

The Therapeutic Effect of Good Humour in Palliative Care: Á Propos *Patch Adams* (1998) and *Planta 4ª* (2003)

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Summary

Facing a serious issue with humour does not necessarily mean “lightly”, such that humour can be used as a therapeutic tool and to treat the stress of individuals facing such circumstances. The holistic care requested by the WHO for terminal patients includes, where possible and indicated, the courteous and spontaneous use of a sense of humour, because the end of life is also a useful time to share moments of laughter and fun as another way of improving the quality of life of such patients and their families. Laughter and humour can stimulate a positive and hopeful attitude and provide new perspectives to people’s problems. However, their use requires carers who are highly sensitive to the perception of when they are necessary or when they might be inappropriate. Here we review the possibilities of laughter and humour as coadjuvants to improve the wellbeing of patients and some guidelines for their use in terminal patients through a study of the two films, *Patch Adams* and *Planta 4ª*, both of which address different but important aspects of palliative care.

Keywords: Humour. Sadness. Palliative care. *Patch Adams*. *Planta 4ª*.

Sadness is but a wall between two gardens
Gibran Khalil Gibran (1883-1931)

health staff and the carers of patients with terminal illnesses.

Introduction

Humour acts as a bridge between human beings. It is a part of human communication that serves in relationships, for the transmission of messages, and for gaining knowledge of others. A sense of humour helps to maintain a suitable emotional and mental state; it corrects communications deficits among people as if it were a lubricant and, as well as being a source of amusement and entertainment, it reduces the stress of daily life. Because it is so important, all cultures have and continue to exalt the possibilities of humour, happiness and laughter within daily activities, together with the wellbeing of their members and during the different phases of people’s lives. The positive effects of humour can be seen throughout life. It has been used in the care of cancer patients, in non-sedated patients in intensive care, in psychotherapy, in pre-operative circumstances, and even in interventions aimed at improving the self-care of

Owing to their interest in terms of palliative care and the broad acceptance by the public, the films *Patch Adams* (1998) by Tom Shadyac and *Planta 4ª* (2003) by Antonio Mercero, both of which highlight the possibilities of using humour to improve the quality of life of patients, are reviewed.

The cinema as a positive reflection of humour in illness

Patch Adams (1998)

Technical details

Title: *Patch Adams*

Country: USA

Year: 1998

Director: Tom Shadyac

Music: Marc Shaiman

Photography: Phedon Papamichael (director

of photography)

Film editor: Don Zimmerman

Screenwriter: Maureen Mylander, based on the book *Gesundheit: Good Health Is a Laughing Matter* by Hunter Doherty Adams (Patch Adams) and Maureen Mylander

Cast: Robin Williams, Daniel London, Monica Potter, Philip Seymour Hoffman, Bob Gunton, Josef Sommer, Frances Lee McCain, Harve Presnell, Daniella Kuhn, Peter Coyote, James Greene, Michael Jeter, Harold Gould, Bruce Bohne and Richard Kiley.

Color: Color

Runtime: 115 minutes

Genre: Comedy, Drama

Production Companies: Blue Wolf, Bungalow 78 Productions and Farrell/Minoff

Synopsis: A “biopic” of the American physician Hunter “Patch” Adams

Awards: Nominated for the Oscar for Best original Music (1998)

<http://www.imdb.com/title/tt0129290/>

This film recounts the story of Hunter “Patch” Adams (Robin Williams) (Figure 1), who voluntarily admits himself to a psychiatric hospital after he has tried to commit suicide due to problems of self-esteem and misunderstandings. At the mental institution, he begins to appreciate the positive effects of humour on his fellow patients and becomes convinced that humour could be as good a tool to boost wellbeing in sick people as any other. This prompts him to study medicine. In his student years he explores and finds several occasions to unveil the positive effects of humour, allowing patients to take their minds of their problems and communicate better with one another. Adams feels that the mission of any physician should not be limited to curing disease and preventing fatalities but should also attempt to improve patients’ quality of life. In this, humour is part of the treatment. It allows patients to fulfil some of their dreams; it allows them to show themselves as they really are, take themselves less seriously, and to feel closer to the people around them, thereby reducing anxiety and even the amount of analgesia their require, and it allows them to cope better with their delicate situation. This focus, which differed considerably from the prevailing policies in those years, and Adams’ ideas and somewhat bizarre behaviour all run up against the “stagnating official structure” of the times, especially so in the person of Dean Walcott (Bob Gunton), who forbids Patch to have any dealings with his patients until his third year of studies and imposes a series of obstacles that hinder Adam’s

possibilities of gaining his degree, even though he is a privileged student. Walcott even sets up a tribunal to analyse Patch’s “excessive happiness”.



Figure 1: *Patch Adams* (Robin Williams). The prototype physician who uses humour in medicine

The film is a critique of the dehumanisation of professions, in particular of the medical profession. It was well received by the public but not by physicians, because it acclaims one of them but ridicules the profession itself with some scenes of dubious content, with extreme distortions of reality in search of a cheap laugh, and it has all the sentimentality of commercial cinema. Although the film brings up the issue of humour in the patient-physician relationship, it creates a world of the very good and the very bad. In this film there is a vast distance between reality and fiction¹ and the fact is that medicine is not child’s play, as we sometimes see through the eyes of Tom Shadyac, who also directed *Ace Ventura: Pet Detective* (1994) and *The Nutty Professor* (1996)- What is positive in the analysis of this film is that apart from their knowledge of science, we see that physicians who provide a good control of symptoms and even cure diseases must also attempt to develop good communications skills and create an atmosphere for their

patients in which there is room for humour as a way of accepting themselves and others, which will eventually improve their wellbeing.

Planta 4ª (2003)

Technical details

Title: *Planta 4ª* (Spain), *Entre Amigos* (USA)

Country: Spain

Year: 2003

Director: Antonio Mercero

Music: Manuel Villalta

Photography: Raúl Pérez Cubero

Film editor: José María Biurrún

Screenwriter: Albert Espinosa, Antonio Mercero and Ignacio del Moral Based on the play *Los Pelones* (*The Baldies*) by Albert Espinosa.

Cast: Juan José Ballesta, Luis Ángel Priego, Gorka Moreno, Alejandro Zafra, Marco Martínez, Marcos Cedillo, Maite Jauregui, Diana Palazón and Elvira Lindo.

Color: Color

Runtime: 100 minutes

Genre: Comedy, Drama,

Producer: Boca Boca Producciones S.L.

Synopsis: The film tells of the lives of adolescents housed on the 4th floor of a hospital –the traumatology unit– for osteosarcomas

Awards: Nominated for a Goya for the Best Film (2003)

<http://www.imdb.com/title/tt0319917>

This film deals with the issue of cancer and the severe disabilities that may sometimes accompany osteosarcoma in a group of young adolescents - Miguel Ángel (Juan José Ballesta), Izan (Luis Ángel Priego), Dani (Gorka Moreno) and Jorge (Alejandro Zafra) (Figure 2)- most of them receiving chemotherapy and undergoing amputations, who decide to help one another face up to a very tough future and make their long stay in the hospital as cheerful as possible. It is based on a true story in which Albert Espinosa, who suffered osteosarcoma, shows how humour can be an efficient tool for coping with difficult times. In the film we see the different stages of rejection, denial (especially when doubtful information is given out), and acceptance of the disease. He shows how patients' attitudes can be improved when they feel sheltered by the presence of older companions who share their feelings, and funny situations arise as they grow older and their sexual desires awaken. The fear of diagnosis is mixed with the first incidents of love;



Figure 2: Humour in the face of adversity in a groups of adolescents with osteosarcoma (*The Baldies*)

loneliness is mixed with a feeling of belonging to the group, and sweet and bitter moments are intermingled, all with cancer as a background. Humour becomes a lubricant to ease the grittiness of their situation and helps them to bear the side effects of chemotherapy and even amputation. In the words of Winston Churchill (1874-1965) *Imagination consoles us for what we are not; humour for what we are*². Of special interest is the value of the company of people who know how to laugh at themselves, because their presence infects others and helps them to evade their problems and worries. The film shows different situations with a heavy dose of humour in order to highlight friendship and acceptance into the group of those recently arrived, which is crucial in a stage in which young people must cope with the effervescence of their years, although with a pronounced tendency towards isolation, which only tends to exacerbate their disease. In *Planta 4ª* the distortion of reality to create situations that make us laugh at the presence of “goodies” and “baddies” is to be criticised, as is the false idea of how hospitals are run and, especially, the commercial accent of the production. For example, it is excessive to portray the young patients wandering around the hospital as though they were in their own

homes and of course the wheelchair races, taking their own X-rays, and having access to case histories are unthinkable.

With these two film examples, we have considered it interesting to explore the benefits of humour in medicine and the general principles that may govern its use in medical practice.

The benefits of humour in medicine

The effect of humour is timeless. The Bible says: There is no riches above a sound body, and no joy above the joy of the heart (Ecclesiasticus 30:16). Over the years much has been written about laughter, which releases tensions and is the social lubricant *par excellence*^{3,4}. Laughter itself elicits a general relaxation of the body, is an innate form of behaviour, and does not have to be learnt, since both deaf and blind children can laugh. *It is popularly known, although it should be recalled, that eating properly and laughing heartily are two extraordinary medicines* (Grande Govian, cited by 5). A good guffaw is the expression of an exultant state of mind. It represents an intense emotional state, convulsive and explosive, and is a paroxysmic release of contained tension manifested in a decompressive and expulsive way. Whereas sobbing involves inspiration, laughter is linked to expiration and works as a safety valve. Humour and laughter have beneficial effects on human physiology, communication, and people's spiritual aspects through the release of endorphins, leading to increased oxygenation of the blood, improved circulation, the activation of T lymphocytes, stimulation of the sympathetic nervous system, and of the immune system, which protects us from infections and other processes related to bodily wellbeing and the alleviation of pain^{3,4}. In this sense, Norman Cousins, affected by ankylosing spondylitis, explains in his book *Anatomy of an Illness* that: *Ten minutes of belly laughter had an anaesthetic effect and would give me at least two hours of painfree sleep*⁶. His book was made into a TV production in 1984, under the same title *Anatomy of an Illness*, directed by Richard T. Heffron (Figure 3).

What does laughing at a good joke do? Intelligent jokes change the atmosphere of an anodyne social gathering and may even break up a cold and tedious situation. "What then makes the joke so mighty, to create that synchrony of behaviours, in this case laughter?" In one study that analysed the brain activity of different people who were told 30 jokes, the individuals selected had to press a button every time they found something funny or amusing. It was

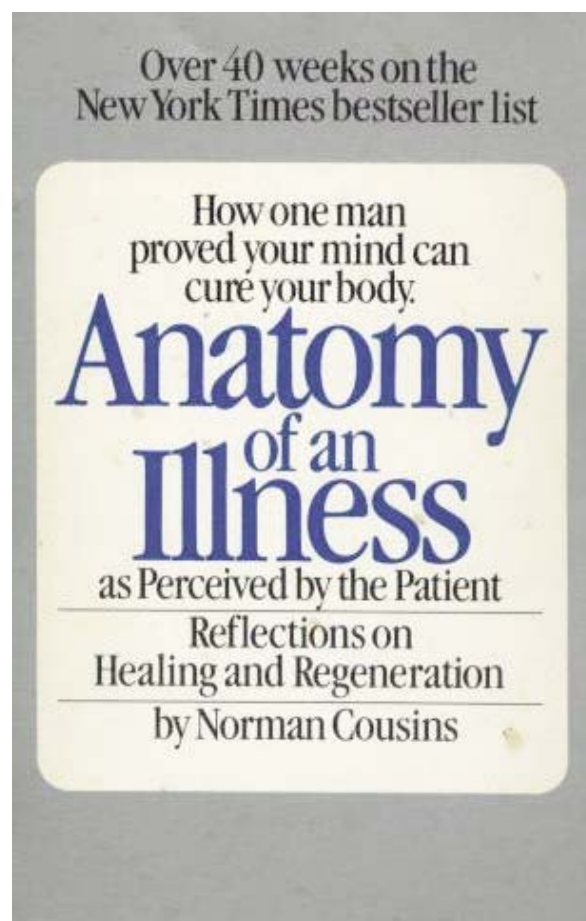


Figure 3: Cover of the English copy of *Anatomy of an Illness* by Norman Cousins

found that a joke -good or bad, funny or not- activated several areas of the brain, depending on the information to be processed, its meaning, or its characteristics. There was convergence in the activation of one brain area -the ventromedial prefrontal cortex- in all the good or funny jokes. The prefrontal area is important for the systems of the "emotional brain": those that are activated every time a person feels a sensation of pleasure. People afflicted with lesions to this area, particularly in the right hemisphere, have a certain difficulty in finding some types of stories or jokes funny. The humour in a joke is not only in the joke itself but also in the person who tells it and in the social context in which it is told. There seem to be some people with a greater capacity for "approach" or emotional "empathy", who are able to predispose us to find something supposed to be amusing funny⁷. Laughter can be a cathartic release, a purifier of emotions and a releaser of emotional tension.

Laughter provides a safe and acceptable way of escape for repressed emotions and serves as a positive reference point for both carers and patients since it strengthens the self-esteem of both and acts as a

protective mechanism that facilitates the restoration of physical balance. This is explained very well in a story told by the wife of someone with Alzheimer's disease: *When I first realised that my husband did not recognise me, I got furious, I was consumed by disbelief... Then something happened that completely changed my personality. I had always given him a kiss on the cheek at breakfast time. I continued doing so but it was hopeless. One day I asked him "What would your wife say if she knew I was kissing you?" to which he answered "I don't know, but if you don't tell her, neither will I"...*⁸. We must use a sense of humour whenever possible to ease conflicts. When we laugh, our face muscles and our diaphragm contract, helping us to breath. Oxygenation reaches maximum levels and the secretions of the digestive organs and salivary glands increase, helping our digestion and reducing fatty acid levels.

Humour and laughter are useful when establishing a relationship between carers, patients, and family members and they help to break the ice in tense situations. At the same time they serve to foster confidence and reduce fear. Once a therapeutic relationship has been set up, they may become a powerful curative agent⁹⁻¹¹. Humour is a positive mechanism for some individuals and acts as an equilibrator of concern about death; it helps to foster hope, creates a sense of perspective and helps to establish people's understanding about themselves and others. Barry Sultanoff, the President of the American Holistic Association stated: *Laughing together can be a time of intimacy and communion, a time when we come forward, fully present and touch into each other's humanness and vulnerability. By joining in humour and acknowledging our oneness, we can have a profound experience of unity and cooperation. That in itself maybe one of the most profound expressions of healing energy of which we are capable.* (cited by 12).

It is easier to laugh in company than when alone, which shows that laughter is intimately linked to sociability. At group level, humour serves to improve collaboration, functioning as a balancing agent and social lubricant because it helps to create a positive working atmosphere, generating confidence, attenuating anger, facilitating the acceptance of imperfections among colleagues, and neutralising or reducing tension³. In one study addressing the attitudes of nurses, it was found that humour is not only useful when placating conflict but also that it facilitates greater creativity, flexibility, and capacity for problem solving¹¹. Humour makes daily life more amusing and increases staff satisfaction¹³. It improves productivity and the working climate; it is a source of motivation, stimu-

lates the imagination, and favours fluidity in communications among different team members. It has a positive function on workers' self-esteem; it secures optimism, and the fears and anxieties deriving from health-care work are reduced. Hert¹⁴ carried out a study on humour in a group of terminal patients and found that in 57% of them humour had formed part of their previous existence and that its meaning for them had decreased in the new situation¹⁴, although most (85%) claimed that having moments of humour was of great use to them. This can be related to their ability to generate hope; it gave them a sense of perspective and helped them to understand themselves and others and everybody was pleased to enjoy humour. They considered that situations in which humour should be limited were at very serious and transcendental moments and during crises. The patients recognised the help they derived from humour to feel "connected" to other people, to parry the perception of the situation that would have otherwise seemed overwhelming. Better relaxation is another part of humour. Viktor Frankl (1905-1997), the Austrian neurologist and psychiatrist who survived Auschwitz, wrote words to the effect of *Humor was another of the soul's weapons in the fight for self-preservation. It is well known that humor, more than anything else in the human make-up, can afford aloofness and an ability to rise above any situation, even if only for a few seconds*¹⁵, which is splendidly seen in the film *La vita è bella* (1998), by Roberto Benigni (Figure 4).

The use of humour in medicine

Humour has been used as a means to cope with frightening situations, to decrease anxiety, rage and depression, and to achieve an atmosphere of relaxation and comfort for terminal patients^{14,16,17}. Humour is individual and acquires different meanings for each person, especially in the case of terminal patients, such that it is important to approach each situation with sensitivity and intuition and not overarchingly assume that humour will be welcomed by all¹⁸. More experienced nurses have more positive attitudes towards humour in professional circumstances than younger ones¹². A possible explanation for this difference would lie in the fact that their experience has allowed older nurses to develop a better sensitivity for gauging when humour is appropriate and how to use it in the daily practice of caring for people in a sensitive and comfortable way.

The use of humour must be valued, too, from the patient's perspective, their clinical situation,



Figure 4: The subtle humour of *Life is beautiful* in the poster promoting it

their families and the medical staff's own experience. Some authors have suggested that the initiative for its use should be sparked by the patients themselves, although others consider that the medical staff should directly observe and attempt to identify the attitudes of patients as regards humour and laughter, asking them whether they like laughing and what makes them laugh. Our success in stimulating patients' laughter will be increased if we first ask ourselves the following questions¹²:

Has the patient given any indication suggesting that s/he would be receptive to humour?

Does the patient try to share her/his sense of humour with the staff or visiting persons?

What is the patient's capacity to perceive and understand humour?

How does the patient use humour? Is s/he sarcastic or absurd and ridiculous?

Note which type of humour your patient engages in. Does s/he explain jokes, play practical jokes, or bring fun objects to the hospital?

Is there some humoristic topic that your patient might consider taboo?

Avoid humour of a sexual, ethnic or religious nature to minimize the risk of offending the patients.

Have you observed whether the patient has any preference for a particular type of humour?

Will humour be seen as something irritating?

Will this indicate that you are interested in the patient's health?

If we are to stimulate laughter and its therapeutic potential, it is crucial to adapt the humoristic intervention to the style of humour preferred by the patient. People can increase their potential for laughter if we can expose them to funny materials so carers can consciously change their behaviour to elicit more laughter and make patients' surroundings a happier place. Humour has manifold sources and there are many ways of learning how to use it. However, the "road-map" must be drawn up *ad hoc*. Each person and each situation are unique, and the terrain changes day by day, such that it is necessary to seek different tools and resources^{12,19}. Receptiveness, opportunity, sensitivity and content are all leading criteria in whether humour should be used as a resource or not²⁰.

The philosophy of palliative care includes the family and the patient as a unit and hence it is essential to consider family preferences and attitudes when evaluating humour. *It is possible to use humour in daily life with patients since one is starting out from the perspective that it will help them to wrestle with their adversities*²¹. The final stages of life may degrade human beings and so humour, understood in its broadest aspect, helps to accept limits; to discover one's vulnerability and fragility in a more tolerant way. It may even help to make the subjective more objective, to make things relative, and help patients develop their capacity to distance themselves ironically from situations, and from themselves, with greater ease: the basic application of humour.

Humour is also a protective element for carers and the nursing staff, physicians and other health professionals who daily work with the reality and horror of illness, suffering, and death^{12,22}. In this context, carers will often apply a sense of humour as a means to maintain a certain distance between themselves and the person who is suffering, thereby protecting themselves from a sympathetic response. Christina Maslach, in her book *Burnout: The Cost of Caring*, describes the way in which the nursing staff use the sense of humour and laughter to work through the

stress and the horror to which they are often witnesses: (Paraphrasing) Sometimes things are so frustrating that to contain your pain you laugh at situations that perhaps are not so funny. You laugh, but in your heart you know what is really happening. You do it, however, because your own needs are important: we are all human and we should be ourselves²³.

Humour is a form of combating stress and tension and it may be of unexpected help in a difficult circumstance. It can help to break the ice in difficult situations, to foster trust, and to reduce fears and worries about death. The ability to laugh provides a momentary release from the intensity of what would otherwise be crushing. Paraphrasing Wooten (12), the staff in a hospital waiting room had placed the following notice to be read by visitors and family members with a view to educating and calming visitors as regards their sense of humour as a working instrument that will contribute to better attention towards their loved ones. The notice read as follows:

*“Sometime you may see us laugh
Or even tell a joke.
Please know that we are attending to your loved ones
as best we are able.
There are moments in which tension is maximum.
There are times when our systems are stressed.
In humour we have discovered a factor
Able to maintain our mental balance.
So if you are a patient who is waiting,
A family member or a friend,
Please do not misinterpret our smile:
It's what stops us from screaming.*

The therapeutic value of humour can be taught and it is possible to improve our attitudes and tolerance through a flexible education that includes our becoming familiarised with potentially comic situations: not only our own production of jokes and anecdotes but also the ways of coming out on top of a difficult situation and improving communication. However, to make use of humour it is necessary to develop a sensitivity about when to use it: that is, to have a sense of opportunity. To become initiated in the topic, it is suggested that we observe which response something as subtle as a wink or a gentle but funny comment might rouse in the patient. A negative attitude towards the use of humour by the caring staff and a lack of a good relationship with the patient and the family are obstacles for the therapeutic use of humour. It is generally considered that humour should

not be used and should be avoided in the following situations:

In the agony period and final hours of the disease, because this is when the patient and family are subject to a huge emotional impact and hence are not receptive to any kind of outside intervention.

When communicating the diagnosis, where the mental process of understanding is very important and requires as much attention as possible.

In the presence of family members or other patients who are in different stages of their disease or acceptance of it.

Sexist and ethnic humour and the type of humour that is always inappropriate²⁴.

General guidelines for the practical application of humour in medicine

Health professionals can exert their positive effects on their patients as from the early phases of the relationship up to the final stages by following these guidelines²¹:

- 1.- Establish from the very beginning a healthy, happy and “empathic” relationship with the patient.
- 2.- Adopt positive attitudes as regards the information given to the patient and in doubt-solving.
- 3.- Help the patient and family to identify what most worries them about the disease process.
- 4.- Reinforce any positive aspect or progress, however insignificant it may appear
- 5.- Encourage patients to engage in activities that are pleasant and are of interest to them.
- 6.- If cheerfulness is the normal state of the human being, this should be reinforced with reciprocal cheerfulness.
- 7.- Be very aware of attitudes that favour a relationship of humane care based on respect and understanding.
- 8.- Learn to laugh at ourselves, of our weaknesses, mistakes, fears and ignorance, which is the first step to put us in the position of being able to recognise that among us all we know it all”.

You cannot stop melancholy from flying over your head but you can try to stop it making a nest in your hair (Anonymous proverb). Humour is the pivot of life about which we all wish to rotate²⁵. Just on its own,

humour, as pointed out by Miguel Mihura, *allows us to get out of ourselves, tip-toe down some 20 metres, look around ourselves... and discover new features and profiles that we were unaware of before*²⁶. A sense of humour can be a way to help patients and their families and hence for this to materialize the health staff must be prepared to allow the spontaneous and reciprocal emergence of humour with the patient. With an atmosphere of humour, the staff feel supported and are enriched when they share humour and affection. *The most valuable humoristic treatment does not consist of telling the patients jokes but in helping them to adopt a humoristic attitude towards life*¹⁷. Humour must be used as an effective complement to the other therapies being implemented and it is necessary to subtract drama from daily life, to place the negative expectations that we often have to face in our work in the right perspective, and to learn how to laugh at ourselves, although without forgetting that our work is very serious. Humour can serve to make us feel better, to go beyond things, and it is the essence of creative work. For the health personnel, humour will be useful as part of an overall therapy encompassing the physical, the mental and the spiritual.

Funny films as medicine: some examples

As we have seen above, through laughter and humour the cinema can help to increase our levels of endorphins, cortisol, T lymphocytes, and with this our health, such that it can be a perfect antidote against stress and serve as an escape valve that we can use at will. Norman Cousins, with his ten minutes of laughter, managed to achieve an important analgesic effect for his ankylosing spondylitis by watching films by the Marx brothers⁶. Cousins voluntarily chose the cinema as a way to laugh away and improve his symptoms⁶. This and other possible benefits of watching movies could be used with all patients, including terminal patients, owing to their positive effects on health as part of programs aimed at prevention, treatment and improvement of the quality of life. In this sense, there are countless funny films that can serve for such purposes. Oscar Giménez, for example, suggests some comedies of historical note²⁷: *The General* (1927) by Clyde Bruckman and Buster Keaton; *City Lights*, 1931 by Charles Chaplin; *Duck Soup* (1933) by Leo McCarey; *It Happened One Night* (1934) by Frank Capra; *Singin' in the Rain* (1952) by Stanley Donen and Gene Kelly; *Some Like It Hot* (1959) by Billy Wilder; *Annie Hall* by Woody Allen; *Dr. Strangelove or How I Learned to Stop Worrying and Love the Bomb* (1964), and *Monty Python and the Holy Grail*, (1975) by Stanley Kubrick,. To these could be added *Modern Times* (1936),

The Gold Rush (1925) and *The Great Dictator* (1940) by Charles Chaplin, and *It's a Mad Mad Mad Mad World* (1963) by Stanley Kramer (Figure 5).



Figure 5.- A good film for smiling

References

- 1.- Dans PE. Doctors in the Movies: Boil the Water and Just Say Aah. Bloomington IL: Medi-Ed Press; 2002.
- 2.- Logos non solo parole [homepage on the Internet] Logos Group; 2008 [cited 2007]. Winston Churchill (1874-1965); [about 2 screens]. Available from: http://www.logoslibrary.eu/pls/wordtc/new_wordtheque.w6_home_author.home?code_author=1865&lang=EN
- 3.- Giménez Ó. El humor terapéutico bajo el escrutinio de la ciencia. Jano. 2001;(1406):15-16.
- 4.- Astudillo W, Mendinueta C, Larraz A, Gabilondo S. La labor de enfermería con el enfermo terminal. In Astudillo W et al, editors. Cuidados del enfermo en fase terminal y atención a su familia. 5th ed. Barañain: EUNSA; 2008. p. 125-135.
- 5.- Lupiani M, Gala FJ, Bernalte A, Lupiani S, Dávila J, Miret MT. El humor, la alegría y la salud. C. Med. Psicosom. 2005;(75):40-47.
- 6.- Cousins N. Anatomy of an Illness as Perceived by the Patient. New York: W. W. Norton & Company; 2005.
- 7.- Mora F. ¿Qué hace gracioso un buen chiste? El Cultural. El Mundo. 2006;(57):7-9.
- 8.- Ballard EL, Gwyther LP, Toal TP. Pressure points: Alzheimer's and Anger. Durham, NC: Duke University Medical Center; 2000.
- 9.- El buen humor y la salud. Notas Paliativas. 2005;7(1):14-15.
- 10.- Descamps MA. Le langage du corps et la communication corporelle. Paris: Puf; 1989.
- 11.- Sumners AD. Professional nurses' attitudes towards humour. J Adv Nurs. 1990;15(2):196-200.

- 12.- Wooten P. You've got to be kidding! Humor skills for surviving managed care. *Dermatol Nurs*. 1997;9(6):423-429.
- 13.- Triás de Bes F. La risa y la productividad. *El País Semanal*. 2005;(1494):106-107.
- 14.- Herth K. Contributions of humor as perceived by the terminally ill. *Am J Hosp and Palliative Medicine*. 1990;7(1):36-40.
- 15.- Frankl VE. *Man's Search for Meaning: An Introduction to Logotherapy*. New York: Washington Square Press; Herder; 1963.
- 16.- Haig RA. *The Anatomy of Humor. Biopsychosocial and therapeutic perspectives*. Springfield IL: Charles C. Thomas; 1988.
- 17.- Moody R. *Laugh after laugh: the healing power of humor*. Jacksonville, FL: Headwaters Press; 1978.
- 18.- Rojas González M. *Cuidar al que cuida*. Madrid: El País Aguilar; 2006.
- 19.- Robinson VM. *Humor and the Health Professions: The Therapeutic Use of Humor in Health Care*. 2nd ed. Thorofare, NJ: Slack Inc; 1991. p. 55.
- 20.- Leiber DB. *Laughter and humor in Critical care*. *Dimens Crit Care Nurs*. 1986;5(3):162-70.
- 21.- Carbelo Vaquero B, Asenjo Esteve A, Rodríguez de la Parra S. Una aproximación terapéutica al humor en el cuidado paliativo. *Atención Primaria*. 2000; 26(1):58-62.
- 22.- Schröeder M, Martín E, Fontanals MD, Mateo D. Estrés ocupacional en cuidados paliativos de equipos catalanes. *Medicina Paliativa*, 1996;3(4):26-31.
- 23.- Maslach C. *Burnout: The Cost of Caring*. Englewood Cliffs. NJ: Prentice- Hall; 1982.
- 24.- Ruiz Gómez MC, Rojo Pascual C, Ferrer Pascual MA, Jiménez Navascués L, Ballesteros García M. Terapias complementarias en los cuidados: Humor y risoterapia. *Index Enferm*. 2005;14(48-49):37-41.
- 25.- Catalán JM. Reír se acentúa en la "i". *Jano*; 2001;(1406):10.
- 26.- Mihura M. *Mis memorias*. Madrid: Temas de Hoy; 1998. p. 304-305
- 27.- Giménez O. Diez comedias que han hecho historia. *Jano*. 2001;(1406):104-105.