

AN EVALUATION OF THE ACCURACY AND PORTRAYAL OF IN VITRO FERTILIZATION IN FILM

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Background: Dating back to Thomas Edison's portrayal of tuberculosis in the early years of movies, storylines centering on medicine have been commonplace. However, these plotlines are also subject to inaccuracies with the potential propagation of misinformation in the name of creating a more compelling story. We were specifically interested in how in vitro fertilization (IVF) is portrayed in films, given the well documented poor public knowledge of and related cultural anxiety towards assisted reproductive technologies [1,2].

Objective: To observe and characterize the portrayal of IVF in fictional films.

Materials and Methods: We searched the internet movie database (www.imdb.com) from inception to September 2023 using the keywords “in vitro fertilization” and “IVF” to identify fictional films about IVF. Two independent researchers reviewed film titles and plot summaries to determine whether they met inclusion criteria, with a third reviewer resolving any discrepancies. We excluded films that did not explicitly include IVF, and instead focused on other assisted reproductive technologies. The final list of films was distributed among the three researchers with expertise in gynecology and infertility. We coded each film and recorded background information on the film, protagonist demographics, indication for IVF, and whether the depiction of IVF was medically accurate.

Results: Our IMDB search yielded 2474 results, of which 2223 titles were removed during our initial review. Of the remaining 251 titles, 47 met our inclusion criteria. These movies were released between 1985 and 2023. The most common genres included drama (70.2%), comedy (25.5%), and thriller or horror (21.3%). Notably, 42.5% of the included films were categorized under multiple genres. Of these 47 movies, 23 were available to purchase or rent in English. The majority of these films were not medically accurate (52.2%). Most couples portrayed in these movies were heterosexual (87.0%). IVF was mostly portrayed in the context of infertility (91.3%), compared to a minority of films featuring IVF for genetic indications. Of the individuals pursuing IVF for infertility, few storylines centered on male-factor (19.0%) or unexplained infertility (14.3%). When proceeding with IVF, 34.8% of patients either had multiple pregnancies or received multiple embryos during one transfer. Additionally, 47.8% of films demonstrated patients who failed multiple treatments or cycles prior to achieving a pregnancy. When coding movies, four common threads emerged: (1) experimental procedures, (2) relationship struggles, (3) ethical concerns, and (4) negative portrayals of infertility specialist.

Conclusions: Portrayal of IVF in films appears to be overall negative and centers on the heterosexual experience. These movies commonly use IVF as a vehicle to introduce horror, relationship strain, or despair. Additionally, subfertility diagnoses seen in movies do not mirror national data. The extent to which these movies influence public perception is not clear, but their existence poses the threat of introducing bias among patients and a mischaracterization of the medical treatment.

Support: None

References:

1. Maher, J. Something else besides a father, reproductive technology in recent Hollywood film. *Feminist Media Studies*, 2014. **14**(5): p. 853- 857.
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