



Artistic representations of infectious disease

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Abstract

Artistic representations of disease are widespread yet largely ignored in health psychology research. In this paper we use two infectious diseases, tuberculosis and the plague, as tracers to study how infectious diseases are represented in novels, films, paintings, and songs. They were represented especially in terms of their causes and seriousness. Studying how diseases are represented in various art forms extends our understanding of how they are socially constructed. This knowledge can also be incorporated into the training of health care providers to sensitize them to issues in patient care.

Key words: infectious disease, novels, films, paintings, songs

Introduction

There has been much research on cognitive and social representations of health, illness and disease within health psychology (Crawford, Brown, Baker, Tischler, & Abrams, 2015; Murray, 1990). The dominant cognitive approach has derived from the common-sense model (CSM) of illness regulation which considers it in terms of cause, identity, perceived control, seriousness and time-line (Leventhal, Meyer, & Nerenz, 1980). The social approach considers both how illness is constructed in everyday conversation and how it can draw upon broader social representations (e.g., Frank, 2002; Herzlich, 1974; Kleinman, 1988). These approaches have been explored using questionnaires, interviews, focus groups and ethnography.

Recently, there has been what could be described as a rapprochement between the social sciences and humanities, with ‘medical humanities’ moving in the direction of ‘health humanities’ (e.g., Jones, Blackie, Garden, & Wear, 2017). Within health psychology there is an opportunity to engage in this ‘artistic turn’ and to connect with recent developments within the humanities. In previous articles we have raised these issues (e.g., Kaptein & Lyons, 2009, 2010; Kaptein, Hughes, Murray & Smyth, 2018; Murray & Gray, 2008). The aim of this paper is to consider artistic representations of two infectious diseases – tuberculosis and the plague - and how these connect with previous research on cognitive and social representations of disease.

Sources

There are a range of publicly available sources of artistic representations of diseases. In this paper we accessed the following:

1. Literature, Arts, & Medicine database of New York University [www.litmed.med.nyu.edu] which lists novels, poems and films about various diseases and medical conditions. The three search terms applied were: infectious disease, tuberculosis and plague;
2. NIH PubMed system. The three previous search terms were used in combination with ‘AND novels,’ ‘AND film,’ ‘AND painting,’ ‘AND music’;

3. Encyclopedias on *Literature and Medicine* and on *Medicine in Literature* (von Engelhardt, 1991; von Jagow, & Steger, 2005) and *Images of illness* (Meulenberg, van der Meer, & Oderwald, 2002);
4. Work specifically focusing on artistic aspects of tuberculosis (Bynum, 2012) and the plague (Hoffmann, 2006);
5. Work discussing films on diseases (Colt, Quadrelli, & Friedman, 2011) and the Internet Movie Database (www.imdb.com);
6. *Medicine in literature and art* (Carmichael, & Ratzan, 1991) and *The artist and the physician* (Dequeker, 2006) were used to identify paintings of the two diseases;
7. Music was searched in *Opera: Desire, Disease, Death* (Hutcheon, & Hutcheon, 1996).

Once the items that referred to tuberculosis or the plague had been identified they were reviewed by the team to identify evidence of the five core dimensions of the CSM and other features.

Results

Tuberculosis The dominant artistic representations of tuberculosis were of a disease of passion and of poverty, the emaciated patient and the lack of cure or even death. In Susan Sontag's (1979) classic essay on *Illness as metaphor* she comments that: "tuberculosis ... was understood as ... a disease of love ... thought to come from too much passion, afflicting the reckless and sensual ...". This portrayal of tuberculosis as being a disease of passion was coupled in many novels with the idea that the only prospect of recovery from the disease required long-term rest often in sanatoria. Such facilities were common up until the late twentieth century. They were based upon the idea that recovery from tuberculosis required a combination of good food, fresh air and rest which could be found well away from the emotional turmoil of city life. In *Scarred hearts* by Max Blecher (1937) the author describes the frustrations of life in a sanatorium. *The magic mountain* by Thomas Mann (1924) is a famous novel set in a sanatorium in which the characters discuss themes of life and death. The short story *Sanatorium* by William Somerset Maugham (1938) who was also a physician concerns his experiences

of such an institution. Finally, *August* by Christa Wolf (1976) is another short story about a tubercular patient set in a sanatorium.

The other image of tuberculosis in novels is the link with poverty which was often coupled with death. In the essay *How the poor die* George Orwell (1952) describes his experiences in a French hospital where he had been admitted for pneumonia and suspected tuberculosis. He describes the abysmal conditions faced by patients in the public wards:

‘you see horrors that you don't seem to meet with among people who manage to die in their own homes, as though certain diseases only attacked people at the lower income levels.’

Many years later Orwell died of tuberculosis.

In films there is again this combination of passion and poverty. The link with passion is evident in the Japanese film called *Drunken Angel* (Akira Kurosawa, 1948) in which the central character was diagnosed with tuberculosis and the treatment recommended was to calm down and stop living the high life of drinking and womanizing. The link with poverty is evident in film *The citadel* which is an adaptation of the novel by Cronin (1937). In the film, the central character is a physician who treats people with tuberculosis in an impoverished Welsh village.

In paintings, the link with poverty and death is apparent. In *T.B. Harlem* by Alice Neel (1940) the patient is portrayed as emaciated and living in a rundown tenement apartment. In *The sick child* by Edward Munch (1950), the tubercular patient was represented as emaciated and other-worldly – exhausted by poverty and perhaps excessive passion.

In songs, there is especially the link with poverty. *TB sheets* is a song by Van Morrison (1967) in which he sings about visiting a girl who is dying from tuberculosis. He feels enclosed and guilty and sings about the need to open the window so that he can breathe and escape the stench of poverty, disease and possible death. While in *Whippin' that old T.B.* by Jimmie Rodgers (1932) the advice to the tubercular patient was to be resigned to the inevitable fate of death: “...don't worry about consumption, even if they call it T.B./ ain't no use to worry, no use to lay down and die/ cause nine times out of ten ain't nobody will cry.”

Plague Whereas in the case of tuberculosis the disease is represented in terms of emotion, poverty and death, artistic representations of the plague often refer to other-worldly causes and death. The novel *The plague in Bergamo* (Jacobsen, 1911) is a description of what happens when the plague appears in a small city. The plague is represented as a punishment for sin, eliciting reactions of fear and revenge. The film *The seventh seal* by Bergman (1957) depicts the plague in southern Scandinavia around 1350. The plague is represented as being caused by God and lacking any treatment. In the painting *Plague* by Arnold Böcklin (1898), the artist represents the plague as an evil marauder roaming the streets and causing death and destruction. There is no escape. Finally, in the opera *Oedipus Rex* by Stravinsky (1992) the plague again is represented as a marauding evil. In it the choir sings:

*The plague falls on us/ Thebes is dying of plague / From the plague preserve us/
for Thebes is dying/ Oedipus, the plague has come/ free our city from plague/
preserve our dying city* (in Hutcheon, & Hutcheon, 1996, p. 17).

Discussion

This brief report illustrates the way artists have represented tuberculosis and the plague over the past century. From a cognitive perspective, there was evidence of the five core dimensions of the Common Sense Model of illness. In terms of cause, tuberculosis was represented in terms of passion and poverty while the plague was due to divine forces. In terms of identity the tubercular patient was represented as emaciated. In terms of perceived control both tuberculosis and the plague were generally outside personal control. The time-line was unclear but both diseases were represented as serious with the prospect of recovery unclear and death a definite possibility.

From a social perspective an important issue in the case of both diseases was the extent to which they were represented as a threat. Although this was not explicit in the case of tuberculosis, the frequent discussion of sanatoria implied the potential threat. By isolating the tubercular patient in the sanatorium, the wider public was protected. In the case of the plague, the issue of the perceived threat was paramount – it was the vengeful marauder. Artistic representations are not neutral but both reflect and

contribute to social representations and health and illness practices. There is a need for further research exploring the role of arts in healthcare.

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Or Peer Review Only

9 November 2019 **Rebuttal**

Re: Artistic representations of infectious disease

We are grateful to the reviewer for his/her comments about the manuscript. Addressing the issues raised allowed us to revise the manuscript in such a way that we feel the manuscript now expresses our views more clearly.

1.

We toned down any claim about ‘the revolutionary nature’ of the manuscript. We now refer to existing and solid theoretical models re health psychology and health humanities (Crawford et al., 2015; Jones et al., 2017; Leventhal et al., 1980). Text to this effect was added on page 1, page 6, revised manuscript.

Crawford, P., Brown, B., Baker, C., Tischler, V., & Abrams, B. (2015). *Health humanities*. Houndmills: Palgrave. Jones, T., Blackie, M., Garden, R., & Wear, D. (2017). The almost right word: The move from *medical* to *health* humanities. *Academic Medicine*, 92, 932 – 935. Leventhal, H., Meyer, D., & Nerenz, D.R. (1980). The common sense representation of illness danger. In S. Rachman (Ed.), *Contributions to Medical Psychology*, vol. 2 (pp. 7 – 30). New York: Pergamon Press.

2.

Given the word limit for a Short Report (1500 words) we deleted all text about cholera and HIV/AIDS. Therefore, the issue of the reviewer about our use of possibly dated material about AIDS/HIV was addressed.

3.

Further to the reviewer’s suggestion, the two paintings have been deleted in the revised version of the manuscript. We would welcome any opportunity to include the paintings – if the paper is accepted for publication – at a later stage, if the Editor would agree.

4.

The reviewer emphasizes the importance of methodological rigour in analysing the material that forms the basis for our Results and Discussion sections. We do hope that the reviewer (and the Editor) believe us when we respond with “we could not agree more!”. For precisely this reason, the first author of the current manuscript attended scientific conferences on ‘medical/ health humanities & art’ over the past years in order to learn about methodology, theoretical models and clinical applications in research on art genres in relation to health and illness (i.e., the IGEL conferences in Montreal, London, Paris, in 2012, 2013, 2014, respectively).

It seems, however, that it is virtually an enigma to find such methodological rigour. In the area of novels, the journal of the Society for the Empirical Study of Literature (IGEL) publishes papers that attempt to offer such methodological rigour. In our view, however, the field does not yet seem to have succeeded in that goal up to now to a great extent. We wholeheartedly agree with Tschacher

et al. (2012) who state that: “Art experts are commonly skeptical of applying scientific methods to aesthetic experiencing” (p. 96). There are excellent attempts to study novels empirically (e.g., Koopman (2015), and Marr (2011)). Their work, however, is the exception rather than the rule in empirical studies of literature. The same to an even greater degree, in our view, is true for the empirical study of film, paintings and music (for film, for example: Toye, F., & Jenkins, S. (2015). ‘It makes you think’- exploring the impact of qualitative films on pain clinicians. *Br J Pain*, 9, 65-9; for paintings Venkatesan, S., & Saji, S. (2018). Graphic medicine and the limits of biostatistics. *AMA Journal of Ethics*, 20, 897 – 901; for music Wagner, J.N. (2015). “Breath of life you’ll be to me”- the portrayal of tuberculosis in the opera ‘La Traviata’. *Hektoen International*, 7, (4)).

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Our point is reinforced, in our view, by looking at the major journals in the area of medical humanities (no journal focusing specifically on health humanities is available up to now): *Journal of Medical Humanities*, *Medical Humanities*: it is almost impossible to find papers in those journals with empirical studies applying a methodological rigour.

In the revised manuscript we attempted to address this issue by adding text at the end of the Method section (page 4), and in the Discussion (page 5, page 6).

Again, we thank the reviewer sincerely for the excellent comments. We hope we have addressed the issues raised.