Society of Medical Education & Research

2023, Volume 3, Page No: 40-53

ISSN: 3108-5059

Asian Journal of Ethics in Health and Medicine

Immersive Roleplay and Intensive Training: Advancing Clinical Ethics Consultation in Japan

Yu Uneno[1], Naoki Todayama[1*]

[1] Department of Biomedical Ethics, Faculty of Medicine, The University of Tokyo, Tokyo, Japan.

***E-mail** ✉ todayamanaoki@yahoo.com

Abstract

Clinical ethics consultation (CEC) remains limited in Japan, partly due to the absence of a structured training system. To address this, we designed an "immersive role-play (IR)" program, which incorporates immersive theater techniques into role-play learning. This approach uses professional actors and studio settings to enhance authenticity and creates a dynamic, realistic scenario flow that engages participants deeply in the role-play experience. Between 2016 and 2019, we conducted an intensive CEC course for healthcare professionals that included IR as a core component. Following the sessions, participants completed an anonymous questionnaire evaluating IR's educational value. Responses were recorded using a 4-point Likert scale assessing satisfaction and perceived learning outcomes. Additionally, an open-ended section invited participants to comment on IR's effectiveness and areas for improvement. Overall, responses across all categories—usefulness, satisfaction, comprehension, and engagement—were positive. Compared with conventional role-play, participants rated IR significantly higher, particularly for its "realism," "seriousness," "awareness of communication skills," and "recognition of narrative diversity." In the open-text feedback, the most frequent remark highlighted that participants gained practical insights into procedural aspects of CEC. IR proves to be an effective hands-on training method, though it may not be universally suitable. It is most beneficial for individuals currently serving, or preparing to serve, as consultants. In contrast, novices and intermediate learners who have yet to build a solid foundation in CEC theory and skills may require alternative, stage-specific educational approaches before engaging in IR.

Keywords: Clinical Ethics, Clinical Ethics Consultation, Role-play, Immersive Role-play, Medical Educ

Background

The demand for clinical ethics consultation (CEC) has become more evident in today's increasingly complex medical environments. In Japan, the number of institutions offering CEC has grown steadily since the 2000s, influenced by medical function evaluations and strict policies set by the Ministry of Health, Labour and Welfare [1]. However, the actual number of CEC cases each year remains low, making it difficult to determine whether CEC is functioning effectively in practice [2]. The main barriers are the absence of a structured training system and the lack of a well-defined methodology for CEC [2].

Most clinical ethics seminars in Japan are short and primarily classroom-based. Their content generally includes: (A) lectures to provide essential knowledge for consultations, and (B) group discussions to practice advice-giving and case responses [3]. Yet, CEC is inherently practical, emphasizing communication and

Access this article online https://smerpub.com/

Received: 12 February 2023; **Accepted:** 03 April 2023

How to cite this article: Uneno Y, Todayama N. Immersive Roleplay and Intensive Training: Advancing Clinical Ethics Consultation in Japan. Asian J Ethics Health Med. 2023;3:40-53. https://doi.org/10.51847/4N6jGjIXgl

adaptability in clinical settings. While classroom lectures are valuable for building theoretical knowledge, hands-on training is critical for developing the ability to apply that knowledge in diverse, real-life situations. Thus, desk-based learning alone is insufficient; experiential practice is necessary [4].

Despite the need for practical training, entrusting inexperienced trainees with actual CEC cases as on-the-job training is not feasible, since errors could negatively affect patient care and healthcare staff. A more appropriate approach, as in clinical medicine, would be for trainees to observe and learn directly from experienced consultants. However, this presents challenges in Japan: even large hospitals receive only a few CEC requests annually, meaning that opportunities to observe real cases are rare and insufficient for meaningful training [2]. Consequently, "how to secure hands-on training opportunities with feedback and establish an effective training system" [5] has become a central issue in preparing future CEC specialists.

Simulation-based education, particularly role-play, has been proposed as a solution to the scarcity of clinical training opportunities. Role-play offers several advantages, such as providing a safe space to learn from mistakes, developing communication and situational awareness skills, encouraging proactive engagement, and offering experiential practice in scenarios not easily accessible in real clinical settings [6–10]. However, existing role-play methods also have limitations. Prior research notes the difficulty of achieving realism; when professionals act as patients, their portrayals may lack authenticity, reducing the depth of learning. As a result, role-plays sometimes feel more like games among novices than genuine practice [11, 12].

To address these shortcomings, we developed a new training approach called "immersive role-play (IR)," which adapts immersive theater techniques to the learning of clinical ethics. Unlike traditional theater, where audiences passively observe, immersive theater allows them to move freely, participate, and share the same space with performers [13]. Translating this into education, learners become active participants in a clinical story, experiencing scenarios as if they were actual consultants facing ethical dilemmas. The key distinction between IR and conventional role-play lies in its use of professional actors and realistic clinical settings, which enhance immersion and authenticity.

In this study, we introduce the seminar where IR was implemented and describe its design principles, features, procedures, and scenarios. We then evaluate its significance using findings from a participant questionnaire survey.

Details of the seminar

Center for bioethics and law seminar

The Center for Bioethics and Law (CBEL), part of the Department of Biomedical Ethics at the Graduate School of Medicine, The University of Tokyo, serves as both a research and educational hub for bioethics and medical ethics. As part of its outreach, CBEL has offered seminars for healthcare professionals and medical students. This was the first initiative in Japan to introduce an intensive seminar modeled after the short, intensive bioethics courses commonly conducted in the United States. The program was designed to give participants a foundational understanding of bioethics within a condensed timeframe [14].

The CBEL Seminar was launched in 2004 and continued until 2019. It included a basic 2-day course and four advanced courses: research ethics (1 day), clinical ethics (3 days), risk management (1 day), and public health ethics (2 days). Each course was offered annually at different times, with completion of the basic course required before enrollment in any advanced course. The clinical ethics consultation (CEC) course was added later. Trial versions ran in 2009 and 2010, but regular implementation was delayed due to staffing and other constraints. With growing recognition of the importance of CEC in Japan, the course was officially introduced in 2016 with strong support from the Center for Patient Consultation and Clinical Ethics at The University of Tokyo Hospital. The curriculum was substantially revised from the pilot versions, with a particular emphasis on immersive role-play (IR) [14].

The CEC course ran annually from 2016 to 2019. Its primary goal was to equip healthcare professionals with the methodological framework, theoretical background, and practical skills required for CEC. The curriculum was divided into two main parts: theory and practice. The theory section built on knowledge already acquired in the basic course, such as the "four principles of biomedical ethics" and the "four quadrants approach," and was delivered through a mix of group discussions and interactive activities rather than conventional lectures. Based on this theoretical foundation, participants engaged in IR as the practical component.

The seminar was designed as a short but intensive program. From 2016 to 2018, it was held over three consecutive days: two days for theory followed by one day of practice. In 2019, the program was extended to four days (two days for theory and two for practice) to allow each part to be scheduled over weekends, thereby improving accessibility. Each session ran from 9:00 AM to 6:00 PM.

Core competencies and curriculum

When designing the CEC course, the first step was to define the necessary core competencies within the Japanese context. The American Society for Bioethics and Humanities (ASBH, 2011) had already established a framework of core competencies for CEC, broadly categorized into (1) skills, (2) knowledge, and (3) attributes, attitudes, and behaviors [15]. Using this as a foundation, the CBEL Seminar adapted the framework to Japan's specific cultural and medical context, categorizing competencies into four groups: abilities, qualities, skills, and knowledge **(Table 1)**.

In tailoring these competencies, particular consideration was given to challenges unique to Japan: the limited spread and understanding of CEC, the strong authority traditionally held by attending physicians, the family-oriented approach to decision-making, and cultural perspectives on life and death. Based on these considerations, the curriculum was designed to systematically foster the identified competencies **(Table 2)**.

In the following section, we explain how CEC was conceptualized within the framework of this program.

Table 1. Core competencies of the CEC defined at the CBEL Seminar

Qualities	**Sense of responsibility**
	Courage
Ability	Insight
	Practical wisdom
	Sense of balance
Skills	Information-gathering skills
	Evaluation skills
	Analytical skills
	Solution-oriented skills
	Facilitation skills
	Communication skills
Knowledge	Knowledge of medicine
	Knowledge of ethics
	Basic knowledge of law
	Knowledge of psychology

(Qualities) In ASBH (2011), attributes, attitudes, and behaviors include patience, compassion, integrity, courage, and humility. We took "qualities" to broadly classify the aforementioned terms, and categorized them as shown in the table. Our addition of "qualities" was based on the situation in Japan at the time. That is, in 2016, when this course was conducted in Japan, clinical ethics consultation was expanding, but the existence of the clinical ethics consultant as a professional designation had not yet taken root, and professionalism (or professional virtue) needed to be taught.
(Ability) This item is not in the ASBH (2011). This is roughly equivalent to "Phronesis."
(Skills) In ASBH (2011), core skills are divided into three major categories: skills to evaluate and analyze ethical issues, process skills, and communication skills. These include facilitation skills at conferences, skills for improving the quality of consultations, and for managing consultations. We have reorganized them into six categories as shown in the table, omitting those related to departmental administration and management, in light of the actual situation in Japan.
(Knowledge) In ASBH (2011), core knowledge was divided into nine categories, including moral reasoning and ethical theory, general bioethics issues and concepts, and healthcare systems. We categorized them into four major categories from a more practical perspective.
ASBH: American Society for Bioethics and Humanities, CBEL: Center for Bioethics and Law, CEC: clinical ethics consultation

Learning Content	Methods and Duration
Knowledge	
General CEC principles (theory and approaches)	Lecture, hands-on practice, and group discussion (approx. 5 hours)
Ethical foundations (procedural fairness, patient autonomy, two-tier model, virtue-based ethics, care ethics, narrative approaches, and decision-making processes)	Lecture, hands-on practice, and group discussion (approx. 5 hours)

Psychological insights for effective communication	Conventional role play (approx. 4 hours)
Legal knowledge	Conventional role play (approx. 4 hours)
Common ethical challenges	Interactive Reflection (IR) (approx. 6 hours)
Organizational principles	Interactive Reflection (IR) (approx. 6 hours)
Skills	
Data collection, organization, assessment, ethical dilemma analysis, problem resolution, recommendation formulation, enhancing CEC effectiveness, communication abilities, group facilitation, and self-reflection	Lecture, hands-on practice, and group discussion (approx. 10 hours)
	Conventional role play (approx. 4 hours)
	Interactive Reflection (IR) (approx. 6 hours)
Abilities	
Duty and bravery	Conventional role play (approx. 4 hours)
	Interactive Reflection (IR) (approx. 6 hours)
Traits	
Perceptiveness, pragmatic judgment, and equilibrium	Conventional role play (approx. 4 hours)
	Interactive Reflection (IR) (approx. 6 hours)

CBEL: Center for Bioethics and Law, CEC: clinical ethics consultation
*"Conventional role-plays" are role-plays in which the participants play not only the role of the consultant, but also that of the doctor or other relevant person. It is a simple role-play exercise which aims to provide the participants with experience of information gathering and to provide feedback to each other on how to gather information

We adopted the ethics facilitation approach proposed by the ASBH as the most effective framework. In this model, the consultant's role is to collect and structure information, analyze ethical issues, and then support fair and reasonable decision-making while clarifying the values of each party involved. Accordingly, the seminar emphasized building skills and knowledge in information gathering, stakeholder value recognition, and decision-making support.

For ethical analysis, we used a case-based approach rooted in casuistry and introduced by Johnsen. Participants primarily relied on the four principles of medical ethics to identify ethical concerns. However, since many cases cannot be resolved solely by "specifying" and "balancing" these principles, we incorporated a narrative approach derived from narrative theory. This method interprets value conflicts as differing narratives, establishes shared goals among stakeholders, and seeks solutions by formulating a new, mutually acceptable narrative. In the theoretical section prior to IR, these methods were taught through lectures and exercises.

On immersive role-play (IR)

Design policy of IR

When designing CEC role-play, a key consideration is which aspects of the consultation to simulate—what participants will actually experience and learn depends on their level of readiness and the objectives of the course [7, 16]. It also reflects the philosophical stance on how CEC itself is understood as an activity. Based on this, IR was structured as follows:

Target learners

IR was not created for novices. Instead, it was designed as a practical and advanced exercise for professionals who are already experienced or expected to serve in clinical settings.

Key experiences and learning goals

The IR was designed to help participants engage with and internalize the following aspects of CEC practice:

(a) Importance of narrative

A core component of CEC is recognizing the narratives of all stakeholders, understanding ethical dilemmas as narrative conflicts, and seeking resolution through this lens [17].

(b) Fragmented information

In real cases, consultants rarely have complete information at the outset. They must piece together an overall picture from partial and fragmented details [18].

(c) Information variability

The information collected to understand stakeholder narratives can change depending on the method and timing of intervention. Furthermore, consultants become part of the stakeholder group once they engage in the process.

(d) Centrality of communication

CEC is entirely built on communication—whether with the client, the stakeholders, or within the consultant team. Each layer of communication requires careful attention [19].

To enable participants to genuinely experience these elements, we placed strong emphasis on realism and fidelity. This included fidelity in the physical and environmental setup, authenticity of patients and stakeholders through trained actors, and psychological immersion of learners in the consultation experience.

Implementation of IR

The immersive role-plays (IRs) were carried out following a structured process. Each training session was limited to about 15 participants, all of whom had prior instruction in the theory and skills of CEC. Participants were divided into three groups of four to five members based on their professional experience, and each group participated in the IR as a consulting team. Every team received a different scenario, while groups not actively engaged in the role-play observed as spectators.

The scenario began with a consultant receiving a case request. The participants, acting as consultants, then met with relevant stakeholders to collect information. After completing the scenario, they conducted a review session, during which they organized and evaluated the gathered information, analyzed the ethical issues, and formulated recommendations. The exercise concluded with the team presenting their recommendations to the client.

The time structure was as follows: approximately 30 minutes for pre-briefing, 60 minutes for scenario enactment, 60 minutes for review, and 60 minutes for observing other groups. A final debriefing session of about 150 minutes wrapped up the training. In total, the program lasted around six hours.

Preparation, stage, and staff of IR

The IR sessions took place in a professional studio normally used for filming movies and television dramas. The stage setup replicated a hospital environment, including areas such as a nurses' station, lounge, examination room, and patient room. Each area was staffed with simulated patients, doctors, nurses, and other roles, portrayed by trained actors (hereafter referred to as "performers"). The stage was divided into multiple sections, where different events occurred simultaneously and in parallel **(Figure 1)**.

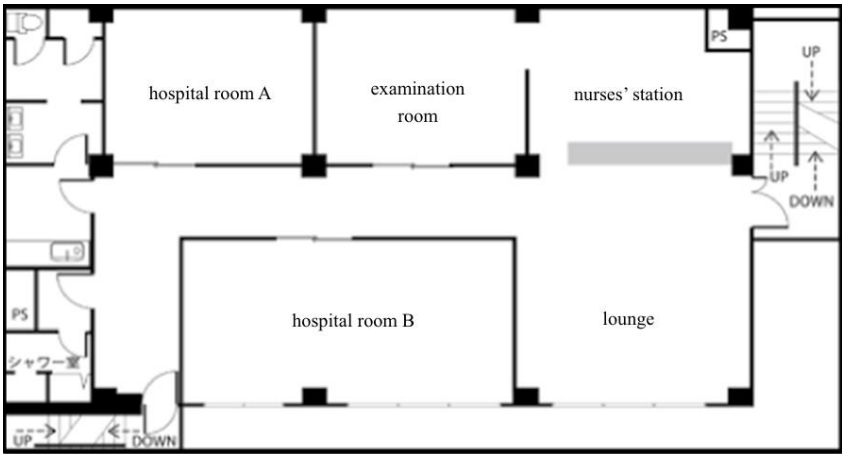

Figure 1. Stage of IR

Each IR scenario involved eight performers, four of whom were professional actors. Those with strong improvisation skills were assigned to central roles such as the client, the patient, or the doctor. While these actors followed scripted instructions at key points in the scenario, they were also expected to adapt their communication with the learners—who played the consultants—based on the character profiles they had been given. More details on the actors' responsibilities are outlined below.

The IR followed a timed structure in which specific events were scheduled to drive the progression of the scenario. We provided actors with behavioral guidelines for these events, but outside of those moments, they were instructed to interact with the learners freely, staying true to their assigned characterizations. Although reference points for standard responses were provided, actors were encouraged to adjust their reactions to fit the learners' behavior.

For instance, if the script specified that the simulated patient must meet the doctor at 2:00 p.m., the actor had to follow that timeline. However, the patient's emotional state, tone, and dialogue during the visit were left to the actor's judgment. Even if the patient character became distressed or resentful in response to the learners, the actor still had to ensure the storyline advanced—such as reaching the doctor's office at the scheduled time.

Table 3 outlines these mandatory "scheduled events" in chronological order, along with the reference "standard responses." For most performers, about 80% of the one-hour role-play consisted of unscripted, improvisational interaction. Given these demands, rehearsals for IR began about one month prior to implementation.

Table 3. Actions of the main performers in Scenario 1 (excerpts from some of the characters)

Time	Major Events	Patient	Patient's Partner	Attending Physician
8:40	Request for consultation			
8:45	Proceed to stage area			
8:50–8:52	Refusal of treatment declared	Hospital Room B: Discusses with physician, refuses treatment	Hospital Room B: Arrives at hospital, visits spouse's room	Hospital Room B: Conducts rounds, speaks with patient
8:55–8:57	Patient's agitation, partner's fatigue, nurses' weariness	Hospital Room B: Rejects nurse assistance, tense silence	Hospital Room B: Experiences strained interactions with patient, tense silence	Nurse Station: Script [Physician Action 1]
9:00–9:02	Apology to staff, partner's exhaustion	Hospital Room B: Tells partner, "I need space."	Nurse Station Lounge: Exits room, apologizes to nurse, stays in lounge	
9:00–9:02	Head nurse and physician discussion			Nurse Station: Discusses with head nurse

9:03–9:05	Policy differences among staff			Examination Room: Talks with head nurse
9:05–9:10		Hospital Room B: Script [Patient Action 1]	Lounge: Script [Partner Action 1]	Examination Room: Script [Physician Action 2]
9:15–9:17	Concerns about medical errors	Hospital Room B:	Lounge: Converses with physician	Nurse Station Lounge: Finds patient's partner, engages in discussion
9:15–9:20	Patient's genuine emotions, nurse's shift in perspective	Hospital Room B: Talks with head nurse		
9:18–9:22	Head nurse meets patient's partner	Hospital Room B: Script [Patient Action 2]	Lounge: Discusses with head nurse	Hospital Room B: Script [Physician Action 3]
9:25–9:30		Hospital Room B: Script [Patient Action 3]	Lounge: Script [Partner Action 2]	
9:40–9:42	Physician's uncertainty, staff dilemma	Hospital Room B: Script [Patient Action 4]	Lounge: Script [Partner Action 3], Script [Partner Action 4], Script [Partner Action 5], returns to Hospital Room B	Examination Room: Discusses with nurse, Script [Physician Action 4]
9:45–9:50	Briefing session, patient restates treatment refusal	Hospital Room B, Examination Room: Moves to doctor's office, briefing begins	Hospital Room B, Examination Room: Moves to doctor's office, briefing begins	Examination Room: Briefing session starts
9:52–9:54	Head nurse and physician interaction	Examination Room: Returns to Hospital Room B	Examination Room: Returns to Hospital Room B	Examination Room: Discusses with head nurse
10:00–10:02				Examination Room: Requests consultant

There were 11 performers in Scenario 1, but the five people most involved with the CEC consultant were the patient, the patient's partner, the attending physician, the nurse, and the head nurse (the consultant client). Detailed action charts were created for the afore-mentioned five persons, out of which three are described here. The performers were experienced actors and seminar staff (actual MDs and Ns) who had been training for several months

HRB: hospital room B, MD: medical doctor; N: nurse; Nr. St: nurse's station, Ph: attending physician

Progression of IR

The IR began with learners, acting as consultants, receiving a phone call from the performer playing the client role, during which they were given an outline of the case. Working as a group, they then proceeded through several steps: (1) gathering information by meeting stakeholders in five different settings; (2) interpreting this information to understand each person's narrative; (3) identifying the ethical dilemma within the scenario; (4) exploring possible ways to resolve or mitigate the issue; and (5) presenting their conclusions to the client.

The IR was structured and time-controlled, with scheduled events occurring throughout the scenario to move the story forward. After the initial phone call, events unfolded on different parts of the stage according to the timeline, culminating in the final step: providing the client with recommendations. Importantly, participants could not witness every event or fully grasp all the changes in stakeholder perspectives, simulating the uncertainty of real-world practice. Three IR scenarios were prepared, each lasting about one hour.

Features of IR

To ensure realism, the researchers arranged for a professional studio, complete with props and trained actors, to replicate the clinical environment and increase learner immersion. But IR went beyond surface-level fidelity. A defining feature was that events occurred simultaneously in the five stage areas (examination room, nurses' station, lounge, and two patient rooms).

This structure offered several educational benefits. First, it reflected the fragmented nature of real consultations, where consultants rarely have complete information at once. Learners had to piece together partial details,

strengthening their ability to "infer the whole from fragments," a skill crucial in practice. Second, the simultaneous scenarios required participants to collaborate effectively and manage their time efficiently as a team. Finally, since the situation evolved in response to their interventions, learners became part of the story itself, engaging as active participants rather than detached observers. This dynamic design encouraged deeper immersion and role identification.

Evaluation of IR

Learners were assessed by scorers positioned across the stage, while performers also contributed feedback as commentators. The evaluation included both individual and group components. Individual evaluation consisted of four items on communication skills and two on commitment. Group evaluation covered three areas: understanding of medical facts, recognition of stakeholder narratives, and effectiveness of problem-solving, with an additional item assessing teamwork and collaboration.

Each of the 10 criteria was rated on a 3-point scale, followed by an overall rating, also on a 3-point scale. After all scenarios, evaluation sheets and performer comments were collected, and a review meeting was conducted.

Scenarios of IR

Three scenarios were created, all centered on the theme of treatment refusal**.** There were two main reasons for this focus. First, refusal of treatment is frequently encountered in Japanese clinical practice, influenced by cultural norms that differ from Western concepts of self-determination [20, 21]. Second, in line with the casuistic approach, repeated analysis of similar cases allows for the accumulation of knowledge and provides future learners with comparative material to aid problem-solving [22].

Although all three scenarios dealt with treatment refusal, the background and motivations varied significantly. In each case, participants were required to grasp the stakeholders' narratives and work toward resolving the conflicts presented **(Table 4)**.

Table 4. Scenario outlines

Time	Major Events	Patient	Patient's Partner	Attending Physician
8:40	Request for consultation			
8:45	Proceed to stage area			
8:50–8:52	Refusal of treatment declared	Hospital Room B: Discusses with physician, refuses treatment	Hospital Room B: Arrives at hospital, visits spouse's room	Hospital Room B: Conducts rounds, speaks with patient
8:55–8:57	Patient's agitation, partner's fatigue, nurses' weariness	Hospital Room B: Rejects nurse assistance, tense silence	Hospital Room B: Experiences strained interactions with patient, tense silence	Nurse Station: Script [Physician Action 1]
9:00–9:02	Apology to staff, partner's exhaustion	Hospital Room B: Tells partner, "I need space."	Nurse Station Lounge: Exits room, apologizes to nurse, stays in lounge	
9:00–9:02	Head nurse and physician discussion			Nurse Station: Discusses with head nurse
9:03–9:05	Policy differences among staff			Examination Room: Talks with head nurse
9:05–9:10		Hospital Room B: Script [Patient Action 1]	Lounge: Script [Partner Action 1]	Examination Room: Script [Physician Action 2]
9:15–9:17	Concerns about medical errors	Hospital Room B:	Lounge: Converses with physician	Nurse Station Lounge: Finds patient's partner, engages in discussion
9:15–9:20	Patient's genuine emotions, nurse's shift in perspective	Hospital Room B: Talks with head nurse		

9:18–9:22	Head nurse meets patient's partner	Hospital Room B: Script [Patient Action 2]	Lounge: Discusses with head nurse	Hospital Room B: Script [Physician Action 3]
9:25–9:30		Hospital Room B: Script [Patient Action 3]	Lounge: Script [Partner Action 2]	
9:40–9:42	Physician's uncertainty, staff dilemma	Hospital Room B: Script [Patient Action 4]	Lounge: Script [Partner Action 3], Script [Partner Action 4], Script [Partner Action 5], returns to Hospital Room B	Examination Room: Discusses with nurse, Script [Physician Action 4]
9:45–9:50	Briefing session, patient restates treatment refusal	Hospital Room B, Examination Room: Moves to doctor's office, briefing begins	Hospital Room B, Examination Room: Moves to doctor's office, briefing begins	Examination Room: Briefing session starts
9:52–9:54	Head nurse and physician interaction	Examination Room: Returns to Hospital Room B	Examination Room: Returns to Hospital Room B	Examination Room: Discusses with head nurse
10:00–10:02				Examination Room: Requests consultant

Methods

To assess the educational impact of IR, a questionnaire survey was conducted among participants of the CBEL Seminar CEC course held from 2016 to 2019. Over this four-year period, a total of 75 healthcare professionals participated, with no duplicate respondents.

The survey was distributed after completion of the entire course each year. It included closed-ended items rated on a 4-point Likert scale, focusing on participant satisfaction with IR and perceived learning outcomes. Responses were collected anonymously and analyzed descriptively. In addition, the questionnaire contained an open-ended section where participants could share their views on the effectiveness of IR and suggest areas for improvement. The number of responses is presented in **Table 5**.

After tabulating the survey data, responses to the open-ended questions were analyzed using content analysis. One author initially coded the responses, a second author reviewed them, and both authors then discussed and finalized the coding scheme.

Table 5. Number of open-ended responses

2016	On effectiveness	16
	On improvements	7
2017	On effectiveness	14
	On improvements	10
2018	On effectiveness	15
	On improvements	9
2019	On effectiveness	17
	On improvements	7

Results

A total of 75 participants attended the four IR sessions, with 62 having prior experience in role-play learning **(Table 6)**. Responses to the question regarding the practical usefulness of IR were overwhelmingly positive, with 100% of participants selecting "Strongly agree" or "Agree." Satisfaction with the exercise was similarly high at 99%, while 100% of respondents reported a deeper understanding of CEC and increased interest in its practice **(Table 7)**.

Table 6. Experience of the participants in role-play learning

Occupations of participants (n = 75)		
Physician	37	49%
Nurse	36	48%
Other	2	3%
Experience in role play learning		
Yes	62	82.6%
	Physician	41.3%
	Nurse	41.3%

	Other	0%
No	13	17.3%
	Physician	8%
	Nurse	7%
	Other	3%

Table 7. Responses of the participants (n = 75)

Items	Strongly agree		Agree		Disagree		Strongly disagree	
I think IR would be useful in the practice of clinical ethics consultation	60	80%	15	20%	0	0%	0	0%
I was satisfied with IR	54	72%	20	27%	1	1%	0	0%
I have a deeper understanding of CEC through IR	58	77%	17	23%	0	0%	0	0%
I have increased interest in the practice of CEC through IR	57	26%	18	24%	0	0%	0	0%

The 62 participants with prior experience in conventional role-play were asked to compare IR with the role-play they had previously encountered **(Table 8)**. Overall, IR was rated more favorably than traditional role-play. Its advantages were especially notable in four areas: "realism," "seriousness," "awareness of the importance of communication skills," and "understanding the diversity of narratives."

Table 8. Comparison of IR and previous role-plays (n = 62)

	Strongly agree		Agree		Disagree		Strongly disagree	
IR was more realistic	50	81%	11	18%	1	2%	0	0%
It was easy for me to play the role	34	55%	23	37%	5	8%	0	0%
I could seriously participate in IR	50	81%	10	16%	2	3%	0	0%
It was easy for me to actively participate	41	66%	15	24%	5	8%	1	2%
I was able to recognize the importance of communication skills	45	73%	14	23%	1	2%	1	2%
I was able to understand that there are various narratives in the clinical setting	48	77%	11	18%	3	5%	0	0%

Analysis of the 62 open-ended responses on IR's effectiveness revealed that the most frequently mentioned category was "practical and procedural" (32 responses), followed by "realistic" (20), "information gathering" (16), "overview and reflection" (13), "virtues, motivation, and qualities" (10), "narrative" (10), and "teamwork" (8) **(Table 9)**.

Table 9. Open-ended responses regarding effectiveness and improvements

Label	Number of Responses	Examples
Feedback on Effectiveness		
Practical and Actionable	32	"This training equipped me with practical steps I can apply in my work." "As a new consultant, I feel ready to move forward confidently, like taking off training wheels."
True-to-Life	20	"The hands-on, realistic approach made it easy to apply in a clinical setting." "It was valuable since I lacked direct experience with CEC."
Data Collection Skills	16	"It taught me how to gather information professionally and courteously." "I realized how challenging it is to collect data and understand the full context."

Self-Reflection and Perspective	13	"It gave me a chance to see myself from an outside perspective, which was more insightful than playing the role myself." "The realistic scenarios helped me recognize my habits and learn from observing others' actions."
Personal Attributes and Drive	10	"This experience will definitely boost my confidence in clinical settings." "It motivated me to be courageous and step into real-world practice!"
Understanding Narratives	10	"It clarified the importance of exploring different perspectives behind a situation and how to manage them moving forward." "I learned the value of verifying details and emotions from multiple sources, as well as the challenges involved."
Collaboration	8	"It reinforced the critical role of teamwork in CEC." "Working together highlighted both the benefits and challenges of team dynamics."
Feedback on Improvements		
More Time for Interactive Reflection (IR)	12	"I wish we had additional time to reflect and discuss." "More time for consideration would have been helpful."
Advance Information Needs	5	"Having prior details about the ethics consultation team and its members would have helped me engage more fully in the role play." "Lacking basic disease knowledge, I would have benefited from preliminary information about treatment directions."
Venue Enhancements	2	"A larger nurse's station would improve the experience." "A dedicated conference room would have made discussions easier."
Scheduling Improvements	2	"It would be better if the CEC course dates were announced earlier."
Observer Engagement	2	"There were too many observers, which felt overwhelming." "Observers could benefit from having tasks to stay engaged."
Technology Integration	1	"Linking my cell phone (PHS) to the activity would have been useful."
Action Feedback	1	"I wanted staff to provide feedback on whether each action was effective or not."
Cost Concerns	1	

Learner reflections and feedback

Participants reported gaining valuable insights into the practical aspects of conducting CEC, including procedures, information gathering, and communication ("I learned procedures that will be useful in practice" and "It was very helpful for me to collect information in the future"). Many also emphasized the importance of teamwork ("I was able to understand specific points to keep in mind when working in teams"), the challenge of understanding the whole picture from fragmented information ("I realized how difficult it is to collect information and grasp the whole picture"), and the significance of recognizing stakeholders' narratives ("It was helpful to understand that there are various narratives behind the scenes"). Several participants noted that IR allowed them to reflect on CEC from a new perspective, stating, "It gave me an opportunity to objectively reflect on how I behave and how I am viewed by others."

Regarding improvements, the most frequent suggestion was for more time allocated to IR. Other common requests included receiving more information about cases in advance, improving facilities and scheduling, and enhancing the evaluation process ("I wanted the staff to evaluate each action to see if it was good or not").

Discussion

The simulated ethics consultation exercise using IR received very positive evaluations across all measures, including usefulness, satisfaction, understanding, and interest. Compared to traditional role-play, IR was rated favorably, particularly for "realism," "seriousness," "understanding the importance of communication skills," and "understanding the diversity of narratives." Open-ended responses indicated that participants learned practical procedures, suggesting that the four main learning objectives of IR—(a) importance of narrative, (b) fragmented information, (c) variability of information, and (d) communication skills—were effectively achieved.

Design policy and educational effectiveness

The most common CEC training exercise is case analysis on paper [23, 24], where participants organize the situation and identify ethical dilemmas from a pre-prepared outline. While this method is simple and widely accessible, it presents all information at once, limiting opportunities to gradually infer the whole picture from fragments, reducing realism, and eliminating interaction with stakeholders [25, 26].

Traditional role-plays improve on paper exercises by increasing environmental and patient fidelity, which helps learners understand the importance of communication and engagement as a stakeholder [6–9]. However, classroom-based role-play still has limitations due to time and resource constraints.

IR was developed to address these limitations by maximizing environmental and physical fidelity and running simultaneous, parallel scenarios. This approach simulates the reality of incomplete information and allows learners to infer the overall picture from fragmented details. By enhancing patient fidelity, IR also immerses participants as active contributors to the scenario rather than passive observers. Unlike paper-based exercises or conventional role-play, IR enables practical, realistic training without giving learners a complete overview of all events.

Given these characteristics, IR is not suited for beginners. It is most effective for participants who have foundational knowledge of CEC and some clinical experience. The positive outcomes from the questionnaire suggest that IR provides meaningful, practical experience, boosting participants' confidence and competence in clinical ethics consultation.

Effectiveness of the audience role system

A distinctive feature of IR is the "audience" system, which allows participants to learn either as consultants in the role-play or as spectators when another team is performing. Learners in the audience are treated as "non-existent" by both the performing consultants and the actors, allowing them to move freely on stage, listen to conversations, and access materials such as medical records. While consultants actively gather information and interpret stakeholder narratives, audience members gain a bird's-eye perspective on how consultants navigate these tasks.

Open-ended responses reflected the benefits of this system, with learners noting, "It is better to be an observer than a performer to get a bird's-eye view," and "By playing the roles of exerciser and spectator, I could also see the big picture." Observing the scenario provides two main advantages: it helps learners understand the constraints of the consultant's role and promotes observational learning, allowing them to gain insights into effective communication and problem-solving strategies [27, 28].

Cultivating professional qualities

In actual CEC, there is rarely a single "correct" answer, and even well-informed analyses may lead to outcomes that are less than ideal. Practitioners must make decisions under time pressure with incomplete information. In this context, professional virtues—such as integrity, courage, and responsibility—are critical. IR enhances immersion and learner fidelity, allowing participants to experience the limitations of the consultant role and develop these qualities. Open-ended feedback supported this, with comments such as, "I think it will inspire me to be courageous in the field," and "I am humbled by the experience."

Limitations and improvements of IR

Traditional role-play allows learners to switch roles (e.g., physician to patient) to gain new perspectives [29]. In IR, the high fidelity of actors—especially in patient roles—prevents role-switching, which limits this advantage. However, the audience system partially compensates by providing observational opportunities to view the scenario from a different perspective. One participant noted, "It gave me an opportunity to objectively reflect on how I behaved to see how others saw me. It is better to be an observer than a performer to get a bird's-eye view of the entire scenario."

IR is primarily designed for participants ready to serve as consultants and is thus not suitable for beginners or intermediate learners who have not yet mastered CEC theory and skills. For these learners, simulations such as paper exercises or standard role-plays are more appropriate.

Additionally, the long duration of IR poses challenges for debriefing. Debriefing is essential in role-play learning [29, 30], and although the program included a 150-minute debriefing, longer sessions may require even more time to ensure that each learner receives sufficient feedback.

Limitations of the Study

This study had a small number of participants who experienced IR, limiting the number of surveys available to assess its educational effects. Consequently, the analysis was restricted to descriptive statistics. Additionally, to protect participant anonymity, information such as job title, years of experience, and the size or type of medical institution could not be collected. There were also limitations in the evaluation process. While individual learners were assessed using six items and groups using four items, the study did not allow for a detailed comparison between individual and group evaluations to examine IR's effectiveness more comprehensively. Moreover, minor differences in the event format in 2018 may have influenced survey responses. The study also did not measure the extent to which IR influenced actual behavioral changes in CEC practice, or how long any effects might last. Future studies should include larger samples, incorporate objective indicators of educational impact, and investigate behavioral changes before and after IR.

Conclusion

This study designed and implemented IR as a practical and effective CEC role-play program. By maximizing environmental and patient fidelity and running concurrent and parallel scenarios, IR enhanced participants' immersive experience. Its goals were to help learners understand: (a) the importance of narrative, (b) fragmentation of information, (c) information fluctuations, and (d) the significance of communication. From 2016 to 2019, IR participants provided highly positive feedback across all areas, including usefulness, satisfaction, understanding, and interest. Overall, IR was rated more favorably than traditional role-play, particularly for "realism," "seriousness," "understanding the importance of communication skills," and "understanding the diversity of narratives." Open-ended responses highlighted gains in practical procedural skills, and the audience system was shown to be effective in enhancing learning. These results indicate that IR achieved its intended educational objectives and functioned as a program with substantial educational impact.

Acknowledgments: None

Conflict of Interest: None

Financial Support: None

Ethics Statement: None

References

1. Nagao N, Takimoto Y, Akabayashi A. A survey on the current state of hospital ethics consultation in Japan. JJBA. 2005;15:101–6. (in Japanese) https://doi.org/10. 20593/jabedit.15.1_101.
2. Dowa Y, Takimoto Y, Kawai M, Shiihara T. Hospital ethics committees in Japan: current status from an exploratory survey 2012–2015. Am J Prev Med. 2022;8(5):6. https://doi.org/10.21203/rs.3.rs-1407045/v1.
3. Japan Association for Clinical Ethics. Clinical Ethics Advisor Training Seminar. http://square.umin.ac.jp/j-ethics/adviser.htm. Accessed August 15, 2022.
4. Sawyer KE, Dundalk N, Snyder A, Diekema DS. Competencies and milestones for bioethics trainees: beyond ASBH's healthcare ethics consultant certification and core competencies. J Clin Ethics. 2021;32(2):127–48.
5. Mokwunye NO, DeRenzo EG, Brown VA, Lynch JJ. Training in clinical ethics: Launching the clinical ethics immersion course at the Center for Ethics at the Washington Hospital Center. J Clin Ethics. 2012;23(2):139–46.
6. Dent JA, Harden RM, Hunt D, editors. Practical guide for medical teachers. 5th ed. Amsterdam: Elsevier; 2017.
7. Maran NJ, Glavin RJ. Low- to high-fidelity simulation – a continuum of medical education? Med Educ. 2003; 37(Suppl 1): 22–8. https://doi.org/10. 1046/j.1365-2923.37.s1.9.x.
8. Abe Y. Simulation-based education in healthcare. JSICM. 2016;23(1):13–20. (in Japanese)
9. Abe Y. Simulation education for nursing. Tokyo: Igakushoin; 2013. (in Japanese)
10. Bradley P. The history of simulation in medical education and possible future directions. Med Educ. 2006;40(3):254–62. https://doi.org/10.1111/j. 1365-2929.2006.02394.x.
11. Gotoh Y, Yanagita T, Kita S, Tagashira H, Tagashira H. Application of role- play exercises for medical pharmacology education. Med Bull Fukuoka Univ. 2015;42–1:183–8. (in Japanese)

12. Honnda Y. The effect of the simulation program in the clinical interview skill with simulated patients and roll playing. Bull Saitama Prefectural Univ. 2007;9:63–8. (in Japanese)
13. Stephen ME. Immersive theater. Contemporary performance Nov 9, 2021. https://contemporaryperformance.com/2021/11/09/immersive-theater/. Accessed 27 July 2022
14. The University of Tokyo Center for Biomedical Ethics and Law editor. 10th anniversary CBEL. Tokyo: The University of Tokyo Center for Biomedical and Law; 2013. (in Japanese)
15. American Society of Bioethics and Humanities Task Force. Core competencies for healthcare ethics consultation. 2nd ed. Chicago: ASBH; 2011.
16. Munshi F, Lababidi H, Alyousef S. Low-versus high-fidelity simulations in teaching and assessing clinical skills. J Taibah Univ Med Sci. 2015;10(1):12–5. https://doi.org/10.1016/j.jtumed.2015.01.008.
17. Kuhnel LA. Getting to the heart of the matter: navigating narrative intersections in ethics consultation. Narrat Inq Bioeth. 2019;9(2):163–71. https://doi.org/10.1353/nib.2019.0028.
18. Edelstein LM, Lynch JJ, Mokwunye NO, DeRenzo EG. Curbside consultation re-imagined: borrowing from the Conflict Management Toolkit. HEC Forum. 2010;22(1):41–9. https://doi.org/10.1007/s10730-010-9120-y.
19. Shelton W, Geppert C, Jankowski J. The role of communication and inter- personal skills in clinical ethics consultation: the need for a competency in advanced ethics facilitation. J Clin Ethics. 2016;27(1):28–38.
20. Miura Y, Itai K, Ayabe T. Classification of contents in clinical ethics consultation requests: based on clinical indicators of University of Miyazaki Hospital. Seimei-rinri. 2020;30(1):40–9. (in Japanese)
21. Asai A. The question of ethics consultation. Intern Med. 2012;101(10):3012–8. https://doi.org/10.2169/naika.101.3012 (in Japanese)
22. Spielthenner G. The casuistic method of practical ethics. Theor Med Bioeth. 2016;37(5):417–31. https://doi.org/10.1007/s11017-016-9382-8
23. American Society of Bioethics and Humanities Clinical Ethics Consultation Affairs Committee. A case-based study guide for addressing patient-centered ethical issues in health care. Chicago: ASBH; 2017.
24. Wasson K, Kuczewski M, McCarthy MP, Parsi K, Anderson EE, Hutchison P. Navigating clinical ethics: using real case constellations to guide learners and teachers in medicine. South Med J. 2017;110(3):195–9. https://doi.org/10.14423/SMJ.0000000000000615
25. Zarea Gavgani V, Hazrati H, Ghojazadeh M. The efficacy of digital case scenario versus paper case scenario on clinical reasoning in problem- based learning: a systematic review and meta-analysis. Res Dev Med Educ. 2015;4(1):17–22. https://doi.org/10.15171/rdme.2015.003
26. Nunohara K, Imafuku R, Saiki T, Bridges SM, Kawakami C, Tsunekawa K, et al. How does video case-based learning influence clinical decision-making by midwifery students? An exploratory study. BMC Med Educ. 2020;20(1):67. https://doi.org/10.1186/s12909-020-1969-0
27. Bandura A. Social learning and personality development. New York: Holt, Rinehart, and Winston; 1963.
28. Bandura A. Social learning theory. Oxford: Prentice-Hall; 1977.
29. Baile WF, Blatner A. Teaching communication skills: using action methods to enhance role-play in problem-based learning. Simul Healthc. 2014;9(4):220–7. https://doi.org/10.1097/SIH.0000000000000019
30. Fanning RM, Gaba DM. The role of debriefing in simulation-based learning. Simul Healthc. 2007;2(2):115–25. https://doi.org/10.1097/SIH.0b013 e3180315539