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PERCEPTION OF UNDERGRADUATE MEDICAL STUDENTS ATTENDING TB AND CHEST DISEASES CLINICAL POSTINGS ON ASSESSMENT OF RESPIRATORY SYSTEM EXAMINATION USING MINI CEX

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ABSTRACT

Mini-Clinical Evaluation Exercise (Mini CEX) "Is the backbone of the scientific landscape". The American Board of Internal Medicine, (ABIM) developed the Mini CEX method of assessing skills" It is an assessment tool used to check something out an individual's clinical expertise, from bench to bed (B2B).

It is a method of the assessment of clinical skills including accomplishments. The latest swings in medical education are moving towards turnout clinical and professional behavior observed in clinical environments (workplace-based learning). Community centered education, academic and clinical research, assessments, MCQ item analysis, standardization exam procedures, learning outcomes, teaching strategies like implementing technology, effective plan of action for appraisal and interpretation in medical education help to execute better teaching outcomes. In the workplace-based methods of assessment for clinical potentiality, Medical researches appreciated and recommended Mini CEX as a reliable assessment method.

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INTRODUCTION

Investigators calculated the advantages of mini-CEX and assess the effects. The assessment tools that measure the trainees' performance.

Mini-CEX is focused on generalized analysis of the internal structure and was excluded from the meta-analysis Structured Clinical Examinations (OSCEs) have been used widely across many education fields for several decades. The training of health care professionals has undergone radical changes over the past 100 years

This need for assessment methods which can be used to document and track the development of competence in clinical practice has been the major drive towards the development of assessment in the workplace, commonly called Workplace-Based Assessment. There are at least 55 methods just dedicated to the direct observation and assessment of the clinical skills of medical trainees. In health professions education, the need for a broad range of assessment strategies by multiple assessors at multiple points in time is widely

accepted. Assessor Training Assessment ability is acquired and not innate.

Central turn round and round of assessment

Assessments have a good time and an innermost character in medical fragment It achieves by evaluating students' progress and the curriculum after effects.

Various appliances have been developed to focus on intellectual curriculum of learning or clinical sciences in written or oral exams.

Assessor Pedagogy and Assessment potentiality

It follows therefore, that assessor training is an indispensable part of any assessment programme. Assessors require knowledge of the competencies to be assessed. Understanding of the correct administration of the assessment process (observation and recording tasks intrinsic to the instrument).. There is good evidence that this level of basic training has not been universally achieved in WBA programmers and the need to address this type of training is not a matter for debate

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Mini CEX to upgrade patient consciousness

There is a wealth of literature describing the mortality, morbidity and financial costs of errors in medical practice.. The public demand for safe, effective patient-centered care is widely acknowledged. Mini CEX can be think about as a sustainable and reliable formative assessment tool and used to magnify the educational experience of the students. It is highly functional in involving patient-doctor interaction and help to upgrade the doctor-patient bond.

The traditionally used assessment tools that measure the trainees' granting in workplace is the mini-Clinical Evaluation Exercise (mini-CEX).

Researchers have estimated the success of mini-CEX by assessing its educational resources. Assessment emphasizes on: history taking, physical examination, communication, clinical judgment, and professionalism

A typical encounter lasts 15-20 minutes, including feedback

The mini CEX (Clinical Evaluation Exercise) is a workplace-based assessment tool intended to assess the clinical performance. Mini CEX focuses on the actual performance and not just knowledge.

This leads to better learning as well as helps to develop and strengthen the doctor–patient bond.(15) Evaluation is an important part of the learning process. Traditionally clinics are assessed by long case and short case. The strength of long case lies in encounters with real patients. The reliability and reproducibility of scores from long cases are found to be varying from 39 % to 67% according to several studies. If more encounters are planned with different case scenarios and different examiners, the assessment was found to yield better reproducible scores .Mini clinical evaluation or Mini CEX is an evaluation instrument which offers results over 95% reproducibility when compared to traditional long case examination .Mini CEX involves real patients, different case scenarios, multiple encounters and exposure both to senior and junior faculty.



It offers the students more opportunity for observation and feedback. Studies on Mini CEX evaluation for undergraduates are very sparse in comparison to postgraduate education. Examination of the Respiratory system is one of the important skills for an undergraduate student. Therefore Mini CEX was introduced to phase 2 learners in the department of TB& CD to assess their acquired knowledge in clinics in respiratory medicine during their clinical postings. There are challenges in the implementation of Mini CEX for undergraduates. More time and more number of encounters are required for undergraduates. Trained faculties are required to provide constructive feedback and individual attention.

Objectives

To evaluate history and physical examinations skills of Phase 2 learners in Respiratory system through Mini CEX

RESULTS

Students described their experiences (Reflections) as follows

- "The choice of a clinical skill like history or general examination or physical examination assessment offers more time for discussion and detailed analysis of symptomatology and physical signs."
- "The constructive feedback offered to us provides impetus to self directed learning and problem solving skills"
- 3. "We gain in depth knowledge of the clinical problem as we progress to higher grades, can develop critical analysis, clinical judgment and communication skills by interacting with more number of patients and faculty feedback."
- 4. "Clinical cases like pleural effusion, fibro cavity disease, corpulmonale, bronchiectasis, usually have general features like use of accessory muscles of respiration, deviation of trachea, drooping of shoulders, clubbing and bipedal edema. They also have a significant history of chronic cough, expectoration, hemoptysis, dyspnea and wheezing. We were exposed to all the cases and learnt in detail because we were assessed and our knowledge documented."

	Where the learner is going	Where the learner is	How to get there
Teacher	Clarifying, sharing and	Engineering effective discussions, tasks, and activities that elicit evidence of learning	Providing feedback that moves learners forward
Peer	understanding learning intentions	Activating studen resources for or	
Learner		Activating student of their own I	

How to use the assessments?

Assessments should be part of a structured program of teaching that is designed for doctors in training – and in each clinical placement, the teaching program. Junior doctors should be asked to carry out a certain number of assessments (DOPS, Mini-CEX and CbD) in each placement.

The learning objectives keep thete3acheron the track while assessment moves the student along the track.

CONCLUSION

Clinical skills are very important to acquire in the formative years of undergraduate training. Students spend 3 hours per day at the bedside during clinical posting. Assessment of clinics either in OP or IP settings is possible in Mini CEX. Each student is allotted a case and then picks up a skill and the faculty to test his knowledge. A convenient time for both student and faculty is agreed upon to take the test. Mini CEX is a feasible tool for assessment of clinical skills at regular intervals. It develops mentoring relationships and builds confidence among students. MiniCEX. Can enhance and strengthen learning skills, assessing of learning resources and

improve clinical skills. This canbe a support to other methods in a conventional curriculum

Suggested Reading

- Sara Mortaz Hejri,1 Mohammad Jalili,

 Masoomi,5 Saharnaz Nedjat,6
 and John Norcini, The utility of mini-Clinical Evaluation
 Exercise (mini-CEX) in undergraduate and postgraduate
 medical education: protocol for a systematic review,
 NCBI ,Systemic reviews, Syst Rev. 2017; 6: 146.
- 2. Norcini J, Burch V. Workplace-based assessment as an educational tool: AMEE guide no. 31. *Med Teach*. 2007; 29(9):855–71.
- 3. Weston PS, Smith CA. The use of mini-CEX in UK foundation training six years following its introduction: lessons still to be learned and the benefit of formal teaching regarding its utility. *Med Teach*. 2014; 36(2):155–63.
- Ahmed K, Miskovic D, Darzi A, Athanasiou T, Hanna GB. Observational tools for assessment of procedural skills: a systematic review. Am J Surg. 2011; 202(4):469–80.
- 5. Naeem N. Validity, reliability, feasibility, acceptability and educational impact of direct observation of procedural skills (DOPS) *J Coll Physicians Surg Pak.* 2013;23(1):77–82
- Ansari A, Ali SK, Donnon T. The construct and criterion validity of the mini-CEX: a meta-analysis of the published research. *Acad Med.* 2013;88(3):413–20. doi: 10.1097/ACM.0b013e318280a953
- 7. Kare-Silver N, Booton P. Assessment in training: purpose and recent changes. *London Journal of Primary Care*. 2010;1:1–6.
- 8. Smee S. ABC of learning and teaching in medicine. Skill Based Assessment. *BMJ*. 2003;326:703–706
- 9. Carraccio, C. L. and Englander, R. (2013). From Flexner to competencies: reflections on a decade and the journey ahead. Academic Medicine, 88(8), 1067–73.
- Frank, J. R., Mungroo, R., Ahmad, Y., Wang, M., De Rossi, S. and Horsley, T. (2010a). Toward a definition of competency-based education in medicine: a systematic review of published definitions. Medical Teacher, 32(8), 631–37.
- 11. Makary, M. A. and Daniel, M. (2016). Medical error-the third leading cause of death in the US. British Medical Journal (Online), 353, i2139.
- Swanwick, T. and Chana, N. (2009). Workplace-based assessment. *British Journal of Hospital Medicine*, 70(5), 290-93.

- 13. Kogan, J. R., Conforti, L. N., Iobst, W. F. and Holmboe, E. S. (2014). Reconceptualizing variable rater assessments as both an educational and clinical care problem. Academic Medicine, 89(5), 721–27.
- 14. Van der Vleuten, C. P., Schuwirth, L. W. T., Driessen, E. W., Dijkstra, J., Tigelaar, D., Baartman, L. K. J. and van Tartwijk, J. (2012).
- 15. Lockyer, J., Carraccio, C., Chan, M.K., Hart, D., Smee, S., Touchie, C., Holmboe, E.S., Frank, J.R. and ICBME Collaborators. (2017). Core principles of assessment in competencybased medical education. Medical Teacher, 39(6), 609–16.
- Ponnamperuma, G. (2013). Workplace based assessment.
 In: Walsh, E. (Ed.). Oxford Textbook of Medical Education. 1st ed. Oxford: Oxford University Press. p. 537–48.
- 17. Kogan, J.R. and Holmboe, E. (2013). Realizing the promise and importance of performance-based assessment. Teaching and Learning in Medicine, 25(Suppl. 1), S68-S74.
- 18. Massie, J. and Ali, J. M. (2016). Workplace-based assessment: a review of user perceptions and strategies to address the identified shortcomings. Advances in Health Sciences Education: Theory and Practice, 21(2), 455–73
- 19. Makary, M. A. and Daniel, M. (2016). Medical error—the third leading cause of death in the US. British Medical Journal (Online), 353, i2139
- Kogan, J. R., Conforti, L. N., Iobst, W. F. and Holmboe, E. S. (2014). Reconceptualizing variable rater assessments as both an educational and clinical care problem. Academic Medicine, 89(5), 721–27
- 21. Kasabah, S, Gokul, G. Mini clinical evaluation exercise in dental education in Kingdom of Saudi Aabia: a pilot study. *Int J Cur Res Rev.* 2017;9(2):20-24.
- 22. Behere, R. Introduction of mini CEX in undergraduate dental education in India. *Educ Health*. 2014;27(3):262-268.
- 23. Norcini, JJ, Blank, LL, Duff, FD, Fortna, GS. The mini-CEX: a method for assessing clinical skills. *Ann Intern Med.* 2003; 138:476-481.
- 24. Shilpa Chawla Jamenis, ShilpaPharande, SheetalPotnis, Use of Mini Clinical Evaluation Exercise as a Tool to Assess the Orthodontic Postgraduate Students, *journal of Indian orthodontic society*, January 16, 2020.

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