Original Article

Utilizing short videos as a reflective method for teaching medical ethics concepts: an exciting experience for both students and their teacher

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Abstract

Educational approaches to teaching medical ethics are often successful provided that they engage students actively in class. The present study set out to develop, implement, and evaluate an instructional approach to teaching medical ethics using brief dramatized videos to present common clinical ethical dilemmas in culturally respectful, psychologically safe formats.

Five short educational videos were created based on the general medical ethics curriculum in Iran, each depicting a specific ethical issue (informed consent, truth-telling, patient privacy, medical errors, and conflicts of interest). The videos featured child actors and were used in interactive classroom sessions over two academic semesters. This educational approach was evaluated by conducting a cross-sectional survey based on the CIPP (Context, Input, Process, Product) model.

The evaluation showed high levels of student satisfaction across all four CIPP domains, with particularly strong scores in student engagement, video content quality, and application of ethical principles. Students reported that the video-based sessions helped them better understand ethical challenges and facilitated deeper reflection on professional behavior.

It appears that short, culturally sensitive educational videos have the potential to serve as an effective tool for teaching medical ethics. We therefore recommend future implementation across diverse educational contexts and studies.

Keywords: *Medicine; Medical ethics; Teaching; Reflective practice; Art.*

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Received: *23 Feb 2026*
Accepted: *30 Jun 2026*
Published: *18 Aug 2026*

Citation to this article:
Noori Hekmat S, Mobasher M, Ahmadipour H, Malekpour Afshar R, Pardakhty A. How Utilizing short videos as a reflective method for teaching medical ethics concepts: An exciting experience for both students and their teacher. J Med Ethics Hist Med. 2026;19:12.

Introduction

Medical schools do far more than educate healthcare professionals; they generate future physicians entrusted with the well-being of communities. Their responsibility extends beyond teaching clinical excellence to actively fostering the values, attitudes, and social skills necessary to transform knowledge into compassion. Becoming a doctor is a professional vocation in service rather than entering a career. Prioritizing patient needs, even at personal expense; gaining trust through polite communication; and being a leader in excellence and empathy are all requirements of modern medical professionalism. This ethical foundation is not optional. It has a major impact on patient relationships, treatment outcomes, and overall quality of care (1,2). Ultimately, funding professional identity formation (PIF) during training is an investment in improved healthcare. PIF must begin on day one and be incorporated into each clinical experience because tomorrow's healthcare system depends on today's medical students (3). Even though professors serve as students' primary mentors, ethics teachers still have to answer the inevitable question: "How do we best communicate these defining professional values?" (4). In ethical clinical situations, physicians rely on internally stored ethical intuitions rather than intentional reasoning. It is therefore necessary to use simulation learning activities such as case studies that connect theory and practice, peer debates that tackle real-world problems, and stories about moral heroes. Active, student-centered learning paradigms are increasingly supported by educational research (5,6). Teaching medical professionalism requires more than just lectures; it demands hands-on, immersive approaches that encourage students to practice ethical reasoning and professional behavior in realistic contexts. Engagement is crucial because motivated students put forth more effort and grow more profoundly (7). Also, the curricula should align with learners' needs rather than merely with institutional traditions (8). Leading medical schools worldwide are implementing active teaching strategies such as professional skills workshops, simulated clinical scenarios, and problem-based learning (9,10). Eventually, professionalism is learned via practice and reflection repeated over time, rather

than something medical students read in a textbook. As a result, an educational system should evaluate students based on their capacity to apply their knowledge in practice and their comprehension of the idea that a practitioner's skill set extends well beyond medical knowledge to include professional practice, communication, and decision-making. Students' practical competencies, communication skills, and sense of professional values can be improved through effective educational plans, thereby causing a paradigm shift in the medical education system (11,12).

Numerous studies have explored the role of art in medical education. One scoping review highlighted several approaches, including Visual Thinking Strategies (VTS), structured curricula, and unstructured roundtable discussions with art curators or artistically inclined clinicians. The review highlighted a growing effort to integrate fine art education into medical training, primarily to enhance visual perception skills and empathy. Across most interventions, medical students reported satisfaction with the art programs (13). Using VTS, some educators encourage students to think systematically about images by asking questions such as “What is going on in this picture?” (14,15). Overall, incorporating art into medical education appears to enhance students’ visual perception, empathy, and personal reflection (13). However, because real-world clinical scenarios are not always available for training, role-plays, short films, and theatrical presentations can effectively replace both teaching and evaluation. Instead of merely discussing human values through lectures or case studies, teachers can use educational approaches grounded in the arts to give students the chance to observe, experience, and express these values. As a result, these tools can engage students intellectually and emotionally, enabling them to examine moral conundrums in authentic yet controlled environments. This suggests that a range of artistic approaches, such as theatre or video-based methods, can motivate students to engage more deeply with ethical values and professional practice. By transforming abstract ethical principles into concrete and emotionally resonant experiences, these approaches may facilitate the internalization of professional values. In the present study, short dramatized videos were developed to depict ethical challenges commonly faced by medical students across different clinical settings. These videos were implemented in classroom teaching and evaluated as an instructional strategy for medical

ethics education. It is worth mentioning that the intervention was intentionally designed to align with the cultural context and educational goals of the participating training institutions.

Methods

A) Creation of Educational Videos

The medical ethics course is a 16-week program designed for fourth-year medical students that covers a broad range of topics, including the history of medicine, ethical reasoning, confidentiality, informed consent, physician–patient relationships, end-of-life care, medical errors, and professional responsibilities. Traditionally delivered through interactive, in-person sessions, the course was recently enhanced with the addition of short dramatized videos. These videos depicted ethical dilemmas commonly encountered by medical students in clinical practice and were developed in accordance with the national medical ethics curriculum and professional ethics guidelines (16,17).Five key ethical topics were selected for the video project: informed consent, patient privacy, truth-telling, conflicts of interest, and medical errors. For each topic, three scenarios were initially drafted, and one scenario per topic was finalized following consultation with the working group. The art director refined the scripts to enhance dramatic impact while preserving educational integrity. Children aged 6 to 10 years were cast to portray both healthcare providers and patients and were guided through parent-assisted practice using age-appropriate audio recordings. Filming was conducted in a teaching hospital, with scheduled breaks and playtime to ensure the children remained comfortable and engaged. The final videos were carefully reviewed and edited for consistency before being introduced into classroom teaching.

B) Teaching through Videos

In February 2022, these short videos (2–3 minutes each) were incorporated into medical ethics classes. The videos humorously portrayed realistic clinical ethical dilemmas and their potential resolutions. To encourage independent critical thinking, students were not informed of the subject matter in advance. After each viewing, they submitted written reflections analyzing the ethical dimensions of the scenario and engaged in structured class discussions. The instructor guided the class by posing targeted questions that highlighted the topics presented in the videos, while facilitating in-depth exploration of ethical concepts through group discussions. The use of children as actors portraying

clinicians and patients introduced a creative, non-threatening element that helped frame complex scenarios in a psychologically safe and interactive format. Additionally, the videos were designed to align with cultural norms, including gender roles and dress codes, to ensure their appropriateness and acceptance within the medical education setting.

C) Evaluation of Educational Impact

A cross-sectional evaluation was conducted in 2022 to assess the impact of this video-based approach. Of the 234 fourth-year students, 141 (60.3%) participated. Data were collected over two academic semesters using a 36-item questionnaire structured around the Context (8 items), Input (9 items), Process (10 items), and Product (9 items) domains of the CIPP model (18). The researcher-developed questionnaire was specifically designed based on this model and aligned with the medical ethics courses in the undergraduate medical curriculum in Iran, as well as relevant literature (16,19). Next, through three group discussion sessions, the research team reached consensus on the content, structure, sequence, and number of items within each domain. During these sessions, each item was carefully reviewed and refined with respect to its level of difficulty, clarity, relevance, and potential ambiguity. The team also evaluated whether individual items should be revised, removed, or merged to improve the instrument's overall quality and coherence. The questionnaire was distributed online with students' verbal consent, and anonymity was strictly maintained. Responses with more than 10% missing data were excluded from the analysis. Items were rated on a three-point scale (Yes = 2, No Opinion = 1, No = 0) and then normalized to a 0–100 scale. Scores were interpreted as follows: below 50 indicated dissatisfaction, 51–70 indicated moderate satisfaction, and 71–100 indicated satisfaction. An open-ended question was also included to capture qualitative feedback from participants.

D) Validity, Reliability, and Ethics

The questionnaire's validity was confirmed using the Content Validity Ratio (CVR) and the Content Validity Index (CVI), with input from 10 faculty members in medical education and medical ethics at universities of medical sciences. Internal consistency was measured using Cronbach's alpha, and the tool's construct validity was supported by confirmatory factor analysis. Data analysis was conducted using SPSS version 22, with t-tests and Pearson's correlation where applicable ($P \leq 0.05$).

Descriptive statistics, including means, standard deviations, frequencies, and percentages, were used to summarize participants' demographic characteristics and questionnaire scores. Also, independent-samples t-tests were performed to compare mean scores across the CIPP dimensions between demographic groups, and Pearson's correlation coefficients were calculated to examine the relationships among the CIPP dimensions. In addition, a confirmatory factor analysis (CFA) was conducted to assess the questionnaire's factorial validity. Finally, path analysis was used to examine whether the relationships among the CIPP dimensions were consistent with the hypothesized conceptual framework of the CIPP model.

Ethical approval was obtained from the Ethics Committee of Kerman University of Medical Sciences (IR.KMU.REC.1400.236). Children participated in the video production with informed parental consent and personal assent. Students were informed that the videos would be used for both educational and evaluative purposes, and that data collection would ensure confidentiality and voluntary participation.

Results

A) Creation of Educational Videos

Five short videos (2–3 minutes each) were produced in alignment with the medical ethics curriculum, covering key topics such as informed consent, truth-telling, patient privacy, conflicts of interest, and ethical responses to medical errors. Each video employed dramatized scenarios featuring children and adopted a light, engaging tone to create a safe and accessible learning environment. This video-based approach has been used since February 2022 to teach fourth-year medical students at Kerman University of Medical Sciences, and these resources remain an integral part of the teaching program. Two sample videos can be viewed at https://B2n.ir/q63385.

B) Evaluation Based on the CIPP Model

The educational impact of these videos was evaluated using the CIPP (Context, Input, Process, and Product) model, with a 36-item Likert-scale questionnaire and one open-ended question. A total of 141 students participated (60.3% female; mean age 23). Analysis of their responses indicated that the video-based teaching approach was positively received across all four CIPP domains (Table 1). Mean scores indicated

high satisfaction, with no significant differences by gender or age ($P > 0.05$).

Table 1. The central tendency, dispersion, distribution indicators, and desirability level of different domains of the CIPP model scores in using short videos as a reflective method for teaching medical ethics concepts to medical students

		Context	Input	Process	Product
	Mean	81.79	86.79	78.91	90.29
	N	138	138	138	138
	SD	23.62	19.99	22.21	19.09
	Median	87.50	94.44	85.00	100.00
	SEM	2.01	1.70	1.89	1.62
	Min	0.00	.00	.00	.00
	Max	100.00	100.00	100.00	100.00
Desirability Level N (%)	**Undesirable = 17 (12.3)**		**10 (7.2)**	**22 (15.9)**	**7 (5.1)**
	Relatively desirable = 18 (13.0)		**9 (6.5)**	**16 (11.6)**	**8(5.8)**
	Desirable = 103 (74.6)		**119 (86.2)**	**100 (72.5)**	**123 (89.1)**

As presented in Table 2, item-wise analysis revealed that the specific items in each domain that received the highest scores were: Item 1 in Context, Item 4 in Input, Item 6 in Process, and Items 6 and 8 in Product. Overall, more than 70% of the students provided positive feedback across all domains, with particularly high scores in the Product domain, indicating a positive impact on learning.

However, a minority (20–25%) of the students expressed less satisfaction with certain aspects, particularly with Items 3–6 in the Context, and two items in the Process domain. Despite these few lower-rated items, student responses to the open-ended question reflected a generally favorable perception of the intervention. The following student comments highlight key strengths and areas for improvement:

- “I liked the videos I watched, and I think it would be better if more videos were made about the physician-patient relationship.”
- “The idea of using educational videos is creative and more effective than lecture-only teaching.”
- “It would be helpful to show a video at the start of each session, followed by a related question.”
- “Concepts presented in videos stay with me longer than those taught through traditional methods.”
- “Having children in the videos makes the tone lighter and more engaging.”
- “A dedicated space for ethics education would enhance the course and increase student participation.”
- “Adding more videos would improve the depth and appeal of the content.”

Table 2. Distribution of the students' responses regarding use of videos as a reflective method for teaching medical ethics concepts to medical students at Kerman University of Medical Sciences

	Items	Yes N (%)	No Opinion N (%)	No N (%)
Context	1. Does watching these videos allow for the transmission of complex moral concepts in a simple way?	118 (85.5%)	10 (7.2%)	10 (7.2%)
	2. Teaching the concepts of medical ethics by showing videos helps students learn how to communicate appropriately with patients.	110 (79.7%)	15 (10.9%)	13 (9.4%)
	3. Teaching the concepts of medical ethics by showing videos helps students to better respond to patients' needs.	104 (75.4%)	0 (0.0%)	34 (24.6%)
	4. Teaching the concepts of medical ethics by showing videos helps to better prepare students to accept their future role as ethical health professionals.	110 (79.7%)	0 (0.0%)	28 (20/3%)
	5. Teaching the concepts of medical ethics by showing videos helps students learn how to communicate appropriately with the professor.	93 (67.4%)	17 (12.3%)	28 (20.3%)
	6. Teaching the concepts of medical ethics by showing videos helps students learn how to communicate appropriately with their colleagues on the treatment team.	105 (76.1%)	0 (0.0%)	33 (23.9%)
	7. Teaching the concepts of medical ethics by showing videos helps empower students to face and resolve ethical issues in relation to patients.	115 (83.3%)	0 (0.0%)	23 (16.7%)
Input	1. Educational videos will have a longer lasting effect than traditional teaching methods.	115 (83.3%)	0 (0.0%)	23 (16.7%)
	2. Are you satisfied with the educational experience gained from watching these medical ethics videos?	115 (83.3%)	11 (8.0%)	12 (8.7%)
	3. Are you satisfied with the content of these videos?	110 (79.7%)	12 (8.7%)	16 (11.6%)
	4. Teaching the concepts of medical ethics through educational videos is effective in achieving the educational objectives of the lesson.	128 (92.8%)	0 (0.0%)	10 (7.2%)

	5. Are the concepts of medical ethics in the videos clear and understandable to you?	125 (90.6%)	4 (2.9%)	9 (6.5%)
	6. Are the concepts of medical ethics in the videos useful and practical for you?	117 (84.8%)	13 (9.4%)	8 (5.8%)
Process	1. Do you approve of casting child actors in the production of videos related to professional ethics in medical sciences?	93 (67.4%)	16 (11.6%)	29 (21.0%)
	2. The choice of children to play roles has added to the appeal of the videos.	87 (63%)	21 (15.2%)	30 (21.7%)
	3. The medical ethics videos were of appropriate audio and video quality	123 (89.1%)	4 (2.9%)	11 (8.0%)
	4. Appropriate filming techniques were used in editing the medical ethics videos.	108 (78.3%)	12 (8.7%)	18 (13.0%)
	5. The medical ethics videos were of appropriate graphic quality.	117 (84.8%)	8 (5.8%)	13 (9.4%)
	6. There was harmony between sound and image in the medical ethics videos.	127 (92.0%)	4 (2.9%)	7 (5.1%)
	7. The performance ability of the actors in the medical ethics videos was acceptable.	101 (73.2%)	15 (10.9%)	22 (15.9%)
	8. The level and pace of the dialogues in the videos were appropriate for understanding the concepts of medical ethics.	108 (78.3%)	14 (10.1%)	16 (11.6%)
	***Teaching medical ethics concepts with videos helps students:**	**Yes N (%)**	**No Opinion N (%)**	**No N (%)**
	1. Become familiar with ethical challenges in providing health services.	122 (88.4%)	6 (4.3%)	10 (7.2%)
	2. Appreciate the importance of respecting patient rights, especially in an educational environment.	122 (88.4%)	8 (5.8%)	8 (5.8%)
	3. Recognize the significance of respecting the rights of other health service workers.	117 (84.8%)	13 (9.4%)	8 (5.8%)
	4.Understand the importance of professional behavior in the event of a medical error.	120 (87.0%)	9 (6.5%)	9 (6.5%)
	5. Appreciate the significance of obtaining informed consent in establishing effective doctor-patient communication.	121 (87.7%)	10 (7.2%)	7 (5.1%)
Product	6. Understand the importance of maintaining patient confidentiality and privacy in establishing effective doctor-patient communication.	122 (88.4%)	8 (5.8%)	8 (5.8%)
	7. Appreciate the importance of managing conflicts of interest in gaining patients' trust.	116 (84/1%)	15 (10.9%)	7 (5.1%)

8. Understand the importance of displaying professional behaviors in gaining people's trust.	122 (88.4%)	9 (6.5%)	7 (5.1%)
9. Be more prepared to accept their future role as ethical health professionals.	113 (81.9%)	15 (10.9%)	10 (7.2%)

C)Psychometric Properties of the CIPP Model

The validity and reliability of the evaluation tool were rigorously assessed, and the content validity index was confirmed. The Kaiser-Meyer-Olkin (KMO) value was 0.86, and Bartlett's test for sphericity was significant (χ^2 = 2904.203, *P* = 0.000), indicating suitability for factor analysis. Given that the model structure was predetermined, no exploratory factors were extracted. In the confirmatory factor analysis, all items had factor loadings ≥ 0.3, except those highlighted in Table 3, which were removed. Reliability measures were acceptable, with Cronbach's alpha and composite reliability supporting internal consistency. Model fit indices were within acceptable ranges: χ^2/df = 2.39, SRMR = 0.09, CFI = 0.91, IFI = 0.91, NFI = 0.86, and NNFI = 0.90. SmartPLS 3 software was used for analysis (Table 3).

Table 3. The factor loadings, t-values, Cronbach's alpha coefficients, average variance extracted (AVE), and composite reliability (CR) of the different dimensions of using short videos as a reflective method for teaching medical ethics concepts to medical students by applying the CIPP evaluation model

Factor	Item	Loading/*T*-Value	Cronbach's Alpha Coefficients/AVE/CR
Context	**2**		0.778/0.50/0.849
	3	**0.65/8.83**	
	6	**0.75/12.61**	
	7	**0.70/12.15**	
	8	**0.61/8.05**	
	9	**0.66/11.50**	
	10	**0.61/7.71**	
	11	**0.62/7.59**	
Input	**1**		0.706/0.53/0.868
	4		
	5		
	12	**0.58/6.41**	
	13	**0.80/15.60**	
	14	**0.69/10.15**	
	15	**0.72/8.00**	
	16	**0.68/6.81**	
	17	**0.75/10.23**	
Process	**18**	**0.60/7.64**	0.655/0.50/0.881
	19	**0.68/11.78**	
	20		
	21	**0.58/5.68**	
	22	**0.76/14.32**	
	23	**0.67/10.15**	

	24		
	25	**0.78/16.45**	
	26	**0.77/14.08**	
	27	**0.67/10.67**	
	28	**0.72/7.17**	0.773/0.529/0.910
Product	**29**	**0.69/8.25**	
	30	**0.72/7.94**	
	31	**0.74/10.28**	
	32	**0.75/7.97**	
	33	**0.63/6.28**	
	34	**0.73/8.88**	
	35	**0.78/12.52**	
	36	**0.74/11.14**	

Path analysis (Figure 1) demonstrated statistically significant correlations between domains: Context–Input (r = 0.90, t = 5.05), Input–Process (r = 0.94, t = 4.18), and Process–Product (r = 0.84, t = 5.26), supporting the model's structural validity.

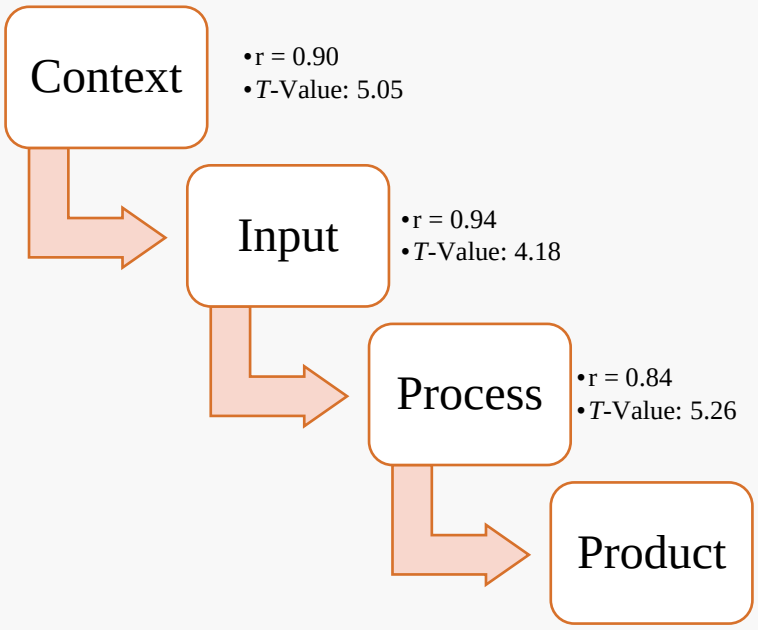

Figure 1. Path analysis of the medical ethics video evaluation questionnaire from the students' perspective using the CIPP model.

Discussion

In this study, medical ethics education was delivered through the production of five short videos, each designed around the course's learning objectives, intended outcomes, and common clinical ethical dilemmas. These videos were integrated into five structured teaching sessions conducted over two academic semesters. The effectiveness of this approach was assessed using the CIPP model. Results

indicated not only substantial acquisition of factual knowledge but also meaningful reflection on the ethical issues presented, as demonstrated by the high scores in the product domain. Perhaps most encouraging was the consistency of learners' positive responses, with minimal variation in scores, suggesting broad and uniform engagement with the content. Overall, these findings suggest that short, targeted educational videos can significantly enhance medical ethics learning and may be highly effective in supporting the development of students' professional competencies. The key findings revealed overwhelmingly positive responses across all four CIPP domains. Specifically, the highest scores were observed for: understanding course objectives (Context), quality and usefulness of video materials (Input), student engagement and active participation (Process), and the application of ethical standards in real clinical situations (Product). These results underscore that well-designed, locally relevant video segment are more than just visually appealing; they can serve as powerful learning tools that transform complex ethical principles into meaningful, practice-oriented learning experiences. The uniformly positive student feedback also suggests a growing preference for educational formats that prioritize short, visually rich content over traditional, text-heavy lectures in medical ethics education.

Scholars continue to stress that medical ethics education must remain adaptable and actively foster critical thinking skills (20). However, approaches to ethics education vary widely across institutions and countries, so medical schools tailor their programs to local needs, cultural contexts, and societal values (21). Within this diverse landscape, some academics argue that the arts (e.g., painting, poetry, music, and film) can deepen physicians' engagement with patients by fostering empathy, reflection, and cross-cultural understanding (22). Growing evidence further suggests that integrating the arts into medical education not only contributes to the humanization of medicine but also strengthens critical thinking and supports the development of professional practice among both learners and practitioners (23). Recent research consistently indicates that contemporary students respond more positively to interactive and experiential learning approaches, such as small-group discussions of ethical cases and virtual learning platforms, than to traditional didactic lectures (24,25).

In one study, the authors found that the arts have a much broader role in medical education than simply enhancing individual skills or competencies. Their review suggests that arts-based approaches enrich medical education by encouraging reflection, empathy, creativity, communication, and critical thinking while supporting the development of professional identity. The authors identified four key ways in which the arts contribute to medical education: fostering professional development, enhancing teaching and learning, challenging the dominant technical-rational approach to medicine, and helping learners understand clinical practice as a series of social and interpersonal performances. The authors also emphasize that the impact of the arts cannot be fully captured through traditional competency-based or quantitative evaluation methods. Instead, they recommend using qualitative approaches that recognize professional growth, lifelong learning, creativity, and the humanistic dimensions of medical practice, ultimately helping to educate more reflective, compassionate, and socially responsive physicians (26).

Our findings are consistent with those of previous studies. In the present study, we applied the CIPP model as a qualitative framework to evaluate the use of video presentation in medical ethics education. The Context, Input, Process, and Product (CIPP) model, developed by Stufflebeam and colleagues in the late 1960s, is one of the most widely used frameworks for evaluating educational programs. Rather than focusing solely on outcomes, the model provides a comprehensive assessment of a program through four interconnected dimensions. Context evaluation explores the needs of the target audience and the setting in which the program is delivered, helping determine whether it is appropriate for its intended context. Input evaluation examines the availability and suitability of key resources, including personnel, funding, and educational materials, in relation to the program's objectives. Process evaluation assesses how the program is implemented, identifying strengths and areas for improvement. Finally, product evaluation determines whether the program has achieved its intended educational outcomes (18). In a previous study at Kerman University of Medical Sciences, researchers used this framework to assess medical ethics education. Their findings demonstrated that the model provides a structured, practical approach for evaluating the program's goals, available resources,

implementation, and educational outcomes, thereby supporting its usefulness as a comprehensive evaluation framework for medical ethics training (19).

Some studies have explored art-based teaching strategies in medicine. One study evaluated an educational intervention combining clinical simulation with art-based teaching methods to enhance oncology fellows' skills in breaking bad news (BBN).

Recognizing that BBN requires not only technical communication skills but also emotional intelligence, empathy, ethical sensitivity, and reflection, the authors developed a blended educational model integrating experiential simulation with structured engagement in the arts. The art component of the intervention focused on visual and expressive arts, including guided observation of artworks, facilitated group discussions, and reflective art-based activities. The authors concluded that combining simulation with visual and reflective art-based teaching provides a powerful, learner-centered approach for shaping learners' attitudes and teaching complex, ethically sensitive clinical communication skills in oncology (27). The studies' findings discussed above are align with ours.

Another study described an innovative approach to ethics education that incorporated the arts into medical training. In this intervention, students were asked to observe real clinical situations and subsequently express their ethical and emotional responses through painting. The author suggested that this activity, when used in medical ethics sessions, can serve as a powerful reflective tool, enabling future physicians to more deeply appreciate the significance of professional values in clinical practice (28).

In a systematic review, the authors examined the use of short audiovisual materials, often referred to as "trigger films" or "didactic icebreakers," in teaching medical ethics and professionalism. Their thematic analysis identified nine key educational benefits, most significantly the ability of these materials to stimulate discussion, create realistic learning experiences, and adapt to a variety of educational contexts. The review showed that trigger films effectively engage learners, encourage critical reflection on complex ethical dilemmas, and promote interactive classroom discussions. Although the available evidence was derived primarily from descriptive studies and expert commentaries rather than rigorous experimental research, the authors concluded that short videos are a

practical and valuable complement to traditional ethics instruction. By presenting authentic clinical scenarios, they foster active participation and reflective learning instead of passive knowledge acquisition (29). The findings of the above-mentioned study are consistent with those of the present study and highlight the value of integrating video-based ethical scenarios with guided discussion and reflective learning to enhance students' understanding and application of ethical principles.

Limitations

Some limitations should be considered when interpreting the findings of this study. First, although the sample size was adequate for estimating the proposed measurement and structural models, it was relatively small for confirmatory factor analysis and path analysis. Even so, the hypothesized factor structure demonstrated acceptable model fit and statistically significant factor loadings, supporting the stability of the estimated measurement model. However, sample size may have affected the stability of the parameter estimates and limited the generalizability of the findings. Future studies with larger, more diverse samples are needed to confirm the model's robustness. Second, the cross-sectional nature of the study precludes any conclusions about temporal or causal relationships among the CIPP dimensions. Therefore, the structural paths identified in this study should not be interpreted as evidence of causality. Third, all data were obtained through self-reported questionnaires, which may have introduced common biases, such as recall bias. Future research would benefit from using multiple sources of evidence, for instance, faculty assessments, to provide a more comprehensive evaluation of the intervention. Finally, because this study was conducted at a single institution, the findings may not be generalizable to other educational settings or institutional contexts. Future research involving a larger collection of video materials across multiple institutions could provide a more comprehensive evaluation of both the effectiveness and scalability of this educational approach.

Conclusion

The findings highlight the potential of short, culturally sensitive educational videos as an effective tool for teaching medical ethics. By presenting real-world ethical dilemmas through engaging video scenarios, this approach can successfully facilitate students’ understanding

and reflection on the issues. Evaluation using the CIPP model demonstrates the method's effectiveness across all domains, with particularly strong impacts on student engagement, ethical reasoning, and application of knowledge. Moreover, the overwhelmingly positive feedback indicates that incorporating the arts into medical ethics education can help transform abstract ethical principles into meaningful, practice-ready competencies. The videos provide realistic simulations of the clinical environments Iranian medical students encounter in academic medical centers. Future research should explore the scalability of this approach, its long-term impact, and its integration with other active learning strategies to strengthen the reflective and professional aspects of medical curricula.

Acknowledgments

This manuscript was written based on the results of a research proposal approved by Kerman University of Medical Sciences in 2021 under ethics code (IR.KMU.REC.1400.236) obtained from the National Ethics Committee in Biomedical Research. The authors wish to express their deepest gratitude and warmest appreciation to all participants and co-workers who, in any way, inspired the researchers and contributed to the overall success of this undertaking. The authors are also grateful to Dr. Soheyl Saryazdi, an art director and GP, Kerman University of Medical Sciences, for editing a demonstration video.

Funding

A funding (No. 400000299) was received from Vice Chancellor of Research and Technology of Kerman University of Medical Sciences for editing the videos.

Conflict of Interest

The authors declare that there is no conflict of interest.

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