

## **SUBMISSION TO THE IMJ – ORIGINAL PAPER**

**Title:** The Perception of Art among Patients and Staff on a Renal Dialysis Unit

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**Abstract**

This study investigated the purpose and effectiveness of giving outpatients receiving dialysis treatment an opportunity to engage in art activities while receiving care. A mixed method study was conducted. 21 semi-structured interviews were conducted with outpatients attending the dialysis unit and 13 surveys of clinicians were completed.

The principle reasons to partake in the art activity programme included: to pass time, to relieve boredom, to be creative, to try something new, distraction from concerns, to stay positive and to achieve something new. Patients who did not participate in the programme pass their time primarily by watching TV or sleeping. All staff who partook in the survey were satisfied with the programme and wanted it to continue. Our findings indicate that the creative arts programme is viewed positively by staff and patients alike, and might be useful in other hospital departments. Further in depth qualitative research would be useful to interrogate the potential effect of engagement in art on positive mental health and quality of life for patients with chronic conditions.

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## INTRODUCTION

Patients with end stage renal disease (ESRD) commonly experience low self-esteem and lack of confidence<sup>1</sup>. They are increasingly dependent on the health care system and may be isolated from the larger community. Patients with ESRD attend hospital as out-patients, typically spending 15 – 18 hours in treatment each week, with 3 – 5 hours travel time. Although there have been significant improvements in technology and medical care, the individual receiving dialysis may experience reduced quality of life and become uncertain of the future due to their dependence on life sustained technology and the expertise of health care professionals<sup>2</sup>. The prognosis in dialysis is poor and most patients are well aware of this. They are also aware of the demands and sacrifices made by significant others who also care for them. The combined difficulties of ESRD contribute to social isolation, affect job prospects and social life and can result in negative feelings. It is necessary for all aspects of patients' experiences with ESRD and haemodialysis to be considered if the health care providers are to ensure a positive health outcome<sup>3</sup>.

The interdisciplinary field of arts and health has an international interest in how the arts can contribute to healthcare<sup>4</sup>. The arts are associated with a range of positive health impacts such as improving social networking<sup>5</sup>, increasing life expectancy<sup>6</sup>, lessening social inequality and increasing access to healthcare<sup>7</sup>, enhancing positive affect<sup>8</sup> and aesthetically altering the health care environment<sup>9, 10, 11</sup>. Recent research regarding arts in hospitals indicates concern that hospitals are aesthetically neglected healthcare environments as emphasize the importance of meeting patients' aesthetic needs as part of their overall health care<sup>12- 15</sup>.

There is a very small literature on arts and ESRD, with a key study indicating modest positive changes in a measure of quality of life, but which did not clearly articulate the perceptions of staff and patients on the role of art in a dialysis unit, or gauge effectiveness from the staff perspective. We therefore undertook a mixed methods study of these issues in a dialysis unit in a university teaching hospital with an active art programme.

The main purpose of this study was to understand the views and perceptions of the art activity of patients that engage in the activity, those who do not and the staff that care for them. This study arose from sixteen years of providing four art sessions for patients in the dialysis unit. A total of 400 hours of visual art sessions per year, for 16 years, with 20 patients participating per week, has produced a vast body of anecdotal evidence of the benefit of art sessions in our hospital.

## METHODS

This study was mixed method. A qualitative study involving patients on renal dialysis in Tallaght Hospital and a mixed method survey involving staff with exposure to the arts programme on the renal dialysis unit were conducted in March 2016. These methodologies were employed to help us to gain an insight into the perceptions of a variety of staff members and patients on the unit regarding the arts programme on the renal dialysis unit. The studies helped to probe the nuances related to the questions asked. The study had local ethical approval. All participants provided written informed consent and surveys were given to the staff on the unit.

Patients on the renal dialysis unit who had exposure, awareness, or participated in the arts programme between March 2015 and March 2016 were included in this study. All patients interviewed had passed the 3DY cognitive test<sup>16</sup>. Staff on the renal dialysis unit who were aware of the arts programme and had interacted with patients that had exposure to the arts programme were surveyed separately. An artist that has worked on the program since the set-up also gave an extensive interview. Recruitment was employed for both studies using convenience sampling.

Interviews were conducted with the patients on renal dialysis and the data was analysed using thematic analysis method. Surveys were circulated among the staff members working on the renal dialysis unit. For the purpose of this project, patients were categorised into those participating in the arts programme and those not participating in the arts programme.

Questions for the patients who participated in the interviews are presented in Table 1.

Questions were based on qualitative methodology set out by Patton<sup>17</sup>. All interviews were conducted individually by one of the three research staff in a hospital setting. The staff survey was available via survey monkey and paper format at the unit desk. The questions in both the interviews and the survey aimed to evaluate the staff perception of the arts programme. Thematic analysis was used to analyse the data<sup>18</sup>.

## RESULTS

21 patients participated in the interviews. 10 of these were participating in the art programme and 11 were not. All of the patients had some knowledge about the programme. 16 surveys were completed by a variety of staff members on the unit.

### *Patients who engage in art programme*

10 patients were interviewed who participated in the programme (4 males and 6 females). Their ages ranged from 33 to 82 years of age with a mean age of 57.5. There were many recurrent themes for why the patients chose to participate (see Table 2). The most prominent reason being “to pass time” or “relieve boredom”. Many of the patients gave multiple answers which are expressed in the data. One patient summated: “It keeps you active, something in common with everyone. It doesn’t just stop in the hospital.”

Many patients expressed that they have an inability to sleep – as is common on dialysis - so participating in art projects is a good alternative. One of the artists that work on the unit said “it gives them another focus away from the clinical”. In terms of the favoured projects, three were found; crochet, mosaic, and painting. Again some named multiple projects whereas others expressed no preference.

### *Patients who choose not to engage in art programme*

Eleven patients were interviewed who chose not to take part in any art activity ( 9 males and 2 females between the ages of 49 and 83 with a mean age of 72). Reasons for not participating in the programme included having no interest in art, having other things they would prefer to do, having physical issues that dominated their attention and perception that art activity would be too difficult.

Many patients cited poor mobility in their hands as a problem preventing them from participating in the programme. This stems from patients having bad arthritis or having had fingers amputated. If not participating in art, eight patients watch tv, six sleep and five said they read to pass the time.

### *Analysis of staff survey*

16 staff members completed the survey over the month of March. Of these 11 were staff nurses, 3 nurse managers, 1 student nurse and 1 artist in resident. All had some degree of knowledge about the art programme.

The staff were asked to write down what they felt was the main purpose of the programme. A variety of themes arose (Table 3). The staff were asked to say how useful (from 1 not

useful to 5 extremely useful) they found the arts programme for patients in a variety of criteria. Table 4 shows the average score for each criterion.

Staff were asked if they thought any other departments would benefit from this programme. 13 of them said yes, 1 said no and 2 were unsure. Of those that said yes, 7 of them suggested it would be very good for chemotherapy patients, 1 said it would be good for care of the elderly and 1 said it would help any long term stay patients. Staff suggested other useful activities might include music and knitting.

All 16 participants said that they valued the art programme and wanted it to remain.

## **DISCUSSION**

To our knowledge this is the first study to qualitatively analyse the perception of a unit based, artist-led art programme among renal dialysis patients. The researchers were independent of the dialysis unit and this lack of affiliation with the programme perhaps allows a more objective standpoint than most researchers in the current literature.

Patients undergoing long-term renal dialysis experience a markedly impaired quality of life (QOL), increased anxiety and depression<sup>19, 20</sup>. It is also important to note that art based practices have been shown to be highly beneficial to psychological and social recovery<sup>21, 22</sup>. In exploring patients' perceptions of the creative arts programme, the general consensus among those who participated was that the programme had a beneficial impact on patients' mood, providing an interactive and rewarding avenue for self-expression, relieving boredom while increasing the sense of community spirit on the unit. Despite the small numbers represented in this study, it should be noted that the study builds on sixteen years' experience of providing art sessions for outpatients in the dialysis unit and a large body of anecdotal evidence and positive qualitative feedback from patients and staff.

More women than men participated in the art programme, leaving an overwhelming disproportionate representation of males not participating. Age may also be a factor in taking part, with the mean age of those participating being almost 15 years less than those who chose not to. This however would need to be confirmed in a larger study. Despite that, we would recommend projects more tailored to specific genders, as some male patients might not be comfortable with activities such as crocheting. A common complaint from patients, both in the arts programme and not, were their "bad hands" – patients commonly suffer from arthritis, peripheral oedema or even amputation of digits. If accommodations were made more readily available, it would be quite beneficial to the programme. Education programmes to inform staff and patients of the role of art in healthcare is also recommended.

Staff believed the art programme was important in reducing boredom, reducing social isolation and providing a positive distraction from the dialysis. They also noted that the programme helped decrease some patients' anxiety and depression. Over 80% thought the art programme would be beneficial in other units and wards; namely chemotherapy, geriatric medicine and any long stay patients. The most telling result of all was when we asked staff if they thought the arts programme should be kept. The accord was unanimous.

The main message is positive, not only from patients' perspectives, but also for hospital staff, both viewpoints largely focussed on better mental health, a stimulation of communication and a better healing environment<sup>23 – 25</sup>.

The sample size was small, and the investigation limited in this study. Further research, over a longer period of time, with more participants, and a more in depth, structured analysis would yield more robust findings and a more nuanced understanding of the benefits of art in

the renal dialysis unit. Overall, our findings indicate that the creative arts programme is viewed positively by staff and patients alike, and might even be useful in other departments outside the renal dialysis unit. We suggest that the creative arts programme deserves more attention, thus allowing it to develop, improve, and maybe even spread.

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**Table 1 Interview questions for patients**

<b>Interview questions for patients participating in the art programme in the dialysis unit</b>	<b>Interview questions for patients who DID NOT participate in the art programme in the dialysis unit</b>
How long have you been on dialysis?	How long have you been on dialysis?
How long have you taken part in the arts programme on dialysis?	Could you tell me what you know about the arts programme?
Can you tell me a little bit about your experience of the arts programme?	Why did you decide to not take part in the programme?
What do you feel is the main purpose of the programme?	How do you pass your time on the unit?
Why did you choose to take part in the programme?	Is there another activity (e.g. reading club, bingo, listening to music etc.) that you would be more likely to join? Why?
What do you enjoy most about the programme?	How do you feel when you are coming into the renal dialysis unit for treatment?
Do you prefer working on group projects or individual projects? Why?	Do you have any more comments that you'd like to add?
Have you had a favourite project? Why?	
What has been your least enjoyable art project?	
How do you feel when you are coming into the renal dialysis unit for treatment?	
Do you think the arts programme has helped to alleviate concerns?	
Is there anything that you would like to add or change to the programme?	

**TABLE 2 REASONS PATIENTS GAVE TO PARTICIPATE IN PROGRAMME**

<b>PASS TIME</b>	<b>6</b>
<b>RELIEVE BOREDOM</b>	<b>7</b>
<b>EXPRESS SELF</b>	<b>1</b>
<b>SAW OTHERS ENJOYING PROGRAMME</b>	<b>2</b>
<b>SOMETHING NEW</b>	<b>3</b>
<b>INCREASES THE COMMUNITY FEEL ON THE UNIT</b>	<b>2</b>



**TABLE 3 STAFF VIEWS ON PURPOSE OF PROGRAMME**

<b>NEW SKILLS</b>	1
<b>OPPORTUNITY TO BE CREATIVE</b>	4
<b>PASS TIME</b>	8
<b>DISTRACTION</b>	4
<b>COMMUNICATION TOOL</b>	1
<b>STAY POSTIVE</b>	2
<b>THERAPY FOR RELAXATION</b>	1
<b>ENTERTAINMENT</b>	2

**TABLE 4 HOW USEFUL IS THE ARTS PROGRAMME FOR PATIENTS IN: (SCALE: 1 NOT USEFUL, 5 EXTREMELY USEFUL)**

<b>REDUCING DEPRESSION</b>	3.13
<b>REDUCING ANXIETY</b>	3.40
<b>REDUCING SOCIAL ISOLATION</b>	3.93
<b>REDUCING BOREDOM</b>	4.26
<b>IMPROVING QUALITY OF LIFE</b>	3.27
<b>PROVIDING A POSITIVE DISTRACTION</b>	3.93
<b>IMPROVING PATIENTS MOOD</b>	3.73
<b>HELPING PASS TIME ON THE UNIT</b>	4.13
<b>MAKING IT EASIER FOR PATIENTS TO COME IN FOR TREATMENT</b>	2.47
<b>AS A VALUABLE USE OF HOSPITAL RESOURCES</b>	3.47