

Can an art intervention influence quality of life in a hospitalized patient?

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The importance of Quality of Life (QoL) is becoming more obvious in this age of specialized medicine. With the advent of 'scientific' medicine, treatment of the disease rather than the patient has become the imperative. Many studies have been undertaken to evaluate the effect of art interventions in hospital medicine. Few are large and well controlled. The 'Open Window' study addresses the effect of the introduction of a multi media art intervention into a stem cell transplant unit. The results on reducing anxiety, depression and improving the experience have been documented. The European Hematology Association (EHA) believes that QoL is an intrinsic part of medical care. Hopefully, greater awareness of doctors will enhance the concept and attempts to increase QoL for patients will become part of established medical practice.

Quality of Life is an elusive concept and has a different meaning according to the setting in which it is used. For the purposes of this article, I will consider QoL as the ability of patients with a serious illness to minimize the stress, anxiety and depression associated with their illness together with the possibility of death. I will explore here the ability of an art intervention to influence QoL in a positive way. For the purposes of this discussion, art is defined as not so much concerning objects but about human experience and how that experience is passed from one individual to another.

The idea that we are treating patients and not illnesses is not new, and the total care of patients is often referred to as 'holistic care'. According to William Bynum, in his wonderful small book, *The history of Medicine: a very short account*,¹ Hippocrates (if indeed he was one man), often referred to as the 'father of medicine,' believed in the holistic approach to patients: "Whenever the art of Medicine is loved, there is also love of humanity". Later, the philosopher Plato made the prescient observation: "The greatest mistake in the treatment of disease is that there are Physicians for the body and Physicians for the soul, although the two cannot be separated." The idea that the patient is as important as the disease was eloquently stated by the 12th century Jewish Physician/Philosopher, Miamonides (Mūsā ibn Maymām or RaMBaM): "The physician should not treat the disease but the patient who is suffering from it."

However, today it seems we have lost the ability to treat the patient rather than the disease. Why should this have happened? The 19th century was the era of scientific medicine and sophisticated hospitals came into being. Since then, there have been many important developments and scientific advances. In spite of all these developments, medicine remains an art involving a relationship between doctors and patients. Although medicine uses scientific methods, it is not a science, and hopefully never will become one. Doctors have an obligation to make sure that their patients are given the best treatment available but always in a caring and holistic environment. Yet how

often have we heard the complaint (if indeed we have the time to listen) from patients that "my doctor spends most of the time looking at a computer and talking about test results"? Of course, test results are important as a means of monitoring the effects of treatment or the progression/regression of an illness, but they should never take the place of adequate communication between doctor and patient.

In an effort to introduce a more 'holistic' environment, especially in hospitals, a number of international investigators have introduced art interventions.²⁻¹⁰ Unfortunately only a few, if any, have carefully evaluated the results of these interventions relying on the premise that 'it must be good for patients'. The numbers of patients studied have been small and interventions poorly controlled. Yet we



Figure 1. The 'Open Window' Team: Fran Hegarty, Denis Roche, Professor Shaun McCann and Dr Catherine McCabe.

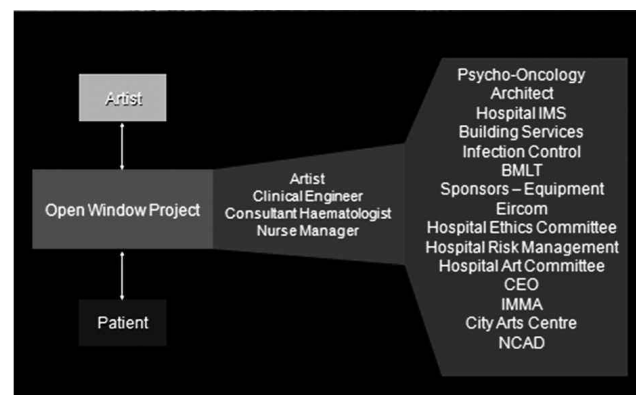


Figure 2. The number of people/agencies involved in obtaining permission and conducting the study. BMLT: Bone Marrow for Leukaemia Trust; CEO: Chief Executive Officer; IMMA: Irish Museum of Modern Art; NCAD: National College of Art and Design.



Figure 3. An image from the 'Open Window' study.



Figure 4. The 'tent' constructed by Denis Roche in which art evaluation took place.

know that images, for example, are potent symbols, interpreted in different ways by individuals through memory and experience. Therefore, images can have a destructive or a healing influence.

As a hematologist in charge of a stem cell transplant unit, I was very aware of the sense of isolation and fear that many patients experience during this difficult and life-threatening therapy. When we opened a new transplant unit in St James's Hospital, Dublin, in the year 2000, I was very pleased with the 21-room facility. Each room had an *en suite* bathroom/shower and High Efficiency Particulate Air (HEPA) filtration. However, I was struck by the medical and clinical environment similar to the professionalized atmosphere of a scientific laboratory, and the length of time patients were confined to their rooms. I struggled to find a way of connecting patients with the outside world and making their time less stressful in this strange environment. Following a meeting and discussion with the artist Denis Roche, I obtained funding from the Bone Marrow for Leukaemia Trust, a registered charity, to carry out a pilot study on a novel art intervention. Denis's idea was to construct a 'virtual window' in the patient's room (Ulrich used a real window) and to introduce art images, video, music and photographs using mobile phone technology. We were extremely fortunate to enlist the help of Fran Hegarty, a hospital physicist and artist. The Irish Cancer Society awarded us a 'psycho-oncology' grant, and with this support I employed Catherine McCabe, a lecturer in the School of Nursing and Midwifery at Trinity College, Dublin to act as a research fellow (Figure 1).

Before conducting a formal study on the effect of the intervention, called 'Open Window,' I decided that a prospective, randomized clinical trial was necessary, especially in view of the lack of well-conducted studies in the literature. As the details of the study have already been published,¹¹ I will refer only to the most important results and elaborate solely on some of the difficulties encountered and their possible implications. The study showed significantly reduced levels of anxiety and depression in the group who took part in the 'Open Window' project. Participants in the intervention (study) group also demonstrated a significantly better experience of the transplant when compared to the control group ($P < 0.001$).

In general, it is clear that hospitals struggle with budg-

ets, and providing an art intervention is difficult, as it has to compete with requests for new equipment or services. Physicians, therefore, need to convince the executive that such interventions are an essential part of medical care. This requires perseverance and self-belief. The Chief Executive Officer (CEO) of St James's Hospital in Dublin, with whom I had had many disagreements during my time as director of the National Stem Cell Transplant Unit, was very supportive of the idea. However, it was necessary to negotiate with a large number of people before the study was undertaken (Figure 2).

How is it possible to evaluate the quality of the art intervention (Figure 3)? Is it possible that any intervention could have a similar effect? The 'Open Window' study, like Ulrich's, found, for example, that patients preferred scenes of nature.¹² These are difficult questions and our study attempted to address the first. The evaluation required a control group that received identical treatment to the intervention group. Obviously the study could not be 'blinded' as the virtual window was not present in the control group's rooms. This was problematic, because all patients referred to the unit were asked to take part in the study. If a patient was subsequently randomized to a room without the virtual window a certain sense of disappointment was experienced. However, the randomization was important to prevent bias on the part of the staff in choosing patients with an interest in art, and also to make sure both groups, control and intervention, were demographically comparable. The quality of the art was assessed by a committee consisting of a nurse manager, the curator (Denis Roche) and the 'Open Window' team, an art historian/critic, a practising artist, and myself. A psychiatrist and clinical psychologist were available at all times to make sure images were not upsetting. They were never required. Initial attempts at evaluation of presented images were a failure. They took place in a room beside the Stem Cell Transplant Unit and all participants, especially the nurse manager, allowed my opinion to hold sway. To overcome this problem, Denis designed an inflatable 'tent' which could be placed anywhere and the images could be viewed away from the patients' medical environment. This was an immediate success as the hierarchy of the hospital unit was effectively ignored (Figure 4). Not all images were accepted by the 'Open Window'

team. Some were refused because they were of poor artistic quality or deemed inappropriate for patients with a life-threatening illness. The curator approached artists who he thought would be amenable to our idea. Some artists refused, saying that their artwork was unsuitable or that they did not want to make art for a specific environment.

What did we learn from this study? Firstly, that it was a difficult study to conduct but, very importantly, it could be done. Secondly, a number of unexpected events happened. The researcher, Catherine, found that many patients treated 'Open Window' as a personal 'art gallery', i.e. returning to images which they found reassuring or pleasant. Thirdly, 'Open Window' also opened up conversations between medical staff, patients and visitors that were not concerned with just the usual medical problems associated with stem cell transplantation, such as mucositis, hair loss, etc. For some, 'Open Window' allowed them to imagine being part of the scenes that they viewed, to be 'somewhere else' other than in their room, and to think about something else other than their illness.

The reduction in anxiety and depression found in the study was significant, but what surprised us most was the positive difference in the experience of patients undergoing stem cell transplantation when exposed to 'Open Window', *versus* those who were not. Expectation is a profound form of reality. As we know, the journey (in this case the stem cell transplant procedure and all that it entails) and the destination are intertwined, one with the other. A destination (in this case, discharge from the stem cell unit) without a journey would seem insignificant, and a journey without a destination would be meaningless. The highly significant alteration in the experience and expectation of the transplant was a phenomenon that we, like others, feel is extremely important. A number of studies suggest that expectations for recovery may contribute to the patient's outcome.^{13,14} Although prior explanation of the procedure may influence patient expectations in the transplant setting, both groups were given a detailed account of what to expect. Therefore, the 'Open Window' intervention had a direct beneficial effect on expectations and experience.

The 'Open Window' study is thus a paradigm. We do not suggest that an art intervention will necessarily influence the outcome of stem cell transplantation, but we do suggest that it makes the patient's time in hospital less difficult. Such interventions can be applied to many areas of medicine that have less rigorous restrictions than those of stem cell transplantation, and may significantly influence the QoL of patients. As Holm and colleagues pointed out: "*Interventions designed to increase a patient's expectations may be beneficial and should be examined in controlled studies*".¹⁵

In this age of so-called scientific medicine, when so many advances have been made, especially in the treatment of hematologic diseases, it is easy to lose empathy (an understanding of patients' feelings as opposed to sympathy which is an expression of one's own feelings) with

patients and to make the mistake of treating the disease, not the patient. The European Haematology Association (EHA) believes that QoL is so important that it has made it its 'mantra' for 2012-2013. With further education of doctors and healthcare workers, and the input of patient advocacy groups, hopefully QoL will become an important part of patient care. Traditionally, art interventions are commonly found in pediatric wards, but the 'Open Window' study has provided proof of principle that such an intervention has a definite place in an adult setting.

Note: The opinions in this article are those of the author and not necessarily those of the EHA.

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