Review

Learning concepts of cinenurducation: An integrative review

Jina Oh a,b,* , Jeongae Kang c, Jennie C. De Gagne b,d

a Department of Nursing, Institute of Health Science, Inje University, Busan, South Korea
b Department of Nursing, North Carolina Central University, Durham, NC, USA
c School of Education, Purdue University, West Lafayette, IN, USA
d School of Nursing, Duke University, Durham, NC, USA

ARTICLE INFO

Article history:
Accepted 24 March 2012

Keywords:
Film
Nursing education
Cinenurducation
Student-centered learning
Experiential learning
Reflective learning
Problem-solving learning

SUMMARY

Background: Cinenurducation is the use of films in both didactic and clinical nursing education. Although films are already used as instructional aids in nursing education, few studies have been made that demonstrate the learning concepts that can be attributed to this particular teaching strategy. Aim: The purpose of this paper is to describe the learning concepts of cinenurducation and its conceptual metaphor based on a review of literature. Method: The databases CINAHL, MEDLINE, PsychINFO, ERIC, EBSCO, ProQuest Library Journal, and Scopus databases were searched for articles. Fifteen peer-reviewed articles were selected through title and abstract screening from "films in nursing" related articles found in internationally published articles in English from the past 20 years. Result: Four common concepts emerged that relate to cinenurducation: (a) student-centered, (b) experiential, (c) reflective, and (d) problem-solving learning. Current literature corroborates cinenurducation as an effective teaching strategy with its learning activities in nursing education. Conclusion: Future studies may include instructional guides of sample films that could be practically used in various domains to teach nursing competencies, as well as in the development of evaluation criteria and standards to assess students’ learning outcomes.

Introduction

To ensure that nursing students can respond to the changing health needs of society in today’s complex health care system, nursing education must be guided by the standards of competency and expectations of professional nursing organizations. Since excellence in nursing knowledge, skills of clinical judgment, and professional attitudes are required in nursing education, it is imperative that nurse educators design educational experiences that address such learning needs (Tanner, 2006). Teaching higher level thinking skills, such as synthesis of knowledge and clinical decision-making, cannot be accomplished wholly through traditional methods (Gazarian, 2010). Particularly, adult learners in the nursing field thrive on real-life examples and engagement in active learning opportunities (Edmonds, 2011). There are many strategies that can be used in nursing education, some of them traditional, others fairly new and innovative. However, nurse educators face the challenge of identifying and implementing instructional methods best suited to the needs of their students while meeting learning objectives.

In the past, films were only considered for commercial use, but they are regularly used in classrooms as learning aids. Film in education can be categorized into ‘education of film’ and ‘education through film’ (Lee and Lee, 2008). While the former refers to film production, the latter means using films as instructional methodology. Among many teaching strategies and methods, films can be a unique way to engage learners, thereby promoting active learning (Edmonds, 2011; Herrman, 2006). Films create trends, have tremendous influence on learning, and are a significant method of teaching (Zauderer and Ganzer, 2011). During the presentation of a film, the content is transmitted with a variety of experiences such as emotions, feelings, attitudes, actions, and knowledge (Arroio, 2010). Films may offer a visual portrayal, often a personal narrative, of the emotional aspect of living with a health problem (Zauderer and Ganzer, 2011). They can also help develop students’ awareness, disseminate information, and train people at-large as well as students of health sciences and healthcare professionals (Diez et al., 2005).

Films are also teaching tools receiving considerable attention in medical literature (Alexander et al., 2007). For example, film clips have been used as part of a case-based module in medical education (Lumlertgul et al., 2009). Such tools were perceived by medical students as familiar, evocative, and nonthreatening (Blasco et al., 2006).
In 1995, Alexander introduced the term cinemeducation, a combination of the words cinema and medical education, which presented an innovative way to educate diverse cultures that could be observed in the medical field. Alexander et al. (2007) maintained that cinemeducation is effective in physics–mental–social–spiritual aspects. Refining Alexander’s (1995) notion of cinemeducation, we are introducing cinenurducation, specifically intended for nursing research, practice, and education. That is, cinenurducation is a compound of cinema, nursing, and education. In this paper, we define cinenurducation as an instructional method that uses films, or some clips, as a context in which students engage in a learning process that enhances competencies in nursing. Cinenurducation has the potential to aid students and educators in overcoming the limitations and gaps that might occur when teaching or learning solely from textbooks. According to Giampietro (2003), a neologism is necessary if an old paradigm cannot suitably address the challenge or change. He goes on to say that “it is necessary to introduce new concepts and words to explore and build new epistemological tools” (p. 94). With this in mind, we have put forward a new catchword pointing to a paradigm shift in the world of learning concepts are associated with cinenurducation through rigorous discourse and the adventure of discovery.

Although the use of films in nursing education is recommended, the extent and method under which films should be incorporated are unknown. Moreover, few studies have been conducted that demonstrate the learning concepts that can be attributed to the use of films in nursing education. Forbes and Hickey (2009) contend that “Synthesis of the recent literature in the field will assist faculty who are beginning curriculum evaluation and the revision process in their own schools” (p. 1). The aim of this paper was to review empirical studies on the use of films in nursing education in order to understand the key learning concepts. The following research questions were addressed: (a) How effective are films as an instructional method of teaching and learning in nursing education? (b) What is the learning concept of cinenurducation? and (c) How can a conceptual model for cinenurducation be constructed?

Method

Extensive literature searches were conducted to analyze the content of studies addressing the use of films in nursing education. Among various types of literature reviews, we used Whittemore and Knaff’s (2005) integrative review method as this method allows the combination of different research methodologies for theory development and evidence-based practice. A screening of the computerized databases was made to search for these articles. Data were collected from a review of CINAHL, MEDLINE, PsychINFO, ERIC, EBSCO, ProQuest Library Journal, and Scopus databases, using combinations of the terms ‘film, movie, or cinema,’ ‘nursing,’ and ‘education, learning, or teaching’ as keywords. The inclusion criteria during this review were as follows: (a) peer-reviewed articles written in the English language published in the past 20 years (from January 1991 through December 2011) and (b) empirical studies that focused on the use of films in class for nursing students.

The articles were selected through title and abstract screening from “films in nursing”–related articles among internationally published studies. A secondary abstract review was performed on the initially screened articles, with review of the full text. The selection procedure was managed with the authors’ consensus required. The search strategy yielded 198 articles. After eliminating 93 duplicates, we reviewed all titles for possible inclusion and identified 105 articles. Seventy-nine articles were excluded for one or more of the following reasons: (a) main focus on medical students and other majors; (b) main focus on nurses’ image in film rather than nursing education; (c) main focus on using films as therapy; (d) main focus on movie reviews; and (e) main focus on guiding faculty to the use of films (see Fig. 1).

Of the 26 original empirical studies from the review of literature, 11 articles were excluded because films were used with other teaching strategies such as music, books, YouTube, or pictures. Finally, we organized our own readings on a shared drive to develop a common set of analytical concepts grounded from the 15 retained empirical studies. As the review progressed, we recorded, using annotation, our specific comments on the different sections of the studies. Questions and thoughts that arose were addressed both through e-mails and regular face-to-face meetings. We had rigorous discussions on

**Fig. 1.** Flowchart outlining the number of articles retrieved and included or excluded at each stage of the review process.
the concept being studied to extract findings into themes for the review of literature. Data from each study were summarized and an iterative analysis process was used to compare and contrast the key findings and to draw out several learning concepts.

Findings

Using the aforementioned inclusion and exclusion criteria, we selected 15 empirical studies for cinenurducation. Although we searched for literature between 1991 and 2011, the articles that met all criteria had been published from 1995 to 2011 (see Table 1). All of the 15 studies were undertaken in the U.S. Of the 15 studies, 10 were course evaluation methods, followed by experimental (n=2), mixed-methods (n=2), and qualitative (n=1) designs. In the study by Rivers et al. (2011), a pretest–posttest of Rosenberg Self-Esteem Scale and an instructor-developed survey were given after each of the 18 films shown in the elective nursing cinema course. Wilt et al. (1995) also used experimental research design with control and treatment group from a voluntary sample of senior baccalaureate nursing students enrolled in a mental health nursing course, using the modified Layton Empathy Test as a pretest and as a posttest. On the other hand, Raingruber (2003) conducted a phenomenological study with eleven master’s students on the advantages and disadvantages of using films in teaching mental health nursing. Studies involved more than 738 students who were predominantly in undergraduate and RN-BSN programs, but two studies assessed graduate students at the Master’s level.

Of the 15 studies, six were used in mental health or psychiatric nursing, followed by medical–surgical, advanced adult health, pediatric, fundamental, and other nursing courses. Various topics and themes, including knowledge (e.g., growth and development, family system, neurological and psychological illness, and management style and theory), skill (e.g., pain management, palliative care, and appraisal and therapeutic communication), and attitude (e.g., empathy, ethical nursing care, professionalism, multiculturalism, end of life, and quality of life), were used in nursing class and practice. The genres of films were an animation (The Lion King, 1994), a science fiction (Star Trek IV: The Voyage Home, 1986), and many dramas. The most frequently used evaluation tools were simple questionnaires, open-ended questions, or comments. Although the participants and courses varied, discussion activities were used in most of the classes. After in-depth discussion and investigation of the relevant literature, we have narrowed down the core attributes of cinenurducation to the four learning concepts: (a) student-centered learning, (b) experiential learning, (c) reflective learning, and (d) problem-solving learning. Several points extracted from articles provided evidence that cinenurducation demonstrates the characteristics of these learning concepts. The following provides an explanation of how each learning concept can be attributed to the use of films in the studies reviewed (Table 2).

Student-centered Learning

Although traditional nursing education using teacher-centered learning approaches have produced efficient, knowledgeable nursing graduates for many years (Brown et al., 2008), today’s students, including the growing numbers of adult learners, demand a student-focused learning environment. Weimer (2002) defined the student-centered environment as one in which the power is shared between students and the teacher. Here, students take more responsibility in monitoring and reflecting their own learning process, make decisions about their own learning, and become more autonomous and flexible (Weimer, 2002).

As reported by Edmonds (2011) and by Zauderer and Ganzer (2011), students prefer viewing films to listening to lectures as the former creates a helpful, informative, and fresh learning environment. Using films in nursing has the potential to aid students and teachers in overcoming limitations and gaps that might occur with the use of textbooks (Edmonds, 2011). Hyde and Fife’s (2005) study supports that films in the classroom are a useful technology within the constructivist framework context. The authors attested that students engaged autonomously in creating meaningful learning or

### Table 1: Films used in the studies.

<table>
<thead>
<tr>
<th>Author(s) (year)</th>
<th>Purpose(s)</th>
<th>Film(s) (year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenter et al. (2008)</td>
<td>To explain pain management in a terminal patient (a) To describe the creation of an assignment that uses films to enhance knowledge of the dying process (b) To engage students in thinking about the quality of life palliative care.</td>
<td>Whose Life is it Anyway? (1981); Tuesdays with Morrie (1999)</td>
</tr>
<tr>
<td>DiBarotto and Seldromidge (2009)</td>
<td>To identify a teaching strategy that incorporated the concepts of multicultural education and cultural competence into an engaged learning opportunity</td>
<td>Freedom Writers (2007)</td>
</tr>
<tr>
<td>Edmonds (2011)</td>
<td>To describe the methods used to teach psychiatric students principles of growth and development.</td>
<td>The Lion King (1994)</td>
</tr>
<tr>
<td>Higgins and Lantz (1997)</td>
<td>To describe an approach using film and a writing assignment to teach psychiatric principles of growth and development.</td>
<td>When a Man Loves a Woman (1994); Analyze This (1999)</td>
</tr>
<tr>
<td>Hyde and Fife (2005)</td>
<td>To outline the methods used to enhance the curriculum on neurological and psychopathological illnesses and discuss the evaluation from student and faculty perspectives.</td>
<td>Fatal Attraction (1987); Clean and Sober (1988); The Fisher King (1991); Sleeping with the Enemy (1991); Clean, Shaven (1994)</td>
</tr>
<tr>
<td>Kerber et al. (2004)</td>
<td>To describe the methods used to teach psychiatric mental disorders and report students’ reactions to the strategy</td>
<td>My Life (1993)</td>
</tr>
<tr>
<td>Masters (2005)</td>
<td>To evaluate students’ perception of viewing films as an alternative to some clinical time in a psychiatric mental health course.</td>
<td>Used People (1992); Mr. Jones (1993); The Tie that Binds (1995); Anywhere But Here (1997); The Ice Storm (1997); A Map of the World (2000)</td>
</tr>
<tr>
<td>Parker and Faulk (2004)</td>
<td>To describe how the film was used as a reflective learning activity in a family health systems course.</td>
<td>Janet Dean (1954); One Flew Over the Cuckoo’s Nest (1975); Miss Evers’ Boys (1997) et al. (total 18 films)</td>
</tr>
<tr>
<td>Rivers et al. (2011)</td>
<td>To obtain the students’ reactions to the image of nurses and nursing in films and television programs.</td>
<td>Star Trek IV, The Voyage Home (1986); Starman (1984); Regarding Henry (1991)</td>
</tr>
<tr>
<td>Stringfield (1999)</td>
<td>To share the lesson learned from the use of movies in teaching nursing concepts.</td>
<td>One Flew Over the Cuckoo's Nest (1975); Ordinary People (1980)</td>
</tr>
<tr>
<td>Stringfield and Ramirez-Smith (1995)</td>
<td>To present the use of videos and film clips as a method of enhancing critical thinking.</td>
<td>Born on the Fourth of July (1989); Mr. Jones (1993); Good Will Hunting (1997); Girl, Interrupted (1999); 28 days (2000); A Beautiful Mind (2001)</td>
</tr>
</tbody>
</table>

---

**Table 1 continues...**
Student-centered learning can be created through entertainment such as films (Karlowicz and Palmer, 2006), Herrman (2006) believed that using films allowed students to vicariously experience a condition through the actors’ or the clients’ viewpoints.

Watching films allowed a strong connection between the learners and the film characters, helping students clarify their experiences (Carpenter et al., 2008). However, Carpenter et al. (2008) cautioned that younger nursing students with little-to-no life experience with pain, loss, or death felt uncomfortable. Similarity to Carpenter et al.’s (2008) findings, the study of Zauderer and Ganzer (2011) indicated that the experience of witnessing a psychiatric disorder allowed students to better understand the experiences of the patients they were encountering during their clinical rotation. Likewise, Masters (2005) pointed out that students can indirectly experience different mental health issues in a safe learning environment.

Films can be useful in clinical scenarios that depict disability or death, since all nursing students will not necessarily be exposed to such circumstances (Northington et al., 2005). According to DiBartolo and Seldomridge’s study (2009), students, after establishing a connection with characters or situations in the film, were able to better understand what patients and their families might have been experiencing, and further increased their level of empathy (Briggs, 2011; DiBartolo and Seldomridge, 2009). DiBartolo and Seldomridge (2009) used films such as Who’s Life is it Anyway? and Tuesdays with Morrie to illustrate the grieving and dying process terminal patients go through, which is similar in the movie Wit that was used in Briggs’s study (2001).

### Reflective Learning

Reflection is a learning experience that generates positive change through a rational and intuitive process (Taylor, 2000). Through reflection and interpretive exercises, students can learn not only technical skills but also meaning-intensive knowledge (Horton-Deutsch and Sherwood, 2008). As a key instructional strategy, reflection makes it possible for students to improve attitudes and integrate values that cannot be easily obtained through training only (Blasco et al., 2006; Shapiro, 2006). A reflective teaching strategy can transfer students’ personal responses to learning situations by transferring facts from one context to another (Billings and Halstead, 2009).

Enhancing the understanding of the human life as audiovisual resources (Blasco et al., 2009), films in nursing classes give impetus for prompt and deeper reflection (Parker and Faulk, 2004; Raingruber, 2003; Witt et al., 1995). Specifically, Parker and Faulk (2004) indicated using film My Life as a reflective learning activity. Students discussed differences between their belief and reality by using critical reflection (Parker and Faulk, 2004). Films in class also triggered a wide range of emotional reactions (Rivers et al., 2011). Edmonds (2011) initiated a discussion about multiculturalism and cultural competency among students following the movie Freedom Writers which enhanced critical reflection of students. When used to raising open discussions, students can feel free to share their points of view because films are impersonal in comparison to traditional classroom instructional setting (Ber and Alroy, 2002).

Films in class provided an effective way of learning about ethical responsibility in nursing care, professional values, and the ethical principles of the nurse’s role (Briggs, 2011; Carpenter et al., 2008; DiBartolo and Seldomridge, 2009; Raingruber, 2003). In the movie Wall Street, nursing students understood the concept of management and leadership (Stringfield, 1999). When asked by their instructor to visualize themselves as the nurse manager from the movie One Flew Over the Cuckoo’s Nest, the nursing students displayed a variety of reactions such as positive images of nursing or ethical responsibilities toward the film (Witt et al., 1995). The use of films to promote introspection was echoed in Raingruber’s study (2003) in which students were prompted to anticipate how they would react to a situation similar to the one portrayed in the film.

<table>
<thead>
<tr>
<th>Table 2 Learning concepts derived from the literature.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning concept</td>
</tr>
<tr>
<td>Student-centered learning</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Experiential learning</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Reflective learning</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Problem-solving learning</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: The superscript numbered in this table corresponds with the author(s) superscripted in Table 1.
Problem-solving Learning

Adult students tend to be more pragmatic than younger ones, and prefer a problem-based learning process (Billings and Halstead, 2009). Promoting critical thinking skills and problem-solving learning allows students to find, evaluate, and substantiate the information required to support conclusions for actual situations (Rowles and Brigham, 2005). Previous knowledge is combined with problem-solving steps to develop new tools and a knowledge base that can eventually be applied to similar situations (Rowles and Brigham, 2005). While the solutions to problems are open-ended with neither right-or-wrong nor single correct answers, problem-solving learning assists in transferring classroom situations to clinical settings (Weerts, 2005). That is, through films, students can deepen their understanding of and apply their knowledge to the real world (Edmonds, 2011).

Several authors have indicated that using films enhanced the knowledge and understanding of content taught in class (Briggs, 2011; Carpenter et al., 2008; DiBartolo and Seldomridge, 2009; Edmonds, 2011; Higgins and Lantz, 1997; Hyde and Fife, 2005; Kerber et al., 2004; Masters, 2005; Parker and Faulk, 2004; Raingruber, 2003; Stringfield and Ramirez-Smith, 1995; Zauderer and Ganzer, 2011). For example, the movie *The Lion King* provided enhanced knowledge and understanding of growth and development in pediatric nursing to second year nursing students (Higgins and Lantz, 1997). Carpenter et al.’s study (2008) that showed students’ cognitive level on pain assessment and management improved after watching the movie *Wit*. Zauderer and Ganzer’s (2011) study on the outcomes of teaching psychiatric and mental health nursing through the use of several popular Hollywood movies supported problem-solving learning and exemplified that the strategy achieved a higher level of cognitive processing and higher participation than did a discussion of the textbook content. Masters (2005) highlighted that using films as fostered critical thinking, given that the viewing of a specific scene was likely perceived and processed differently among students, leading to interesting discussions on different levels of perception, interpretation, and applicability in nursing situations. Parker and Faulk (2004) concluded that the use of films in the classroom allowed their students to gain a better understanding of the theoretical basis for nursing actions, not just for the clinical concepts.

Discussion and Conclusion

The use of commercial films or film segments as instructional media has a long history. For nurse educators, however, their use as a pedagogical tool is, by comparison, relatively recent and not without controversy. Indeed, film theory (Stam, 2000) has attracted both strong criticism and support, and been linked to well-established disciplines such as linguistics, semiotics and anthropology. Hence, the exploration of the aesthetic and discursive elements of films is warranted as a rich source of critique and commentary for future studies.

Cinenurdication is a teaching strategy that entails learning principles in nursing education. Four learning concepts in cinenurdication were identified in this review. Fig. 2 demonstrates a conceptual metaphor of cinenurdication using the image of a film projector, illustrating abstract elements to more tangible relations. The reels comprise four learning concepts: (a) student-centered, (b) experiential, (c) reflective, and (d) problem-solving learning. The related learning activities interact simultaneously with the reel; that is, these four learning concepts can be embedded in students’ experiences towards nursing competencies. Indeed, cinenurdication rejects the view that learning is a passive transmission of information from the instructor. It emphasizes ownership of learning while allowing individuals and groups to achieve higher levels of cognitive results such as application, analysis, and synthesis. As Gazarian (2010) asserted, the current health care environment calls for nurses to approach clinical problems from a range of perspectives and to synthesize multiple sources of knowledge.

Entertainment media like films are recognized as helpful in promoting health knowledge and behavior, especially when learners consider the information as useful and relevant to their interest and work (Weerts, 2005). Selecting appropriate films for class is time consuming, which may hinder educators from further exploring this educational strategy. Also, cinenurdication necessitates matching a film to the relevant curriculum. Well-planned film clips can allow students to safely explore their own intellectual and emotional reactions to situations resembling real life without real-life accountability (Alexander and Waxman, 2000). Therefore, selection of appropriate movie segments is critical (Stringfield, 1999). Another consideration in cinenurdication is the need for a scientific evaluation tool to validate the effectiveness of the use of films in nursing education. To evaluate the usefulness of cinenurdication, researchers must consider, not only experimental studies, but also qualitative studies such as narrative accounts from students’ subjective interpretation of films or Delphi studies that allow a consensus investigation of a broad range of viewpoints and opinions of experts. Faculty feedback is essential and perhaps the most important factor influencing learning because it allows students to reflect on their own skills (Cant and Cooper, 2009).

The fact that this review includes solely a selected group of studies may be perceived as a limitation. Although rigorous discussions were made to analyze the literature, the subjectivity of our interpretation and application may have been inevitable. However, we believe that this paper can serve as a door to the expansion of cinenurdication, which would provide a reference point for progress in the future. Although the literature has shown that using films is an effective strategy in various domains and at different levels of nursing education, some issues have been raised concerning cinenurdication. Therefore, it is important to conceptually position films as discourse or a form of social semiotics as is the pedagogical contribution that films can become as a learning medium. Future studies should consider the use of instructional guides that provide appropriate sample films used to effectively teach nursing competencies while developing evaluation rubrics and assessment instruments that are appropriate and reliable for cinenurdication. Contemporary nursing has increasingly emphasized the importance of critical thinking and self-reflection, and nurse educators have begun to accommodate new approaches to teaching and learning that reflect the four learning concepts identified in this paper. Future studies must be made relating to the cinenurdication with nursing competencies to link it to the achievement of such efficiencies appropriate to role preparation.

Acknowledgments

The authors would like to acknowledge Lorraine Steefel, DNP, RN, CTN-A, adjunct assistant professor, UMDNJ School of Nursing, Newark, NJ for assistance with proofreading and editing the manuscript.
References


