Medicine and Art – science and emotion

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As medical librarians and information professionals we are familiar with the role of art in our work, through the atlases that line our bookshelves and the illustrations that routinely appear in both printed and digital literature. Why is this role important? There's a clue in the familiar aphorism "A picture is worth a thousand words", which captures the essential truth that art is about communicating information. Since our professional role is also the business of communicating information, there should be obvious benefits for us in studying and understanding how art performs this function.

Of course, "communicating information" hardly begins to convey the full power of art. It is true that in its purest and most scientifically accurate form, medical illustration has to provide objective information to enhance the viewer's knowledge. But art is also subjective and emotional, both in exposing the thoughts of the artist and in seeking to prompt a response from an audience. Every artwork implies a relationship between two participants – between the creator and the viewer, or between action and reaction. The intention of this theme issue is to encourage readers to consider that relationship in a variety of medical settings, for a variety of purposes, and to explore how artists' intentions and viewers' responses can be instructive in acquiring a better appreciation of the process of communication.

We should start by acknowledging at the outset that a small collection of articles on medicine and art, however informative and insightful each might be, can only scrape the surface of what is a huge and complex subject. At a basic scientific level we can consider the neurology and neuropathology of art – how the brain functions during the creative artistic process in both health and illness – and the emerging discipline of neuroesthetics (1). We can similarly explore how the creativity of many artists has been influenced by their own temporary or chronic physical disabilities. Progress in understanding these functions can in turn be applied both diagnostically, by analysing the art produced by patients, and therapeutically, by encouraging patients to create art for themselves; and it extends into the role of psychoanalysis in studying and interpreting works of art and the mind of the artist.

Medicine in a social context has often been the subject of works by some of the world's most acclaimed artists. We think of Rembrandt's "The Anatomy Lesson of Dr Nicolaes Tulp" (2), essentially a group portrait painting that features a dissected cadaver at its centre; or, by way of contrast, William Hogarth's satirical portrayal of a dissection "The Reward of Cruelty" (3). A similar contrast in mood is evident in Van Gogh's "Ward in the Hospital at Arles", reflecting his own sense of isolation (4) set against the humanity of Picasso's early "Science and Charity" (5).

Another rich area for study is that of medical professionals and scientists as artists: this group includes those such as surgeons, obstetricians and pathologists who create pictures – either at the point of action, or later in retrospect – to record their clinical and research observations, as well as artistically-talented practitioners who develop parallel careers as professional artists. The evolution and future direction of medical illustration as a career, the role of libraries in curating collections of medical art … the list of potential topics is almost endless.

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In this theme issue the sequence of articles starts with Pascale Pollier. She takes us on a personal journey that describes her work as a contemporary medical artist and illustrator, and places it within the broader historical context that both starts and ends her account. She produces images and objects in a variety of media and techniques, combining scientific accuracy, technical virtuosity, and emotional engagement. Underpinning everything is her appreciation of the great medical illustrators, epitomised by her regard for Vesalius.

The world of the classical medical illustrator is explored further by Franco Toni in his account of the anatomical drawings made by the celebrated sculptor Antonio Canova, which are housed in the Library of the Istituto Superiore di Sanità in Rome. Like Leonardo three hundred years earlier, Canova produced his drawings purely to improve his own understanding of the human form and to acquire the knowledge that would inform his work as a sculptor. The drawings can thus be regarded as an example of medical illustration in its purest form, in which the creator and the viewer were intended to be one and the same person.

The world of contemporary biomedical art, recorded at a personal level by Pascale Pollier, is explored more fully by Vasia Hatzi. She describes how the international community of artists, moving increasingly away from traditional medical illustration to adopt innovative techniques and materials, are creating a corpus of works that extends the boundaries of conventional medical art. And she explains how the MEDinART network is providing an organisational framework that encourages artists to explore collaborations and public exhibitions.

The focus changes, in the contribution by David O'Flynn and William Schupbach, from the professional artist to the patient as artist. The artists in question are those "outsiders" who produced paintings and drawings while confined in an asylum during the mid-twentieth century, and their surviving output is in the Adamson Collection. The Collection was assembled by the artist Edward Adamson, whose work with these patients is now acknowledged as having made a major contribution to the development of art therapy. The paper also discusses the practical issues faced by the Wellcome Library in curating the major part of the Collection.

Finally, Thomas Walshaw describes the work and objectives of the organisation Paintings in Hospitals, which lends high-quality works of art to care organisations. While art as therapy is the principle around which the organisation's activities are built, the therapy in this case is not derived through the patient's act of self-expression in creating art, so much as from the ability of art to improve the health and well-being of the viewer – in this case patients, their carers, and health care professionals. The paper also discusses the evidence base that confirms the effectiveness of this approach both in improving well-being and in reducing health-care costs.

It seems inevitable that the imaginative opportunities provided by new technologies will stimulate new ways to create medical art, attract new types of "artist" to exploit these opportunities, and find new ways of disseminating the results to audiences via social media. It is likely, too, that we shall see the increasingly political use of medical art to improve the popular understanding of science and to support public health campaigns. At the University of Alberta in Canada, for example, the SCI+POP project explicitly uses images to convey complex health science issues such as vaccination and uses social media to deliver its message to the widest possible public audience (6). Here too, as our contributors have illustrated in their different ways, we see further evidence of how scientific information can be transmitted through art, and how in the process it becomes more accessible through the emotive responses thus evoked.

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REFERENCES

1. Neuroesthetics [Internet]. Wikipedia [cited 2019 November 10]. Available from: https://en.wikipedia.org/wiki/Neuroesthetics

2. Rembrandt. "The Anatomy Lesson of Dr. Nicolaes Tulp". Hektoen International: a Journal of Medical Humanities [Internet], Summer 2014 [cited 2019 November 10]. Available from: https://hekint.org/2017/01/22/rembrandt-the-anatomy-lesson-of-dr-nicolaes-tulp/

3. Hogarth W. "The Reward of Cruelty" [Internet]. Wikipedia [cited 2019 November 10]. Available from: https://en.wikipedia.org/wiki/The_Four_Stages_of_Cruelty#The_reward_of_cruelty

4. Van Gogh, V. "Ward in the Hospital at Arles". Hektoen International: a Journal of Medical Humanities [Internet], Summer 2015 [cited 2019 November 10]. Available from: https://hekint.org/2017/01/26/hospital-at-arles-van-gogh-1889/?highlight=van%20gogh

5. Picasso P. "Science and Charity" [Internet]. PabloPicasso.net [cited 2019 November 10]. Available from: http://www.pablopicasso.net/science-and-charity/

6. Caulfield T. Mixing science and art to make the truth more interesting than lies. The Conversation [Internet], 2 August 2018 [cited 2019 November 10]. Available from: https://theconversation.com/mixing-science-and-art-to-make-the-truth-more-interesting-than-lies-100221

FURTHER READING

Anderson J, Johnstone EB, Shackleton E. The art of medicine: over 2000 years of medicine in our lives. Lewes: Ilex; 2011.

Emery AEH, Emery MLH. Medicine and art. London: Royal Society of Medicine Press; 2003.

Herrlinger R. History of medical illustration from antiquity to A.D. 1600. London: Pitman Medical; 1970.

Rousselot J (ed). Medicine in art: a cultural history. New York: McGraw-Hill; 1967.