



## A study to assess the effectiveness of OSPE over traditional practical examination in child health nursing on the performance among nursing students of Narayan Nursing College

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### Abstract

**Background:** Accurate assessment of clinical skills is essential in nursing education. Traditional practical examinations are often criticized for subjectivity and lack of standardization, whereas the Objective Structured Practical Examination (OSPE) offers a more structured and objective approach.

**Objectives:** To compare the effectiveness of OSPE with traditional practical examination in assessing the performance of undergraduate nursing students in Child Health Nursing.

**Methods:** A comparative study was conducted among 30 undergraduate nursing students at Narayan Nursing College Jamuhar Rohtas Bihar. Students were evaluated using both traditional practical examination and OSPE. OSPE consisted of multiple stations with standardized checklists to assess specific clinical competencies. Data were analysed using chi square statistical test, and simple t – test significance was considered at  $t < 2.72$

**Results:** The mean score of students in OSPE 17.8 was higher than in the traditional practical examination 16.1. The difference was found to be statistically significant (. OSPE demonstrated improved objectivity, better skill-based assessment, and minimized examiner bias compared to traditional methods.

**Conclusion:** OSPE is a more reliable and valid assessment tool than traditional practical examinations. Integration of OSPE into nursing education is recommended to improve assessment quality and student performance.

**Keywords:** OSPE, traditional practical examination, nursing students, child health nursing, clinical skills assessment

### Introduction

In child health nursing, students are required to acquire not only theoretical knowledge but also strong clinical and practical skills to meet the unique physical, psychological, and developmental needs of children. Now 'a day's medical education are based on clinical observation so OSPE is the best selection Method to assess the nursing student clinical knowledge over traditional method so for better understanding to asses the effectiveness of OSPE over traditional practical exam in child health Nursing on the performance of nursing student of NNC. The Traditional method. Therefore, the present study is needed to evaluate the effectiveness of OSPE over traditional. Practical examination methods in child health nursing. The findings of this study will help nursing Educators adopt more reliable and valid assessment strategies, improve students' clinical Competence, and enhance the quality of nursing education [1].

### Objective

- To assess the effectiveness of Objective Structured Practical Examination (OSPE) over the traditional practical examination method in Child Health Nursing among nursing Students.
- To evaluate the performance level of nursing students assessed by OSPE in Child Health Nursing.
- To compare the performance scores of students assessed by OSPE and traditional Practical methods.

### Hypothesis

- **H<sub>1</sub>:** There is a significant difference in the performance scores of nursing Students assessed through OSPE

compared to those assessed through Traditional practical examination in Child Health Nursing.

- **H<sub>2</sub>:** Nursing students assessed through OSPE will have higher mean Performance scores than those assessed through traditional practical Examination in Child Health Nursing.
- **H<sub>3</sub>:** There is a significant association between the performance of nursing Students and selected demographic variables (such as age, gender, previous Academic performance, or year of study).

### Operational Definition

- Assess in the study refer, it is to the collection of data to describe or better understand a Problem, issue and purpose of describing.
- Effectiveness in this study refers to the extent to which the Objective Structured Practical Examination (OSPE) improves nursing students' knowledge, psychomotor Skills, overall practical performance In Child Health Nursing, as measured by structured evaluation scores and student Feedback, in comparison with the traditional practical examination method.
- OSPE is a systematic, objective, and structured method of practical assessment in which Nursing students rotate through a series of pre-planned stations designed to evaluate Knowledge, psychomotor skills, communication, and clinical competencies using Standardized checklists, particularly in subjects like Child Health Nursing [2].
- Traditional Practical Examination is a conventional method of assessment where Students perform procedures in front of an examiner and are evaluated

mainly through Observation without standardized checklists<sup>[3]</sup>.

- Child Health Nursing is a branch of nursing concerned with the care of infants, Children, and adolescents to promote health, prevent illness, and provide treatment<sup>[4]</sup>.

### Sample Technique

The sample consists of students of B Sc nursing 3<sup>rd</sup> year those who fulfil the inclusion criteria.

### Sample size

The study sample comprises of 30 students of B.Sc. N 3<sup>rd</sup> year of Narayan Nursing College, Rohtas

### Sampling technique

Non-Probability Convenient sampling technique was used to select the samples<sup>[5]</sup>.

### Criteria for sample selection.

#### Inclusion criteria

- Nursing students studying Child Health Nursing in the selected institution.
- Students who were present during the period of data collection.

- Students who had basic theoretical knowledge of newborn assessment

### Exclusion criteria

- Nursing students who were absent during the assessment period.
- Students who were not willing to participate in the study.
- Students who were involved in the pilot study.

### Reliability of the tool

In this study, the reliability of the OSPE checklist for newborn assessment was established using

The following methods:

1. **Inter-rater Reliability:** The OSPE checklist was administered to a group of nursing students and evaluated independently by two examiners. The scores given by both evaluators were compared to determine consistency. A high level of agreement indicated good inter-rater reliability.

2. **Internal Consistency:** Internal consistency of the checklist was assessed using Cronbach's Alpha. The obtained value was 0.82, which indicates good reliability of the tool.

**Table 1:** Comparison of Performance Scores

Group	Sample Size(N)	Mean	SD	Mean Difference	t- value	Table Value( 0.05) df(28)
OSPE (Experimental)	15	17.8	1.41			
Traditional (Control)	15	16.1	1.95	1.7	2.72	2.048

The analysis revealed a statistically significant difference in mean performance scores, with the OSPE group achieving higher scores than the traditional group (t = 3.91, p < 0.05). The structured, objective, and standardized nature of OSPE contributed to improved student performance and greater consistency in evaluation.

### Summary

The findings of the study clearly demonstrate that OSPE is a more effective method of practical evaluation compared to traditional practical examination in Child Health Nursing. The structured format, objective scoring system, and comprehensive assessment approach contribute to improved student performance. The study also emphasizes the role of academic preparation and attendance in enhancing practical competency. The results support the growing emphasis on OSPE as a modern, reliable, and valid method of clinical evaluation in nursing education<sup>[6]</sup>.

### Conclusion

The present study concluded that the Objective Structured Practical Examination (OSPE) is a more effective method of practical assessment compared to the Traditional practical examination among nursing students in Child Health Nursing.<sup>7</sup> The analysis Revealed a statistically significant difference in mean performance scores, with the OSPE group achieving higher scores than the traditional group (t = 3.91, p < 0.05). The structured, objective, and standardized nature of OSPE contributed to improved Student performance and greater consistency in evaluation.

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