

Cinemeducation in Medical Training: Using Film and Television to Teach Empathy, Professionalism, Patient Safety and Research Ethics

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ABSTRACT

Background: Film and television shape how trainees and the public imagine clinicians, patients, hospitals, medical errors and research. In health professions education, cinemeducation uses those familiar narratives as structured prompts for reflection, discussion and skills development.

Objective: To review how film and television have been used in medical training and to identify practical applications for teaching empathy and psychosocial care, professionalism and ethics, patient safety and systems thinking and media literacy related to research.

Methods: This narrative review examined published reports describing deliberate educational use of feature films, television series, medical dramas, documentaries and selected clips in undergraduate medical education and related health professions training. We identified relevant literature through database searches, reference-list review and citation tracking. Included publications described a media-based educational intervention, relevant learning objectives or outcomes and enough detail about the media, learners, instructional format or evaluation to support thematic synthesis.

Results: Cinemeducation was used in required courses, electives, workshops and both faculty-led and learner-led sessions. Most interventions paired full films or curated clips with facilitated discussion, reflective writing, small-group analysis, role-play or simulation. Across studies, learners commonly described these activities as engaging and emotionally resonant and as helpful for perspective-taking, recognizing ethical and professional dilemmas and analyzing medical errors and system contributors to harm. Recent content analyses also point to inaccurate or sensationalized portrayals of trauma care, clinician behavior, clinical research, informed consent and ethics oversight, which create opportunities for structured media-literacy teaching. Reported outcomes, however, were usually short-term and self-reported and the literature was limited by heterogeneous designs, small samples and single-institution evaluations.

Conclusions: Film and television can serve as flexible teaching tools when educators use clear objectives, carefully chosen material, structured facilitation and explicit discussion of inaccuracies and sensationalized portrayals. Used this way, cinemeducation can support reflective, empathetic, ethically grounded, safety-conscious and media-literate clinical practice.

Keywords: Cinemeducation; Medical education; Medical professionalism; Empathy; patient safety; Research ethics; Television medical dramas

Introduction

Television medical dramas and films are a pervasive part of the cultural landscape in which future clinicians, patients and families form expectations about medicine. On screen, viewers encounter dramatic resuscitations, ethically fraught clinical decisions, emotionally charged patient narratives and high-stakes research storylines that can shape how medicine is understood long before they encounter these issues in formal training. Popular media can act as an informal curriculum, shaping assumptions about professionalism, patient safety, research and the social role of clinicians¹.

This influence matters because entertainment portrayals are often compelling precisely when they are selective, compressed or inaccurate. Recent analyses have documented unrealistic depictions of trauma resuscitation in popular medical dramas, concerns that televised portrayals may affect perceptions of clinicians and emergency care and portrayals of medical research that may shape public views of consent, oversight and trust in science^{2,3}. A recent emergency medicine-focused study also suggests that medical dramas can examine social determinants of health and their relevance to patient outcomes and access to care⁴.

For educators, those distortions create both a risk and an opening for teaching. “Cinemeducation,” the intentional use of film and television in health professions education, treats media as a text for guided analysis rather than passive consumption¹. Prior work in medical education has shown that selected films, television episodes and curated clips can support reflection and discussion around empathy and psychosocial care, professionalism and ethics, patient safety and systems thinking and media literacy related to research and public understanding of medicine^{5,6}.

In medical training, this approach works well because familiar narratives can bring difficult topics to the surface in ways lectures often cannot. A single scene may simultaneously illustrate communication failures, hierarchy, bias, unrealistic heroism, flawed consent or the emotional experience of illness, creating an accessible entry point for deeper discussion. When paired with structured facilitation, these media examples can help learners compare dramatized medicine with accepted standards of clinical practice, safety culture and ethical conduct^{1,5}.

Even so, television and film need careful framing when they are brought into the curriculum. Without explicit framing, learners may absorb inaccurate portrayals of emergency care, normalize unprofessional behavior or accept distorted depictions of clinical research and institutional oversight. The growing literature on portrayals of trauma resuscitation, clinician image, hidden curriculum, social determinants of health and research ethics underscores the need to engage medical media critically rather than assume its messages are benign^{2-4,7}.

This narrative review examines how film and television have been used in medical training across four overlapping domains: empathy and psychosocial care; professionalism and ethics; patient safety and systems thinking; and media literacy and research ethics. This review examines how cinemeducation has been used, where it seems most useful, where it may be misleading and what educators should consider when bringing film and television into clinical training.

Methods

Review design and scope

This article is a narrative review of using film and television in medical training. A narrative review was chosen because the literature is heterogeneous and includes educational interventions, pilot studies, descriptive reports, mixed-methods evaluations, conceptual articles and content analyses of medical media⁸. The goal was to identify recurring educational uses and practical implications, not to estimate a pooled effect or provide an exhaustive systematic account of the literature.

The review addressed the following question: how have film and television been used in medical training to support learning related to empathy and psychosocial care, professionalism and ethics, patient safety and systems thinking and media literacy and research ethics? The scope focused primarily on medical learners and closely related health professions trainees in formal or semi-formal educational settings.

Literature identification

We identified relevant literature through targeted searches of PubMed/MEDLINE, ERIC and Google Scholar, completed in August 2026. Search terms combined media-related concepts—including “cinemeducation,” “cinema,” “film,” “movies,” “television,” and “medical dramas”—with terms related to medical training and the review domains, including “medical education,” “medical students,” “medical training,” “empathy,” “professionalism,” “ethics,” “patient safety,” “systems thinking,” “research ethics,” “clinical trials,” and “hidden curriculum.” We examined reference lists of key articles and relevant review papers and used forward citation searching to identify additional publications. We also considered relevant conference abstracts identified through database searching, reference-list review and forward citation searching when they provided directly relevant, recent evidence on the educational or clinical implications of medical-media portrayals.

Selection of literature

We selected peer-reviewed publications and relevant conference abstracts based on their relevance to the review question and practical implications for medical training. Publications were included when they described the intentional use of feature films, documentaries, television series, medical dramas or selected audiovisual clips as educational tools; involved medical trainees or closely related health professions learners; or provided content-analysis evidence relevant to the accuracy, ethical implications or educational use of medical portrayals. We included conference abstracts selectively when they described directly relevant work not otherwise available as a full peer-reviewed publication; we interpreted findings from abstracts cautiously because methodological detail and peer review may be limited.

We prioritized publications that provided sufficient information about the learner group, media type, instructional format, educational objective or reported outcomes to support thematic interpretation. Empirical studies, descriptive educational reports, mixed-methods evaluations and selected conceptual articles were considered. Publications focused solely on entertainment without educational or clinically relevant implications or on audiences unrelated to health professions education, were excluded.

Data abstraction and synthesis

For each publication, we recorded the learner population and setting, media format, educational activity, learning objectives, principal findings and reported outcomes or practical implications. Content analyses of medical dramas were reviewed separately as contextual evidence about the portrayals learners and the public may encounter; they were not interpreted as evidence of the effectiveness of cinemeducation interventions.

Because the literature varied substantially in study design, intervention format, learner populations and outcomes, meta-analysis was not appropriate. Findings were synthesized narratively and organized into four overlapping domains: empathy and psychosocial care; professionalism and ethics; patient safety and systems thinking; and media literacy and research ethics. The synthesis emphasized recurring instructional approaches, learner-reported outcomes, limitations of the evidence and considerations for critically using dramatized medical media in training.

Methodological considerations

This review was not designed as a systematic review and did not seek to identify every potentially relevant publication. Its conclusions reflect a thematic interpretation of a diverse and evolving literature. To promote transparency, the review specifies

its purpose, scope, information sources, search concepts, selection boundaries and approach to narrative synthesis.

Results

Overview of included literature

The literature identified for this narrative review included a heterogeneous mix of empirical studies, descriptive reports, pilot educational interventions, reflective curricular articles and recent content analyses examining portrayals of medicine in film and television. Across these publications, cinemeducation was used in required courses, electives, workshops, seminars and other structured teaching settings involving medical students and related health professions learners^{1,5,6}. Most interventions paired full films or selected clips with facilitated discussion, reflective writing, small-group analysis, role-play or simulation, suggesting that active processing rather than passive viewing was a consistent feature of educational use.

Across the included literature, four overlapping domains recurred: empathy and psychosocial care; professionalism and ethics; patient safety and systems thinking; and media literacy and research ethics. **(Table 1)** summarizes the educational aims, illustrative media content, teaching approaches and reported outcomes across these domains.

Table 1: Domains, educational aims and illustrative media-based teaching approaches

Domain	Typical learning objectives	Illustrative media content types*	Representative teaching methods	Typical learner-reported or literature-supported outcomes
Empathy and psychosocial care	Develop perspective-taking; recognize psychosocial dimensions of illness; explore family experience, suffering, disability, grief and end-of-life care; identify how social context shapes clinical experience.	Feature films or clips focused on serious illness, disability, family dynamics, chronic disease, end-of-life care or barriers linked to social determinants of health.	Guided viewing; facilitated discussion; reflective writing; small-group debrief; comparison of patient narrative with real clinical encounters.	Greater attention to patient and family experience; increased awareness of emotional and non-technical aspects of care; deeper reflection on social context and inequities affecting health.
Professionalism and ethics	Analyze physician-patient and interprofessional relationships; apply principles of consent, confidentiality, boundaries, bias, respect and conflict of interest; recognize positive and negative role modeling.	Short scenes from films or medical dramas showing difficult conversations, consent encounters, confidentiality breaches, disrespectful interactions, ethical dilemmas or portrayals that may influence public perceptions of clinicians.	Brief didactic framing plus clip review; structured ethics discussion; reflective exercises; case comparison; role-play or facilitated debrief.	Improved recognition of ethical and professional tensions; clearer distinction between acceptable and unacceptable conduct; increased awareness of how media portrayals may affect the image of clinicians and emergency care.
Patient safety and systems thinking	Recognize how communication failures, hierarchy, workflow, supervision and other system factors contribute to harm; distinguish individual error from systems contributors; critique unrealistic emergency care portrayals.	Television or film scenes depicting medical errors, near misses, adverse events, trauma resuscitation, communication breakdowns or system failures.	Clip-based case analysis; root-cause or systems discussion; structured safety debrief; comparison with protocols; simulation paired with clips.	Increased awareness of latent safety threats and systems contributors to harm; better understanding of safety culture; improved ability to critique unrealistic or overly heroic depictions of resuscitation and emergency care.
Media literacy and research ethics	Critically appraise portrayals of clinical trials, experimental therapies, informed consent, oversight and investigator behavior; examine how media narratives shape trust in research and institutions.	Episodes or scenes featuring clinical trials, experimental treatments, research misconduct, conflicts of interest, weak oversight, mistrust narratives or sensationalized representations of science.	Guided viewing with critical appraisal questions; comparison with real research regulations and ethical standards; facilitated discussion; media-analysis assignments.	Recognition of inaccuracies and sensationalism; greater awareness of how entertainment media may shape views of medical research, consent and institutional trust; stronger media-literacy framing of research ethics.

*Illustrative media content types refer to categories of films and television scenes rather than specific copyrighted titles.

Empathy and psychosocial care

A substantial portion of the literature used film and television to support teaching on empathy, humanism, communication and the psychosocial dimensions of illness. In these reports, educators selected media that highlighted patient narratives, family dynamics, grief, serious illness and difficult conversations, then used guided reflection or discussion to help learners consider the emotional and social context of care^{4,9-11}. Learners frequently described these sessions as memorable and perspective-shifting and some studies suggested gains in empathy-related or humanistic awareness.

These activities were commonly presented as a complement to biomedical instruction, creating space for learners to engage with suffering, uncertainty and the lived experience of illness. Related work also suggests that medical dramas can prompt discussion of the hidden curriculum and the professional values conveyed through onscreen clinical interactions^{7,9,11-13}.

Professionalism and ethics

Professionalism and ethics formed another major area of application. Common topics included physician-patient relationships, confidentiality, informed consent, conflicts of interest, collegial respect, bias, helping relationships and ethical decision-making in clinically ambiguous situations¹²⁻¹⁴. Short audiovisual clips and films can serve as effective discussion prompts by making ethical tensions concrete, emotionally engaging and open to multiple interpretations¹³⁻¹⁶.

These interventions typically use selected scenes to trigger guided discussion, reflective writing or case-based analysis, enabling learners to compare dramatized conduct with professional expectations in real-world practice^{14,16,17}. For example, films addressing serious illness, grief and end-of-life care can help learners examine communication, quality of life, family experience and the complexity of human responses to dying^{10,11,13-16}.

Reported outcomes in this domain were primarily based on learner reflections and pre- and post-self-assessments. Participants often described improved recognition of ethical tensions, greater awareness of how unprofessional behaviors—such as dismissiveness, objectification of patients, poor communication or shortcuts in consent—might manifest in real clinical settings and opportunities to reflect on professional identity formation¹⁶⁻¹⁸. Recent commentary on how television medical dramas may affect the public image of clinicians further reinforces the importance of critically examining onscreen professionalism rather than assuming such portrayals are neutral⁹.

Patient safety and systems thinking

A smaller but increasingly relevant body of literature focused on patient safety and systems thinking. These reports used film and television clips showing medical errors, near misses, communication failures, hierarchy, workload pressures and system breakdowns to help learners identify contributing factors to harm and consider safer alternatives^{19,20}. In some settings, audiovisual clips were combined with simulation or structured debriefing, broadening the range of safety scenarios available for analysis.

Learners commonly reported that these sessions helped them visualize latent system problems and appreciate how multiple small failures can accumulate into patient harm¹. Newer analyses of medical dramas also document unrealistic depictions of trauma resuscitation, highlighting that such scenes may be educationally useful not because they model best practice, but because they offer concrete examples for critiquing deviations from real emergency care, teamwork, workflow and safety culture².

Media literacy and research ethics

Media literacy and research ethics emerged as another recurring domain, particularly in reports that examined portrayals of clinical trials, experimental therapies, investigator behavior, institutional oversight and trust in medicine²¹. In these sessions, learners compared dramatized portrayals with accepted standards for informed consent, risk-benefit communication, ethics review and professional conduct in research²². This made film and television a practical entry point for discussing how

public ideas about science and experimentation may be shaped outside formal curricula.

Recent content-analysis literature strengthens this domain. A 2026 study of prime-time dramas documented portrayals of medical research across a large sample of episodes, supporting the view that entertainment media can meaningfully shape how lay audiences and trainees imagine research³. Such findings help explain why research portrayals are a legitimate target for critical appraisal within medical training, particularly when learners are encouraged to identify inaccuracies, sensationalism, mistrust narratives and omissions in oversight or consent processes²¹.

Cross-cutting patterns

A few patterns appeared across the literature. First, media-based teaching was usually most effective when paired with structured facilitation, reflection or discussion rather than simple viewing alone¹⁻⁵. Second, the same clip or episode often supported multiple educational objectives, with a single storyline simultaneously surfacing issues related to empathy, professionalism, safety, equity and research ethics^{17,23}. Third, the educational value of medical dramas appeared closely tied to the educator's ability to frame inaccuracies, emotional intensity and narrative simplification as opportunities for analysis rather than as models for imitation²⁴.

The reported outcomes were encouraging, but the evidence base remained limited. Most studies relied on self-reported perceptions, reflective writing or short-term pre/post assessments rather than observed behavioral change or longitudinal outcomes. As a result, the available evidence supports cinemeducation as a feasible and engaging instructional approach, but it remains less clear how strongly these activities affect long-term clinical behavior, professional identity formation or patient-facing outcomes²⁰.

Discussion

Film and television can be more than engaging adjuncts to classroom teaching. When used intentionally, they provide accessible, emotionally resonant case material through which learners can examine empathy, professionalism, patient safety and research ethics in ways that are memorable and readily applicable to clinical training¹⁶. Across heterogeneous reports, the most effective implementations were not defined by media exposure alone, but by structured facilitation, guided reflection and explicit comparison between dramatized scenarios and real standards of practice^{1,5,6}.

Across the literature, cinemeducation worked best when educators treated popular media as something to analyze rather than something to simply watch. The narrative force of film and television can make ethical tension, suffering, conflict and error immediately visible, helping learners recognize issues that may be less accessible in lecture-based formats⁶. At the same time, this same narrative power can normalize distorted expectations if scenes are not carefully framed and debriefed.

These four domains remain useful because they recur in both the educational literature and recent media analyses. In the empathy domain, audiovisual narratives appear especially valuable for helping learners attend to patient experience, family context and the emotional texture of illness^{11,25-27}. These strengths now extend beyond individual empathy alone: recent

work suggests that medical dramas can also be used to discuss social determinants of health, structural barriers and inequities in access to care, broadening the pedagogic value of patient-centered storytelling.

In professionalism and ethics, medical dramas offer a steady supply of concrete, discussable examples of both admirable and problematic conduct¹²⁻¹⁴. Learners can examine how consent is handled, how clinicians speak to patients and colleagues, how hierarchy operates and how professional identity is performed under pressure¹⁸. Importantly, recent commentary has also highlighted that televised portrayals may shape the public image of clinicians and emergency care, reinforcing the need to analyze not only what characters do, but also what these portrayals may teach viewers about who clinicians are⁹.

The patient safety and systems-thinking domain is strengthened by newer evidence showing that emergency and trauma care are often represented in unrealistic ways. Popular medical dramas may compress time, simplify workflows, minimize team complexity and overemphasize individual heroics in ways that diverge from actual resuscitation practice². That does not reduce their teaching value. It clarifies how to use them. They are most helpful when learners identify what is missing, what is inaccurate, what safety threats are embedded in the scene and how real teams, equipment, communication structures and institutional systems would alter the clinical response^{19,20}.

Recent analyses of prime-time medical dramas have made media literacy and research ethics an increasingly important area for medical education^{21,22}. These findings support the concern that entertainment media may meaningfully shape assumptions about clinical trials, investigator motives, informed consent, ethics oversight and trust in science³. For learners, this creates an opportunity to interrogate how popular narratives portray experimentation, uncertainty, benefit, risk and institutional accountability. For educators, it underscores that research ethics teaching should address not only formal doctrine, but also the informal media messages that trainees and patients may already carry into clinical and research environments.

These observations also suggest practical guidance for implementation. First, a single film clip or episode frequently supports multiple learning goals at once, allowing educators to teach empathy, ethics, safety and research literacy through the same narrative^{1,14}. Second, emotional engagement appears to be one of cinemeducation's principal strengths, but it is also its greatest risk; vivid, memorable scenes may also be misleading, sensationalized or norm-setting in problematic ways^{17,28}. Third, the educational value of medical dramas depends less on the media's intrinsic quality than on the quality of the questions posed before, during and after viewing^{1,12}. **(Table 2)** summarizes the principal advantages, risks and mitigation strategies for using film and television across the four educational domains.

Table 2: Common advantages and risks of using film and television in medical training.

Domain	Key advantages	Key risks	Mitigation strategies
Empathy and psychosocial care	High emotional engagement; vivid portrayal of patient and family experience; useful entry point for discussing suffering, grief, chronic illness and social context.	Over-identification with characters; melodrama; unrealistic recovery arcs; emotional distress; oversimplification of structural determinants of health.	Pre-viewing framing; content warnings when appropriate; structured debrief; explicit discussion of what is realistic, omitted or socially contextualized in the scene.
Professionalism and ethics	Concrete, memorable examples of ethical tension and professional behavior; exposes hidden curriculum issues; supports discussion of consent, boundaries, bias and teamwork.	Normalization of unprofessional conduct; glamorization of rule-breaking; oversimplified ethical resolution; reinforcement of distorted public images of clinicians.	Link discussion to professional standards and real-world expectations; ask learners to identify both positive and negative role models; explicitly discuss how portrayals may influence patient expectations and trust.
Patient safety and systems thinking	Rich, visible scenarios of error chains, communication failures, hierarchy and harm; helps learners discuss safety concepts that may be difficult to observe directly in training.	Overemphasis on individual heroics or blame; unrealistic timelines; inaccurate trauma or resuscitation workflows; underrepresentation of team and systems complexity.	Use root-cause or systems frameworks; compare scenes with actual emergency care processes and safety protocols; ask what is missing, inaccurate or unsafe in the portrayal.
Media literacy and research ethics	Engaging way to discuss trials, consent, risk-benefit framing, ethics oversight and trust in science; makes the hidden media curriculum visible.	Inaccurate or sensationalized portrayals of research; mistrust narratives; exaggerated misconduct; omission of safeguards and oversight processes.	Critical appraisal exercises; explicit comparison with real consent and oversight standards; discussion of how clinicians can address misconceptions with learners, patients and the public.
Cross-cutting across domains	Familiar, accessible material; one clip may support multiple learning objectives; strong narrative structure promotes recall and discussion.	Learners may mistake dramatized medicine for realistic practice; curricular time constraints; variable facilitator experience; emotional intensity may overwhelm analysis.	Define clear objectives; select short, purpose-built clips; train facilitators; connect discussion back to real clinical standards, systems issues and educational goals.

These observations also suggest a practical way to build these sessions. Short, purpose-selected clips are often more adaptable than full films, particularly when the educational objective is narrow, such as informed consent, error disclosure, difficult communication or recognition of systems contributors to harm¹⁷. Facilitators should explicitly identify learning goals in advance, contextualize the scene clinically, invite learners to critique realism and omissions and connect the discussion back to professional standards, patient-safety principles and current ethical expectations. This kind of framing helps preserve the emotional and narrative benefits of media while reducing the risk that inaccurate portrayals will be mistaken for acceptable practice¹⁹. **(Table 3)** provides a practical framework for planning and facilitating cinemeducation sessions, from pre-viewing preparation through reflective consolidation and curricular integration.

Table 3: Practical framework for planning and facilitating cinemeducation sessions.

Phase	Recommended educator actions	Suggested learner activities	Risks if omitted
Pre-viewing	Define clear learning objectives; select clips or films that match the educational aim; provide brief clinical and ethical context; set expectations for respectful discussion and critical appraisal of realism.	Identify prior assumptions about medicine in film or television; note specific issues to watch for, such as empathy, consent, teamwork, safety threats, social context or research oversight.	The session may feel like unstructured entertainment; objectives may remain unclear; learners may default to passive viewing or superficial reactions.
Viewing	Prompt active viewing with focused questions; pause strategically when helpful; ask learners to note emotional responses, professional behaviors, systems issues, unrealistic elements and important omissions.	Take notes on key interactions, errors, communication patterns and portrayals of realism or inaccuracy; identify both effective and problematic behaviors.	Key teaching moments may be missed; learners may focus on plot rather than analysis; inaccurate portrayals may go unchallenged.
Immediate post-viewing discussion	Facilitate a structured debrief using questions tied to the session objective; compare onscreen events with real clinical standards, patient-safety principles and ethical expectations; invite multiple perspectives.	Share observations; compare dramatized events with real-world practice; discuss what was accurate, misleading, omitted, emotionally salient or potentially harmful if normalized.	Discussion may remain superficial or be dominated by a few voices; emotional reactions may go unprocessed; links to clinical practice may be lost.
Reflective consolidation	Guide brief written or verbal reflection on how the scene relates to future practice; reinforce take-home points in empathy, professionalism, safety, systems thinking or research ethics.	Summarize key learning points; identify how one would respond differently in practice; reflect on how media shapes expectations of clinicians, patients or research.	Insight may remain transient; learners may remember the drama but not the lesson; educational impact may not extend beyond the session.
Integration with curriculum	Connect session themes to existing teaching in communication, ethics, patient safety, emergency care or research methods; refer back to the clip in later sessions, debriefings or assessments when appropriate.	Link the session to coursework, simulations or clinical experiences; revisit the same themes in later learning contexts.	Media-based teaching may feel disconnected from the core curriculum; reinforcement may be lost; the session may be seen as novel but nonessential.

Important limits in the evidence remain. Much of the literature consists of small, single institution reports that rely on self-reported learner perceptions, reflective narratives or short-term pre/post assessments. Although these studies consistently suggest that learners find cinemeducation engaging and educational, they provide less certainty about long-term effects on behavior, professional identity formation, patient communication or clinical performance. A small number of included sources were conference abstracts, which may offer limited methodological detail and have not necessarily undergone full peer review.

Additional limitations arise from the review design itself. As a narrative review, this article aimed to synthesize themes and practical applications across a diverse body of literature rather than provide an exhaustive, systematic accounting of every relevant publication²⁹. The included literature spans educational interventions, conceptual papers and recent content analyses of media portrayals; this breadth is useful for interpretation, but it also introduces heterogeneity in methods, outcomes and evidentiary weight. Accordingly, interpret the conclusions as a thematic synthesis of an evolving field rather than a definitive estimate of educational effectiveness.

Future work should move in two directions. One is methodological: more multi-site, theory-informed studies are needed to assess whether media-based teaching produces durable changes in empathy, ethical reasoning, communication, safety thinking or research literacy. The other is conceptual: future scholarship should continue examining what medical dramas portray about resuscitation, professionalism, research, equity and structural determinants of health, since these depictions help define the hidden media curriculum that educators are attempting to address.

For contemporary medical training, the practical implication is straightforward. Television and film should not be dismissed as mere entertainment, nor adopted uncritically as ready-made teaching cases. Used deliberately, they offer a flexible way

to engage learners with the emotional, ethical, systemic and epistemic dimensions of medicine; used uncritically, they risk reinforcing the very misconceptions educators hope to correct³⁰.

Conclusion

Film and television already shape how learners, patients and the public imagine medicine. This review suggests that, when used deliberately, they can also serve as practical teaching tools for empathy, professionalism, patient safety and research ethics.

Their value lies not simply in engagement, but in the way they make complex clinical, ethical and systems issues visible and discussable. Used well, cinemeducation can help medical training address the emotional, cultural and ethical dimensions of practice while teaching learners to question inaccurate or sensationalized portrayals rather than absorb them uncritically.

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References

1. Law M, Kwong W, Friesen F, et al. The current landscape of television and movies in medical education: a review of the literature. *Perspect Med Educ* 2015;4(5):218-224.
2. McFadden P, Debenham S, Wigstadt S, et al. The Unrealistic Depiction of Trauma Resuscitation in Popular Medical Dramas: A Content Analysis. *Am J Emerg Med* 2020;38(5):1034-1035.
3. Mulder NJ, Lopez CC, Li CC, et al. Portrayals of Medical Research in Prime-Time Dramas: A Content Analysis. *Cureus* 2026;18(7):e112794.
4. Grinstead E, Johnson A, Decker B, et al. Analysis of social determinants of health in medical dramas to enhance emergency medicine training. *The American J Emergency Med* 2026.
5. Cambra-Badii I, Moyano E, Ortega I, et al. TV medical dramas: health sciences students' viewing habits and potential for teaching issues related to bioethics and professionalism. *BMC Med Edu* 2021;21(1):509.

6. Hoffman BL, Hoffman R, Wessel CB, et al. Use of fictional medical television in health sciences education: a systematic review. *Adv Health Sci Educ Theory Pract* 2018;23(1):201-216.
7. Nikroo N, Lee M, Leach E, et al. The Hidden Curriculum of Medicine Portrayed in Popular Television Medical Shows. *Medical Student Res J* 2022;9:7-13.
8. Sukhera J. Narrative Reviews in Medical Education: Key Steps for Researchers. *J Grad Med Educ* 2022;14(4):418-419.
9. Ouellette L, Ritter H, Shaheen M, et al. Are Television Medical Dramas Bad for Our Image? *Am J Emerg Med* 2021;41:235-236.
10. Steffan R, Johnson A, Bivins K, et al. Educational Insights from the Screen: Analyzing Pediatric Death Communication in Medical Television Programs (abstract). *Acad Emerg Med* 2024;31(S1):335-336.
11. Arora A, Kaur K, Pathiyil RS, Babar MG. Cinema as a pedagogical tool for empathy training in dental education: a qualitative study. *BMC Med Educ* 2025;26(1):64.
12. Shaheen M, Brown A, Huynh V, et al. Not Your Grandmother's Doctor Show: Bioethics and Professionalism in Television Medical Dramas (abstract). *Ann Emerg Med* 2012;60(4):149.
13. Weaver R, Wilson I. Australian medical students' perceptions of professionalism and ethics in medical television programs. *BMC Med Educ* 2011;11:50.
14. Rattani A, Kaakour D, Syed RH, et al. Changing the channel on medical ethics education: systematic review and qualitative analysis of didactic-icebreakers in medical ethics and professionalism teaching. *Monash Bioeth Rev* 2021;39(1):125-140.
15. DiBartolo MC, Seldomridge LA. Cinemeducation: teaching end-of-life issues using feature films. *J Gerontol Nurs* 2009;35(8):30-36.
16. Gramaglia C, Jona A, Imperatori F, et al. Cinema in the training of psychiatry residents: Focus on helping relationships. *BMC Med Educ* 2013;13:90.
17. Rueb M, Rehfuess EA, Siebeck M, et al. Cinemeducation: A mixed methods study on learning through reflective thinking, perspective taking and emotional narratives. *Med Educ* 2024;58(1):63-92.
18. Aftab R, Afzal A, Babar S, et al. Use of cinemeducation for professional identity formation in medical students. *J Pak Med Assoc* 2026;76(3):306-307.
19. Cambra-Badii I, Gomar-Sancho C, Mastandrea PB, et al. Cinemeducation to teach patient safety: an experience in medical students. *Humanities and Social Sciences Communications* 2024;11(1):561.
20. Gonzalez-Caminal G, Gomar-Sancho C, Mastandrea PB, et al. Combining simulation and cinemeducation to teach patient safety: a pilot study. *Innovations in Education and Teaching International* 2023;60(1):80-90.
21. Fisher JA, Cottingham MD. This isn't going to end well: Fictional representations of medical research in television and film. *Public Understanding of Science* 2017;26(5):564-578.
22. Lumlertgul N, Kijpaisalratana N, Pityaratstian N, et al. Cinemeducation: A pilot student project using movies to help students learn medical professionalism. *Med Teach* 2009;31(7):e327-32.
23. Hirt C, Wong K, Erichsen S, et al. Medical dramas on television: a brief guide for educators. *Medical teacher* 2013;35(3):237-242.
24. Davin S. Medical dramas as a health promotion resource-an exploratory study. *Int J health promotion and education* 2000;38(3):109-112.
25. Blasco PG, Moreto G. Teaching empathy through movies: reaching Learners' affective domain in medical education. *J Education and Learning* 2012;1(1):22.
26. Ahmadzadeh A, Esfahani MN, Ahmadzad-Asl M, et al. Does watching a movie improve empathy? A cluster randomized controlled trial. *Canadian Med Education J* 2019;10(4):e4.
27. Salajegheh M, Sohrabpour AA, Mohammadi E. Exploring medical students' perceptions of empathy after cinemeducation based on Vygotsky's theory. *BMC Medical Education* 2024;24(1):94.
28. Primack BA, Roberts T, Fine MJ, et al. ER vs. ED: a comparison of televised and real-life emergency medicine. *J emergency medicine* 2012;43(6):1160-1166.
29. Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. *J Chiropr Med* 2006;5(3):101-117.
30. Zago D, Cautero P, Scarpis E, et al. TV medical dramas: assessing the portrayal of public health in primetime. *Frontiers in public health* 2024;12:1432528.