

STUDENT EXPERIENCE IN CREATING SIMULATION VIDEOS OF EXPERT WITNESS TESTIMONY IN COURT: FROM THE THEORY TO PRACTICE

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ABSTRACT

Background: This study aims to explore the experience of clinical students studying at the Department of Forensic medicine in creating simulation videos of expert witness testimony in court.

Methods: This one-center study used a qualitative story telling design. Twenty clinical students volunteered to simulate expert witness testimony in court by taking 59 recorded scenes as teaching materials for preclinical medical students. The room was set resembling to a courtroom following the instruction of scriptwriter and director by lecturer. Students were distributed into several playing characters such as judges, prosecutors, lawyers, defendant and doctors, while others served as assistant directors, cameramen, narrator, scene takers, artistic directors, equipment stylists, and editors. The scenario is outlined in detailed scenes to guide the students in performing the characters. After completing the simulation, each student reflected on their experience during the creation of simulation video. The results of these reflections are then compiled into a learning concept adjusting to narrative medicine.

Results: Students claimed that they obtained new experiences during the learning process. The experience allowed students to learn in more interesting way by transforming theory into practice. Students also agreed on proposing this learning channel as a breakthrough in learning process. Creating simulation video plays a significant role in the audiovisual learning process which supported students comprehending the process of giving an expert witness testimony.

Conclusion: Transforming education into video simulation is recommended as a game changer in a learning process. Most medical students are likely to absorb the knowledge better when it is applied into video simulation.

Keywords: Expert testimony, students experience, video simulation

ABSTRAK

Latar belakang: Penelitian ini bertujuan untuk menggali pengalaman mahasiswa rotasi klinik kedokteran forensik dalam membuat video simulasi pemberian keterangan ahli di pengadilan.

Metode: Penelitian satu pusat ini menggunakan desain bercerita kualitatif. Dua puluh mahasiswa rotasi klinis secara sukarela mensimulasikan kesaksian ahli dengan 59 adegan direkam sebagai bahan ajar untuk

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mahasiswa kedokteran. Setting ruangan mirip dengan ruang sidang, dengan dosen sebagai penulis naskah dan sutradara, beberapa mahasiswa bertindak sebagai hakim, jaksa, pengacara, terdakwa dan dokter. Mahasiswa lainnya bertindak sebagai asisten sutradara, juru kamera, narator, pengambil adegan, direktur artistik, penata peralatan, dan editor. Setelah melakukan simulasi, setiap mahasiswa merefleksikan pengalamannya membuat video simulasi. Hasil refleksi tersebut kemudian disusun menjadi sebuah konsep pembelajaran yang mengacu pada kedokteran naratif.

Hasil: Skenario simulasi dirinci adegan demi adegan untuk memudahkan mahasiswa memainkan karakter yang dimainkannya. Mahasiswa mengaku mendapatkan pengalaman baru dalam proses pembelajaran. Pengalaman membuat video simulasi bagi mahasiswa membuat mahasiswa lebih tertarik karena dapat mengembangkan teori ke dalam praktik. Banyak mahasiswa yang mengaku tertarik dengan metode pembelajaran ini. Video simulasi ini berperan penting dalam proses belajar secara audiovisual sehingga mahasiswa terbantu dan mendapatkan gambaran bagaimana melakukan testimoni ahli nantinya.

Kesimpulan: Simulasi video adalah cara yang lebih baik untuk belajar. Sebagian besar mahasiswa kedokteran mempelajari hal-hal baru dengan lebih baik ketika melihat simulasi video untuk menerapkannya dalam situasi nyata di masa depan.

Kata kunci: Kesaksian ahli, pengalaman mahasiswa, simulasi video

PRACTICE POINTS

- The experience of making simulation videos help the students to gain their interest by transforming theory into practice.
- Simulation video plays a significant role in the audiovisual learning process which assists students in comprehending the process of giving an expert witness testimony

INTRODUCTION

Crime is a term used when referring to a potential offence in human interaction which triggers the development of forensic medicine.¹ The word “forensic” comes from Latin term “Forum” which means “market” that was used as a court place in ancient Roman era. Forensic medicine is a branch of medical science that uses science and technology to assist law enforcement and justice.²⁻⁴ With increasing intensity, quantity and quality of crime, this medical branch also required scientific investigation system to reduce errors and increase the truth value of the legal evidence.³⁻⁷ As the court judges do not have the competency to uncover the evidence using scientific medicine, experts in their fields are needed to provide opinions to analyze the criminal case.⁵ In relation to law enforcement, a doctor may be presented to court as an expert witness to

provide expert testimony.^{4,5} According to the Law of Indonesia, an expert testimony is a legal evidence in the form of information given by someone who has special expertise on matters needed to make clear of a criminal case.^{3,6}

The requirement for doctors to provide expert testimony in court underlies the reason of why this material is included in the medical education curriculum in Indonesia.³ This mandatory competency must be delivered in the medical education curriculum at each institution. The Faculty of Medicine, Universitas Syiah Kuala (FM USK), starting in the odd semester of the 2021/2022 academic year, has included expert witness testimony as one of practicum modules. As it is difficult to see firsthand how a doctor gives expert information due to case rarity and confidentiality, especially during the Coronavirus Diseases 2019 (COVID-19)

pandemic, we initiate to create a simulation video of giving expert testimony. In this study, we would like to share our experience in creating video simulation of giving expert witness testimony in court.

In the Competency-Based Curriculum (CBC) FM USK, the learning process is carried out in a series of integrated and continuous modules. According to the Indonesian Doctors' Competency Standard 2019, there are 9 competence areas which needs to be delivered. Various basic theory and skills related to the management of forensic medicine cases are acquired during the preclinical stage. While the practicum module for providing testimony is held at the clinical practice stage of education by creating video simulation. Thus, students will gain experience in managing various ethical and medicolegal issues that are often encountered in daily practice by being an expert witness in court.

This study aims to explore the experiences of clinical students at the Department of Forensic Medicine in creating video simulation of expert testimony in court. The video simulation serves as a learning object for preclinical students who are studying forensic medicine. It is expected that this video can illustrate doctors's duty in a trial of criminal cases and reduce hesitancy and ambiguity that medical students may face in the future. By learning this practice module, medical students are expected to understand that doctors have an important role during a criminal court to support judge's decision against the defendant.

METHODS

Study design

This one-center study used qualitative story telling design using Interpretative Phenomenological Analysis. An in-depth understanding of clinical students' experiences at the Department of Forensic Medicine towards video simulation of giving expert witness testimony was obtained.

Setting

The project was conducted on FM USK hall room, supported by cinematography team equipments.

The room was set resembling to a courtroom and the scenario was written by the lecturer who served as the director. Clinical students of Forensic Medicine Department took part as the casts and supporting teams including assistant directors, cameramen, narrator, scene takers, artistic directors, equipment stylists, and editors. Casts position was adjusted with following condition: judges at the frontside, prosecutors on the left side, lawyers on the right side, and doctor on the middle side facing the judges panel (Figure 1). Video recording was taken in detailed scenes of each cast (Figure 2,3, and 4).

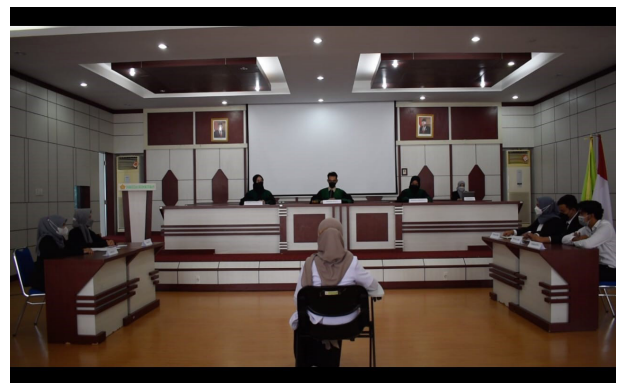


Fig.1. The setting was arranged resembling to a courtroom



Fig.2. The director directs the cameraman to shoot each scene



Fig.3. The scene where the doctor gives answers to the prosecutors' questions



Fig.4. The scene where the doctor gives the answer to the legal advisor's question

Participant and data collection

The study participants were twenty clinical students at the Department of Forensic Medicine, FM USK. Students were voluntarily involved in creating the simulation video. After the completion of video, students were asked to provide feedback on how their experience, feelings, and benefits towards the video simulation process, learning atmosphere, and learning outcomes. The feedback are submitted and combined into narrative text with story telling approach.

Ethical considerations

This study has been ethically approved by the Dean of FM USK as also the permission to create simulation video. The video was created as a learning tool in

the disaster management and forensics courses, 7th semester. Every participant involved has approved the video content, agreed to participate, and agreed on its utilization as teaching materials, both in printed and electronic form. The authors were also the participants directly involved, all of whom agree that the results of their performance, both the actions and the experiences, are allowed to be published.

RESULTS AND DISCUSSION

Study characteristics

This video simulation was created in the Faculty of Medicine, Syiah Kuala University, by clinical student of Forensic Medicine Department Batch August 2nd to September 4th, 2021. The subject characteristics can be found in Table 1.

Table 1. The characteristics of the crew and cast (n=25)

Initial	Crew/cast	Gender	Position	Task
TS	Crew	M	Lecturer	Scriptwriter/Director
KK	Crew	F	Lecturer	Observer
RFL	Crew	F	Clinical rotation student	Assistant director
CPC	Crew	F	Clinical rotation student	Equipment stylist
UH	Crew	F	Clinical rotation student	Cinematographer
HZ	Crew	F	Clinical rotation student	Cinematographer
NN	Crew	F	Clinical rotation student	Scene recorder
PHF	Crew	F	Clinical rotation student	Narrator
WM	Crew	M	Clinical rotation student	Artistic stylist
RP	Crew	F	Clinical rotation student	Artistic stylist
MFA	Crew	M	Clinical rotation student	Editor
MRAE	Crew	M	Student	Cinematographer

Initial	Crew/cast	Gender	Position	Task
SAF	Crew	F	Student	Cinema stylist
MSZ	Crew	M	Student	Sound stylist
ICM	Cast	F	Clinical rotation student	Doctor
IM	Cast	M	Clinical rotation student	Chief of judge
SAUK	Cast	F	Clinical rotation student	Co-judge
RF	Cast	F	Clinical rotation student	Co-judge
DR	Cast	F	Clinical rotation student	Prosecutor
RR	Cast	F	Clinical rotation student	Prosecutor
TZA	Cast	M	Clinical rotation student	Legal advisor
MR	Cast	F	Clinical rotation student	Legal advisor
FM	Cast	M	Clinical rotation student	Oath taker
YMR	Cast	M	Clinical rotation student	Defendant
NA	Cast	F	Clinical rotation student	Defendant's wife

Video simulation, in whole or in part, has been an important learning tool in medical education for most of century. The field of narrative medicine is currently growing rapidly as it is easier for students to understand. One of the forms of narrative medicine is by creating simulation videos. Through simulation videos, learning becomes more effective and efficient in terms of time.^{8,9} The success of learning depends on student's perception towards the learning method. Positive students' perceptions will result into better learning motivation so that learning objectives become easier to obtain.¹⁰ The quality of training received by students also depends on how the lecturer teaches the training. Consequently, the teaching quality will affect student behavior, satisfaction and their success in gaining competence.¹¹

Students' feedback towards the creation of simulation video

We provided several quotations of students towards the creation process of simulation video of giving expert testimony. The first theme described students' feeling during the making of the video. Some students were nervous because it was their first time making a video, but in the end, they were pleased for their friendly teamwork between the crew and cast.

"I sincerely thank my supervisor (TS and KK) who provide in the creation of this video since it is the first video I ever made in Syiah Kuala University. I felt quite tense during the shooting, but it was so fun to play the drama with friends. Despite we have a lot of weakness and problem behind the scenes, everything was covered by our laughs. I sincerely thank my friends who prepared the tools and the room, they make it easy for us. I hope, this video can be a learning object for our juniors and I hope they can make a better one next time." (RFL, female student, assistant director)

"I was one of the cinematographer and honestly it was my first experience. I'm not very familiar with recording something as complex as yesterday. I was confused about how to take the right video, so the situation during the recording process can be conveyed properly. Fortunately, The Cinematography Team of FM USK helped the recording process. I am very happy to participate in this video, even though I didn't take part as the cast. I finally got a clear vision about the process of giving expert testimony. (UH, female student, cinematographer)."

Students also feel lucky and happy to get the opportunity to make videos. They thought that

watching videos will help them to learn the material more effectively as the videos can be watched repeatedly.

“I feel very fortunate to be included in the making of video of expert witness testimony. I can explore new roles that I have never done before so that if there is a further activity that requires me to become a cinematographer, I will be more trained.” (HZ, female student, cinematographer)

“I feel happy to be involved in making this simulation video, because I think the skill in giving expert testimony in court is very important for medical students to understand. Simulation videos are digital learning media that aims to explain materials and skills. It is expected that it will facilitate learning process for many people in the future.” (PHF, female student, narrator)

“I really enjoyed the making process of this video. My course mate also have high enthusiasm that we all have the same vision to succeed this video as teaching material later.” (MFA, male student, editor)

Besides, there were also students who feels unfair due to their missing role as the casts, but were still happy to help in the process of making simulation videos.

“I feel sad that I didn’t get the chance to be one of the characters in the video, but I’m glad that I helped prepare the video. My role as an equipment stylist does not really appear when the simulation video is played or takes place. However, my role appears before the simulation video is taken and after the video is shot. However, I am aware that without the equipment team, the process of making videos cannot run. A joy arises at the time after the video shooting process is complete and runs smoothly without any obstacles.” (CPC, female student, equipment stylist).

Playing Role

The second theme discussed was the playing role and its execution. Each student has their own assigned roles according to scenario. The cast were adjusted and carried out independently by students. Every role has its own characteristic to play.

Assistant director

“Even though I wasn’t the doctor who delivers expert witness in this video, but as an assistant director, I still feel what it’s like to be a doctor who is responsible for others’ fate. As an assistant director, I was required to be able to control the video shooting properly from what it should be. Watching the actors/actress playing their roles has made me immersed in the drama script. Apart from the actors, another things that impressed me in this video was the setting of the place. In my opinion, the hall has been converted resembling to the court which highly illustrates how the real trial venue looks like so students can imagine well.” (RFL, female student, assistant director)

Equipment stylist

“The process of making this simulation video was guided directly by our supervisor (TS) as the only one forensic medicine consultant in our institution. On that occasion I was entrusted as the equipment stylist, responsible for tools preparation, materials and places used in the process of making a video simulation of expert witnesses testimony. The process was carried out in the Hall of the Faculty of Medicine, Syiah Kuala University. The equipment stylist has an important role in the video production process and the course of the event. Equipment stylist will prepare detailed materials the day before the video is taken or made. Before the event, my friends prepared all the materials such as document, nameplate, table, sound, room and helped the documentation team in preparing the cameras and clothes needed. On that day, my team and I also cleaned up or arranged the chairs and tables according to the position of event members in making of the video. Many preparations were made by the team members before the video ran.” (CPC, female student, equipment stylist)

Cinematographer

“As a cameraman, I have a responsibility for all shooting techniques and recordings. In making this video, I have to visualize the image according to the planned concept. Along with

other cameramen, I am also responsible for taking insert images, additional images, and providing good results. Before the day, our team had prepared themselves according to their respective roles. I also prepared myself as well as possible for the event and the success of this video simulation of expert witness testimony. Actually this (cameraman role) was the first time for me so at first I was nervous sometimes because I was worried that something would go wrong. The shooting still obeyed the health protocols during COVID-19 pandemic. While recording the simulation video, I got a lot of new things and experiences. The events depicted on the stage played by another friend of mine should be recorded as well as possible in order to minimize the repetition of the scene. Being a cameraman must always be ready wherever we are. The scenes has to be shot from certain angles that represent the needed scenes or close up to the actors who are getting a part to talk.” (HZ, female student, cinematographer)

Scene stylist

“I acted as a scene stylist who assists director in making notes about the course of the video-making process. During the process of making the video, I watched the entire trial process while typing dialogue of the players who played the role of doctors, judges, prosecutors, lawyers, legal advisors, and defendants. Even though I didn’t have any lines, I still felt nervous and tried to carry out my role well from start to finish. I wore a black suit and prepared my laptop to type the news of the event. I try to be upright and appear authoritative. I really enjoy my role. I think this role fits my character very well. The difficulty that I had while playing this character was that there were several actors whose voice volumes were low, which made it difficult for me to write the transcript. The role that I carry out is very helpful for me in providing an overview of how to provide expert testimony as an expert witness. I watched the proceedings and listened carefully to how my friend, who acted as an expert witness, answered and gave explanations to questions posed by judges, prosecutors and lawyers. I am grateful

that I was able to participate in the making of this video. It provides me a big picture of what my role will be when I become a doctor. Hopefully this video can also be useful for other doctor candidates.” (NN, female student, scene stylist)

Narrator

“I acted as the narrator whose function was to carry out the prologue and identify events with words that could not be included in the dialogue. Starting from scene 1, I described the role of expert witnesses in the trial as follow. “In relation to law enforcement, a doctor can be presented in court as an expert witness to provide expert testimony. Based on the law, what is meant by an expert witness is a statement given by someone who has special expertise on the things needed to make light of a criminal case for the purpose of examination.” I also explained in advance about what it is meant to be an expert witness and its role in court. Narrator also explained the obligation of expert witnesses to take an oath, with following description. “Expert witnesses are obliged to take an oath before the court that he will give information according to his best knowledge except if it is due to his dignity, job or position which is requires him to keep a secret may refuse to provide the information requested”. The scene of doctors taking oaths against expert witnesses can be seen in the video, but from here we can see the importance of the narrator’s role in explaining that expert witnesses can refuse to testify for several reasons.” (PHF, female student, narrator)

Video editor

“I served as an editor to complete all the footage into a learning video. As an editor, I have to master the entire flow of the trial, in this case the defendant was caught in a murder case against someone using a rope to wrap around the victim which caused the victim to have breathing difficulty until the victim died. During video shooting, I also provide input on how to take the right angle and good lighting so that the video results can be better. For me, making this video giving expert testimony also means to learn how a forensic specialist or forensic expert deals with a single agenda trial of expert

witness testimony. Learning by this way helps us to understand the materials deeper. Indeed, my role as an editor was not directly related to the flow of the video, but this is also a challenge that increases my enthusiasm. This is because video editing requires soft skills outside of my study and I have a strong desire to make impressive videos, especially for other students to learn audio-visually.” (MFA, male student, editor)

Take home message

The third theme discussed about lessons inferred from making this simulation video. Students stated that this simulation really helped them in understanding how the giving of expert testimony was carried out.

“There are many learning channels. Individually, I learn better through video. Moreover, I had the opportunity to see directly the process of friends performing their roles. It made me remember more about the conditions and I also came to know that in a trial, many are involved in it. At first, I thought that it only includes judges, prosecutors, and expert witnesses. This simulation also taught me that if then I must do my best later I was asked to be an expert witness. What expert witnesses say in court determine someone’s fate, whether or not the fate belongs to victim or the defendant. , I feel very grateful because I have been exposed to the trial atmosphere, because speaking with powerful person is definitely not easy. So at least I can prepare myself from now on. Lastly, I would like to thank our supervisor for allowing us to be part of the process. I had a very extraordinary experience and of learned a valuable lesson. I hope that this video can help others to understand how to give expert witness testimony. Hopefully this learning method can also be applied to other learning materials.” (UH, female student, cinematographer).

“The simulation video is very interesting and good for students. Due to rare court trials especially during the COVID-19 pandemic, this simulation video acts to support students in gaining idea of how to do expert testimony. In addition, videos can increase the attractiveness of students to

learn more about medicolegal aspects.” (CPC, female student, equipment stylist)

“Video simulation is a better way for studying. We can get the point easily by watching the video. I am highly excited with this.” (HZ, female student, cinematographer)

“From this video, I know the role of doctors as expert witnesses. The process of making and editing this video needs maximum preparation, so that the video can be used in the next few years for learning activities in forensic medicine.” (WM, male student, artistic stylist).

“From my personal experience, i am a type of students who learn most by audiovisual. Video simulation is the best and interesting method to learn a subject. Most of medical students can learn new thing better when it comes to video simulation to apply it in future real situation.” (MFA, male student, editor)

Difficulties and expectation

The fourth theme discussed about student difficulties in creating simulation videos along with students expectation. Students answered several challenges and it will be better in actual expert description situations.

“Because this is our first video, we can find a lot of challenges. It can be about time, camera preparation and others. But it was so much fun. I hope this program is continued by juniors.” (PHF, female student, narrator)

“I think this is the new transformation for behavioral medicine curriculum. I understand about the topic because I can get the real imagination and points. I hope this method will be used in other learning topics.” (UH, female student, cinematographer).

“I think this video simulation made me enjoy behavioral medicine and gain more knowledge about giving expert testimony.” (NN, female student, scene recorder)

“I think it would be better if forensic and medicolegal science divisions could make other learning projects, of course, around forensic

and medicolegal topics with new methods and breakthrough. It will matter on the learning process, its dynamic and its variation so that the saturation and curiosity of the next student will be higher.” (MFA, male student, editor)

“This video simulation can help the medical students to understand and imagine how to give an expert witness testimony in the future.” (RP, female student, artistic stylist).

From the theory to practice

Simulation-Based Education (SBE) is a strategic and effective learning method to assist the learning process, improve clinical knowledge and skills, and provide attractive independent learning opportunities. In addition, SBE can increase students' learning motivation because it is not monotonous, and can bridge the gap between theory and practice.^{12,13} Theory in the academic learning process is very important in the development of educational methods that have scientific value. However, without direct practice, it will be difficult to understand the learning concept.^{14,15} Simulation-based training creates a safe and fun learning environment; however, this training is significant cost and time consuming.¹⁶

During the last two years (2020-2021), medical education underwent a transformation in education system. Due to the COVID-19 pandemic situation, medical institutions have explored a number of ways to improve teaching including by using technology by changing the classroom learning system to online learning; implement interprofessional, interactive, and independent team-facilitated learning.¹⁵⁻¹⁸ Video simulations like this offer a different perspective on translating learning theory into teaching practice.¹⁸ This is a good collaboration in the process of learning psychomotor skills from a cognitive and affective perspective.¹⁴

This qualitative study explores the experiences of clinical students at Forensic Medicine Department in making simulation videos of expert testimony. The main strength of this study is the use of video-stimulated recall combined with the Interpretative Phenomenological Analysis methodology, which allows in-depth qualitative analysis.¹⁷ The results of

this video provide new insights regarding student learning in giving expert testimony by conducting simulations that are close to the actual situation in court. The results of our observations of clinical rotational students of forensic medicine show positive nuances in learning,⁹ which can be seen from their enthusiasm in making simulation videos both as crew and cast.

CONCLUSION

Transforming education into video simulation is recommended as a game changer in a learning process. Most medical students are likely to absorb the knowledge better when it is applied into video simulation.

RECOMMENDATION

Realizing the importance of student learning experiences, simulation videos can be an alternative for students to gain competence. It is necessary to make new innovations in the teaching and learning process that is fun and attractive, as what has been done by the Department of Forensic Medicine at FM USK.

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COMPETING INTEREST

The authors declare no competing interests related to the study.

AUTHORS' CONTRIBUTION

Taufik Suryadi – data analysis, and publication manuscript

Intan Chaharunia Mulya – data analysis, and publication manuscript

Kulsum Kulsum – compiling the data and writing the basic concepts of the manuscript

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