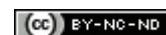


Introduction of Mini-clinical Evaluation Exercise for the Formative Assessment of Postgraduates in the General Surgery Discipline

KAILASH CHAROKAR¹, ANIL KAPOOR²

ABSTRACT

Introduction: The common practice prevalent in most of the Postgraduate (PG) teaching institutes is that while the PGs are clinically evaluating the patients for the traditional long case, they are mostly not directly observed by the faculty. The presentation of the case by PGs is the main focus of assessment. Workplace Based Assessment (WPBA) tools assess the clinical competence of students at the 'does' level of Miller's pyramid, while they perform in a real setting.

Aim: To assess the feasibility, acceptability and effectiveness of Mini-Clinical Evaluation Exercises (Mini-CEX) for the PGs in Surgery.

Materials and Methods: This educational intervention study was conducted in the General Surgery Department, over a period of one year. Sixteen PGs of 1st, 2nd, and 3rd-year residency participated in the study, and 13 faculty as assessors. The Mini-CEX was conducted and the abim.org proforma was used to record the observations by the faculty. The perceptions of the PGs and faculty were obtained at the end of the study using a predesigned validated feedback questionnaire. The change in

the level of acquisition of clinical skills of the PGs was evaluated using the group mean, median and rank. The Friedman test was applied to calculate the statistical significance at $p < 0.05$ using Statistical Package for the Social Sciences (SPSS) version 20.

Results: A total of 124 Mini-CEX encounters were conducted over a period of one year. The mean satisfaction score for the Mini-CEX encounters was 7.3 ± 0.88 and 6 ± 0.89 on the global rating (0-9) among the PGs and faculty respectively. While 14 PGs (87.5%) accepted that Mini-CEX was easy to conduct as compared to the traditional long case. Ten faculty (76.5%) accepted that it was feasible to conduct with the prevailing professional workload. Twelve PGs perceived that Mini-CEX was an effective tool for improving clinical skills. Statistically significant (p -value < 0.05) improvement was found in the competencies of medical interviewing, physical examination, counseling skills, and professionalism.

Conclusion: Mini-CEX was acceptable to the PGs and faculty. It was found to be an effective and formative assessment tool for learning clinical skills in a supportive workplace-based environment for clinical skills improvements.

Keywords: Direct-observation, Feedback, Formative assessment, Workplace-based assessment

INTRODUCTION

Over the last few decades, there is a changing trend towards WPBA for evaluating the competency of PGs. These assessment techniques have also been evaluated in other specialties such as midwifery and dentistry [1,2]. The PG residency training is largely based on the traditional observer model i.e., learning by observing teachers and seniors. However, assessment of PGs, while they are actively engaged in patient's related clinical activities is not often a common practice. The long case presentation evaluates case presentation skills of students rather than their actual clinical skills. The apex body regulations clearly mention the PGs' training in India as competency-based [3].

Mini-CEX, designed by the American Board of Internal Medicine (ABIM) in 1995 has been found to be a valid and reliable tool to assess the clinical competencies of trainees [4]. The Mini-CEX was designed to meet the necessity of clinical skills acquisitions and professional communication between PGs and faculty [4]. It is an effective tool to assess the PGs' for the actual performance ("does"). A 6-8 encounter Mini-CEX has a reliability of 0.83, which is much higher than a long case or an Objective Structured Clinical Examination (OSCE) of a similar duration [5]. A composite reliability coefficient of 0.8 was observed in the study of Moonen-van Loon JM et al., for eight encounters of Mini-CEX, nine of DOPS (Direct Observation of Procedural Skills), and nine of Multi-Source Feedback (MSF) over a period of one year [6].

Mini-CEX works on principles of the Direct Responsibility Model [7]. Primarily, the student interacts and evaluates the patient

and the teacher makes notes based on direct observation of patient-student clinical encounters in the pre-designed structured format. Finally, when the clinical encounter is over, the teacher provides immediate specific feedback and guidance based on the observations to the student for further improvement. The aim of the present study was to evaluate the feasibility, acceptability and effectiveness of Mini-CEX for the formative assessment of the PGs in our Institute.

MATERIALS AND METHODS

The educational intervention study was conducted in the Department of General Surgery, of a Tertiary Care Centre attached to a medical college in central India between April 2016 to March 2017. Convenient sampling was used. Study participants were 16 PGs while 13 faculty members evaluated them. Written consent was taken prior to the study from all the students. The faculty participated voluntarily. The permission to implement the study was granted by the Institutional Ethics Committee vide letter No: PCMS/OD/2016/887 Code No: IEC- 2016/04 dated 24.05.2016 People's College of Medical Sciences & Research Center, Bhopal, Madhya Pradesh, India. Direct observation of PGs during patients' clinical encounters using Mini-CEX proforma with immediate specific feedback was done. The sensitisation sessions were conducted separately for the students and faculty. The PG sensitisation was done by an interactive small group discussion, which was followed by the role play, and the plenary session in the end. A faculty discussion was held separately and the Mini-CEX generic form available from free downloads abim.org. was used [8].

Subsequently, implementation methodology was discussed and a consensus was reached. Students and faculties were encouraged to have exercises in different clinical settings like ambulatory care (OPD), indoors and the emergency ward. The standard protocol was followed for the Mini-CEX encounters as described by Norcini JJ et al., [9]. The encounter day, place of encounter, and the complexities of the cases were decided by the faculty and the PGs. It was planned to have nine encounters per PG with a focus on four competencies: medical interviewing skills, physical examination skills, counselling skills and professionalism in CEX. The generic form was used for recording the faculty observations during the Mini-CEX encounters. The completed Mini-CEX forms were collected and records were maintained chronologically. On completion of one year, feedback from PGs and faculty was obtained using the predesigned validated questionnaire, with close-end questions on a 5 point Likert Scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree) and a few open-end questions.

The first two encounters being introductory were considered as preparatory for the study. All the PGs completed seven Mini-CEX encounters, only a few completed 8-9 encounters. Therefore, only five Mini-CEX encounters (E3-E7) scores were considered for the Friedman test to measure the change in the levels of clinical competencies acquired by the PGs.

STATISTICAL ANALYSIS

The data was analysed using descriptive statistics including mean, median, and percentages. The effectiveness of Mini-CEX was evaluated by using serial 'global rating scale' scores of the third to seventh Mini-CEX encounters of every PG student. The Friedman test (Repeated-Measures) was applied to calculate the p-values. The test relies on the rank-ordering of the data and allows to evaluate the differences between three or more repeated evaluation scores. A p-value of <0.05 was taken as statistically significant. Data were analysed using IBM SPSS 20.

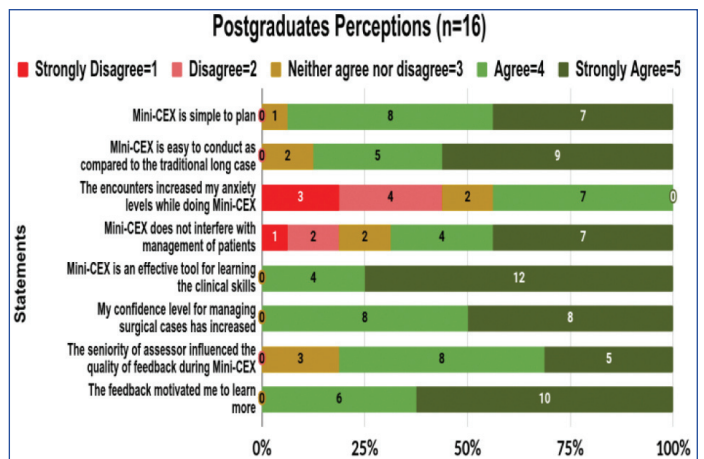
RESULTS

The median (mean±SD) time taken for observation in the encounter was 10 (13.01±4.13) minutes, with the range from 3 to 25 minutes, respectively. The median (mean±SD) feedback time was 5 (6.6±4.26) minutes, with the range from 2 to 20 minutes, respectively [Table/Fig-1].

No. of postgraduates (n=16) [#]	M=15 (93%) F=1 (7%)
Number of clinical encounters during PG training (n=124) (Individual student=7-9)	First year PG=45 (36.29%) Second year PG=49 (39.52%) Third year PG=30 (24.19%)
Clinical settings	OPD=58 (46.77%) Surgery wards=49 (39.52%) Emergency ward=17 (13.7%)
Case complexity	Low=10 (8.06%) Moderate=96 (77.41%) High=18 (14.51%)
Mean time taken (range) minutes	Observation time=13.01±4.13 (3-25) Feedback time=6.6±4.26 (2-20) Total encounter time=5-40
The mean satisfaction score (scale of 0-9)	Postgraduates=7.3±0.88 Faculty=6±0.89

[Table/Fig-1]: Overview of Mini-CEX encounters with surgery postgraduates (PGs).
[#]4 PGs joined in First-year while 4 PGs passed out; encounters were recorded as per the year of PG training

Fourteen out of 16 PGs (87.5%) accepted that Mini-CEX was easy to conduct as compared to the traditional long case. About seven PGs expressed that the Mini-CEX exercise increased their anxiety. About 12 PGs felt that the exercises were effective for their clinical learning [Table/Fig-2].



[Table/Fig-2]: Postgraduates (PGs) feedback on 5-point Likert scale.

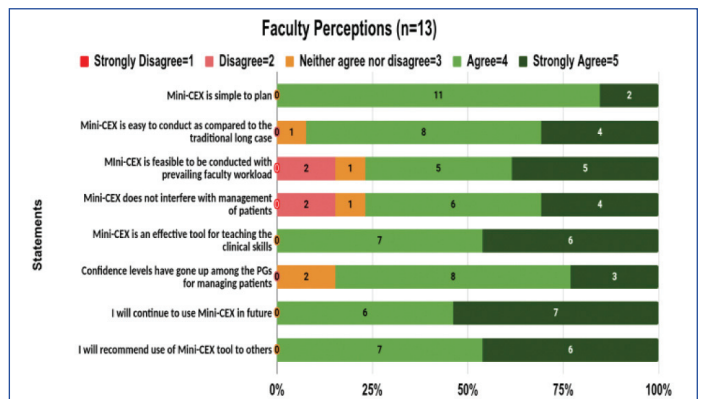
Perception of PGs on Mini-CEX (Verbatim responses to open end items)

"Mini-CEX helps us to overcome our fears when it comes to the real world and we are actually watched!"

"This tool helps us to improve the trainee-patient interaction skills effectively"

"Mini-CEX is acceptable to us and should be widely practiced in OPDs"

All the Faculty expressed that Mini-CEX is simple to plan as compared to traditional long cases, and 10 accepted that it was feasible to be conducted with the prevailing professional workload. All the faculty expressed that they will continue using Mini-CEX and recommend the tools to others for use [Table/Fig-3].



[Table/Fig-3]: Faculty feedback on a 5-point Likert scale.

Perception of Faculty on Mini-CEX (Verbatim responses to open end items):

"Mini-CEX is quick and easy to organise, less time consuming, doesn't interfere with routine clinical work"

"The deeper knowledge and competencies are difficult to judge by this tool, and traditional long cases are better suited for this"

"Mini-CEX may be made mandatory in the PG and UG Curriculum"

It was observed chronologically during the Mini-CEX encounters that there was a progressive increase in the skills acquisitions for the competencies, as is evident by the PGs group mean, median of the global ratings, and the ranks. The acquisition of clinical skills by the PGs was found to be statistically significant for all the four competencies focussed during the study [Table/Fig-4].

DISCUSSION

It was observed from present study that Mini-CEX was feasible and well acceptable in our settings, without any extra resources. Thirteen faculties from the Department of Surgery conducted a total of 124 Mini-CEX encounters with 16 PGs, with a range of

Competencies	Parameters	Global rating scores of Mini-CEX encounters					Friedman value	p-value
		E3	E4	E5	E6	E7		
Medical interviewing skills	Mean (SD)	4.5 (0.6)	4.8 (0.8)	5.1 (1.02)	5.6 (0.79)	5.5 (0.72)	24.9	0.001
	Median	4	5	5	6	6		
	IQR	4-5	4-5.75	5-6	5.25-6.5	5-6		
	Rank	1.94	2.34	3	4	3.72		
Physical examination skills	Mean (SD)	4.5 (0.81)	5.1 (1.3)	5.6 (0.88)	5.7 (1.3)	5.9 (1.06)	24.31	0.001
	Median	5	4.5	5.5	6	6		
	IQR	4-5	4-6	5-6	4.25-6	6-7		
	Rank	1.59	2.81	3.44	3.41	3.75		
Counseling skills	Mean (SD)	3.9 (0.68)	4.6 (1.0)	5 (1.2)	5.3 (1.3)	5.1 (0.62)	23.79	0.001
	Median	4	5	5	6	5		
	IQR	3.25-4	4-5.75	4.25-6	4.25-6	5-5.75		
	Rank	1.63	2.75	3.44	3.72	3.47		
Professionalism	Mean (SD)	3.9 (0.68)	4.2 (1.0)	4.4 (1.4)	5 (1.06)	4.9 (0.57)	17.91	0.001
	Median	4	4.5	5	5	5		
	IQR	3.25-4	3-5	3.25-5.75	4-6	5-5		
	Rank	2.06	2.56	2.84	3.88	3.66		

[Table/Fig-4]: Improvements in clinical competencies of the Postgraduates (PGs) (n=16). p-value <0.05 was considered statistically significant; IQR-Interquartile range

7-9 encounters for every Postgraduate during the study period. The majority of PGs were male (93%). A total of 30 (24.19%) encounters were conducted during the third year, 49 (39.52%) during the second year, and 45 (36.29%) during the 1st year postgraduate training period. An encounter completion rate of 86.11% was observed in present study. A completion rate of 64.4% was recorded in the study of Singh T and Sharma M, 93.3% by Khalil S et al., and 66.7% by Ramula M and Arivazagan N [Table/Fig-5] [5,10-12].

Mini-CEX completion rate (%)	Research study				
	Singh T and Sharma M 2010 [5]	Khalil S et al., 2017 [10]	Gupta S et al., 2017 [11]	Ramula M and Arivazagan N 2018 [12]	Present study
	64.4	93.3	50	66.7	86.11

[Table/Fig-5]: The completion rate of Mini-CEX in the research studies [5,10-12].

The encounters were conducted in different clinical settings in present study, 58 (46.77%) in the OPD, 49 (39.52%) in the surgical wards, and 17 (13.7%) in the emergency ward. In the study by Goel A and Singh T, Mini-CEX was conducted in different settings- OPD (38%), wards (22%), PICU (19%), NICU (15%) and casualty (6%) [13]. In the study of Singh T and Sharma M, most of the encounters were conducted in Outpatients Department [5].

The majority of the cases selected in present study were of moderate complexities (77.41%) followed by high complexity (14.51%) and low complexity (8.06%). In present study, the mean time taken for observation was 13.01±4.13 minutes. The mean feedback time was 6.6±4.26 minutes. The mean time for observation was 12.3 (8-30 min), and feedback was 4.2 (3-10 min) in the study of Joshi MK et al., [14] Norcini JJ et al., in their study recorded the mean time for observation was 15 minutes, and the time for feedback to the resident was 5 minutes [15]. In the study of Merseh E et al., the observation time was 14.24 minutes, and the feedback time was 9.71 minutes; whereas in the study of Deshpande S et al., the observation time was 15.25 minutes, and the feedback time was 11.20 minutes. In present study, the minimum time and maximum time taken for one Mini-CEX exercise was 5 minutes and 40 minutes, respectively [Table/Fig-6] [5,14-17].

Low motivation of faculty along with time constraints were the initial hurdles. A few of the faculty expressed difficulty in conducting and assessing the Mini-CEX encounters during the initial stages. Few

Mini-CEX time	Research study					
	Norcini JJ et al., 2003 [15]	Singh T and Sharma M 2010 [5]	Joshi MK et al., 2017 [14]	Merseh E et al., 2018 [16]	Deshpande S et al., 2018 [17]	Present study
Mean observation time (minute)	15	22	12.3	14.24	15.25	13.01
Mean feedback time (minute)	5	10	4.2	9.71	11.20	6.6

[Table/Fig-6]: The encounter time observed in the research studies [5,14-17].

of the faculty felt that practically it takes more time than what is planned for the encounters. We believe, maybe a little more on the faculty training could resolve such issues. Lack of proper training as one of the limitations in the acceptance of Mini-CEX has also been observed by other authors [5,18-20]. But, as the study progressed, it was observed that these difficulties were resolved and the faculty group expressed that Mini-CEX was feasible and acceptable in our settings in the day-to-day hospital activities like OPDs, ward rounds, thus generating a learning environment without compromising the hospital services.

The feasibility of Mini-CEX was better than the traditional assessment methods as it was being carried out during the course of routine clinical work. Though initially, it requires faculty training and extra time, there is no requirement for additional infrastructure, and hence is a cost-effective assessment tool [21]. Regular training of assessors through workshops on the provision of effective feedback is also required [22]. The UK General Medical Council in Good Medical Practice mentioned that the teachers essentially must-have the skills, attitudes, and practices of a competent teacher to discharge the responsibility for teaching [23]. We feel the important considerations and limitations of the rater-based judgments are issues of observer's self-style, individual bias, and immediate environmental factors. The specific narratives and contextual comments are better informative which justify the rater judgments of the trainees [24].

Mini-CEX was entirely a novel experience for the students. In the beginning, almost 44% of them were anxious due to direct observation of their clinical skills by the faculty in real-time settings. As the study progressed, their anxiety levels reduced, with the realisation that the exercises provided immediate constructive feedback with contextual learning opportunities for the gaps identified in clinical skills as they

were directly observed by faculty. Malhotra S et al., in their study also observed that the anxiety level reduced as the familiarity with the exercise increased [25]. The students' anxiety was insignificant and the acceptance of Mini-CEX by students was good in the study of Goel A and Singh T [13]. In present study, the seniority of the assessor influenced the quality of feedback during Mini-CEX. The direct one to one interaction was perceived as an informal learning environment and was liked by them, and they further expressed that it strengthened the student-teacher professional relationship. Similar were the findings observed in the study of Kogan JR et al., [26]. In present study, all the PGs expressed that Mini-CEX exercises motivated them and the feedback provided was effective for learning clinical skills. Similar findings were observed in the study of Singh T and Sharma M [5,11,13].

The mean satisfaction scores with Mini-CEX exercise were 7.3 ± 0.88 and 6 ± 0.89 on a scale of 0-9, among the PGs and faculty groups. This is a good indicator of their positive feelings and its acceptability. Goel A and Singh T, recorded a mean rating score for satisfaction 7.4 out of 9 for the students and 7.1 for the teachers [Table/Fig-7] [13,16,17,22].

Mini-CEX satisfaction rating (out of rating og 9)	Research study				
	Goel A and Singh T 2015 [13]	Merseh E et al., 2018 [16]	Deshpande S et al., 2018 [17]	Moudgil T et al., 2019 [22]	Present study
Mean satisfaction rating of the students	7.4	7.26	8.34	7.7	7.3
Mean satisfaction rating of the faculty	7.1	-	7.23	8	6

[Table/Fig-7]: Mini-CEX Satisfaction rating in the research studies [13,16,17,22].

The high satisfaction index among PGs and faculty in present study and in other Indian studies is a favourable sign in the light of the thrust of regulatory bodies towards competency-based medical education and WPBA [27].

We found a statistically significant improvement in the competencies of medical interviewing skills, physical examination skills, counseling skills and professionalism. Similar were the findings of Goel A and Singh T and Singhal A et al., [13,27]. Hejri SM and Jalili M concluded that mini-CEX has reasonable validity, reliability and educational impact [28].

Limitation(s)

Mini-CEX was introduced for the first time in the Surgery Department. Being a new experience for the faculty and PGs, it took some time to get used to it. The actual number of encounters held was less than the total number planned.

CONCLUSION(S)

Mini-CEX was found to be acceptable by the PGs and faculty in our setting. It was found to be an effective tool for formative assessment of PGs in identifying the gaps in knowledge and skills. The specific feedback after the Mini-CEX encounters improved PGs' clinical skills and acquisition of desirable competencies. Mini-CEX may be practiced in the Outpatient Department, emergency room, inpatient wards, and Intensive Care Units. Mini-CEX is an effective workplace-based tool for the clinical skills learning of the PGs.

Acknowledgement

We are thankful to abim.org for the provision of free downloading of the Mini-CEX generic form from their website. We are also deeply thankful to all mentor faculties of the MCI Nodal Centre, PSMC, Karamsad, Gujarat, India, for valuable guidance and support. We are thankful to all the faculty and PGs from the

Department of Surgery. My deep gratitude and thanks to Dr. Anju Kapoor, Professor in Paediatrics, PCMS and RC, Bhopal for critical suggestions. We acknowledge and thank our Statistician Dr. Veena Melwani, MD, Community Medicine for supporting the statistical computation and analysis.

Authors' contributions: KC designed the present study, reviewed literature, collected all the data, performed the statistical analysis, and drafted the manuscript. KC and AK examined literature and reviewed the manuscript. In the end, both the Authors have read and approved the final manuscript.

REFERENCES

- Behere R. Introduction of Mini-CEX in undergraduate dental education in India. *Educ Health (Abingdon)*. 2014;27:262-68.
- Sweet LP, Glover P, Mc Phee T. The midwifery mini-CEX- A valuable clinical assessment tool for midwifery education. *Nurse Educ Pract*. 2013;13:147-53.
- Medical Council of India. PG Curriculum General Surgery. New Delhi: MCI; 2020 [cited 22 June 2020]. Available from: [mciindia.org/CMS/wp-content/uploads/2019/09/MS-Surgery.pdf](https://www.mciindia.org/CMS/wp-content/uploads/2019/09/MS-Surgery.pdf).
- Norcini JJ, Blank LL, Arnold GK, Kimball HR. Examiner differences in the Mini-CEX. *Adv Health Sci Educ Theory Pract*. 1997;2:27-33.
- Singh T, Sharma M. Mini-clinical examination (CEX) as a tool for formative assessment. *Natl Med J India*. 2010;23:100-02.
- Moonen-van Loon JM, Overeem K, Donkers HH, van der Vleuten CP, Driessen EW. Composite reliability of a workplace-based assessment toolbox for postgraduate medical education. *Adv Health Sci Educ Theory Pract*. 2013;18(5):1087-102.
- Singh T, Gupta P, Singh D. Teaching clinical skills. *Principles of Medical Education*, 4th edn. Jaypee, New Delhi, 2013; pp. 48-51.
- Mini-CEX Direct Observation Tool. American Board of Internal Medicine (2017) website. Available at: <https://www.abim.org/program-directors-administrators/assessment-tools/mini-cex.aspx>.
- Norcini JJ, Blank LL, Arnold GK, Kimball HR. The Mini-CEX (clinical evaluation exercise): A preliminary investigation. *Ann Intern Med*. 1995;123:795-99.
- Khalil S, Aggarwal A, Mishra D. Implementation of a Mini-Clinical Evaluation Exercise (Mini-CEX) program to assess the clinical competence of postgraduate trainees in Pediatrics. *Indian Pediatr*. 2017;54:284-87.
- Gupta S, Sharma M, Singh T. The acceptability and feasibility of mini-clinical evaluation exercise as a learning tool for pediatric postgraduate students. *Int J Appl Basic Med Res*. 2017;7:S19-22.
- Ramula M, Arivazagan N. Mini-clinical examination (mini-CEX) as a tool for formative assessment for surgical interns. *Int J of Surg Sci*. 2018;2(4):19-22.
- Goel A, Singh T. The usefulness of mini-clinical evaluation exercise as a learning tool in different pediatric clinical settings. *Int J Appl Basic Med Res*. 2015;5:S32-34.
- Joshi MK, Singh T, Badyal DK. Acceptability and feasibility of mini-clinical evaluation exercise as a formative assessment tool for workplace-based assessment for surgical postgraduate students. *J Postgrad Med*. 2017;63:100-05.
- Norcini JJ, Blank LL, Duffy FD, Fortna GS. The Mini-CEX: A method for assessing clinical skills. *Ann Intern Med*. 2003;138:476-81.
- Meresh E, Daniels D, Sharma A, Rao M, Mehta K, Schilling D. Review of mini-clinical evaluation exercise (mini-CEX) in a psychiatry clerkship. *Adv Med Educ Pract*. 2018;9:279-83. <https://doi.org/10.2147/AMEPS160997>.
- Deshpande S, Pande N, Radke U, et al. 'Evaluation of Mini Clinical Evaluation Exercise (Mini-CEX) for post-graduate students in Prosthodontics: Student and Faculty Perceptions', *Med Ed Publish*. 2018;7(1):16. <https://doi.org/10.15694/mep.2018.0000014.1>.
- Massie J, Ali JM. Workplace-based assessment: A review of user perceptions and strategies to address the identified shortcomings. *Adv Health Sci Educ Theory Pract*. 2016;21:455-73.
- Foley T, Walsh E, Sweeney C, James M, Maher B, O'Flynn S. Training the assessors: A Mini-CEX workshop for GPs who assess undergraduate medical students. *Education For Primary Care*. 2015;26:446-47.
- Daelmans HE, Mak-van der Vossen MC, Croiset G, Kusurkar RA. What difficulties do faculty members face when conducting workplace-based assessments in undergraduate clerkships? *Int J Med Educ*. 2016;7:19-24.
- Singh T, Modi JN. Workplace-based assessment- A step to promote competency-based postgraduate teaching. *Indian Pediatr*. 2013;50:553-59.
- Moudgil T, Bansal Y, Arora R, Bandhu SD. Assessment of clinical competence of interns using workplace-based assessment in ophthalmology rotational posting. *JCDR*. 2019;13(6):NC01-08.
- Kumar S, Verma A. Post graduate curriculum and skill of teacher. *Indian J Surg*. 2017;79:378-79.
- Lee V, Brain K, Martin J. Factors influencing Mini-CEX judgements and their practical implications: A systematic literature review. *Acad Med*. 2017;92:880-87.
- Malhotra S, Hatala R, Courneya CA. Internal medicine residents' perceptions of the Mini Clinical Evaluation Exercise. *Med Teach*. 2002;30:414-19.
- Kogan JR, Conforti LN, Bernabeu EC, Durning SJ, Hauer KE, Holmboe ES. Faculty and staff perceptions of feedback to residents after direct observation of clinical skills. *Med Educ*. 2012;46:201-15.

- [27] Singhal A, Subramanian S, Singh S, Yadav AK, Hallapanavar A, Anjali B. Introduction of mini-Clinical Evaluation Exercise as a mode of assessment for postgraduate students in medicine for the examination of sacroiliac joints. *Indian J Rheumatol*. 2020;15:23-26.
- [28] Hejri SM, Jalili M. Ups, and downs of conducting a BEME review: Lessons learned. *Med Teach*. 2020;42(2):240-41.

PARTICULARS OF CONTRIBUTORS:

1. Associate Professor, Department of General Surgery, People's College of Medical Sciences and Research Centre, Bhopal, Madhya Pradesh, India.
2. Professor, Department of General Medicine, People's College of Medical Sciences and Research Centre, Bhopal, Madhya Pradesh, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Kailash Charokar,
130, Gomti Colony, Nehru Nagar, Bhopal-462003, Madhya Pradesh, India.
E-mail: kcharokar@gmail.com

PLAGIARISM CHECKING METHODS: [\[Jan H et al.\]](#)

- Plagiarism X-checker: Jun 25, 2020
- Manual Googling: Jul 22, 2020
- iThenticate Software: Aug 08, 2020 (9%)

ETYMOLOGY: Author Origin**AUTHOR DECLARATION:**

- Financial or Other Competing Interests: None
- Was Ethics Committee Approval obtained for this study? Yes
- Was informed consent obtained from the subjects involved in the study? Yes
- For any images presented appropriate consent has been obtained from the subjects. NA

Date of Submission: **Jun 24, 2020**Date of Peer Review: **Jul 15, 2020**Date of Acceptance: **Jul 22, 2020**Date of Publishing: **Sep 01, 2020**