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**Original Article** 

# Applicability of Workplace-Based Assessment Tools (Mini-CEX) for the Trainee Doctors of Obstetrics and Gynecology in Bangladesh

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#### **Abstract**

This cross-sectional study was conducted to assess the applicability of workplace-based assessment tools (Mini-CEX) for the trainee doctors of Obstetrics and Gynecology in Bangladesh. The study was conducted from January 2022 to December 2022. The Study population were trainee of selected medical college hospital and Supervisors/Teachers of selected medical college hospital. Medical colleges were selected conveniently. Respondents were selected purposively. Research instruments were Mini-CEX, questionnaire of American Board of Internal Medicine. Scores were given to each scale as: unsatisfactory=1 2 3, satisfactory =4 5 6, superior=7 8 9.

Keywords: Workplace based assessment, trainee doctors, Mini-CEX

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## Introduction

Workplace based Assessment (WPBA) consists of direct observation of trainee performance in clinical settings, followed by the availability of focused feedback<sup>1</sup>. In different phases, workplace-based assessment is the evaluation of what the trainee does in actual life on the job<sup>2</sup>. Latest tendencies in medical training are transferring quickly away from gaining a sure variety of marks in high-stakes examinations and in direction of gathering proof of clinical competence (and professional) conduct noticed in clinical environments (workplace-based assessment). Mini-clinical Evaluation Exercise (mini-CEX) is among the mostly used strategies of workplace-based assessments. Mini-CEX is commentary of what truly occurs throughout encounters with patients. It might probably deal with history, diagnosis, management or explanation. Utilizing Mini-CEX present a chance to not solely enhance trainee and facilitate interplay with the trainee but additionally in the end enhance affected person care<sup>3</sup>. According to **MBBS** 

curriculum, Mini-CEX is not practicing in our clinical practice. This study reflects the applicability regarding Workplace Based Assessment (Mini-CEX) for trainee doctors of Obstetrics and Gynecology in Bangladesh.

## Methodology

This study was a descriptive type of crosssectional study. It was conducted from 01 January 2022 to 31 December 2022 (01 year). This study was conducted in eight medical colleges of Bangladesh. Out of eight, two government and two non-government medical colleges were located in Dhaka, and another two government and two non-government medical colleges were located outside Dhaka. Sample size was 25. The Study population were trainee of selected medical college hospital and Supervisor/Teacher of selected medical college hospital. Medical colleges were selected conveniently. Respondents were selected purposively for administering questionnaire. Research instruments were Mini-CEX, questionnaire of American Board of Internal Medicine. Data were checked and

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edited after collection and then processed and analyzed by using Statistical Package for Social Science (SPSS) computer software version 26. Scores were given to each scale as: unsatisfactory=1 2 3, satisfactory =4 5 6,

superior=7 8 9. Calculation of mean and standard deviation was done when necessary. Statistical inference for numerical data was drawn when applicable.

## Result

Table 1: Distribution of the evaluation results of the trainee in Mini -CEX

	Frequency (%)									
	Unsatisfactory			Satisfactory			Superior			SD
	1	2	3	4	5	6	7	8	9	
Medical Interviewing skills	-	2(8)	-	1(4)	7(28)	8(32)	7(28)	-	-	5.60 ±1.384
Physical examination skills	-	2(8)	-	5(20)	7(28)	7(28)	-	-	-	5.16 ±1.37
Humanistic Qualities/ Professionalism	-	-	-	3(12)	8(32)	9(36)	4(16)	1(4)		5.68 ±1.02
Clinical Judgment	-	-	1(4)	4(16)	9(36)	11(44)	-	-	-	5.20 ±.866
Counseling skills	-	3(12)	2(8)	2(80	6(24)	9(36)	3(12)	-	-	5.00 ±1.554
Organization efficiency	-	1(4)	1(4)	4(16)	8(32)	9(36)	2(8)	-	-	5.160 ±1.178
Overall clinical competence	-	-	-	4(16)	11(44)	9(36)	1(4)	-	-	5.28 ±.791

Table 1s shows distribution of the evaluator results of the trainee in 9-point score, the mean score of Medical Interviewing skills was 5.60±1.384, Physical examination skills was 5.16±1.37, Humanistic Qualities/Professionalism was 5.68±1.02, Clinical

Judgment was 5.20±.866, Counseling skills was 5.00±1.554, Organization efficiency was 5.160±1.178 and overall clinical competence is 5.28±.79.

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Table 2: Distribution of the level of satisfaction of trainee doctor by evaluator in Mini-CEX

The level of satisfaction	Medical Interviewing	Physical examination	Humanistic Qualities/	Clinical Judgment	Counseling skills	Organization efficiency	Overall clinical
by evaluator	skills	skills	Professionalis	J		_	competenc
			m				e
Mean	5.60	5.16	5.68	5.20	5.00	5.160	5.28
Median	6.0000	5.0000	6.0000	5.0000	5.0000	5.0000	5.0000
Mode	6.00	5.00 <sup>a</sup>	6.00	6.00	6.00	6.00	5.00
Std.	1.38444	1.37477	1.02956	.86603	1.55456	1.17898	.79162
Deviation							
Minimum	2.00	2.00	4.00	3.00	2.00	2.00	4.00
Maximum	7.00	7.00	8.00	6.00	7.00	7.00	7.00

Table 2 shows distribution of the level of satisfactory of trainee doctor by evaluator in Mini–CEX. Among them mean was 5.00- 5.68, median is

## **Discussion**

We distributed of the evaluator results of the trainee in 9 point score, the mean score of Medical Interviewing skills was 5.60±1.384, Physical examination skills was 5.16  $\pm 1.37$ , Humanistic Qualities/ Professionalism was 5.68±1.02, Clinical Judgment was 5.20±.866, Counseling skills was  $5.00\pm1.554$ . Organization efficiency was 5.160±1.178 and Overall clinical competence was 5.28±.791 (Table7). In mini-CEX acquired competence for history taking in Ob & Gyn, which were higher than for the physical examination and clinical judgement. The strengths of the mini-CEX include the opportunity for extensive sampling across patients and settings and training observation <sup>1</sup>. Integration of the role of medical educators into the planning e.g., essential clinical curriculum was proliferation of WPBA. Many hospital staffs and clinicians, for whom teaching was not a core interest, may view WPBA as an added burden to their heavy clinical obligations. We had worked closely with our medical school to ensure that clinicians were recognized and accredited as educators and can contribute to undergraduate and postgraduate curriculum. If we show the distribution of the level of satisfaction of trainee doctor by evaluator in

most of 5, mode was most of 6, Std deviation was .866-1.55, minimum was .2-4 and maximum was 6-8.

Mini–CEX, among them mean was 5.00- 5.68, median was most of 5, mode was most of 6, Std deviation in 866-1.55, minimum was .2-4 and maximum was 6-8 .The Mini-CEX tool particularly important where there was poor assessor engagement <sup>4</sup>. Part of the problem, we feel in that there needs to be a cultural change about the way these assessments were being used in a summative way rather than as a means of formative assessment. perhaps workplace learning exercise may be more appropriate term than assessment. It should be free from stress and anxiety which was also mentioned in other study <sup>5</sup>.

#### Conclusion

Despite different limitations described for the applicability of WPBA, we report a high level of satisfaction among our trainers and trainees. This indicates that WPBA can be successfully integrated in our training programme. It is an encouraging step towards the acceptance of these tools into our day-to-day clinical practice. In the study we feel that faculty development and administrative support are important factors to incorporate WPBA in our training program

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