggestions.

#### Project Summary

Assessing the performance of students & interns in the clinical setup is important but challenging. Performance assessmentis not done well in most instancesas it requires multiple sampling overtime. In-training assessments done at the end of a term introduce a 'halo effect'. Most of these problems can beovercomebythe mini-CEX [4].

So for this reason gradual introduction & implementations of different learning aids specifically mini-CEX should be there form preclinics and clinics in order to improve education standard.

## Learning Experience

After attending advanced workshop HSET so many new strategies were there in mind about different teaching, assessment and evaluation methods.

In class room I had carried out different interactive sessions on communication skills and included PBL MCQs, SAQs and LAQs in internal assessment examination.

When I actually started with the present study, I thought I have only consider different learning competencies of mini-CEX format but when I came across different literature specifically ABIM guideline and competencies then explored that each aspect of mini-CEX is based on different components which were discussed in HSET workshop.

Overall it was a great learning experience as teacher as well as it was very helpful endeavor for improvement of academic carrier and personal life.

#### References

- Alberto AlvesDelima, Cees Van Der Vleute: MINI-CEX:VA method integrating direct observation & constructive feedback for assessing professional performance: Rev Argent Cardiol. 2011; 79: 531-536.
- 2. ABIM -Web -http//www.adim.org
- Eric S Holmboe, Monica Yepes, Frederick Williams, Stephen J Huot: Feedback & the mini clinical evaluation excercies. J Gen Intern Med. 2004 May; 19(5pt2): 558-516.
- 4. BalakrishnanRNair el.al. The mini clinical evaluation exercise (MINI-CEX)for assessing clinical performance of internal medical graduates: MJA. 2008; 189: 159-161.

- PandeNeelam,RaisoniPoonam,DeshpandeSaee: Perceptions of dental post-graduates about mini-cex: A pilot study. JETHS.volume issue-2 sept-dec2014.
- MalhotraS, HatakaR, CourneyaCA. Internal medicine resideant's perception of the mini-clinical evaluation exercise. Med. Teach. 2008; 30: 414-19.
- Norcini JJ, Blank LL, Duff FD, Fortna GS: A method for assessing clinical skills. Ann Intern Med. 2003 Mar 18; 138(6): 476 – 81.
- Norcini JJ, Blank LL, Arnold GK, Kimball HR: The mini-cexclinical evaluation exercise: A preliminary investigation. Ann Intern MED. 1995 Nov15; 123(10): 795-7.
- 9. E.D. Theaker, E.J. Kay and S. Gill, Development and preliminary evaluation of an instrument designed to assess dental students communication skills: British Dental Journal. 2000 Jan 8; 188(1).

# Indian Journal of Trauma and Emergency Pediatrics

Handsome offer for subscribers!!

Subscribe **Indian Journal of Trauma and Emergency Pediatrics** and get any one book or both books absolutely free worth Rs.400/-.

# Offer and Subsctription detail

Individual Subscriber

One year: Rs.7650/- (select any one book to receive absolutely free)

Life membership (valid for 10 years): Rs.76500/- (get both books absolutely free)

Books free for Subscribers of **Indian Journal of Trauma and Emergency Pediatrics.** Please select as per your interest. So, dont' wait and order it now.

Please note the offer is valid till stock last.

#### CHILD INTELLIGENCE

By Dr. Rajesh Shukla

ISBN: 81-901846-1-X, Pb, vi+141 Pages

Rs.150/-, US\$50/-

Published by World Information Syndicate

# PEDIATRICS COMPANION

By Dr. Rajesh Shukla

ISBN: 81-901846-0-1, Hb, VIII+392 Pages

Rs.250/-, US\$50

Published by World Information Syndicate

Order from

Red Flower Publication Pvt. Ltd.

48/41-42, DSIDC, Pocket-II

Mayur Vihar Phase-I

Delhi - 110 091(India)

Phone: 91-11-45796900, 22754205, 22756995, Fax: 91-11-22754205

E-mail: sales@rfppl.co.in, customer.rfp@gmail.com

Website: www.rfppl.co.in