

Editorial

Rare diseases in the cinema

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One of the objectives of this journal is to promote the use of the cinema as an educational tool in the field of health for professionals and students as well as the general public. In this respect, different movies have a great value and an enormous educational potential. Their utilization, however, must be done under the premise that film is not science and that movies are neither books nor scientific publications. The scientific elements that appear on screen are for the sake of a script. For this reason it is not strange that movies contain exaggerations and falsities. Along these lines, the Journal of Medicine and Movies published a paper that shows that diverse scenes and sequences of some films are very useful for familiarizing students about the aspects of addiction to diverse activities and substances. This was opinion of the students who participated in the investigation that is published in this journal. For example, many students have become familiar with aspects of substance and habit addictions through the movies. Speaking from experience, the author of this article has observed how addictions, though frequent in society, are often far from being directly known by medical students, even in their final years of medical school. A correct selection of movies has permitted students in the past to become familiar with the various aspects of heroin, sex, gambling, alcohol, and television addictions¹.

Applying this method, popular movies could be of great value to increase familiarity with diseases foreign to the common practice of medicine. These types of illnesses, known as rare diseases, are defined as having incidence of less than 5 people per 10,000 in the general population². There are more than 5000 rare diseases³, and the incidence used as a point of reference includes illnesses relatively known and other

less known, which would be appropriately called "rare diseases that are rarer still."

In the first group of mentioned rare diseases, or illnesses relatively known, there are many of these present in diverse films, but when being used with health personnel, the use of the cinema, in a teaching/learning process is of less interest than using cinema to clarify doubts about the strange, uncommon diseases. This point can be easily understood by pointing out a few examples of diseases, for example: AIDS [*Philadelphia* (1993) by Jonathan Demme], Alzheimer's disease [*Son of the Bride/ El hijo de la novia* (2001) by Juan José Campanella], Parkinson's Disease [*This Girl's Life* (2003) by Ash], cerebral palsy [*My Left Foot* (1989) by Jim Sheridan], leprosy [*The Motorcycle Diaries/ Diarios de motocicleta* (2004) by Walter Salles], obsessive-compulsive disorder [*The Aviator* (2004) by Martin Scorsese], tuberculosis [*My Life as a Dog/ Mitt live som hund* (1985) by Lass Hallstrom], syphilis [*A Silent Duel/ Shizukanaru Ketto* (1949) by Akira Kurosawa] or epilepsy [*Night Mother* (1986) by Tom Moore], among others.

These rare infrequent diseases of genetic, degenerative, or autoimmune origin are noticeable, by which film helps to familiarize us. It must not be forgotten that "a picture is worth a thousand words" and in this case "pictures" add interest that arises from the particular movie. Moreover, this method of film instruction is especially useful for educating about rare illnesses that, through therapeutic and prophylactic advances, have been eradicated or have completely disappeared completely in certain areas. Some of these illnesses still pose a future threat to unaffected areas due to contemporary emigration trends, the ease of geographic mobilization, and bioterrorism.

Without performing an indepth study nor creating an exhaustive enumeration, some examples of rare diseases of genetic, autoimmune, unknown or degenerative origins shown in film are: osteogenesis imperfecta, also known as “glass bones,” [*Amélie/ Le Fabuleux destin d'Amélie Poulain* (2001) by Jean-Pierre Jeunet], Down's Syndrome [*The Eighth Day/ Le huitième jour* (1996) by Jaco van Dormael], leontiasis ossea [*Mask* (1985) by Peter Bogdanovich], pigmentary retinitis [*Dancer in the Dark* (2000) by Lars von Trier], cadasil [*The Sea Inside/ Mar adentro* (2000) by Alejandro Amenábar], achondroplasia [*The Station Agent* (2003) by Thomas McCarthy], Morquio's syndrome [*Simon Birch* (1998) by Mark Steven Johnson], acute intermittent porphyria [*The Madness of King George* (1994) by Nicholas Hytner], adrenoleukodystrophy [*Lorenzo's Oil* (1992) by George Miller], el xeroderma pigmentosa [*The Others/Los otros* (2001) by Alejandro Amenábar], Proteus syndrome [*The Elephant Man* (1980) by David Lynch], multiple sclerosis [*Hilary and Jackie* (1995) by Anand Tucker], narcolepsy [*20 centímetros* (2005) by Ramón Salazar], Lou Gehrig's disease or amyotrophic lateral sclerosis [*The Pride of the Yankees* (1942) by Sam Wood], spina bifida [*Shallow Hal* (2001) by Bobby and Peter Farrelly], dyslexia [*Pearl Harbor* (2001) by Michael Bay], Tourette's syndrome [*The Tic Code* (1999) by Gary Winick], chronic fatigue syndrome [*Wide-Eyed and Legless* (1993) by Richard Loncraine], Sudden Infant Death Syndrome [*Everything Put Together* (2000) by Marc Forster], cystic fibrosis [*Alex: The Life of a Child* (1986) by Robert Markowitz], etc.

An example of infectious disease limited to specific geographic locations and very showy examined in a movie is Chagas disease [*Houses of Fire/ Casas de fuego* (1995) by Juan Bautista Stagnaro]. Others movies would include rabies [*Rage/ El mal* (1966) by Gilberto Gazcón], filariasis [*The Tahitian* (1956) by James Knott], plague [*Panic in the Streets* (1950) by Elia Kazan] or cholera [*Contagious* (1997) by Joe Napolitano].

Smallpox is the prototype of an eradicated infectious disease that has been included in various movies. The utilization of cinematographic resources is, in this case justified by its eradication, and it is very important to know the clinical manifestations of smallpox [*The King's Whore/ La putain du roi* (1990) by Axel Corti]. Postpolio syndrome, which has not been

seen by the latest generations of medics of western countries, thanks to vaccination, has been brought to the big screen numerous times [*Sister Kenny* (1946) by Dudley Nichols]. Another example, rheumatic fever, which is now infrequent thanks to adequate treatment of streptococcal pharyngitis related diseases, has been a problem for many years [*Murmur of the Heart* (1995) by Louis Malle]. As well, malaria is a prototype of a rare eradicated infectious disease in many occidental countries and that now, due to emigration and geographic mobility, is again important in healthcare. Additionally, this illness can present complications less known by health care professionals, such as blackwater fever [*Out of Africa* (1985) by Sydney Pollack].

Many of these rare diseases are so manifest, showy and impressive that they have constituted the nucleus the movie script, or have been used to call the attention to the spectator given the impact they produce. There are many possibilities in which to use these films in the process of instruction of doctors and medical students as well as in the divulgation and familiarization of each disease in the general population. In any case, if these movies are utilized as educational tools, it is essential that the instructor profoundly analyzes how the diseases are portrayed in the particular movie, pointing out the realities from the fictitious elements and stressing that each film is only a cinematographic resource.

References

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