"A COMPARATIVE STUDY TO ASSESS THE EFFECTIVENESS OF OSCE VERSUS TRADITIONAL METHOD OF EVALUATION OF SKILLS ON SELECTED PROCEDURE AMONG B.Sc.(N) III YEAR AND GNM II YEAR STUDENTS AT SELECTED COLLEGE OF NURSING, LUCKNOW, U.P".

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ABSTRACT

Traditional method of evaluation are the methods which are used conventionally to produce a written document like exam paper, quiz, long essays etc. The traditional method of evaluation are used to assess the practical skills in terms of the viva, or oral practical examination which has various limitations. The students are usually given a single task in the traditional exam to perform their skills practically which are evaluated based on the criteria of that task.

The OSCE is a versatile multipurpose evaluative tool that can be utilized to evaluate health care professionals in a clinical setting. It assesses competency, based on objective testing through direct observation. It is comprised of several "stations" in which examinees are expected to perform a variety of clinical tasks within a specified time period against criteria formulated to the clinical skill, thus demonstrating competency of skills and /or attitude. The OSCE has been used to evaluate those areas most critical to performances of health care professionals.

The aim of the study is to assess and compare the skills of the GNM II year and B.Sc. III year students regarding selected procedure. The findings highlight that OSCE method can simultaneously be implemented with the Traditional method of evaluation in assessing the clinical skills of students.

The present study entitled**, "A comparative study to assess the effectiveness of OSCE versus traditional method of evaluation of skills on selected procedure among B.Sc.(N) III year and GNM II year students at selected college of nursing, Lucknow, U.P".**

KEYWORDS

Comparative, Competency, effectiveness, OSCE, stations, Traditional method, Evaluation, Procedure.

INTRODUCTION

An OSCE has been considered as one such method. OSCE was first described by Harden and is an evaluative tool that can be used to assess the clinical performance of health care professionals. The objective structured clinical examination (OSCE) is an approach of student's assessment in which aspects of clinical competence are evaluated in a comprehensive, consistent and structured manner with close attention to the objectivity of process (Byrne and Smyth, 2007).

The traditional methods of evaluation are used to assess the practical skills in terms of the viva, or oral practical examination which has various limitations. The students are usually given a single task in the traditional exam to perform their skills practically which are evaluated based on the criteria of that task.

Viva-voce is used in assessing the communication skills and theoretical knowledge which are not structured and has lack of objectivity. Hence, it has several flaws like inter examiner marks variation, examiners subjectivity which prevents uniform marking. These flaws could be minimized by new methods like OSCE.

METHODS

Researcher used descriptive comparative research design to conduct the study. The investigator used a convenient sampling method in the study. The study was conducted in Sahara College of Nursing, Lucknow. A total number of (20 each from B.Sc. (N) III year and GNM II year) 40 samples were selected by using simple probability random sampling technique. The data was collected using observational checklist for OSCE and conducted viva voce/ oral practical exam for Traditional method of evaluation.

RESULT

The study findings revealed that the overall mean of Traditional method score was 11.5 and of OSCE score was 12.5. The standard deviation of Traditional method score was 4.0311 and of OSCE score was 4.3301. The unpaired t test shows that there is significant difference between Traditional method and OSCE score at the level of significance. There was no significant association found between demographic variables age, course and previous knowledge among nursing students at the level of significance (p<0.05).

DISCUSSION

This chapter deals with the discussion on findings of data analysis with the objective and stated hypothesis of the study .**The findings of the study are discussed:**

FIRST OBJECTIVE:

1. To assess the effectiveness of OSCE as a method of evaluation of skills on selected procedures among B.Sc. (N) III year and GNM II year students.

In this study the majority 36 % number of nursing student with inadequate knowledge and 65% number of nursing student having adequate level of knowledge and over all mean score was 11.5.

SECOND OBJECTIVE:

2. To assess the effectiveness of traditional method of evaluation of skill on selected procedures among B.Sc. (N) III year and GNM II year students.

In this study the mean and standard deviation of traditional method knowledge score was (11.5 + 4.0311).

The unpaired 't' test value show that there is a significant difference b/w OSCE versus traditional method knowledge score 12.5 at (<11.5) among B.Sc. (N) 3rd year and GNM 2nd year students.

THIRD OBJECTIVE:

3. To compare the effectiveness of OSCE versus traditional method of evaluation of skill on selected procedures among B.Sc. (N) III year and GNM II year students.

In this study OSCE study reveal that 5 (25 %) student have inadequate knowledge and 15 (75%) has adequate knowledge & Traditional study reveal that 7 (35%) student have inadequate knowledge and 13 (65%) had adequate knowledge.

FOURTH OBJECTIVE:

4. To find out the association of effectiveness of OSCE versus traditional method of evaluation of skill on selected procedures among B.Sc. (N) III year and GNM II year students.

In this study, there was significant association b/w Effectiveness of OSCE VS Traditional method of evaluation with level of knowledge score. The chi square value between OSCE vs Traditional method is 0.05 there was no significant association b/w age and previous source of knowledge.
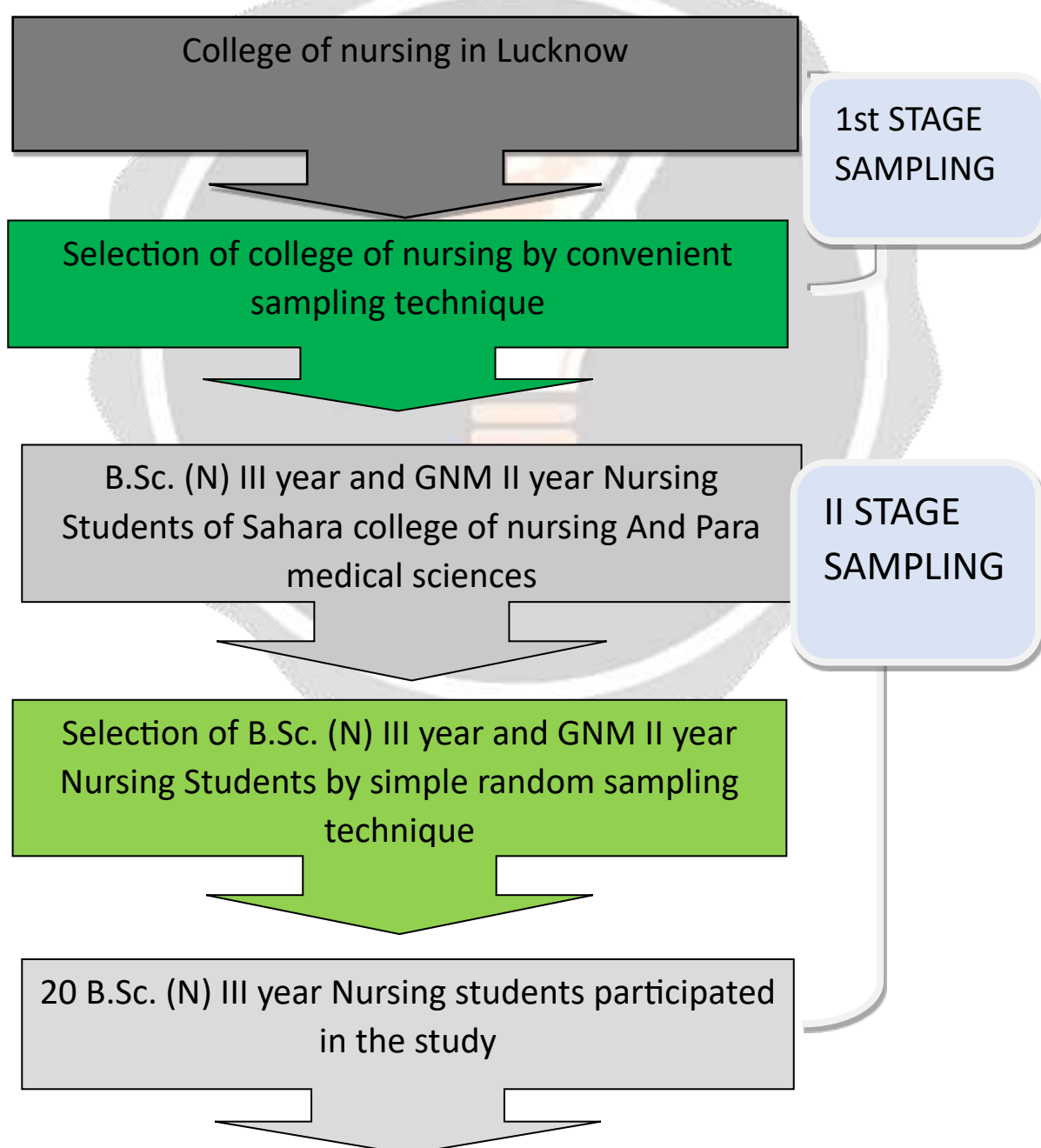
CONCLUSION

The study findings revealed that in traditional method out of 20 students 7 (35%) nursing students had inadequate level of knowledge and 13 (65%) nursing students had adequate level of knowledge.

In OSCE method out of 20 students 5 (25%) nursing students had inadequate level of knowledge and 15 (75%) nursing students had adequate level of knowledge.

The unpaired t test value 2.02 compared with the tabulated table value at level of (p<0.05) was not significant which concluded that the effectiveness of OSCE over traditional method of evaluation among nursing students.

FIGURES

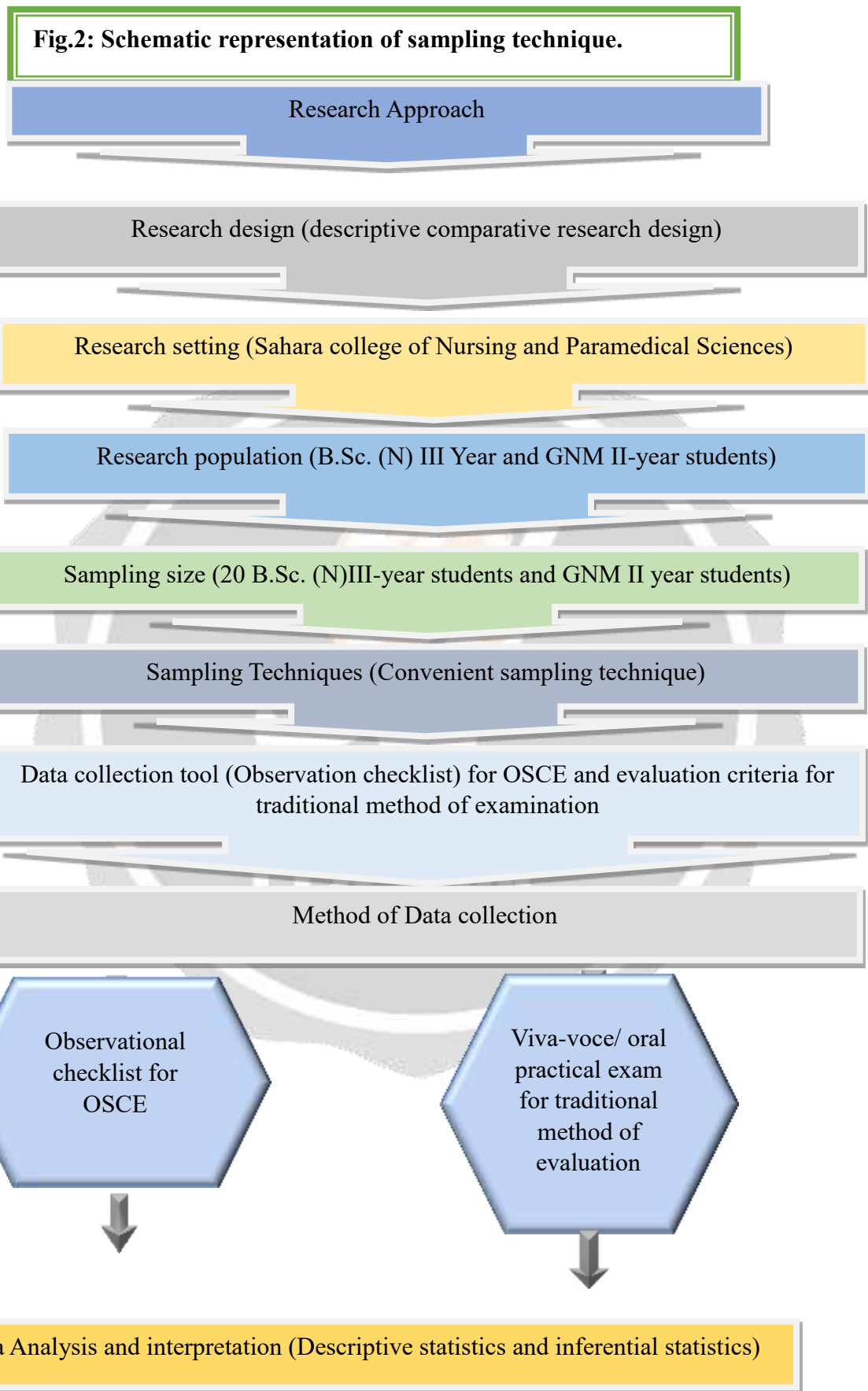College of nursing in Lucknow

1st STAGE SAMPLING

Selection of college of nursing by convenient sampling technique

B.Sc. (N) III year and GNM II year Nursing Students of Sahara college of nursing And Para medical sciences

II STAGE SAMPLING

Selection of B.Sc. (N) III year and GNM II year Nursing Students by simple random sampling technique

20 B.Sc. (N) III year Nursing students participated in the study

Fig.2: Schematic representation of sampling technique.

Research Approach

Research design (descriptive comparative research design)

Research setting (Sahara college of Nursing and Paramedical Sciences)

Research population (B.Sc. (N) III Year and GNM II-year students)

Sampling size (20 B.Sc. (N)III-year students and GNM II year students)

Sampling Techniques (Convenient sampling technique)

Data collection tool (Observation checklist) for OSCE and evaluation criteria for traditional method of examination

Method of Data collection

Observational checklist for OSCE

Viva-voce/ oral practical exam for traditional method of evaluation

Data Analysis and interpretation (Descriptive statistics and inferential statistics)

Fig. 3: Systematic representation of research deign

TABLES

Table no 1: Frequency and percentage distribution of baseline variables of samples according to their age group.

Age in Years	Frequency	Percentage
18-22 years	28	70%
23-27 years	12	30%
Total	40	100%

From the above table 1, it is evident that majority of the nursing students 70% belongs to age group 18-22 years, 30% belongs to age group 23-27 years.

Table 2: Frequency and percentage distribution of baseline variables of samples according to source of previous knowledge.

Previous knowledge	Frequency	Percentage
Yes	20	50%
No	20	50%
Total	40	100%

Table 3: Frequency and percentage distribution of baseline variables of samples based on course.

Course	Frequency	Percentage
B.Sc. (N) III- year	20	50%
GNM II year	20	50%
Total	40	100%

From the above table 3, it is evident that among the B.Sc. nursing and GNM were 50% B.Sc. (N) III-year and 50% GNM II-year students.

Table 4: Frequency and percentage distribution of OSCE method score regarding neonatal resuscitation among nursing students.

Knowledge	OSCE		Mean score	Standard deviation
	Frequency	Percentage		
Inadequate (0-10)	5	25%	12.5	4.3301
Adequate (11-20)	15	75%		

Table No. 4, reveal that 5 (25%) students have inadequate knowledge and 15 (75%) had adequate knowledge. The mean score is 12.5 and standard deviation is 4.3301.

Table 5: Frequency and percentage distribution of Traditional Method score regarding neonatal resuscitation among nursing students.

Knowledge	Traditional Method		Mean score	Standard Deviation
	Frequency	Percentage		

Inadequate (0-10)	07	35%	11.5	4.0311
Adequate (11-20)	13	65%		

Table.5 Reveal that 7 (35%) students have inadequate knowledge and 13 (65%) had adequate knowledge. The mean score is 11.5 and standard deviation is 4.0311.

Table 6: Frequency and percentage distribution of OSCE Method and Traditional Method score regarding neonatal resuscitation among nursing students.

		OSCE		TRADITIONAL	
Knowledge	**Score**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Inadequate	**0-10**	5	25%	7	35%
Adequate	**11-20**	15	75%	13	65%

Table 7: Unpaired 't' test value to assess the association between OSCE and Traditional method score regarding neonatal resuscitation among nursing students.

Description	Mean	Standard Deviation	Obtained value	't' Interference (df)
OSCE	12.5	4.3301	0.785	Not significant
Traditional	11.5	4.0311		

Table 7 Exhibits that overall OSCE mean score is 12.5 and SD was 4.3301 whereas Traditional mean score is 11.5 and SD was 4.0311. The obtained Unpaired 't' value is 0.758 not significant.

Table 8: Chi square test showing association between OSCE and Traditional method scores with selected demographic variables.

S. no.	Demographic variables	Categories	Inadequate	Adequate	Chi square	Df	P value (0.05 level of significance)	inference
1	**Age in Years**	18-22 Years	10	18				
		23-27 Years	3	9	0.474	1	3.84	NS
2	**Previous Knowledge**	YES	7	13				
		NO	5	15	1.6	1	3.84	NS
3	**Course**	B.Sc. nursing	7	13				
		GNM	5	15	1.6	1	3.84	NS

From the above table 8, it is evident that demographic variables such as age, previous knowledge and course are not significantly associated with OSCE and traditional method scores of the nursing students.

Hence, the stated research hypothesis H2 is rejected.

REFERENCES

BOOK

- Sharma K S. Nursing research and statistic, 3rd edition, Elsevier publication, 209, 362-64.
- Pal. P. Textbook of paediatric nursing for nursing students, 2nd edition, CBS publishers & distributors pvt. Ltd. 147-55.
- Dutta P. Paediatric nursing, 2nd edition, New Delhi, Jaypee Brothers Medical Publishers (P) Ltd. 2007, 81-85.

JOURNAL

- Habeeb.S and Banoo M, comparative study to assess the effectiveness of objective structured clinical examination [OSCE] versus traditional method in terms of knowledge regarding antenatal examination among B.Sc. (N) 3rd year students. IJAR March 2019.
- Kaur S, Kaur K, Kaur N, A comparative study to assess the effectiveness of OSCE versus traditional method in terms of knowledge regarding ABG analysis among B.Sc. (N) students. IJSR [Feb-2020].
- Hebsiba PR, Sharma A, Shah N, Mehta S, Yadav S. A study to assess the level of satisfaction among 4th year B.Sc. (N) students related to midwifery on traditional practical examination and OSCE method JNPR. [Dec 2020].

ONLINE

- https://www.ncbi.nlm.nib.gov/pmc/articles/PMC4124544.
- https://www.rch.org.au.
- https://www.researchgate.net.