

Effect of Role Play Video-An Innovate Tool on Court Room Procedures to Educate Medical Graduates

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ABSTRACT

Background: There is a need to understand the concepts especially like court room procedures among the medical students as the practical experience is encountered in many medico legal cases in future as doctors. Creating an educational instructive video for promotion of understanding the concepts of forensic medicine among all budding doctors in their curriculum.

Aim and Objectives: To study the utility and assess of role play using videos in improving the knowledge and attitude of students regarding courtroom procedures in an Indian court.

Methodology: A descriptive questionnaire based study survey was done after obtaining informed consent from students. The pretest and posttest were randomized by giving a number to the students and also to avoid inter participation bias. Validation of questionnaire was then done. The video on court room procedure was done and validated with the help of forensic experts and lawyer colleagues. Statistical and comparison analysis was done.

Results: The present study about 222 second year medical students were assessed, the study showed gender and varied age distribution between 18 to 23 years. The study showed various aspects of knowledge and attitude. In knowledge component, some of the questions posed required a definitive positive or negative response. In the knowledge component, out of the total 28 questions posed, 22 questions showed highly significant changes [$p < 0.5$ significance] in the questionnaire results. In the attitude component about how a doctor behaves inside the court room, of the total 16 questions posed, 10 questions showed highly significant changes [$p < 0.5$ significance] in the questionnaire results. The study also showed various responses regarding the video and positively revealed that such an educational tool is needed and would definitely make a change in curriculum.

Keywords: *Educational tool; Court room procedures; Knowledge; Attitude; Role play videos.*

INTRODUCTION

Court room procedures are complex processes to understand. The exact situation and scenario to access these courts are difficult and the access is only through hypothetical scenes portrayed in television and in movies. Most medical curriculum lack practical exposure with respect to certain medico legal issues pertaining to the concepts of courtroom procedures, which they may face in the future as experts. There is a need for an educational tool to understand the concepts pertaining to these courtroom procedures.

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This project is an attempt to make the concepts easy and improve the understanding of students in handling forensic cases as an expert when they attend the courts. The study attempts to study the utility of role play using videos in improving the knowledge and attitude of students regarding courtroom procedures in an Indian court and to assess the use of role play video in improving the understanding of the legal system in court room procedure.

MATERIAL AND METHOD

Setting: Department of Forensic Medicine, KMC, Mangaluru

Target population: 2nd MBBS Students [3rd Semester].

Sample size: All students attending the classes.

Study design: Descriptive Study

IPPTeam: Forensic experts, Lawyers, Police, Professional Students, Nonteaching professionals.

Data collection: The study initially obtained a clearance from institutional ethical committee Kasturba Medical College after the study protocol was reviewed by the scientific committee. Permission from the Dean was acquired to approach the students and for collection of data from the students inside the classroom. Questionnaire based survey was done (after obtaining informed consent) from students which included following questions (Annexure)

- a. Pretest and Posttest questionnaire of student's self-assessment of improvement in learning.
- b. Student feedback on utility of video in enhancing their knowledge.

Based on feedbacks and suggestions, interventions were suggested and outcome of this study was evaluated in a better manner. The questionnaires was designed in order to have common understanding among participants. The pretest and posttest were randomized by giving a number to the students and also to avoid inter participation bias. Validation of questionnaire was then done. The video on court room procedure was done and validated with the help of forensic experts in the department and lawyer colleagues from SDM Law College, Mangaluru.

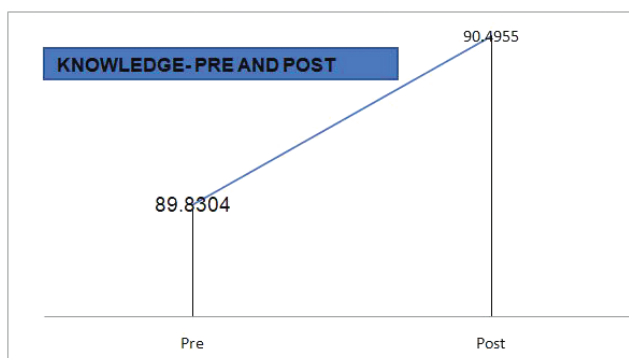
Data analysis: Statistical analysis was done on SPSS Ver. 17.0 Software. Comparison was found by applying students paired 't' test. Association was done by the chi square test and ANOVA. $P < 0.05$ was considered as significant.

RESULTS

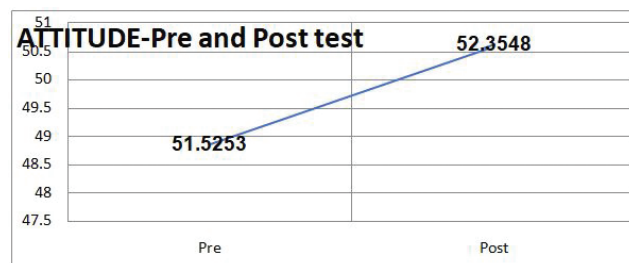
In the present study about 222 students were assessed, the study showed gender and varied age distribution between 18 to 23 years.

The study showed various aspects of knowledge and attitude. In knowledge component, some of the questions posed required a definitive positive or negative response. In the knowledge component ,out of the total 28 questions posed ,22 questions showed highly significant changes [$p < 0.5$ significance] in the questionnaire results .In the remaining 6 questions [Q.9,10,13,18,19,23] ,no significant changes were seen in pretest and post test results . In the attitude component about how a doctor behaves inside the court room, of the total 16 questions posed, 10 questions showed highly significant changes [$p < 0.5$ significance] in the questionnaire results. The remaining 6 questions [Q.2, 6, 9, 14, 15, 16] did not show significant changes in pretest and post test results.

The comparison of mean knowledge and attitude showed significant changes as depicted in the graphs below [Graph.1,2and 3].



Graph. 1: Showing the pre and post-test comparison knowledge results regarding the court room procedures

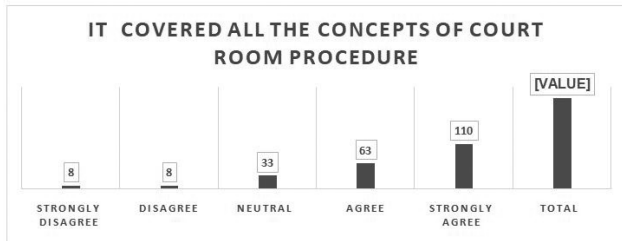


Graph. 2: Showing the pre- and post-test comparison in the attitude inside the court room

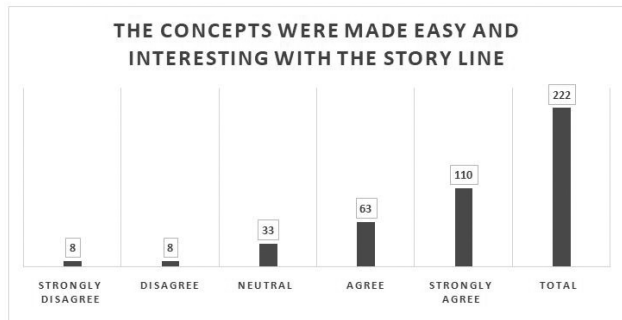
	PRE N = 224	POST N = 224	PAIRED DIFFERENCES		t	p
			MEAN	STANDARD DEVIATION		
KNOWLEDGE	89.8304	90.4955	0.6652	14.27153	0.698	<0.486
ATTITUDE	51.5253	52.3548	0.8295	11.08734	1.102	<0.272

Graph 3: Pre and Posttest Comparing knowledge and attitude among the study population

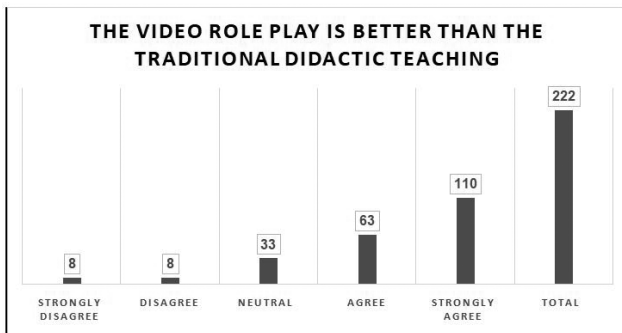
The study also analyzed the various aspects of video and its component and the uses of demonstration of video the results and depicted in the graphs [Graph.4,5,6] below.



Graph 4: Depicting response regarding video covering concepts among the study population

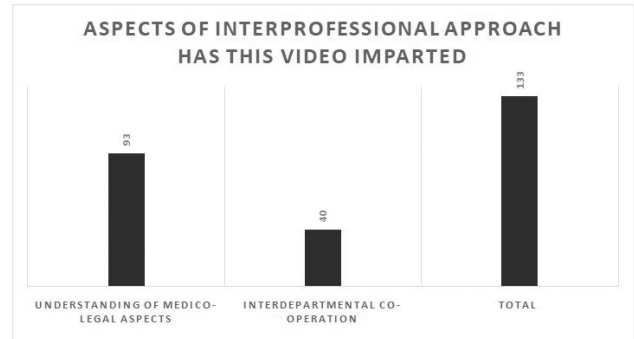


Graph 5: Depicting video response regarding made the concepts interesting with story line among the study population



Graph 6: Depicting video response regarding is better than traditional lectures

The study population were also analyzed to give their feedback about the role play video depicted in the following graphs [Graph. 7].



Graph 7: Depicting response regarding interprofessional approach in the role play video by the study group

DISCUSSION

Fadde, P et al¹ studies showed the usage of an interactive video in coaching a situation for an intellectual basis of developing teacher’s self-reflection. To help trainee educators and to support the comment in the classroom regarding the teaching videos, two approach in interactive videos were designed. The first method was the trainee teachers to write their remarks when observing the short clips of video along with the experts done by video coding, based on qualitative research methods. This is compared with the remarks done by the experts before seeing and coding the succeeding video clip. Written explanations were involved by the experts in the second method of video viewing while in the first method, viewing the same video clips without writing down their interpretations were used after video coding. The written classroom report of posttest, showed the video observing group performed better than the video coding group and significantly better than a no-video control set. The above mentioned study portrayed the importance of use of video clips as an effective tool for understanding the various concepts which is at par with the results of the present study, however with the limitations

Calandra, B et al² research is concerning the effective use of improvement on teacher’s reflection and also encouraging video editing of apprentice teachers’ reflective practice³. The study used a qualitative study

design to observe two guided reflection activities for both the group of research trainees. The primary group were quizzed immediately with a coach after training their lesson and captured about critical things that occurred in the meeting. The subsequent group had no questioning, but to capture their programs on digital video, edit their video for two critical events, and replicate in written form using the same rubric as the earlier group. This found that students who developed video vignettes produced effective and more multidimensional reflections. The study was a significant footstep to facilitating learner teachers' development. The present study is however studied on the effectiveness of teaching concepts among the students and also on futuristic value and thereby improving their approach in some cases especially in attending courts.

Hannafin et al⁴ studied the effect of how a digital video is been used to capture and evaluate a wide range of classroom teaching practices^{5,6}. However these submissions are informal in nature and considered either risk-free or risk-neutral by teachers. The study done can be analyzed and assessed by "others" to determine the presence and/or quality of specific teaching practices. This becomes an emphasis on teacher's accountability, standards-based teaching, documentation of teacher progress, and performance evidence has spawned interest in these video related study. The present study was based on inter professional approach and based on views from all stakeholders and then delivered to students to create interest, educate and also to understand the concepts and attitude in court room procedures.

The outcomes of this study would be an improvement in understanding of concepts in dealing with court room procedures by students or creation an innovate tool of making role play education videos for departmental educational use. To make students become better experts while giving evidence in court or may be included in ethical course/curriculum in future. However there are limitations like the student and other stake holder's participation may not be active or making a video and coming up with a good story [Script] may be very difficult and then to make students to enact on the basis of script and most often funding agencies and time constrains are the major one.

CONCLUSION

This study is carried out to know an effective tool in assessing and to gauge the knowledge and attitude regarding the court room procedures amidst the second

year MBBS graduates. The existing knowledge and attitude level between students were calculated using pretest as most of these concepts were delivered in the didactic lectures. Emerging in the improvement in the delivery of medical curriculum as an innovative interesting tool i.e. role play video, was selected to make the students understand the complex concepts like court room procedures. The results were fruitful and positive as it showed that this method of delivery can definitely help in the better understanding of the concepts and approach in such complex topics. This can be also included as a regular curriculum in subjects like forensic medicine to make the subject more interesting as it helps in knowledge assimilation. This method can be strongly recommended in training such concepts in medical curriculum. Periodic updating and revision of the techniques need to be done by seminars and workshops involving all the stakeholders to make it more effective and interesting so that there is a better tool in education on forensic or any medical concepts.

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Conflict of Interest: None declared

Ethical Clearance: This study was approved by Institutional ethics committee, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, IEC KMC MLR 1-17/311, dated 18/1/2017.

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