



EFFECT OF VIDEO ASSISTED SMALL GROUP DISCUSSION (SGD) METHOD ON II MBBS STUDENTS IN PATHOLOGY

Medical Education

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ABSTRACT

Introduction: The main challenge in conducting the SGD is that, all students are not responsive & don't get involved due to lack of confidence about prior knowledge related to topic to be discussed in SGD. It is also observed that present generation of students like to watch audio-visuals. An intelligent use of audio-visual aids may save time and stimulate student's interest in topic. **Objectives:** To study & assess the effectiveness of Video assisted learning as add on teaching & learning tool to traditional Small group discussion method in improving student's performance in Pathology. **Materials & Methods:** 60 students of II MBBS Pathology were divided into two batches A & B of 30 students each. Video assisted SGD was conducted with one group while another control provided with reading material. Pre-test, Immediate post-test & Knowledge retention Post-test after 2 weeks were conducted with pre-validated MCQ using Google forms. Experiment repeated with vice-versa. **Results:** Outcome of video assisted Small group discussion was very highly significant than control group. Effectiveness of immediate knowledge change & Retention after 2 weeks by video assisted SGD was significantly high among intervention group than control group. 62.5 % of the students have agreed and 24.16% of them have strongly agreed that video assisted Small group discussion was effective and beneficial to them. **Conclusion:** Video assisted SGD can be used as routine add on tool to traditional SGD methods in all departments during the implementation of CBME curriculum.

KEYWORDS

INTRODUCTION

In Competency Based Medical Education (CBME) by National Medical Commission in 2019, Small group discussion (SGD) has been incorporated as one of the keys & major instructional method in undergraduate medical teaching as it is student centric method¹.

Evaluation & feedback from the students & faculties is very much positive for small group discussion. The main challenge in conducting the SGD is that, all students are not responsive & don't get involved due to lack of confidence about prior knowledge related to topic to be discussed in SGD.

Video-assisted teaching program was found to be effective in improving the knowledge, attitude, and practice of the subjects². It is also observed that present generation of students like to watch audio-visuals. An intelligent use of audio-visual aids may save time and stimulate student's interest in topic³. Video assisted Small group discussion may ensure more active involvement of learner & facilitator both in SGD, in CBME curriculum.

At present in CBME Curriculum though emphasis is given on SGDs, Video assisted SGD is not a routine practice & very less literature is available about studies on video assisted SGD. Hence the present study is undertaken

Objectives

At the end of the module every student participating

1. To study the Effectiveness of Video assisted Small group discussion on II MBBS students in Pathology.
2. To study the Effectiveness of Video assisted Small group discussion in Knowledge retention of II MBBS students in Pathology.
3. To analyse the perceptions of the students on video assisted SGD in terms of learning.

MATERIALS & METHODS:

Study Design: Cross sectional study- Pre-validated MCQ based Assessment & Questionnaire based feedback study

Study Participants: Second year MBBS students of 2021 Batch of M.R. Medical College, Kalaburagi in pathology.

Place of Study: Department of Pathology, M.R. Medical College, Kalaburagi

Study Duration: 13 weeks

Sample Size: 60 students were divided into two batches A & B of 30 students each.

Inclusion Criteria

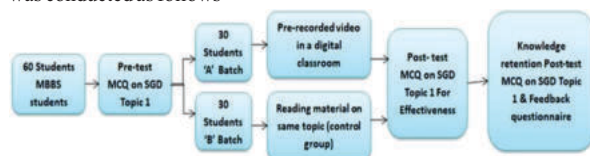
60 II-year MBBS students who voluntarily gave consent to participate in the study

Exclusion Criteria

Students who are absent for classes, not submitted either pre- test or post-test. The students who didn't participate in assessment after 2 weeks

IEC (Ethical) Approval: Ethical approval obtained prior to the study from the institutional ethical committee of M.R. Medical College, Kalaburagi.

Data Collection Method: After getting consent of the students, study was conducted as follows



- Pre-test, Immediate post-test & Knowledge retention Post-test after 2 weeks were conducted with pre-validated MCQ using Google forms.
- Response of students on video assisted SGD Approach was collected by Questionnaire using Google forms immediately after Knowledge retention Post test.
- To avoid ethical issue, B batch was provided same video & A batch was provided reading material after Knowledge retention post-test MCQ conducted after 2 weeks on SGD topic.
- To avoid the bias in students' intelligence, a similar session of SGD & MCQ tests was conducted on another topic of pathology in which B batch was provided video & for A batch reading material was provided.



Statistical Analysis

Data was entered in Microsoft excel sheet & analysis was done using SPSS software (version 2.0), mean, standard deviation and p value were calculated. Box plot is done for the centre of pre-test scores in

both the intervention and control groups similarly for immediate post-test & Knowledge retention post-test after 2 weeks. Paired t test was applied on all pre & post-test to know effectiveness & knowledge retention

RESULTS

Table 1 Paired t test: difference between Pre-test and immediate post test scores

Groups	Pre-test	Immediate post test		Retention post- test after 2 weeks	
		Mean	SD		
Intervention	25.32	5.5	34.62	3.3	32.07
Control	25.57	3.35	27.6	3.39	26.4

Table - 01 Inference: Outcome of both video assisted SGD and control group were very highly significant. However, the mean scores were higher among intervention group than control group



Box plot 1: In the Box plot, the centre of pre-test scores in both, intervention and control groups are similar.

Box plot 2: In the Box plot for immediate post test scores, the centre of the video intervention group is much higher than the control group.

Box plot 3: In the Box plot for scores of retention of memory, the centre of the video intervention group is again higher than the control group.

Table 2 : Paired t test: difference between Pretest and immediate post test scores

	Mean	Std. Deviation	95% Confidence Interval of the Difference		t	df	P value
			Lower	Upper			
Intervention group	-9.30	5.48	-10.71	-7.88	-13.14	59	0.000
Control group	-2.03	1.54	-2.43	-1.63	-10.22	59	0.000

Inference : Outcome of both video assisted SGD and control group were very highly significant. However, the mean scores were higher among intervention group than control group.

Table 3 : Paired t test: difference between Pretest and post test scores for Knowledge retention after 2 weeks

	Mean	Std. Deviation	95% Confidence Interval of the Difference		t	df	P value
			Lower	Upper			
Intervention group	-6.750	5.007	-8.043	-5.457	-10.442	59	0.000
Control group	-0.833	2.218	-1.406	-.260	-2.910	59	0.005

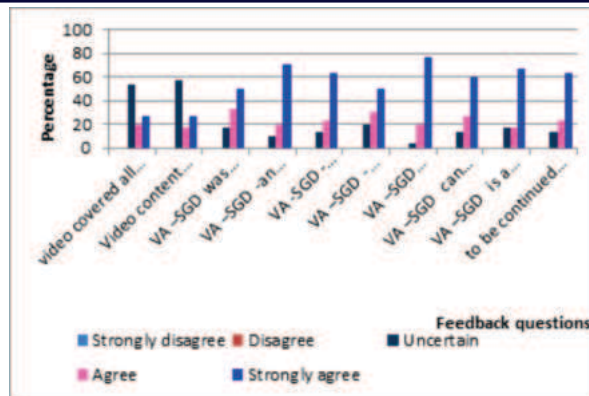
Inference : Outcome of video assisted SGD was very highly significant and the scores were higher among intervention group than control group.

Table 4: Paired t test: Comparison between pretest , Immediate post test & Knowledge retention post test after 2 weeks for Effectiveness & Retention of Knowledge by video assisted SGD

	Mean	Std. Deviation	95% Confidence Interval of the Difference		t	df	P value
			Lower	Upper			
Pretest	-0.25	5.91	-1.77	1.27	-0.32	59	0.744
Immediate post test	7.01	4.47	5.86	8.17	12.15	59	0.000
Retention after	5.66	4.29	4.55	6.77	10.21	59	0.000

Inference : Effectiveness of immediate knowledge change & Retention after 2 weeks by video assisted SGD was significantly high among intervention group than control group.

Bar diagram : feedback on video assisted SGD by the participants: (n=60)



Bar Diagram- 62.5 % of the students have agreed and 24.16% of them have strongly agreed that video assisted Small group discussion was effective and beneficial to them

CONCLUSION

1. Outcome of video assisted SGD for the effectiveness & Knowledge retention is significantly better.
2. Students found video assisted SGD method with more understanding of the topic
3. Video assisted SGD can be added on teaching & learning tool to traditional Small group discussion method for better outcome.

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