a OPEN ACCESS

Saudi Journal of Medicine

Abbreviated Key Title: Saudi J Med ISSN 2518-3389 (Print) |ISSN 2518-3397 (Online) Scholars Middle East Publishers, Dubai, United Arab Emirates Journal homepage: <u>http://scholarsmepub.com/sjm/</u>

Original Research Article

Effectiveness of Role Play Learning vs Traditional Learning in 2nd and 3rd Phase MBBS Students

Dr. Shreedhar Holla Nittor¹, Dr. Geetha KB^{2*}

¹Associate Professor, Department of Internal Medicine, Srinivas Institute of Medical Sciences, Mangalore, India ²Assistant Professor, AIMSRC, Devanahalli, Bangalore, India

DOI:10.21276/sjm.2019.4.8.14

| Received: 03.08.2019 | Accepted: 16.08.2019 | Published: 30.08.2019

*Corresponding author: Dr. Geetha KB

Abstract

The Roleplay is becoming more popular to support learning process of students in professional colleges by asking students to prepare before lectures and actively engaging students during lectures. One of the main reasons is the compartmentalised manner in which they are taught by each clinical department at different time, without any knowledge of what is taught by the other departments. Classroom time is spent in discussion, clarification, exercises, or other learning activities to enhance application of knowledge. This study puts in a sincere effort to find the answer of which method is better.

Keywords: Role play, Class room teaching, MCQ.

Copyright @ **2019**: This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use (NonCommercial, or CC-BY-NC) provided the original author and source are credited.

INTRODUCTION

The Roleplay is becoming more popular to support learning process of students in professional colleges by asking students to prepare before lectures and actively engaging students during lectures [1]. One of the main reasons is the compartmentalised manner in which they are taught by each clinical department at different time, without any knowledge of what is taught by the other departments [2]. Classroom time is spent in discussion, clarification, exercises, or other learning activities to enhance application of knowledge [3]. This method is implemented in the Medicine, Dental and other Allied courses [4-8]. Some cases they recorded that the convention class room was better, in other cases the opposite was quoted as better and there are some studies where they have reported a mixed perception and satisfaction levels. In some studies they even reported that the Role-play teaching was better perceived which did not reflect in the actual performance of the students [9-14]. This study puts in a sincere effort to find the answer of which method is better.

Aims and OBJECTIVES

• To compare the effectiveness of the Roleplay classroom and regular classroom learning in teaching pathology theory for IV phase undergraduate medical students.

MATERIALS AND METHODS

Settings-Department of Internal Medicine, Srinivas Institute of Medical Sciences, Mangalore

Design – Educational intervention will be done by Role play for20 hrs of lecture in one month duration and performance of the students are compared for two methods along with the perception.

Subject - Students of MBBS Phase -IV will be enrolled into the study after obtaining informed consent excluding the students who don't give consent for the study.

Sample size – 150 students of MBBS phase II who are willing to participate

METHODOLOGY

They will be equally divided into two groups by lottery method. One batch will go for traditional lecture classes and the other will be taught using Role play teaching. Lecture classes will be taken in six sessions by the researcher. Three sessions are with Role play (topics given prior to the lecture by power point presentations) and three sessions are regular lectures. After every lecture class the MCQ test of the students will be taken. The means of the scores will be noted. The mean of all the scores after all the three sessions will be calculated and reported.

Sampling technique - All the students of MBBS phase IV who are willing to participate are to assess the students after answering MCQs. considered for both the methods of teaching to avoid the bias of the students for the topics.

Data collection - Pre-test and post -test scores are used

Data analysis - Unpaired and Paired T Test.

Table-2: Independent t test to compare pre-test scores between the two groups							
	GROUP	Ν	Mean	Std.	P VALUE		
				Deviation			
PRE-TEST SCORE	TRADITIONAL	75	2.97	2.41	NOT		
	ROLE-PLAY	75	2.57	1.32	Significant		
	TEACHING						

Tuble 5. Independent t test to compare post test scores between the two groups ininediately after the intervent

	GROUP	Ν	Mean	Std. Deviation	P VALUE
MCQ	TRADITIONAL	75	4.67	1.33	< 0.001
	ROLE-PLAY	75	9.45	0.15	
	TEACHING				

Table-4: Independent t test to compare post-test scores between the two groups 15 days after the intervention

	GROUP	Ν	Mean	Std.	Р
				Deviation	VALUE
MCQ-AFTER	TRADITIONAL	75	4.67	1.6	< 0.001
	ROLE-PLAY	75	9.34	1.744	
	TEACHING				

DISCUSSION

Comparison of the MCQ Pre-Test Score between the two groups shows that DIFFERENCE is higher in TRADITIONAL group and is statistically non-significant. Comparison of the MCQ between the two groups shows that MCQ is higher in ROLE-PLAY TEACHING group and is statistically significant with a p value of <0.001. Comparison of the MCQ-AFTER between the two groups shows that MCQ-AFTER is higher in ROLE-PLAY TEACHING group and is statistically significant with a p value of <0.001. On comparison of the mean values of MCQ and MCQ-AFTER the mean values of MCQ is higher and is statistically significant with a p value of <0.001. ROLE-PLAY TEACHING on comparison of the mean values of MCQ and MCQ-AFTER the mean values of MCQ is higher and is statistically significant with a p value of < 0.001.

The implications of the study are that it is an analytical in nature and it will compare the effectiveness of two methods of teaching. It will provide orientation and motivation to learn the subject by the students. Students become aware of learning methods which will imply a prior preparation of the student about the subject. Helps the teacher to compare the different method and apply the better one in future teaching learning method. Ultimately contributes towards the future literatures about the experiences of both teacher and students about the teaching learning methods. Since the scores in the present study are also observed to be high after repetition of the exams after a span of fifteen days means that this is an effective way

in which the students are going to retain the information also for a long time.

CONCLUSION

The Role-play teachingroom teaching is perhaps the clear winner.

REFERENCES

- 1. Anja, J., Boevé., & Rob, R. Meijer., & Roel, J.(2017). Bosker & Jorien Vugteveen & Rink Hoekstra & Casper J. Albers. Implementing the Role-play teachingroom: an exploration of study behaviour and student performance. Higher Education, 74:1015-1032.
- Unal, Z., & Unal, A.(2017). Comparison of Student 2 Performance, Student Perception, and Teacher Satisfaction with Traditional versus Role-play teachingroom Models. International Journal of Instruction, 10(4), 145-164.
- 3. Missildine, K., Fountain, R., Summers, L., Gosselin, K.(2013). Flipping the classroom to improve student performance and satisfaction. J Nurs Educ, 52:597-599.
- 4. Gubbiyappa, K.S., Baru, A., Das, B., Murthy, C.V., Baloch, H.Z.(2016). Effectiveness of Role-play teachingroom with Poll Everywhere as a teachinglearning method for pharmacy students. Indian J. Pharmacol, 48, S41-S46.
- Bossaer, J.B., Panus, P, Stewart, D.W., Hagemeier, 5 N.E., George, J.(2016). Student Performance in a Pharmacotherapy Oncology Module Before and After Flipping the Classroom. Am. J. Pharm. Educ, 80.31.

- Koo, C.L., Demps, E.L., Farris, C., Bowman, J.D., Panahi, L., Boyle, P.(2016). Impact of Role-play teachingroom Design on Student Performance and Perceptions in a Pharmacotherapy Course. Am. J. Pharm. Educ, 80, 33.
- Morton, D.A., Colbert-Getz, J.(2016). Measuring the impact of the flipped anatomy classroom: The importance of categorizing an assessment by bloom's taxonomy. Anat. Sci. Educ, 10, 170–175.
- Presti, C.R.(2016). The Flipped Learning Approach in Nursing Education: A Literature Review. J. Nurs. Educ, 55, 252–257.
- Chen, F., Lui, A.M., Martinelli, S.M. (2017). A systematic review of the effectiveness of Role-play teachingrooms in medical education. Med. Educ, 51, 585–597.
- Betihavas, V., Bridgman, H., Kornhaber, R., Cross, M.(2016). The evidence for 'flipping out': A

systematic review of the Role-play teachingroom in nursing education. Nurse Educ. Today, 38, 15–21.

- 11. Prober, C.G., Heath, C.(2012). Lecture halls without lectures: a proposal for medical education. N Engl J Med. 366:1657-1659.
- McLaughlin, J.E., Roth, M.T, Glatt, D.M., Gharkholonarehe, N., Davidson, C.A, Griffin, L.M., Esserman, D.A., Mumper, R.J.(2014). The Role-play teachingroom: a course redesign to foster learning and engagement in a health professions school. Acad Med, 89:236–243.
- 13. King, A. From sage on the stage to guide on the side. Coll Teach, 41:30–5.
- 14. McCabe, C., Smith, M., & Ferreri, S. (2017). Comparison of flipped model to traditional classroom learning in a professional pharmacy course. *Education Sciences*, 7(3), 73.