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Title: The aesthetic and cultural pursuits of patients with stroke

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Itemised list of tables:

Table 1  Patient Population

Table 2  Leisure Pursuits Before & After Stroke

Key Words: Stroke, culture, leisure, aesthetics, arts

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Abstract

GOAL: There has been an increasing interest in the arts in healthcare, with a suggestion that the arts and aesthetics can augment patient outcomes in stroke and other illnesses. Designing such programmes requires better knowledge of the artistic, aesthetic and cultural pursuits of people affected by stroke. The aim of this study was to obtain the insights of this group about the profile of arts and aesthetics activities in their lives as well as the influence of stroke on these aspects.

MATERIALS AND METHODS: Patients attending a stroke service were administered questions adapted from the Irish Arts Council’s 2006 questionnaire on participation in aesthetics and cultural pursuits. Information was also collected on stroke type and present functional and cognitive status. Thirty-eight patients were interviewed. Of these, twenty were inpatients in hospital at the time of the interview and eighteen were interviewed in an outpatient setting.

FINDINGS: Popular activities included mainstream cinema, listening to music, dancing, attending plays or musicals and being outdoors. Many patients ceased these activities after their stroke, mostly due to health issues and inaccessibility. The majority of patients valued the importance of the arts in the healthcare setting.

CONCLUSION: This study gives a perspective for the first time on the aesthetic and cultural pursuits of stroke patients prior to their stroke. It portrays a wide variety of cultural and leisure activities, and the cessation of these post-stroke. It revealed the restrictions patients felt on gaining access to leisure pursuits both while in hospital and following discharge.
**Introduction**

There is an emerging interest in the role of arts and aesthetics in the augmentation of the experience of healthcare. Särkämö et al demonstrated that patients who listened to their own music or audiobooks for an hour a day (minimum) during their recovery from stroke showed improvements in sensory processing and verbal memory, compared with a control group. (1, 2) This study illustrates that the mere act of listening to music or audio books may help induce long-term plastic changes facilitating improvements in higher cognitive functions and auditory sensory memory or possibly that aesthetic deprivation hinders recovery. (3, 4) Building further on this research, the design of aesthetic interventions ideally requires better knowledge of the artistic, aesthetic and cultural pursuits of people affected by stroke and any such programme would be better informed by obtaining the opinions of this group about the role of the arts and aesthetics in the healthcare environment. We could find no research assessing the nature of cultural and aesthetic pursuits among patients with stroke and thus designed this study.

There is a paucity of literature on the possible benefits of the arts (as opposed to formal art or music therapy) in stroke rehabilitation and the possible hindrance to recovery caused by aesthetic deprivation. Some of the literature quoted as discussing leisure and recreation does not actually examine these aspects (5), and others dismiss time spent at leisure and recreation as ‘non-therapeutic’ (6, 7). Even in a review of social activities after stroke, some of the papers included in terms of examining leisure and recreation contained no mention of this aspect of recovery (8). One insightful paper report a significant curtailment of recreational activities after stroke, 38% compared to 8% in age-matched controls (9).

The existing literature also has a focus on clinical benefits of arts therapies and arts and health programmes (particularly music therapy) in areas such as depression, improving communication for patients with aphasia and as a rehabilitation tool (10-16). While there have been many papers written on the benefits of arts in hospital environments (1, 17-19) and particularly arts for older people in various settings, (20-23) only two papers focus specifically on the experience of stroke patients in arts post stroke (11, 24) but none examine stroke patients’ interests in arts and culture pre-stroke and during hospital stay. Three papers were found regarding leisure activities and stroke, but not arts or cultural interests (25-27). If
arts and aesthetics play a potentially important role in stroke rehabilitation, more knowledge is needed on the role played by arts, culture and aesthetics in patients’ lives. The study, therefore, also explored the perception of the participants about arts activities in hospital and their relevance.

**Materials and Methods**

Thirty-eight patients completed a questionnaire administered using questions from a major population study of cultural and aesthetic pursuits in the Irish population. The questionnaire was developed from a previously validated survey by the Arts Council of Ireland, used to determine public perception and involvement in the arts. (28) Relevant questions were taken from the Arts Council questionnaire that related directly to attendance at arts events, participation in the arts and receptive engagement in arts as these were relevant to the aesthetic and cultural pursuits of hospital patients with stroke. Questions relating to purchasing arts materials and whether people attended rural or urban arts centres were not included as these were deemed less relevant to our study. The questionnaire was then adapted to include questions regarding the patients’ aesthetic experience of hospital as well as the experience of patients pre and post stroke. The Arts Council questionnaire included demographic questions including income, level of education, occupation and marital status. Wherever possible, questions were taken directly from the Arts Council questionnaire as this was a previously validated questionnaire concerned with the aesthetic and cultural interests of the general public.

The majority of questions were closed, with yes/no or a grading of answers (for example, ‘did you attend arts events once in the last year, 1 – 6 times or more than 6 times?’). The patients were asked only one open-ended question about their preferred arts and leisure past-times, both before and after their stroke. Please see Appendix One for full questionnaire.
A convenience sample was used of twenty-one consecutive admissions to the Stroke Service, and seventeen out-patients from three consecutive out-patient clinics at a university teaching hospital. Inclusion criteria included patients who have had a stroke as a primary cause of admission to the Stroke Service. Exclusion criteria were severe cognitive impairment, severe aphasia/language impairment sufficient to preclude participation, or patients who were too ill to take part in the study.

Whilst 38 patients in total were surveyed, 21 of these were in-patients and 17 out-patients at the time of survey. The full 38 were therefore asked about their arts activities pre stroke and only the 17 out patients were asked about participation and attendance at activities post stroke, as clearly the in-patients could not comment on this aspect. However, the full 38 were asked about their engagement in receptive arts post stroke (questions 7 and 9 of the survey), specifically the questions relating to receptive participation in the arts, particularly which media patients used to listen or watch arts and questions relating to reading.

The assessment included demographic variables, the date and type of stroke (ischaemic/haemorrhagic), Oxfordshire Community Stroke Project classification (OCSP), (29) cognitive screening with the Ottawa 3DY 4-Question Screen for Cognitive Impairment (3DY), (30) and current functional status via the Modified Rankin Scale. (31). The 3DY cognitive test has 4 questions, giving a maximum score of 4, a simple way to quickly assess cognitive ability. The modified Rankin Scale is a commonly used scale for measuring the degree of disability or dependence in the daily activities of people who have suffered a stroke or other causes of neurological disability, Score runs from 0 – 6 with 0 being no symptoms and 6 being ‘dead’.

**Statistical analysis**
Chi-square tests were undertaken on 7 of the most popular arts activities and events. Chi-square tests are used to see if there is a relationship between two categorical variables, in this case the group of patients pre and post stroke. For these statistics the full 38 patients were counted for reading and listening to music whilst the 17 post stroke out patients were used for the other seven activities.

**Results**

**BEFORE STROKE**

Twenty-one men and seventeen women participated; mean age was 67 years, and their functional and cognitive status is summarized in Table 1. Where possible participants completed the questionnaire independently, but where assistance was needed (for example, where participants had difficulty writing or reading the questions) the researchers assisted patients by reading out questions or filling in the answers, as directed by the participant.

Insert Table 1 here -

The participants described a wide range of arts and cultural activity. The most popular activity was dancing, with 19 (50%) of patients having participated at some point before their stroke. Some enjoyed this activity right up to the time of their stroke; others danced earlier in life but remembered enjoying it. Popular types of dance were traditional Irish, ballroom and “60’s” dancing.

Other very popular activities were singsongs in pubs, gardening & “being outdoors”. Eight (21.1%) patients played a musical instrument. Other activities mentioned by patients were ‘doing impersonations’, painting, swimming, going to the gym and choir singing.

Of the subjects who listened to music regularly, the media used to do so was radio or CDs in the majority of cases, with some participants using a digital music player. The popular genres
of music within this patient population were classical, country & western and Irish ballad singers, however, rock, house and pop music also featured. The preferred genres of music concerts attended were classical, rock, pop and traditional music.

Popular choices of reading material were true crime, biographies and the newspaper. Popular TV and DVD viewing was sport, murder mysteries and “old-fashioned” films.

Twenty-seven patients (71.1%) said they had stopped to look at artwork in a public place, while if the patients who said they had noticed such artwork in are included, this figure rises to thirty-four (89.5%).

- Insert tables 2 and 3

AFTER STROKE

For participants who had returned to the community post stroke (n=17, 44.7%) there was generally a decline in attendance at arts events after stroke. Most stated that the decline in attendance was not due to reasons related to their stroke, but because of a variety of other factors including other health issues, ‘having no one to go with’ and inaccessibility of certain arts events (local cinema closing down was one example). However, four (n=4, 24%) patients stated they had simply ‘lost interest’ in attending these events.

The most popular arts events pre stroke were attending films (n=21 55%), concerts or other musical events (n=20, 53%) and plays or shows (n=18, 47%).

Tables 2 - 5 give further information regarding patients’ attendance at arts and cultural events pre and post stroke, their participation in arts activities pre and post stroke, their key leisure/cultural activities and their opinions about the arts.
The reasons given for not continuing participation in activities after their stroke were health issues as a result of their stroke (n=4), health issues unrelated to their stroke (n=5) and transport difficulties (n=3). One patient (n=1) had been attending a ballroom dancing evening weekly up until the age of 70, when she began to feel ‘out of place’ as she was the oldest person in attendance at the event.

It is interesting to note that there was a decline in participation in all leisure and arts pursuits listed after stroke, from reading to attending art exhibitions.

For the whole sample, receptive arts were popular, with listening to music (n=35 92%), watching arts on TV (n=19 50%) and reading (n=25 66%) being popular activities pre stroke. Interestingly, these were also some of the most popular arts activities post stroke (listening to music n=24 (63%), watching arts on TV n=13 (34%) and reading n=14 (37%). Reasons cited for the discontinuation of reading as an activity after stroke included headaches (n=1), poor eyesight (n=5) and lack of concentration(n=6).

Statistical results of Chi-square tests are seen in Table 4 - 5 for both receptive arts and participative arts activities and events pre and post stroke. Results of pre and post stroke levels of engagement in the 2 receptive arts (listening to music and reading) can be seen to be statistically significant. Results are mixed in the 5 most popular participative activities; the most probable reason for lack of statistical significance in some categories is the very small number in the study.

Insert Tables 4 - 5 here

WHILE IN HOSPITAL

Twenty patients (52.6%) had stopped to look at artwork in the hospital, while if the patients who had noticed the artwork are included, this figure rises to 24 (63.2%). However, many of
the acute patients had not left the stroke unit at the time of assessment, and therefore may not have had the chance to notice the artwork distributed around the hospital.

Twenty-five in-patients (65.8%) said they had difficulty gaining access to either the television or the radio/CD player. Nineteen of these (50% of all patients) said that they missed the TV or radio/CD player while being in hospital. Some patients mentioned that they felt it would disturb other patients to have the radio on or that it was impossible to concentrate due to “people coming in and out of the room all the time”. The patients who did not have access to the TV and/or music but did not miss it stated that this was due to health problems while in hospital such as headaches, or that they had lost interest or the power of concentration.

Most patients spoke positively about the artwork on display in the hospital and there was a general consensus amongst the majority of patients that artwork improves the hospital environment and provides a positive distraction, while some patients even mentioned a habit of talking walks along the corridors to look at the paintings on the walls.

When asked where patients would allocate spending on the arts in hospital, thirteen (34.2%) said they would spend it on art classes for patients, twelve (31.6%) would spend it on concerts for patients and twelve (31.6%) would allocate it to exhibiting more artwork throughout the hospital. Other suggestions included cooking workshops, computer skills workshops (to get people ‘back to work’ after stroke), singsongs and dancing evenings (e.g. ballroom, set and 60’s dancing).

ATTITUDES TO ARTS AND ARTS SPENDING

Thirty-five (92.1%) participants thought that the arts have become more available in the past ten years. Thirty respondents (78.9%) believed that as much importance should be given to
providing arts amenities as providing sports amenities. Thirty-one (81.6%) participants agreed that today’s arts and artists are as important to our society as the legacy of the arts and artists of the past. Twenty-four (63.2%) stated that they were interested in the arts. Thirty-eight participants (89.5%) thought that the arts play a valuable and important role in a modern society such as Ireland. Thirty (78.9%) thought that the arts from different cultures give us an insight into the lives of people from different cultures. Thirty-one respondents (81.6%) believed that the current level of spending on the arts should be maintained even in times of economic recession, however only twenty-one (55.3%) thought that spending by the Arts Council in hospitals should be increased, if it meant a cut or smaller increase elsewhere in arts spending.

Discussion

This study gives a new perspective on the aesthetic and cultural pursuits of stroke patients prior to their stroke. It portrays a wide variety of cultural and leisure activities. Most patients had several past-times which they enjoyed before their stroke, many involving the arts. The most popular activities were dancing, mainstream cinema listening to music and radio, being outdoors and gardening.

Most of these activities could not be accessed while in hospital, with the exception of patients who enjoyed listening to music/radio, and had a radio or electronic music device at their bedside (e.g. radio or digital-music/cassette player).

These findings create an impetus to ensure that needs of patients in hospital are met and that those who design hospital units for people with stroke, and those who provide the clinical services, plan accordingly. Provision to the patient’s own choice of music in a manner sensitive to noise for other patients and staff would seem to be a priority, a finding given
extra weight by Sarkamo’s study showing better cognitive and affective outcome for patients
with access to their own choice of music after stroke.

For in-patient services, for example, planning outdoor garden spaces may in part meet some
of those needs. (32) In addition, new technological methods may provide ‘windows’ to the
outside world for those who are confined by the physical and cognitive changes of stroke.
(33) Attention to access to radio and television, in a manner sensitive to privacy and noise
pollution, are important.

Many patients suggested that having a dancing evening or class for inpatients would be
enjoyable and sociable. With some imagination, this sort of programme might be
implemented and be effective at several levels; a programme has been described for dance for
patients with chronic heart failure. (34)

This study also raises the issue of the change in people’s activities after stroke, a topic that is
under-researched. (27) Many of the outpatients interviewed had given up or lost interest in
former activities. The reasons for this varied hugely including lack of local facilities, visual
problems after stroke, loss of confidence after stroke and general health problems. Many of
the inpatients stated that they were looking forward to getting back their normal daily
activities and hoped they would be able to participate in their former past-times.

There was also a lack of patient awareness of the arts programme at the hospital. Despite this,
the vast majority of patients expressed interest in it and would have liked to know more about
it (including patients who expressed little/no interest in the arts in general). An even greater
majority thought that having an arts programme in a hospital was important, with many
stating that it would give people something to look forward to, and would serve as a positive
distraction from immediate health problems. It is clear that one of the obstacles faced in
augmenting an arts programme is improving patient awareness of arts activities in the hospital.

Patient views on the arts, and arts in healthcare, showed considerable diversity and should help to inform the design and implementation of arts programmes. While a number of patients were interested in the arts, a similar number showed little or no interest. Notwithstanding, the vast majority believed the arts play a valuable and important role in society, and most did not think arts spending should be cut in the recession. The majority also thought that providing arts amenities was as important as the provision of sports amenities. These findings mirror the findings of Staricoff et al. (35)

While increasing academic focus is directed on the contribution of architecture, design of healthcare spaces and visual and performing arts in the hospital environment to patient wellbeing, (36) the end-user has rarely been adequately consulted, or participated directly in this research. A recent study of qualitative research which engaged patient perceptions of arts in health recovered only fifty four relevant studies and a number of these recommended further research, a more rigorous approach to consulting patients and larger sample sizes. (37) If arts and aesthetics are to provide tools for assisting patients through the journey of illness, and a means of providing intellectual and social stimulation to patients while in hospital, more insight into the relevance and nature of aesthetic and cultural pursuits is needed.

This study advances our knowledge by providing a foundation for what has been identified by several papers as a key issue; how to tailor the environment, aesthetic supports and arts programmes for patients with stroke. In addition, it can also help us to learn what to avoid in such programmes, an ethical imperative in any healthcare environment. One commentator has noted that “ethics becomes an imperative consideration when art is displayed to a captive population of vulnerable patients who are stressed, fearful, in pain, and may be unable to
choose the art displaced to the) and that inappropriate art styles and subject matter may sometimes worsen outcome. (38) Studies such as this one begin an inquiry as to the basis upon which selection of art for patients might be made.

**Limitations**

There are a few limitations to the research in this study. Firstly, this study focuses on a patient population, not only small in number, but also (due to the geographical location of the hospital) featured a specific section of society. Ten participants (26%) had not continued education after primary education and 8 (21.1%) had not completed their 2nd level education. Only ten participants (26%) had attended 3rd level education. A large majority of the patients were from a lower socio-economic bracket.

Another limitation of this study was that over half of the participants were still in-patients of the hospital and therefore the findings of events and activities enjoyed by stroke patients after their stroke are limited to those who were out-patients, as the patients still on the wards had not yet had the opportunity or were still too unwell to participate in many leisure activities. This decreased the “after-stroke” results to a patient population of just seventeen.

Whilst the study indicates that patients did value visual art in the hospital, and had preferences regarding aesthetic input in hospital (for example providing more concerts, exhibitions and art classes in hospital) the study did not compare in-patient and out-patient responses to these issues. This would be a useful direction for future research, as well as further exploration of the role of arts in rehabilitation during different stages of recovery. It is not possible to make concrete recommendations as to which arts should be provided in different stages of rehabilitation, but this research points to the importance of consulting patients about their aesthetic, cultural and leisure interests in order to programme arts interventions appropriately at all stages of health care.
Conclusion

This study provided an insight into the cultural, leisure and arts pursuits of stroke patients. It demonstrated the wide variety of activities preferred by this particular patient population and highlighted many areas and activities which could be potentially incorporated into the arts programmes of stoke units. Furthermore, this study has drawn attention to patients’ lack of access to resources such as television, radio and music players, and to the restrictions felt by the patient after stroke in relation to involvement in activities and attendance at arts events. This study also suggests that stroke patients would benefit from further awareness of the arts programme in hospital, and that despite the climate of economic cutbacks, patients value the arts highly in both the community and hospital settings.
Acknowledgements

The authors thank the thirty-eight patients who contributed to this study and the staff of the Stroke Unit at Tallaght Hospital.

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Conflict of Interest/Disclosure(s)

Disclosures - none

References

31. Rankin J. Cerebral vascular accidents in patients over the age of 60. II. Prognosis. 5, s.l. Scottish Medical Journal. 1957;2.

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# Questionnaire

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<th>Interviewer Name</th>
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<td>Questionnaire Number</td>
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<tr>
<td>Gender</td>
<td>Age</td>
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<tr>
<td>Martial Status</td>
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</table>

**Occupation/former occupation of Respondent (Chief Earner if Homemaker)**

- Working Fulltime
- Working Part-time
- Self-employed
- Unemployed (seeking employment)
- Fulltime Homemaker
- Student
- Retired

**Educational Level Completed**

- No formal education
- Primary Level
- Attended 2nd Level
- 2nd Level
- Still at 2nd Level
- 3rd Level Undergraduate
- 3rd Level Postgraduate
- Still at 3rd Level

**Children living with them under 18?**

- Date of last stroke
- Type of last stroke (OCSP)
- Oxfordshire Community Stroke Project Class
- 3DY Cognitive Test Result
- Level of Disability (Rankin Scale)
- Other Information
Q1. What are your usual hobbies & leisure activities?

Have you been able to do these since your stroke?

Q2. Which, if any, of these activities have you attended  
a) before your stroke  b) after your stroke

Which, if any, of these activities did you miss attending while in hospital?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Before Stroke</th>
<th>After Stroke</th>
<th>Missed in hospital</th>
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<tbody>
<tr>
<td></td>
<td>1-6 times per year</td>
<td>&gt;6 times per year</td>
<td>1-6 times per year</td>
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<td>Play/Show</td>
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<td>Opera</td>
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<td>Musical</td>
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<td>Variety Show/Pantomime</td>
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<td>Circus</td>
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<td>Open air street theatre/</td>
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<tr>
<td>performance</td>
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<tr>
<td>Comedy</td>
<td>Stand-up Comedy</td>
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<td>Cinema</td>
<td>Mainstream Film</td>
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<td>Art-house Film</td>
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<td>Contemporary Dance</td>
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<td>Dance</td>
<td>Ballet</td>
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<td>Traditional/Folk Dance</td>
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<tr>
<td>Other Dance Performance</td>
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<td>Concert/Performance</td>
<td>Classical Music</td>
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<td>Concert/Recital</td>
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<td>Jazz/Blues Concert</td>
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<td>Other Performance</td>
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<td>Rock or Popular Music</td>
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<td>Traditional Irish or Folk Music</td>
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<td></td>
<td>Country &amp; Western Music</td>
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</table>
Q3. In regards to those arts events which you attended, would you say they were performed by:

- Professionals (ie fulltime, paid people)
- Amateurs/voluntary/non-professional people
- Mixture of amateur and professional
- Don’t know/ can’t remember

Q4. In which of the following venues do you attend these events?

- Cinema
- Church
- Concert Hall/Opera House
- Theatre
- School Hall
- Pub/Hotel
- Town Hall
- Community Centre
- Open air venue
- Library
- Art Gallery
- Other dedicated music/arts venue
- Other
- None of above

Q5. In which of the following activities have you taken part and/or are you a member of a club/society/group for XXXX or have you attended any educational courses/classes in this area
a) before your stroke  b) after your stroke  c) while in hospital

Which, if any did you miss while in hospital?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Before Stroke</th>
<th>After Stroke</th>
<th>While in Hospital</th>
<th>Missed in Hospital</th>
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<tbody>
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<td></td>
<td>Taken Part</td>
<td>Club Class Course</td>
<td>Taken Part</td>
<td>Club Class Course</td>
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<td>Set dancing</td>
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<td>Other Irish traditional/folk dancing</td>
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<td>Other dancing (not fitness class)</td>
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<tr>
<td>Singing</td>
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<td>Sing in a choir</td>
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<td>Other singing to an audience or rehearsing (not karaoke)</td>
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<td>Music</td>
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<td>Play a musical instrument to an audience or rehearsing</td>
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<tr>
<td>Play a musical instrument for your own pleasure</td>
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<tr>
<td>Writing any music</td>
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<td>Drama</td>
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<tr>
<td>Events</td>
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<td>Helping with running arts event or organisation</td>
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<td>Art</td>
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<td>Painting/drawing/sculpture</td>
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<td>Making artworks or animations on a</td>
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</tr>
</tbody>
</table>
Q6. Have you ever stopped to look at any art (ie a sculpture) in a public place (e.g. in a park, on a street etc) within the last 12 months

Yes Have noticed
No Don’t know/ Can’t remember

Have you stopped to look at any art (ie a sculpture) in the hospital?

Yes Have noticed
No Don’t know/ Can’t remember

Q7. Which of the following media have you used to watch or listen to an arts performance or event

a) before your stroke  b) after your stroke  c) while in hospital

<table>
<thead>
<tr>
<th>Media</th>
<th>Before Stroke</th>
<th>After Stroke</th>
<th>While in hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV/Films</td>
<td>Television</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video recorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DVD Player</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Internet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>Radio</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CD player</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Record player</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cassette player</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital music player</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>None of above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What type of music do you listen to?

Q8. How long were you in hospital for?

Which, if any, did you have difficulty having access to while in hospital?

Which, if any, did you miss while in hospital?

<table>
<thead>
<tr>
<th>TV/Films</th>
<th>Difficulty getting access to</th>
<th>Missed while in hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video recorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DVD Player</td>
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<tr>
<td>Internet</td>
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<tr>
<td>Music</td>
<td>Radio</td>
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<tr>
<td>CD player</td>
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<tr>
<td>Record player</td>
<td></td>
<td></td>
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<tr>
<td>Cassette player</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital music player</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None of above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q9. Which of the following have you read for pleasure

a) before stroke  b) after stroke  c) while in hospital

<table>
<thead>
<tr>
<th></th>
<th>Before Stroke</th>
<th>After Stroke</th>
<th>While in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Q10. Do you have any difficulties in attending or taking part in those arts activities which interest you

   a) before stroke  
   b) after stroke  
   c) while in hospital

   Yes  
   No

If yes, what sort of difficulties do you have?

<table>
<thead>
<tr>
<th></th>
<th>Before Stroke</th>
<th>After Stroke</th>
<th>While in hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to building</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Can’t afford – cost</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Family commitments</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other commitments</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transport difficulties</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Fear of going out in the evening</td>
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<tr>
<td>Too far away/ inconvenient</td>
<td></td>
<td></td>
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<tr>
<td>Nobody to go with</td>
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<td></td>
<td></td>
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<tr>
<td>Inadequate information on event</td>
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</tbody>
</table>
Q11 How do you usually find out about the arts activities you are interested in?

Television Radio (national) Radio (local) Newspapers (national)
Newspapers (local) Mailing list (post) Mailing list (e-mail) Word of mouth
Posters/noticeboard Events guide Flyer/leaflet Internet
Teletext Text message Other (specify) None of above

Q12. Are you aware that there is an arts programme in the hospital?

Yes No Unclassifiable

If yes, how did you find out about the arts activities taking place in the hospital while you were here?

Q13. Would you like to know about arts activities in the hospital?

Yes No Don’t know

Q14. Do you think arts programmes in hospitals are important?

Yes No Don’t know

Q15. If you could choose where to allocate spending on the arts in hospitals, which of the following would be the two most important priorities for you?

Eg: Artwork in corridors/waiting rooms, musical concerts, classes for patients etc
Q.16  SA: Strongly Agree  A: Agree  N: Neither agree or disagree  DA: Disagree  SDA: Strongly Disagree  DK: Don’t Know

<table>
<thead>
<tr>
<th>The arts have become more available in the past 10 years</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>DA</th>
<th>DA</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family support and interest is the most important factor in a person to develop an interest in the arts</td>
<td></td>
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<tr>
<td>As much importance should be given to providing arts amenities as is given to providing sports amenities</td>
<td></td>
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</tr>
<tr>
<td>Today’s arts and artists are as important to are society as the legacy of the arts and artists of the past</td>
<td></td>
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</tr>
<tr>
<td>I am interested in the arts (e.g. music, dancing, reading for pleasure etc)</td>
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<tr>
<td>The arts play a valuable and important role in a modern society such as Ireland</td>
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</tr>
<tr>
<td>The arts from different cultures give us an insight into the lives of people from different cultures</td>
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<td></td>
</tr>
<tr>
<td>The current level of spending on the arts should be maintained even in times of economic recession</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Spending on the arts by the Arts Council in hospitals should be increased (even if that means a cut or smaller increase elsewhere in arts spending)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Q17. Where patient lives:

- Urban or suburban – Population over 50,000 people
  - Dublin & suburbs – including towns that have become [art of these urban areas but not towns close by that are commuter towns.

- Large town (or its suburbs) – Population approx between 10,000-50,000 people
  - Carlow, Naas, Celbridge, Newbridge , Bray, Greystones, Dundalk, Navan etc

- Town (or its suburbs) – Population between 1,500-10,000 people

- Rural – Population below 1,500 people or open countryside
Q18. What’s your ethnic or cultural background?

- White – Irish, Irish traveller, Other white background
- Black or Black Irish
- Asian or Asian Irish
- Other, including mixed background

Q19. What was your total annual household income for 2010 (including income from all source)?

- Below €15,000
- Between €15,000 - €29,999
- Between €30,000 - €44,999
- Between €45,000 - €59,999
- Between €60,000 - €74,999
- €75,000 and over
- Other N/A

3DY Cognitive Test

- Day
- Date
- Year
- DLROW