Impact of visual art in patient waiting rooms: survey of patients attending a transplant clinic in Dumfries

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Summary

Background  The clinic waiting area in Dumfries received the highest score among nine units offering transplant follow-up (p < 0.001 for differences between units) in the recent Quality Improvement Scotland Renal Transplant Survey.

Design  The purpose of the present study was to determine which aspects of the Dumfries waiting area patients considered important to their outpatient experience.

Methods  We posted a questionnaire to all 44 renal transplant patients attending the Dumfries Renal Unit in October 2009 in which we asked patients to rate seven aspects of their clinic environment on a scale from 1 (not at all important) to 5 (very important). These were, in random order, comfy chairs, magazines and puzzle books, paintings on the wall, a 42-inch plasma screen TV, views from the windows, potted plants and computers with Internet access.

Results  Thirty-nine (89%) patients responded. The most highly rated feature of our clinic waiting room was the comfy chairs with an average score of 4.4. This was followed by the magazines and puzzle books (3.6), the plasma screen TV (3.6) and the paintings on the walls (3.4). The views from the windows (3.1), the computer (3.0) and the potted plants (2.9) were less highly rated. Respondents expressed a preference for landscapes/nature scenes (84%) and paintings of animals/birds (84%). Fewer wished to look at abstract paintings (27%) or portraits (24%).

Conclusion  The QIS transplant survey has shown large differences in the quality of the environment of the transplant follow-up clinics in Scotland. Our survey of renal transplant patients attending the Dumfries Renal Unit suggests that the paintings we chose to display in our clinic waiting room contributed positively to their outpatient experience.

Introduction

The recent Quality Improvement Scotland/Scottish Renal Registry survey of adult renal units was designed to assess the views of dialysis and transplant patients on the delivery of renal care and services.1 A total of 1938 transplant patients were sent a postal questionnaire in November 2008. Overall response was 63% which is high for a postal survey. In one of the questions patients

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RESEARCH
were asked to grade six aspects of their outpatient experience as good, average or poor. These were cleanliness, comfort, accessibility, general surroundings, toilets and the waiting area. Those scoring their waiting area as ‘good’ in the nine units in which transplant patients are followed in Scotland are shown in Figure 1. The three most recently upgraded units in Dumfries, Monklands and Crosshouse scored highly, while patients attending the Western Infirmary in Glasgow were least satisfied. In an attempt to understand what might be contributing to such a large variation in response we conducted a second survey of the most highly rated unit, Dumfries, the purpose of which was to determine those aspects of the waiting area patients considered important to their outpatient experience.

The Dumfries Renal Unit was upgraded in April 2007 from 12 to 18 dialysis stations. Particular attention was given to the design of the waiting area which is situated at the entrance to the unit on the first floor of the Infirmary (Figure 2). We wanted to create a ‘pleasant space’ for patients while waiting for their clinic appointments and had taken steps to ensure that the room had comfy chairs, supply of magazines and puzzle books, a 42-inch wall-mounted plasma TV, computers with Internet access, some pot plants and a series of Dumfries and Galloway landscapes by local artists, Hugh McIntyre (Figure 3) and Sandy Robb. A recent report by the Department of Health Arts and Health Working Group concluded that the arts were integral to health, healthcare provision and healthcare environments. We were especially interested, therefore, in the possibility that the paintings in the Dumfries Renal Unit waiting room might contribute positively to our patients’ outpatient experience.

**Methods**

We posted a questionnaire to all 44 renal transplant patients who were attending the Dumfries Renal Unit in October 2009. In this we asked patients to rate seven aspects of their clinic environment on a scale from 1 (not at all important) to 5 (very important). We felt these seven aspects represented all the features of the room that might possibly enhance it as a pleasant space. They were, in random order, comfy chairs, magazines and puzzle books, paintings on the walls, a 42-inch plasma screen TV, views from the windows (over a flat hospital roof towards Criffel and the Dunscore hills), potted plants and computers with Internet access. We also asked patients whether they enjoyed looking at paintings and the type of art they would most like to see in a clinic. The choices we gave were landscapes/nature scenes, portraits, animals/bird paintings, abstract art or no preference.

**Results**

Thirty-nine (89%) patients responded to our postal questionnaire. The most highly rated feature of our clinic waiting room was the comfy chairs with an average score of 4.4 (Figure 4). This was followed by the magazines and puzzle books (3.6), the plasma screen TV (3.6) and the paintings on the walls (3.4). The views from the windows (3.1) and the computer with Internet access (3.0) were judged to be less important while the least highly rated feature of the waiting area was the potted plants (2.9) (Figure 4). Perhaps
unsurprisingly, the 24 patients who said they liked looking at paintings and rated this pleasure as 4 or 5/5, scored the clinic paintings more highly (4.1). The patients who responded to our questionnaire emphasized a preference for landscapes/nature scenes (84%) and paintings of animals/birds.
Fewer wished to look at abstract paintings (27%) or portraits (24%). Two of 39 (5%) said they liked looking at art but had no preferences.

**Discussion**

The QIS/SRR survey shows that there are large differences in the quality of transplant clinic waiting areas in Scotland, while the follow-up survey we devised in Dumfries suggests that visual art in the form of paintings hung in the clinic waiting area may be part of the reason why patients regard a room as a pleasant space. In our survey, patients attached the same degree of importance to paintings as they did to TV, magazines and puzzle books. Moreover, they expressed a clear preference for nature scenes, landscapes and pictures of animals or birds over portraits and abstract works.

We did not randomize patients to be followed up in units with and without visual art, nor would it have been possible to do so. For this reason the evidence that paintings were one of the reasons patients rated the Dumfries waiting area so highly can best be regarded as circumstantial. It is true that none of the other units had designed their waiting areas specifically to display visual art, but the other units differed in other respects, such as the provision of less comfortable (polypropylene) chairs and the absence of plasma screen televisions. It could be, therefore, that our patients’ apparent approval of our visual art simply reflected a high degree of satisfaction with other aspects of their waiting area.

That said, there is a growing evidence base to support the view that incorporating visual art into hospital environments improves both patient experience and health outcomes. One study investigated the effects on patients recovering from open heart surgery of exposure to either an image of nature, an abstract image or no image at all. Patients exposed to the nature image experienced less postoperative anxiety than the other two groups. A study of patients undergoing flexible bronchoscopy found that pain control was better in patients shown images of nature than in patients not shown such images. Levels of depression and anxiety were lower in patients undergoing chemotherapy who were exposed to visual art than in patients not exposed to visual art. A qualitative evaluation of an Exeter Healthcare Arts Project found that the display of visual arts in their local hospital was perceived by patients, staff and visitors to have a positive effect on the morale of patients and staff. Forty-three percent of frontline clinical staff believed that the arts had a positive effect on healing and 24% considered that the arts produced therapeutic benefits.

It has been suggested that the beneficial effects of visual art on health are due to positive distraction, namely the belief that a sympathetic environment can create positive feelings and so reduce stressful thoughts. Colours that elicit high levels of pleasure with low levels of arousal are most likely to induce a state of calm, while those causing displeasure and high levels of arousal may provoke anxiety. The implication of these lines of research for clinicians, policymakers, architects and designers is that carefully chosen visual art in clinical environments may be of benefit to patients.

In conclusion, our survey of renal transplant patients attending the Dumfries Renal Unit has shown that the paintings we chose to display in our clinic waiting room contributed positively to their outpatient experience. It is perhaps noteworthy that all of these were landscapes and nature scenes of south-west Scotland, by local artists. A growing body of evidence, which we explore in more detail in an accompanying paper, suggests that visual art in healthcare...
settings may have greater effects on wellbeing and health than has previously been appreciated.

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