The Hospital 'Superbug': Social Representations of MRSA

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Accepted for Publication in Social Science and Medicine 10th May 2006

Final corrected version

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Abstract

The so-called 'hospital superbug' methcillin resistant staphylococcus aureus (MRSA) became a topic of media and political concern from the middle of the 1990's. It was increasingly politicised in the period leading up to the British General Election of 2005. This study examines the *meanings* of MRSA that circulate in Britain by analysing newspaper coverage of the disease over a ten year period. It utilises social representations theory and contextualises MRSA within existing research on representations of emerging infectious diseases (EIDs). A key pattern in the representation of EIDs is to externalise the threat they pose by linking the origin, risk and blame to 'the other' of those who represent them. In this light the study investigates who and what MRSA is associated with and the impact that these associations have on levels of alarm and blame. Key findings are that MRSA is represented as a potentially lethal 'superbug', marking the end of a 'golden age of medicine' in which the story of the discovery of antibiotics has played such a key role. Furthermore, MRSA is constructed around an "it could be you / me" set of assumptions by way of the plethora of human interest stories that dominate the coverage. Finally, the blame for MRSA focuses not on its genesis, but rather on why it spreads. This is attributed to poor hygiene in hospitals, which is ultimately caused by mismanagement of the National Health Service and erosion of the authority and morality symbolised by the 'matron' role. This constellation of meanings speaks to a somewhat different pattern of response to MRSA when compared to many past EIDs.

Author Keywords: MRSA; social representations; superbug; emerging infectious disease

Introduction

The mass media's portrayal of Methicillin Resistant Staphylococcus Aureus (MRSA) acts as a bridge between medical and public understandings of the phenomenon. In this and other newly emerging infectious diseases the media play a vital, if understudied role, in transforming medical findings into public knowledge. This paper addresses the media's role via a systematic content analysis of newspaper coverage of MRSA between 1995 and 2005.

The development of antibiotic resistant bacteria

Staphylococcus aureus is a bacterium commonly found on the skin of healthy people, where it usually remains harmless. However, in those people who are immunocompromised, it can lead to infections ranging from the trivial to the serious. Before the introduction of antibiotics in the 1940s, staphylococci were responsible for most hospital infections, primarily pneumonias (Fisher, 1994) and were initially susceptible to penicillin. However, as early as the 1950's resistant strains of staphylococcus aureus had emerged. Methicillin, a synthetic penicillin, was released onto the market in March 1960 and was used to treat penicillin resistant staphylococcus aureus. However, by the end of the 1960s strains of methicillin resistant staphylococcus aureus (MRSA) had emerged. By 1980 they had spread throughout the world. The emergence of MRSA, together with other related antibiotic resistant strains of bacteria such as Vancomycin resistant enterococcus, threatens to reverse the gains made by Western bio-medicine, ushering in a return to a pre-antibiotic era in terms of the control of bacterial diseases. MRSA can result in serious illness, disability and death.

In parallel to the medical phenomenon of antibiotic resistant bacteria like MRSA, there has been an increased focus on MRSA at a societal level. In the UK, MRSA has moved up the party political agenda and the British government has produced a number of reports on it that focus on hospital hygiene (see DH, 2004; Jones, 2004). The study reported in this paper is concerned with how the print media has brought this medical and policy phenomenon to public awareness.

Social Representations Theory

Social representations theory (SRT) allows one to study the passage of knowledge from scientific thinking, via the mass media, to lay thinking. One of its major concerns is the way in which new threats to a society are constructed, with the media posited to play a key role in the evolution of public thinking. It has been productive in examining how society comes to terms with novel risks such as biotechnology (e.g. Gaskell *et al.*, 2004), genetically modified food (e.g. Bauer, 2002), and new infectious diseases such as AIDS (e.g. Marková & Wilkie, 1987; Joffe, 1999), Ebola (Joffe & Haarhoff 2002), SARS (Washer, 2004), and 'mad cow disease' (Washer, 2006), among others. All of these empirical studies share a focus on the role played by the mass media in constructing groups' common sense. In particular, the mass media provide material that is used to make sense of the phenomenon.

SRT holds that one way a novel threat is made sense of is by the use of *anchors*, which classify and name it and thus make the unfamiliar, familiar (Moscovici, 1984). Things that are unclassified and unnamed are alien, non-existent and at the same time threatening. An anchor reduces strange ideas to known categories and images, thereby

setting them within a familiar context (Moscovici, 2000). For example, in the case of the coverage of SARS, the (alarmist) anchors used to describe the new disease were the Spanish influenza epidemic of 1918 and the Black Death (Washer, 2004). In the case of 'mad cow disease' the early anchors were salmonella and the sheep disease scrapie, and later, AIDS (Washer, 2006). Anchors play a role in either contributing to the amplification of concern related to a disease (if they invoke the potential for high fatality rates) or attenuation of concern (as when diseases are represented as not serious, or not affecting humans).

A key thesis regarding levels of concern related to contemporary risks is that of Beck (1992). He coined the term *Risk Society* to talk of the nature of contemporary risks and the emotional response to them. The *Risk Society* refers to the conditions of contemporary western society in which people have high levels of awareness of myriad risks partly due to the mass media globalising local knowledge, yet a lack of trust in the experts for protection from them. Such conditions create anxiety, particularly since the risks created by the momentum of contemporary innovation often surpass the know-how of the experts who created them, are often not amenable to the senses, and lack temporal and spatial boundaries. MRSA appears to fulfil a number of Beck's criteria for a post-industrial risk and its potential for raising anxiety, particularly insofar as the momentum of antibiotic use has created a problem that surpasses the know-how of the relevant experts.

However, working within a framework that highlights the functioning of lay thinking, Joffe (1999) argues that Beck's notion that post-industrial risks leave people in a heightened state of anxiety makes assumptions that may not be borne out empirically.

Without a gauge of lay or public thinking Beck's model is incomplete. The social representations literature concerning risks demonstrates that lay responses do not map directly onto scientific knowledge, and can serve to distance people from the threat posed by the risk. For example, social representations of AIDS (see Joffe, 1999), in many cultures, tend to externalise it as a problem facing *others* rather than the self. Not only are *others* blamed for its genesis and spread but it is so intricately connected to these 'risk groups' that those not defined as such are left with a sense of immunity to the danger, however seriously the media and other societal institutions take the threat.

Thus far the aspect of social representations theory that has been linked to the raising or allaying of alarm is anchoring. A further process involved in the evolution of social representations of a novel phenomenon is objectification. Objectification saturates an unfamiliar entity with more familiar images, symbols and metaphors which are easier to grasp (Moscovici, 1884). The process of objectification overlaps with that of symbolisation (Joffe, 2003). A fundamental function of a symbol is to provide people with a means to experience abstract content. Symbols provide a sense of understanding at just a brief glance; complex messages are encapsulated in a simple and vivid manner. Symbols also contain an emotional charge, helping to create and maintain certain sentiments.

Douglas' (1966) early writings about dirt and the function of hygiene rituals raise issues that are relevant to a discussion of the symbolisation of MRSA since, as mentioned, policy documents for the most part linked MRSA to hospital hygiene. For Douglas dirt represents disorder – physical, moral and political - and hygiene rituals

symbolically restore order. This applies to both modern and 'primitive' cultures. However, certain differences are evident. For example, modern ideas of dirt and hygiene and thus the modern bases of dirt avoidance are supposedly based on knowledge of pathogenic organisms, which stems from the advances in bacteriology around the end of the nineteenth century. Despite these differences 'primitive' notions of contamination live on. While Douglas' explanation of primitive notions of contamination is vague, her argument that dirt has symbolic and metaphorical meanings beyond those offered by germ theory is incontrovertible.

MRSA is classified as an 'emerging infectious disease'. Therefore the media coverage of MRSA also needs also be placed in the context of other social science research examining news coverage of EIDs. Ungar (1998) examines the media coverage of the Ebola outbreak in 1995 and compares it to diseases such as AIDS, distilling a set of themes into what he terms the *mutation-contagion* package. This is composed of the following core ideas: that microbes are on the rampage; that they are cleverer than us - evolving to 'outwit us' - a reversal of the idea that infectious diseases can be conquered; that microbes and the environment are conjoined in an ecological parable (population growth, antibiotic overuse); that microbes know no boundaries (globalisation); and that we are waiting for the next plague. This package is clearly constructed around a frightening core. However, the sense of threat is hypothetical and remains abstract in the case of Ebola in that it tends to arise in geographically distant or marginal populations. The threat is also offset by the promise of 'medical progress', which offers a stream of 'amazing new discoveries'. In addition, this package of ideas is discarded fairly quickly as the media begin to fashion a containment package in which Western biomedicine / doctors are able to contain the

disease. Ungar's specific argument is that the containment of fear regarding the contagion of Ebola, took the form of placing it with 'the Other'.

This trajectory of media reportage fits well with patterns found not only for Ebola and AIDS (see Joffe & Haarhoff, 2002) but for SARS (Washer, 2004) and a number of previous EIDs. Yet, while elements of Ungar's (1998) analysis are likely to be corroborated by exploration of the MRSA coverage, MRSA cannot be represented as geographically distant in Britain and nor does it affect only marginal populations. In this sense it is likely to be represented in a manner more akin to the 'flesh eating bug' necrotizing fasciitis (see (Gwyn, 1999) or to 'mad cow disease' variant Creutzfeld-Jacob Disease (see Washer, 2006) than the other EIDs. Thus, a key goal of this study is to discern whether an alternative to the 'othering' representation of EIDs can be identified in MRSA newspaper coverage. To do so, the description of MRSA, and blame and risk associated with it must be explored.

Methods

Four UK national Sunday newspapers were chosen to reflect the political spectrum and the highbrow / lowbrow spread of the UK newspapers: They were: *The Observer* (left leaning broadsheet), *The Sunday Times* (right leaning broadsheet), *The Sunday Mirror* (left leaning tabloid) and *The Mail on Sunday* (right leaning tabloid). The Sunday newspapers were chosen because they contained longer pieces on MRSA than the shorter descriptive articles in the daily newspapers, where space is more limited. In addition, the longer articles and features on MRSA in the Sundays were often more analytical. The Sunday newspapers also provide a form of summary of how the daily

papers have covered a story in the preceding week. Any major story that has appeared in a daily newspaper tends to be recounted in the following Sunday's papers (see Washer, 2004).

The time frame for this research was 1st May 1995 to 30th April 2005. There were two reasons for this choice: Firstly, the data were sampled and coded in May 2005, so a cut off point before that was necessary and a ten year period gave a long enough historical sweep to track the representation of MRSA from its early days, when there was very little known or written about it in the newspapers. The other reason was that there was a General Election in Britain in May 2005, and as will be seen, MRSA had played quite a prominent role as a health issue in the campaigning for that election. Hence all articles and letters from the selected Sunday newspapers over this ten year period with 'MRSA' in the text were downloaded from Lexis-Nexis (n = 227). The coding frame was adapted from earlier work on AIDS, Ebola, SARS and 'mad cow disease' to fit the specific content of the articles.

The two graphs below show how the steady increase of cases of MRSA in England and Wales over the ten year period (Fig. 1) is reflected in the newspaper coverage of a selection of national Sunday newspapers (Fig 2) from 1995 up to mid-2004, after which media interest peaks dramatically in the run up to the May 2005 election. The results section reveals the most prevalent content of the newspaper reports over the ten year period mapping its evolution chronologically.

Results

How is MRSA described?

In the early articles MRSA is described as an antibiotic or drug resistant condition, thereby providing a close copy of the medical scientific description, with little embellishment. From 1997, MRSA is often described as "killer superbug" in the tabloids and "potentially fatal superbug" in the broadsheets. Accompanying the dangerous superbug label are a host of allusions to the serious implications of MRSA: a "doomsday scenario", "extremely dangerous", an "impending health crisis", and a "major threat to public health". The emphasis on impending danger is tied in with the "end of the golden age of antibiotics", "caused by overuse of the twentieth-century's magic bullet" in the following way:

MRSA is a kind of time machine returning us to an age when patients routinely died from simple infections. We are still a long way off from the days before Alexander Fleming invented penicillin. But it is alarming just how easily we have squandered the legacy of Lister and Fleming. They gave us a crushing advantage in the fight against bugs which we have failed to safeguard.

There are two reasons for the rapid rise of MRSA -the ability of germs to mutate and evade the iron grip of antibiotics and a disregard for hygiene in hospitals.

(Bowditch 11/03/01 The Sunday Times)

Thus in the first half of the ten year period analysed, MRSA shifts from being described simply as a drug resistant condition to one replete with meanings linked to the squandering of medical advances, germ mutation and a disregard of hospital hygiene.

Amidst ongoing talk of the end of the of the antibiotic age as a doomsday scenario, by 2002 the theme of 'microbes evolving' gains momentum and becomes a focus. The evolution of MRSA is described in terms of the microbe's increasing intelligence and evasiveness: "the clever microbe is mutating to the point of being untouchable even by the most powerful antibiotics" (Dougdale, Irvin & Smyth 24/08/03 *The Sunday Times*).

However, in juxtaposition to this negative scenario, numerous stories focusing on medical miracles emerge. A host of articles refer to unconventional medical breakthroughs that are on the horizon in the search for new cures for MRSA. The headlines provide a flavour of the stories: "Killer frogs come to the aid of mankind" (McKie 27/04/96 *The Observer*); "Tea peps up the power of antibiotics" (Anon 17/05/98 *The Sunday Times*); "Electric nose helps sniff out infections" (Dobson 15/08/99 *The Sunday Times*); "Maggots make our flesh crawl, and heal" (Hill 23/07/00 *The Observer*); "Seaweed cure for hospital super bugs" (Adams 07/01/02 *The Sunday Times*); "The bug that kills bacteria" (Anon 09/07/02 *The Sunday Times*); "A dye to stop the dying: hand-cream prevents nurses passing killer superbug to patients" (Carter 05/01/03 *Sunday Mirror*); "Airfreshener could help beat superbug" (Nixson 08/09/03 *Mail on Sunday*); and "Cashew nuts key to beating bug" (Anon 28/11/04 *The Sunday Times*).

A further theme that dominates in this period refers to various ways that readers are advised to avoid MRSA infection or to cure it, usually by 'boosting the immune system'. Most are complementary medicine alternatives to allopathic medical

treatments. For example, many articles and responses to readers' letters advise honey, tea tree oil, 'Immune Formula' nutrients, 'MRSA Pure Mix, a blend of anti-MRSA essential oils', 'Cellagon Juice, an easily absorbed immune booster', or 'pro-biotic supplements'. The following is a short excerpt from a longer response given to a reader who had written in saying that she had contracted MRSA via a surgical wound and was taking antibiotics for it, as well as having antibiotic dressings:

New antibiotics are being developed to control MRSA but in a few years the clever bugs will change again to become resistant to these as well. Instead of mounting a drug assault on bacteria, we need to harness the body's innate healing power and ability to fight germs then, if necessary, use antibiotics sparingly.

In your case, I advise taking special measures to support your immune system...

...Tea tree oil has been successfully used in trials with MRSA in Australian hospitals. A friend of mine's mother was hospitalised with a chronic infection and contracted MRSA. Luckily she was then shifted to a nursing home, given infusions of vitamins and minerals and a daily rub with tea tree oil. Within two weeks, the swab test for bacterial growth on her skin was negative. The combination of boosting her immune system and combating the infection topically with a natural medicine had beaten the bug.

Anon 04/07/004 Mail on Sunday

In this passage (and there are several others like it) a constellation of themes interacts: microbes are evolving and are cleverer than people/biomedicine but by boosting the immune system with natural medicine one can beat the bug. Thus a fight is

constructed between MRSA and people's immune systems as well as between MRSA and biomedicine. In the description of this fight military / war metaphors are striking: "mounting a drug assault", "fighting germs", "combating infection", "our bodies are becoming defenceless against these enemies".

As well as framing MRSA as a health issue, it is also framed as a political one. From early summer 2004, and in particular from around the autumn party political conference season increased politicisation of MRSA begins and political measures to reduce the spread of MRSA become prominent within in the articles. There are reports of an announcement of a £68 million hospital clean-up programme in May 2004 and in June the government announces a new national strategy to address the MRSA problem. In July 2004, the first league table of deaths caused by the infection in each hospital is widely covered by the media. They also cover a story in which the Conservatives make tackling MRSA a core policy in a populist manifesto, promising £52 million to fight it. In response, the government propose a number of measures to combat MRSA in the months before the election and commission a large study to investigate the problem.

A key feature of the MRSA reportage, particularly after Autumn 2004 and in the run up to the May 2005 election, is the 'human angle', where there are descriptions of the death or disabling of patients from MRSA. Those cases highlighted tend to be unusual: either the famous or the young, with features often constructed around the mismatch between the seemingly trivial nature of the original condition and the seriousness of the MRSA infection that follows.

The majority of tabloid stories about MRSA focus on famous people who have contracted the bacteria, such as the British television actress Leslie Ash, who contracted 'MSSA' (*Methicillin sensitive staphylococcus aureus*) in hospital. MSSA was said to be 'similar to MRSA but could be treated with antibiotics' (Templeton 06/03/05 *Sunday Times*). Another famous person who featured widely in the coverage is Claire Rayner, the former agony aunt and President of the Patients' Association, who contracted MRSA following routine knee surgery. The many stories of ordinary people who contracted MRSA focused on the unusual circumstances in which MRSA was contracted, such as claims by 14 year-old Tom Jeavons' parents that he had contracted MRSA whilst visiting his grandfather in hospital, or people who had contracted MRSA following cosmetic breast surgery.

Personal stories, in particular those about infants who contracted MRSA, dominated the articles in the run up to the May 2005 general election. Most notable are stories about the death of baby Luke Day, aged 36 hours, from MRSA at Ipswich Hospital. Born healthy, he was thought to have contracted MRSA from a health care worker. His death, and those of other babies that were attributed to MRSA became a cause celebre during the election campaign, particularly after the Patients' Association reported that it was now 'commonplace' for babies to become infected with MRSA in hospital. In the six months prior to the May 2005 General Election, the issue of the deadliness of MRSA gained a higher profile and increasingly the coverage included statistics of the numbers of cases and deaths from MRSA.

In sum, the description of MRSA in this ten year period moves from one that maps closely onto the medical story to a discourse of alarm concerning the advent of a

superbug that heralds the end of the golden age of medicine. Simultaneously, ideas step in to counter this doomsday scenario, proposing miracle cures and personal measures that can be taken in the face of microbes trying to outwit biomedicine. In the last part of the period the human angle dominates and is used to indicate the deadliness of the disease and its tendency to strike vulnerable, innocent groups.

Who or what was held to blame?

In the early period of MRSA coverage, blame is frequently apportioned, mostly to health care professionals. Doctors and nurses are seen in a mixed light; often, within the same article, there are references to both poor nursing care and to the dedication of nurses. In terms of the former, there are references to nurses smoking in store rooms and not washing their hands between patients, or not adequately cleaning utensils that MRSA infected patients have used. Nurses' hand-washing and the general hygiene of health care staff is described as 'sloppy', with nurses 'struggling to cope', 'jaded', 'weary' and 'unmotivated'. Doctors and nurses are berated for their lack of training and the lack of hygiene inspections.

However, the same articles describe doctors and nurses as 'brilliant', 'dedicated', 'carrying out tasks with cheerfulness and humanity'. This mixture of praise and criticism regarding basic standards of care and hygiene runs throughout the MRSA reportage. Where poor care is criticised, there is often a caveat that dedicated nurses, in particular, are under pressure due to understaffing and managers cutting corners financially. The following is a typical example:

That the carpet in our consulting room should have been a bit grubby didn't seem a big deal: I am so amazed by, and grateful for, the superlative care my daughter receives that the question of how frequently somebody vacuums strikes me as being neither here nor there.

Maybe cleaners would clean better if they were paid more, and maybe hospital staff would get more of a chance to wash their hands constantly if they weren't permanently busy trying to catch up with their ridiculous mountains of government-imposed paperwork.

(Knight 27/02/05 *The Observer*)

As seen, alongside tempered blame of nurses, doctors and cleaners is blame targeted at the government for their policies. Augmenting this is the issue of NHS cuts, a major theme in the articles. The nurses' and public servants' union (Unison) spokespeople, in particular, are quoted as highlighting the decline in standards of hygiene. They claim that this had followed the privatisation of hospital cleaning services during the Thatcher era and, in addition, that understaffing leaves less time to wash hands between patients. This 'NHS cuts' theme becomes more prominent closer to the election in May 2005 when it is revealed that since privatisation of the NHS cleaning services in 1984, the numbers of cleaners employed has been reduced from 100,000 to 55,000 (Revill 09/01/05 *The Observer*). This allows Labour to rebut the Conservative charge of Labour's responsibility for MRSA, placing the blame at the door of the previous Conservative government. There are also some reports of concealment of the flouting of hygiene guidelines and corruption by hospital authorities and cleaning companies. By May 2005, the allegations of corruption and

concealment are directed not only at the cleaning contractors and hospital trusts, but also at the government.

The major focus on the unsanitary conditions of hospitals persists throughout the period studied. Several newspapers send reporters undercover to London hospitals as ward cleaners. Their reports highlight poor hygiene, training and supervision. There are reports of rat and cockroach infestations, flea-infested laundries, sewerage spilling into operating theatres, blood and urine stains on floors and beds, blocked sinks, poor or non-existent cleaning between patients, under beds, in toilets and so on. The letters pages of the newspapers also feature several letters from readers who have suffered from MRSA, have had relatives suffer from it, or who complain about the poor care and hygiene in hospitals. The following provides a précis:

For years I have been writing about this, prompted by my own observations and by many hundreds of angry letters from readers all over the country. They describe urine and faeces left on lavatory floors, and blood and vomit splattered here and there. They write of dust, hair, litter, used syringes, trays of half-eaten food and general filth on ward floors, of dirty or unchanged sheets and non-sterilised equipment.

They complain of nurses who wear their uniforms outside the hospital, who have hair trailing from caps across their patients and who don't wash their hands between treatments. There are doctors who take the same hand from sick patient to pen, to computer and then, unwashed, to the next patient.

Marrin 07/12/03 The Sunday Times

These descriptions of the state of NHS hospitals are clearly intended to invoke disgust and alarm. They contrast sharply with notions of hospitals as places of order and antiseptic-induced cleanliness. The descriptions of dirty toilets and bodily functions and their association with particular odours also contrast with the antiseptic smell ordinarily associated with hospital wards.

A positive figure is described alongside these negative images. Throughout the period there is much nostalgia for the figure of a hospital matron:

In the old days, the ward sister - the Hattie Jaques battleaxe in uniform - reigned supreme. Actually, the stereotype was not far wrong.

Matrons did do ward inspections and run their fingers along the bed frames to test for dust. If they found that standards had slipped they made sure things were put right.

(Hawker 07/01/01 *The Sunday Mirror*)

The 'bring back matron' theme tends to be accompanied by stereotypes that allude to her power. She is the battleaxe: "In the old days, matron would cause hearts to quake when she scrutinised the area under beds and ran her finger along ledges inspecting for dust" (Sanai 26/01/2003 *The Sunday Times*). Following the June 2004 announcement of a new national strategy to control MRSA, the theme becomes even more prominent, and the stereotype further perpetuated: "All nurses would think it was their responsibility to make sure the loos and the sluice rooms were pristine. Matrons used to rule with a rod of iron to keep standards up" (Templton 04/07/04 *The Sunday Times*); or this blunter example from the tabloids: "When our hospitals had matrons they were spotless because matrons had the ultimate power and, of course, the responsibility. They were able to bollock doctors just as they were able to give

idle cleaners a boot up the backside. Now if anyone dares to tell a cleaner he/she is sloppy, there'd be a mass walkout." (Malone 10/10/04 *Sunday Mirror*)

In sum, blame of doctors, nurses and cleaners for the spread of MRSA is tempered by reference to deeper structural problems that have created the hygiene crisis. Thus blame is placed squarely with the government of the day and the previous Conservative government for NHS cuts. The saviour of this situation is seen to be the hospital matron. It is imagined that such a figure would resolve the hygiene problems, and thereby allay the spread of MRSA.

Discussion

One of the strengths of Social Representations Theory is that it advocates a detailed examination of how novel threats are assimilated by a society and, in particular, how scientific knowledge is transformed via the mass media into widely held notions that become 'common sense'. In the EIDs (AIDS, Ebola, 'mad cow disease' and SARS) studied previously from this perspective anchoring played a major role in the assimilation of the new illness, often acting to raise alarm as exemplified in AIDS as 'gay plague'. However, the striking feature of the early coverage of MRSA is that anchoring to previous epidemics is almost entirely lacking. In the case of MRSA the unfamiliar is made familiar via key symbols, first and foremost 'superbug'.

Although the genesis of the term 'superbug' is unclear, it first appeared in the tabloids as early as 1985, usually in the context of stories about pesticides and the agricultural use of antibiotics. Following this, a popular science book entitled *Superbug - Nature's*

revenge - Why antibiotics can breed disease (Cannon, 1995) was given widespread media coverage at the time of its release. Only later, from about 1997, does the term gain widespread currency and start to become synonymous with MRSA both within and outside of tabloid discourse: in broadsheets and in political statements.

This begs the question of why 'super'? The origin of the word 'super' is from the Latin supra, meaning above or beyond. In idiomatic English, when combined with another word, 'super' means to a greater degree, extra large or of a higher kind (as in superstructure). The reference implies uniqueness (as in supermodel), strength (as in superpower) and/or indestructibility (as in superhero). There are ordinary 'bugs', such as the rather more innocuous 'common cold', and then there are *superbugs*. MRSA is thus symbolised as a phenomenon that is unlike others that have been encountered: ubiquitous, threatening and unconquerable.

The threat and invincibility of the superbug is augmented within the newspaper texts by military metaphors wherein modern biomedicine tries to do battle with this new enemy, or people attempt to buttress their immune systems to defend against it. The newspaper coverage frames the emergence of MRSA within the history of antibiotics, and their role in medicine's successes in relation to infectious diseases. MRSA is later seen as 'nature's revenge' or the 'bugs outwitting us'. In some respects the MRSA coverage fits well with Ungar's (1998) description of the coverage of emerging infectious diseases, in particular his *mutation-contagion* package, with its frightening core of themes. However, within his theory this package is offset with a promise of *containment* of the threat by way of 'medical progress'. No such discourse is present in the MRSA reports. No promise is offered of a medical solution to MRSA. Rather,

the hope of containment arises from alternative therapies and strengthening the immune system via non-allopathic measures. This begs the question of whether the 'superbug' severely jeopardises faith in conventional medicine such that society turns elsewhere to bring it under control.

This corroborates Beck's (1992) *Risk Society* thesis, with its focus on how in late industrial society risk and uncertainty arise from the realisation that the certainties of the utopian project of modernity and globalisation have not been and are not being fulfilled. Beck's point is that unlike historical dangers which were blamed on either God's revenge or nature gone wrong, in contemporary society risks are seen to be 'manmade' as nature's revenge (Lupton 1999). MRSA could thus be cast as a threat that exemplifies the *Risk Society* thesis in being caused by misuse of modern technology, in this case antibiotics. Furthermore, as seen, antibiotics were regarded as one of the most tangible benefits of modern biomedical progress prior to the appearance of MRSA. The recasting of antibiotics from 'magic bullet' or 'wonderdrug' to the cause of something as harmful and frightening as MRSA goes some way to accounting for the alarm with which the media portrays it; something once hailed universally as a 'medical miracle' is now cast as at best impotent, at worst the cause of a new and seemingly insurmountable problem.

Based upon this study's data one could argue that while the symbol 'superbug' expresses the power of MRSA, a further symbol, that of 'matron' expresses nostalgia for a time when antibiotics and clean hospitals were effective in containing disease. In contrast to the medical explanation of MRSA, there was little if any focus on the genesis of MRSA in terms of the over-prescription of antibiotics by doctors in the

newspapers. Less than five articles referred to it. The focus of the blame was not on what caused MRSA to evolve but on reasons for its spread, with poor hospital hygiene said to play the key role. Some of the attributions of blame for the spread of MRSA relate to individuals, for example specific stories of doctors, nurses or cleaners and their laziness, indifference or unhygienic practices. However, far more pervasive are ambivalent attitudes displayed toward doctors and nurses, with links made between their shortcomings and structural problems that are beyond their control. When nurses, in particular, are described as unprofessional it is because the NHS is over-stretched. Similarly, blame does not tend to be attributed to hospital cleaners themselves for the poor hygiene of the wards. Rather, responsibility is laid at the door of politicians or at the system of competitive tendering in the NHS that has caused such poor standards. This echoes UK newspaper coverage of the 'flesh eating bug' scare of 1994, where blame for the outbreak was deflected onto spending cuts at the Public Health Laboratory Service (Gwyn, 1999).

The politicisation of MRSA in the lead up to the 2005 general election allowed politicians of all hues to argue that their party would be the safest stewards of the NHS and that only they could be trusted to adequately fund or manage the health service. MRSA's politicisation played on widespread public fears about the state of the NHS, which was depicted as neglected and under-funded. The unhygienic hospital thus became a symbol of a breakdown of a wider established order. Images and terminology routinely associated with physical disease - contamination, infection, filth and breakdown - were elided with the social and political commentary on the society in which the epidemic was occurring (see Treichler, 1999). The call to *bring*

back matron underscores nostalgia for an imagined 'golden age of medicine' with a better health service, and in particular for hospitals that are orderly, clean and safe.

The symbolisation of 'matron' in this context bears further examination: The term and role of matron had fallen out of use in the NHS for many years. 'Matron' is an explicitly gendered term, carrying with it connotations of matriarch or 'matronly'. The question is why a matron might be felt to be a safer bet to sort out the MRSA crisis than the 'infection control nurse', who, in contemporary NHS hospitals, deals with hospital acquired infections? Perhaps the answer is that unlike the rather *hi-tech*, bureaucratic sounding 'infection control nurse', the regimented female authority figure 'matron' evokes an image of a safe and trustworthy pair of hands in a less-than-trusted NHS. 'Matron' is associated with old-fashioned hygiene, order and morality.

This finding speaks to Douglas' insights concerning 'primitive' notions of dirt living on in contemporary disease-related worries about hygiene. The descriptions of dirt in the MRSA stories reflect an ostensibly 'modern' discussion of the danger of dirt (because of the pathogenicity of bacteria) obscuring a more fundamental and 'primitive' fear of the danger of an invisible contaminant lurking in the chaos of the under-funded and poorly managed NHS hospital. The rules that the matron would be called on to enforce are not only there to prevent disease, but they also function to separate and maintain spatial, personal and symbolic boundaries: washing hands or utensils between patients; wearing nurses uniforms only inside the workplace; urine and faeces in, rather than around, lavatories. The lurid description of toilets and bodily functions and their association with particular odours also contrasts with the antiseptic smell that might ordinarily be associated with hospital wards. The descriptions of the

filthy state of NHS hospitals are clearly meant to invoke disgust, and the contrast is with the 'spotless', 'pristine' controlled ideal of cleanliness that the matron would enforce.

A key contribution of this study is to show how symbols crystallise the meaning of MRSA so that it can be easily apprehended: superbug expresses the perilous nature of MRSA, its ubiquity and invincibility. In the face of this 'doomsday scenario' hope is found in alternative therapies or measures that buttress the body's defences against disease, as well as in a call to 'bring back matron', encapsulating a return to an age of order, authority and morality.

A further, overarching finding is that the pattern of response to MRSA does not fit with the 'risk and 'the Other' 'thesis (Joffe, 1999) that applies to AIDS, Ebola, SARS and many of the infectious diseases that preceded these. In this pattern blame for the new disease threat is targeted at 'Others': either 'foreigners' (e.g. African or Chinese people) or out-groups from within mainstream society (e.g. gay men, drug users, and/or prostitutes). 'Others' are blamed for the genesis of these EIDs and /or for their spread on the basis of their practices, such as living in dirty conditions, eating disgusting food, having promiscuous sex or engaging in other customs that differ from those practiced by those who judge them.

In contrast to this characterisation, in the MRSA coverage there are many personal accounts of people who have suffered as a result of the infection. Indeed some of the 'celebrity victims', who are household names, become iconic in their crusades against MRSA. So whereas the Ebola and SARS reporting was impersonal and faceless and

linked the diseases with 'the Other' (Joffe & Haarhoff, 2002, Washer, 2004), with MRSA there is a human interest factor constructed around an "it could be you, it could be me" set of assumptions. This was also a feature of the coverage of 'mad cow disease' (Washer, 2006). As Kitzinger and Reilly (1997) point out, the human interest factor and the "it could be you / me" factor are not intrinsic qualities of any particular risk, but are social and political constructs "related to journalists' perceptions of their audiences and their own identities" (Kitzinger and Reilly 1997: 334). The journalist must assume that the plight of the people associated with the disease will reflect and resonate with the audience and thus generate empathy.

Thus the pattern of response to MRSA is that the blame for the novel threat is not externalised in the same way as in Ebola and SARS. However, media coverage of the 'flesh eating bug' and 'mad cow disease' however fit well with the MRSA pattern, as the coverage of both diseases is constructed around an "it could be you / me" set of assumptions by way of the human interest stories that dominate the coverage (Gwyn, 1999; Washer, 2006). On the face of it AIDS seems to fit the same pattern as Ebola and SARS because with AIDS the 'Othering' and blaming of members of risk groups for bringing the disease upon themselves and the 'not me / not my group' element is strong. Yet media coverage of AIDS also has elements of the MRSA / 'mad cow disease' pattern in that human interest stories abound, perhaps mainly related to the 'innocent victims' of the disease. These tend to be either young children or heterosexual women who are constructed as having been maliciously or carelessly infected by bisexual or drug using men (Lupton, 1999). In the media coverage it is usually only these 'innocent victims' of AIDS ('people like us') who are given a face or a voice.

Concluding comments

This research has demonstrated the power of symbols in the social representation of an EID such as MRSA, as well as the existence of not just one, but at least two patterns in the representations of EIDs. Furthermore, it has pointed to the politicisation of danger. For Douglas (1992) dangers are always politicised. They are used to cast blame – be it on the victims of the danger for bringing it upon themselves (the pattern identified in relation to many EIDs) or on authorities for negligence (the pattern identified for MRSA and 'mad cow disease'). In both cases danger is used to create villains and victims from those who can be associated with it.

The research reported in this paper provides only part of the social representation of MRSA. The question that remains is whether this media picture is similar to that which is to be found in the accounts of its audience. This is important since alarmist mass media does not necessarily raise anxiety in its audience. Defence by way of representation can step in to allay anxiety. The link between media portrayals of EIDs and lay thinking is under-explored (though see (Miller, Kitzinger, Williams, & Beharrell, 1998) and Joffe & Haarhoff, 2002 for notable exceptions). Therefore, the rather complex interrelationship of media and mind in how publics construct emerging infectious diseases must be a subject of further research.

Having said this, the study reported here adds to a growing body of empirical studies on media representations of 'emerging infectious diseases' and highlights a growing strand in modern media-medical discourse in which the public is faced with one novel infectious disease phenomenon after another. Each new threat (e.g. AIDS, hepatitis c, 'mad cow disease', 'flesh-eating bacteria', SARS, MRSA, avian flu) becomes politicised to a greater or lesser extent and generates much coverage before the novelty and the news value dims and it is replaced by a more newsworthy infectious disease. Whether this array of potential disasters generates cumulative anxiety *a la Beck* or leads to fatalism and indifference must also be the subject of future research.

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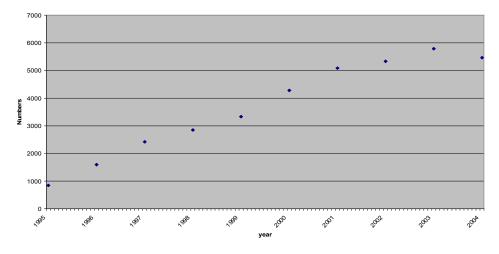
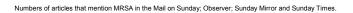


Fig 1.

Source: Health Protection Agency (2005)



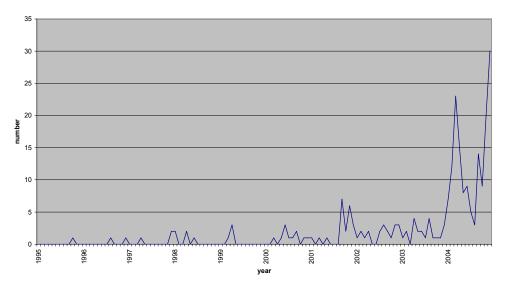


Fig 2.

Source: Lexis-Nexis Professional