

Foolish Medicine : Reflections on the practices of modern clown-doctors and medieval fools⁴⁸

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Résumé :

Les clowns et autres fous du roi existent dans presque toutes les sociétés humaines et sont connus sous plusieurs noms, y compris les plus péjoratifs. Le propos de cet article est de mettre une figure contemporaine assez populaire, celle du clown docteur travaillant dans les hôpitaux et centres pour aînés, en lien historique et symbolique avec celle du bouffon. Au-delà de la promotion du bien-être et de la qualité de vie des patients, le clown docteur occupe une fonction sociale essentielle au sein des structures hospitalières.

⁴⁸ While scholars may argue fine details, medieval fools' work spans from approximately the 5th to the 16th century.

Introduction : The Author is a fool

What follows is heavily influenced by my reading of the work of several influential scholars, notably Billington, 1984; Erasmus, 1941(1511); Otto, 2002; Towsen, 1976; Welsford, 1935; and Willeford, 1969. It draws heavily on experiences gained from 40 years of studying and teaching “clown” to professional artists and university students, and more recently from my work in hospitals as “Dr. Haven’t-A-Clue⁴⁹. However it was an article by my friend and colleague Peter Spitzer a.k.a. Dr. Fruit-loop (a physician by training but a clown by inclination), where he makes reference to hospital clowns as modern day court jesters (Spitzer, 2006), that started me looking at the similarities between the attributes and practices of medieval fools and those of modern clown-doctors. While Spitzer’s article was the catalyst for what follows, my observations are viewed through a specific lens – that of my own particularly ‘idiot-syncretic’ experience gathered from investigation of, teaching about and simply playing the fool. What follows is a highly subjective, personal reflection that draws heavily on my own experiences.

⁴⁹ In 1988, in preparation for a research project on humour and disability, I started to become interested in the use of humour in healthcare settings. In 1992 this research started to focus on the work of clowns in hospitals. From 1999-2001 I worked in France with Caroline Simonds and the clowns of Le Rire Médecin, this research led to the creation of *Fools for Health* in 2000: a non-profit organisation whose clowns have been working for the past 10 years ‘across the lifespan’ in all areas of local hospitals throughout Windsor and Essex County.

Fools are everywhere⁵⁰ – even in hospitals

Fools have been found in almost every human society and have been known by many names including *parasite*, *clod*, *sot*, *buffoon*, *stultor*, *jester* and today simply as *clown*. All these 'fools by any other name' used playfulness and humour to make people laugh, to change their mood and to feel better. Over the last several decades (fuelled in part by the biblical quote, "a cheerful heart does good like a medicine") there has been considerable inquiry, both scientific and anecdotal, into the physiological effects and psychological benefits of humour and laughter (Bennett and Lengacher, 2006a, 2006b, 2007, 2008, 2009; Berk *et al.*, 1989; Cousins, 1979; Fry, 1992; Hudak *et al.*, 1991; Martin, 2004; Miller *et al.*, 2006; Rosner, 2002). Based on this research, there is evidence to suggest that humour and laughter have a positive effect on emotions, physiological processes and pain tolerance.

This research into gelotology, the effects of humour on the human body, led in 1988 to the formation of an Association for Applied and Therapeutic Humour. It defines Therapeutic Humour as "any intervention that promotes health and wellness by stimulating a playful discovery, expression or appreciation of the absurdity or incongruity of life's situation." These beliefs that humour is 'therapeutic' and that laughter is 'good medicine' have in large part influenced the development of clown programs worldwide.

Like fools throughout history, clowns who work in hospitals are also known by many names, for example *therapeutic clown*, *hospital clown*, *caring clown*, and *clown-doctor* – on whom this article will focus.

However the roots of the work of clown-doctors begin before scientific inquiry, randomized controlled trials and the evidence-based medicine that underpin gelotology. Modern clown-doctors, if asked to comment on the influences on their work usually make reference to famous mime teachers (e.g. Lecoq, Decroux, Pochin-

⁵⁰ *Stultorum plena sunt omnia*. This maxim of Cicero can be found in Welsford p. xi, Willeford p. 30 and Otto, whose entire book is based on this premise.

ko, Gaulier), or circus clowns (e.g. Grock, Oleg Popov, Emmett Kelly), or characters made famous by film or television performers (e.g. Jerry Lewis, Charlie Chaplin, Rowan Atkinson). It is my contention that the roots of clown-doctor's work goes back much further, to the practices of medieval fools, particularly court jesters, whose jests were employed to change the mood of kings, clergy and the common people.

Clown-doctors and the tradition of fools as healers

Clown-doctors are not medical doctors⁵¹, they are professional artists specially trained to work in a hospital. Usually clown-doctors work in pairs, wear a red nose, use a minimal amount of stage make-up, wear a white lab coat⁵² and are most often referred to as *doctor* (e.g. Dr. Haven't-A-Clue). They interact with patients, their families and the healthcare team seeking to promote wellness and to improve quality of life through the use of music, improvisational play and humor. I believe that Clown-doctors should be viewed as the latest in a long line of fools who have worked to help heal mind, body and soul something they have done from at least the time of Hippocrates, often heralded as "the father of modern medicine".

According to research conducted by Cotlove, Hippocrates' hospital on the island of Kos, "maintained constant troupes of players and clowns in the quadrangle in the belief that mood influenced healing and that convalescents ought to be kept happy and amused" (Cotlove, 1999). In the 12th century Rahere, ^{one of Henry} the first's court jesters, founded St. Bartholomew's Hospital in London, England (Billington, 1984). This is perhaps not a surprise as one of the primary functions of the court jester was to help cure the monarch or noble when they were feeling melancholy (Otto, 2002), and jesters were often sent to help alleviate distress during serious illness e.g. *Il Matello* who had amazing success in helping Alfonso

⁵¹ Worldwide two clown-doctors do have medical degrees but they are the exception.

⁵² In Scotland and other parts of Europe this is yellow.

D'Este forget his serious illness (Welsford, 1935). And to this day in several cultures clowns perform healing ceremonies, often as a means of driving out spirits that their culture believes cause disease (Towsen, 1986; Van Blerkom, 1995).

At the very end of the 19th century, *The Fratellini Brothers* (a famous clown trio) started making irregular visits to hospitals. This is usually acknowledged as the starting point for the modern practice of clowns visiting hospitals and other healthcare settings. From 1908 onward regular reports begin of other circus clowns performing occasional clown rounds, predominantly in children's wards⁵³. Modern professional clown-doctors began working in hospitals in 1986 when Michael Christensen (*Dr. Stubbs*), along with Jeff Gordon (*Disorderly Gordon*), first set foot in a hospital. Their groundbreaking work led to the first clown-doctor program and to the formation of the *Big Apple Circus Clown Care Unit* (Jando, 2003). While initially this work was confined to pediatric units increasingly clown-doctors are now working with patients of all ages and in all areas of hospitals (Killick, 2003; Meincke, 2000; Oppenheimer *et al.*, 1997; Simonds and Warren, 2001; Spitzer, 2006; Warren, 2003, 2004, 2008). Currently clown-doctors work in more than a dozen countries around the world⁵⁴ and see literally tens of thousands of patients every year.

Joining up the dots... Connecting the 'Jests' of clown-doctors to those of court jesters and Medieval fools

While I fully acknowledge the influence of modern mime and clown teachers on the initial training of performers for this work, I believe the *practice* of clown-doctors, how they dress and what they actually do while in a hospital, can be traced back to the costumes

⁵³ For example *The New York Times* reports Barnum and Bailey visiting children in New York hospitals in 1908.

⁵⁴ These include Australia, Austria, Brazil, Canada, France, Germany, Italy, The Netherlands, Scotland, Switzerland, Spain and The USA.

and *jests*⁵⁵ employed by medieval fools, particularly jesters at the courts of kings and nobles.

Costume

If asked most people would probably describe a fool, especially a court jester, as wearing some form of brightly coloured motley⁵⁶ coat, shoes with bells and a cowl shaped hood adorned with ears and bells on their head (Welsford, 1935). While this was probably not their everyday attire, and certainly a jester's own costume was individualized⁵⁷ (Welsford, 1935), it has influenced costumes worn by performers from Commedia dell'arte to the circus ever since.

Today most modern clown-doctors usually wear very brightly coloured clothes. Some wear diamond patterns or motley and almost all wear a headpiece – whether this is a cap or hat or simply brightly coloured ribbons in their hair. My own clown, Dr. Haven't-A-Clue wears a brightly coloured fool's cap with bells, two differently coloured socks, multi-coloured trousers with brightly coloured diamonds and an elasticised waist, so he may smuggle immigrant families across the border in his trousers. He also has a long piece of elastic sticking out of his waistband to which he attaches odd items or plays like a 'bass guitar' (Figure 1).

Some clown-doctors integrate individualized items into their costume. For example Dr Giraffe's original costume included giraffe ears and cothornous-like⁵⁸ shoes, making her very tall and giraffe-like; and, Dr. Floretta Cauliflower always carries a John Deere

⁵⁵ Jests, describes both physical and verbal business, and many jesters kept books "Jest Books" that contained all their jests. Today the word shtick or lazzi or Jeu would more usually be used to describe this.

⁵⁶ According to Wikipedia (<http://en.wikipedia.org/wiki/Motley>), "The word originated in England between the 14th and 17th centuries and referred to a woolen fabric of mixed colors. It was the characteristic dress of the professional fool."

⁵⁷ Otto is working on a book *The Court Jester in Art, Architecture and Advertising* which will deal with this in more detail.

⁵⁸ The shoes used by actors in ancient Greek theatre.



Figure 1: Dr. Haven't-A-Clue

tool belt around her waist, for she believes that people are like tractors – they need regular tune-ups and their radiators flushed out from time to time.

The fool and his sceptre

By all accounts medieval fools, much like clown-doctors practiced *empty pockets clowning*. They carried very few props around with them and when they did use objects they were those found in the room. However the one exception was the fool's bauble or sceptre. Several scholars discuss the significance

of this object and fools' various ways of interacting with it (Otto, 2002 ; Willeford, 1969). Here I simply wish to observe that modern clown-doctors often carry with them their own baubles. Most wear a stethoscope around their neck that, in combination with a red nose, signifies that I am a clown-doctor, in much the same way as a fool's costume and bauble signified who they were. Clown-doctors also often use finger puppets that they will speak to and personify in much the same way as the jester embodied his bauble with life. Dr. Haven't-A-Clue carries with him a toilet plunger. When the rubber plunger is on, it is used to perform "belly-button-otomies". More usually he removes the rubber plunger and places a finger puppet on the wooden stick and uses it much the same way as the jester used his bauble (Figure 2).

Skills and jests

If scholars such as Welsford and Otto are to be believed the list of skills and jests attributed to medieval fools is almost limitless (Otto, 2002; Welsford, 1935), this is in large part because "The

number of fools is infinite" (Ecclesiastes, 1:15). While the number of clowns working in hospitals is not infinite, at least not yet, nevertheless currently there are literally thousands of individuals working as clowns in hospitals. No two clowns are the same; nevertheless there are many commonalities in the ways that they work. Here I will provide a few brief examples of how modern clown-doctors currently use the verbal, physical, musical, and specialty skills of their antecedents in a hospital setting.

Verbal Jests e.g. *telling jokes, witticisms, speaking nonsense, making up languages and/or making animal sounds, reciting poetry, verse capping⁵⁹ and, delivering news and/or commenting on current events*

Many fools, particularly court jesters, were reputed to be quick witted and quick tongued. They would play with words and sounds and recite poetry, running the gamut from elegiac to the nonsensical. They would also discuss topics and deliver news that no one else could.

Today in hospital many clown-doctors are very verbal. They will talk in gibberish, tell jokes, make puns and even play versions of verse capping e.g. by telling a story one sentence at a time, with each clown adding the next line trying to outdo their partner. They will discuss the weather or talk about last night's te-



Figure 2: Dr. Haven't-a clue with "baubles"

⁵⁹ "A frequent pastime involving jesters... in which one person supplied the first line and the second would complete the couplet, preferably with suitable rhymes and parallels." (Otto, 2002: 16)

levision or sports events or politics. They will use any topic that enables them to form a bridge between them and the patient, their family or the healthcare team. It also helps the patient to stay connected to the outside world, much like a jester bringing news to the feudal courtyard. This is often particularly helpful in the most tense of situations e.g. when working with palliative care patients and their families.

Palliative care work usually involves being quiet, compassionate and respectful and singing soft lullabies. However sometimes, it is also appropriate for the clown-doctors to be loud and to make conversations about topics that are off limits to healthcare professionals⁶⁰, such as politics, sex and religion, but that acknowledges the adult palliative patient as a living breathing human being. For as Patch Adams has often said, “no one is ever dying”. We are all living until we take our last breath.

Physical Jests e.g. *juggling, puppetry; dancing;
tumbling and pratfalls*

Many medieval fools were accomplished dancers and jugglers. Their dances would include the formal dances performed at court and impromptu pieces created on the spur of the moment that might involve dancing on, or with, furniture and end with them tumbling or falling comically. As puppeteers they would animate their baubles, many of which had elaborate faces carved on them (Willeford, 1969), and engage in a conversation with them, often at the expense of the assembled company. As jugglers they would juggle objects found in the room e.g. food, cutlery or crockery.

Clown-doctors use a lot of physical business but have certain limits placed on them by space and health and safety concerns. Tumbling and pratfalls are therefore limited. However, walking into walls is a fairly common practice and Dr. Haven't-A-Clue will often attempt to leave a patient's room via a wall and if space permits perform a backwards roll as a punctuation to the jest.

⁶⁰ For an example of this see Warren, 2009 : 153.

Clown-Doctors dance, a lot. They dance with chairs, with unattached IV poles, with patients, their families, nurses, doctors, and with each other. Their dances may be parodies of known dance styles (everything from ballroom through ballet to hip-hop) or they may be completely unique, improvised on the spur of the moment (figure 3).

Many clown-doctors juggle. Some clowns such as Dr. Dan-D-Lion will juggle alone while others such as Dr. Fifi and Dr. Ops sometimes juggle objects between each other. Clown-doctors use juggling balls, objects found in the room and some even juggle bedpans, first checking that they are clean!

Musical Jests *e.g. singing; playing musical instruments, making music with everyday objects*

Fools, especially those at court, were often accomplished singers and musicians. As musicians they would play the harp or lute or flute, and sometimes even coax music out of everyday objects. They would sing well-known songs of the time and songs of their own making which might range from beautiful ballads to nonsense ditties. They would use these songs to poke fun at the assembled company, to pass comment on current events and to soothe troubled minds.

Today modern clown-doctors use song extensively. They sing familiar songs to



Figure 3: Dr. Twinkle-Toes and Dr. Haven't-A-Clue dancing

change a mood, to help relax or to amuse. Some make up nonsense songs, using animal sounds or nonsense words sung to the tunes of well-known songs. Dr. Cha Cha, Dr. Tilly and others often play a game called “Stump the chump” where a patient suggests a word or phrase and the clowns must sing a song that either begins with it or contains it. Dr. Haven’t-A-Clue often spontaneously sings a couple of lines from a song that includes a phrase or comment spoken to him by a patient or healthcare worker, Dr. Merry Kay!, a trained opera singer, will often sing snippets of arias, while Dr. Bob in France is a ‘human jukebox’ with an almost limitless supply of songs.

Clown-doctors are also often accomplished musicians. Dr. Giraffe is a very accomplished flautist and Dr. Twinkle-Toes a multi-instrumentalist. Some will play music on surgical instruments, for example Dr. Merry Kay! who plays classical melodies on a large syringe! Dr. Cha Cha plays virtuoso heavy metal rock and punk music on her Ukulele. Dr. Diddle used to rest her portable electric piano on her ‘ample bosom’ (her costume had large stiff cones sewn into it), while she played everything from the latest pop tune to a Chopin nocturne on it.

*Specialty Jests e.g. performing magic tricks, training
or taming wild animals, archery, knife throwing, bare
back riding, and, bear baiting*

Court Fools performed a wide variety of magic tricks especially card tricks and prestidigitation. In hospitals today a variety of magical tricks are performed that range from the truly magical to the truly stupid. Often the complexity of the magic reflects the level of expertise, as some clown-doctors are also stage magicians while others have no special training at all. In Australia Dr. Fruit-Loop performs many up close magic tricks at the bedside that dazzle and amaze sick children. On the other hand Dr. Haven’t-A-Clue can make everyone in the room disappear (by very theatrically closing his eyes) or make himself become invisible (by asking everyone in the room to close their eyes) both of which prove he is a master of ‘stupid magic’.

While I know of no clown-doctor who practices archery or bear baiting within a hospital I have encountered modern equivalents of some of the others. Even horse back riding has a modern equivalent – clown-doctors in Australia occasionally ride motorized razor scooters with flashing wheels painted like animals through the hospital corridors. More recently I learned one of the Israeli 'Dream Doctors' rides a horse into the hospital.

Clown-doctors as Lords of Misrule

It is my contention that contextually clown-doctors act as modern *lords of misrule*⁶¹. However for clown-doctors to gain permission to enter a hospital is not as simple perhaps as being anointed Saturn or chosen as the Abbot of Unreason. To gain access they must make presentations to medical committees and hospital boards concerning their value to healthcare before gaining permission to perform as fools within the hospital setting. However, once invited in they are given almost free reign. As long as they do not actively endanger a patient they may practice *decorum of the absurd*, parodying medical and healthcare procedures. Being given license to bend and stretch the rules of the hospital, they may act *appropriately inappropriate*, without fear of retribution. This ability to operate outside the rules is important. Unlike the court jester who was owned by the king, clown-doctors aren't owned by the hospital. They can step outside the constraints of hospital policies and procedure and do what is needed, not simply what is allowed.

Their laughter is infectious but it is not always welcome. Sometimes, complaints that it is too loud or inappropriate may be legitimate. However one professor of Pediatrics believes having

⁶¹ The concept of a Lord of Misrule can be traced back to ancient Rome where a Lord of Misrule, in the guise of the good god Saturn, was appointed for the feast of Saturnalia. During this time the ordinary rules of life were turned topsy-turvy. The Lord of Misrule presided over all of this, and had the power to command anyone to do anything during the holiday period. This practice was also used during the Feast of Fools, regularly celebrated by clergy and laity from the fifth century until the sixteenth century in several countries of Europe, where the Lord of Misrule was given names such as Abbot of Unreason, or Pope of Fools.

clown-doctors on the treatment team helps the team members do their own job more humanely and arguably more effectively. He emphasizes the role the clown-doctors play in shaking up the staff. As he puts it:

"The day you cannot bother us... is the day you must leave..."
(Warren, 2004a)

By creating noise and processions, and by disturbing the serious business of healing, clown-doctors often provide a breathing space in which the medical staff may face patients and themselves as human beings. For if a nurse or doctor takes a genuine interest in a patient, as a human being, the likelihood is the patient will place more faith in and be more compliant with the treatment being suggested by the medical team. In so doing the clown-doctor does not only humanize but may also increase the success of the medical treatment itself.

Clown-doctors as scapegoats

One of the most important purposes clowns serve in the hospital is that from time to time they act as *scapegoats* for the patients, their families and even for the medical staff who work with them. Unfortunately this task, like making people laugh, has probably always been part of a fool's job description⁶²!

At times patients, their family or one or more of the hospital staff (sometimes all of them together) feel the need to collect their 'sins and misfortunes' and bind them upon some unfortunate. They don't have far to look for a scapegoat, for at these times the clown-doctor is easy prey. They make too much noise. They are not always completely sensitive to a nurse or doctor's mood and their irreverence can disrupt medical routines. So why not project your fears, failings and general unhappiness on these 'mirth makers'? At these moments, the clown's value as a meaningful element in the conti-

⁶² Several authors cite the important role of clowns as society's spiritual whipping boy or scapegoat (Welsford, 1968: 67-74).

nuing wellness of the individuals and the community is forgotten. We are back in ancient times and the clown is not a human being but rather a goat to be sacrificed. However, unlike their ancient ancestors, the clown-doctor like the Festival Fool of the Sword Dance can be resurrected. For when they have served their purpose as a whipping boy, their status within the hospital community is not only restored but may be raised if the community or individual, like the wise king, recognizes the value of the scapegoat to his own health and sanity.

“Off with his head”: A few cautionary words on ‘free speech’

In the twenty-first century it is not just ‘natural fools’ who may speak their mind with impunity. The power of ‘free speech’, which has remarkably few limits, means that modern fools (comics, clowns, politicians) may speak freely without fear that their head will end up on a pike or a sharp iron bar at the gates of the city. For what’s the worst that may happen: a slap on the wrist or a fine for their slanderous speech or actions? The downside of this is that humour may be therapeutic or destructive.

However like their antecedent, the Court jester, clown-doctors must be mindful of their surrounding. For inside a hospital the clown-doctor must be careful to work with “all antennas up” (Simonds and Warren, 2001), being mindful of the needs of the patients, the staff and the institution within which they work. They must be careful that their words and deeds remain within the realm of the ‘therapeutic’. The humour must never be destructive or hurtful. They must remember that there are limits to their being “appropriately inappropriate” and while they are given much more leeway than other professionals, if they go too far they can lose their job.

Conclusion

While Fools may always have had a hand in maintaining the health of individuals and societies it has only been since modern research on gelotology, the effects of humour on the human body, that people have started to believe in the power of laughter as Me-

dicine. *The Association for Applied and Therapeutic Humour* defines Therapeutic Humour as “any intervention that promotes health and wellness by stimulating a *playful discovery, expression or appreciation of the absurdity or incongruity of life’s situation*”⁶³ (italics mine). This definition seems to me to be the essence of the work of fools, who through the ages have shed light on and poked fun at the absurdity and incongruities of life.

Court Jesters did not have access to books or television, or the immediacy of the Internet to influence the way they performed in front of nobility. Changes in thought and perceptions of the world were slow and for the most part tightly controlled by the church or the king or noble who owned them. Now the sources for their mirth making are also almost infinite. Modern fools have access to information and knowledge never available to medieval fools. Television and the Internet mean that a joke or shtick heard or seen via an electronic medium at night may find its way into the hospital the next day

All current clown-doctors know about such things as the Holocaust, the genocides perpetrated in Rwanda and the Balkans, global warming. These events, along with breakthroughs in medical research and advances in human rights, shape the practice of clown-doctors just like the conflicts between Rome, France, Spain and England and court intrigues shaped that of medieval jesters and fools. However despite the immense changes brought about by technology, clown-doctors working in modern hospitals keep the practices used by medieval fools, particularly those at court, alive.

In this article I have suggested that work currently carried out in hospitals by modern clown-doctors is influenced by the practices performed centuries ago by medieval fools. Appearances may have changed by the passage of time allowing things like information transfer, modern medical techniques, politics and personal autonomy to distort the original image of the court jester. However,

⁶³ Adopted by AATH board of Directors, June 1st 2000 – <http://www.aath.org>

once the actual mechanics, roles, and skill sets that they employed are uncovered, the lineage may be more direct than seen at first glance. While these historical fools may not be the only influences, and are forgotten by many, nevertheless their jests and attributes still resonate and are one of the primary influences on practice of clown-doctors working in hospitals today.

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Bibliographie :

BENNET M. and LENGACHER C. (2009) "Humor and Laughter May Influence Health IV. Humor and

Immune Function", *Evidence-based Complementary and Alternative Medicine*, 6, pp. 159-164.

BENNET M. and LENGACHER C. (2008) "Humor and Laughter May Influence Health III. Laughter and Health Outcomes", *Evidence-based Complementary and Alternative Medicine*, 5, pp. 37-40.

BENNET M. and LENGACHER C. (2006b) "Humor and laughter may influence health II.

Complementary therapies and humor in a clinical population", *Evidence-based Complementary and Alternative Medicine*, 3(2), pp. 187-190.

BENNET M. and LENGACHER C. (2006a) "Humor and laughter may influence health", *Evidence-based Complementary and Alternative Medicine*, 3(1), pp. 61-63.

BERK L.S., TAN S.A., NAPIER B.J. and EBY W.C. (1989) "Neuroendocrine and stress hormone change during mirthful laughter", *The American Journal of the Medical Sciences*, 298, pp. 390-396.

BILLINGTON S. (1984) *A Social history of the Fool*, Brighton, Harvester Press, New York, St Martin's Press.

- COTLOVE E.W. (1999) Letter re: research at Hippocrates hospital on Kos dated April 8th 1999.
- COUSINS N. (1979) *Anatomy of an illness*, New York, Bantam.
- ERASMUS D. (1946) *In praise of folly. 1511 Reprint*, New York, Hendricks House, Farrar, Straus.
- FRY W.F. (1992) "The physiologic effects of humor, mirth and laughter", *Journal of the American Medical Association*, 267, pp. 1857-1858.
- HUDAK D.A., DALE A., HUDAK M.A. and DeGOOD D.E. (1991) "Effects of humourous stimuli and sense of humor on discomfort", *Psychological Reports*, 69, pp. 779-786.
- KILLICK J. (2003) "Funny and sad and friendly: a drama project in Scotland", *The Journal of Dementia Care*, 11(1), pp. 24-26.
- JANDO D. (2003) *Big Apple Circus - 25 years*, New York, Big Apple Circus in association with Odyssey Guides.
- MARTIN R. A. (2004) "Sense of humor and physical health: theoretical issues, recent findings, and future directions", *Humor: International Journal of Humor Research*, vol. 17(1-2), pp. 1-19.
- MEINCKEE J. (2000) *ClownSprechstunde lichen ist leben*, Bern, Verlag Hans Huber.
- MILLER M. *et al.* (2006) "Impact of cinematic viewing on endothelial function", *Heart*, 92, pp. 261-262.
- OPPENHEIMER D., SIMONDS C. and HARTMANN O. (1997) "Clowning on children's wards", *The Lancet*, 350, pp. 1838-1840.
- OTTO B.K. (2001) *Fools are Everywhere: The Court Jester around the world*, The University of Chicago Press, Chicago.
- ROSNER F. (2002) "Therapeutic efficacy of laughter in medicine", *Cancer Investigation*, 20 (3), pp. 434-436.
- SIMONDS C. and WARREN B. (2001) *Le Rire Médecin: Journal du docteur giraffe*, Paris, Albin Michel.
- SPTIZER P. (2006) "Hospital clowns – modern-day court jesters at work", *The Lancet*, vol. 368, Issue null, pp. S34-S35.
- VAN BLERKOM L. M. (1995) "Clown-doctors: Shaman healers of Western medicine", *Medical Anthropology Quarterly*, 9, pp. 462-475.
- WARREN B. (2009) "Hi Jean!: how clown-doctors help facilitate

infection control and positive health care practice”, in ELLIOTT P. (Ed.) *Infection Control: A Practical Approach To Psychosocial Issues*, Radcliffe Publishing, Abingdon, Oxon, pp. 149-158.

WARREN B. (2008) “Healing Laughter: The Role And Benefits Of Clown-Doctors Working In Hospitals And Healthcare”, in WARREN B. (Ed) *Using The Creative Arts In Healthcare And Therapy*, Routledge, London and New York, pp. 213-228.

WARREN B. (2004b) “Bring me sunshine: the effects of clown-doctors on the mood and attitudes of health care staff”, in TWOHIG P. and KALITZKUS V. (Eds) *Interdisciplinary Perspectives on Health, Illness and Disease*, Rodopi, Amsterdam and New York, pp. 83-96.

WARREN B. (2004a) “Treating Wellness: How clown-doctors help to humanize healthcare and promote good health”, in TWOHIG P. and KALITZKUS V. (Eds) *Making sense of health, illness and disease*, Rodopi, Amsterdam and New York, pp. 1-15.

WARREN B. (2002) “Fools for Health: Introducing clown-doctors to Windsor hospitals”, in WARREN B. (Ed.), *Creating a theatre in your classroom and community*, North York, Captus University Publications, pp. 225-246.

WELSFORD E. (1968) *The fool: His social and literary history*, 1935 Reprint, London, Faber and Faber.

WILLEFORD W. (1969) *The fool and his sceptre*, Evanston, Northwestern University Press.