

Patient-friendly hospital environments: exploring the patients' perspective

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Abstract

Objective To investigate the perceptions and attitudes of patients to the built environments of NHS Trust hospitals, in order to inform design excellence so as to make future hospitals places and spaces responsive to patient needs.

Design An exploratory study of patients perceptions based on qualitative semi-structured personal interviews.

Setting and participants Fifty one-to-one interviews held with hospital in-patients across the four directorates of surgery, medicine, care of the elderly and maternity at Salford Royal Hospitals NHS Trust, Salford, UK.

Results The research found that there was much similarity in the priorities, issues and concerns raised by patients in each of the four directorates. Patients perceived the built environment of the hospital as a supportive environment. Their accounts in each area pointed to the significance of the factors that immediately impacted on them and their families. Patients identified having a need for personal space, a homely welcoming atmosphere, a supportive environment, good physical design, access to external areas and provision of facilities for recreation and leisure. Responses suggest that patient attitudes and perceptions to the built environment of hospital facilities relates to whether the hospital provides a welcoming homely space for themselves and their visitors that promotes health and wellbeing.

Conclusions The findings have important implications for capital development teams, clinical staff, managers and NHS Estates personnel. Although the study has immediate relevance for Salford Royal Hospitals Trust, findings and recommendations reported provide NHS Estates and other relevant stakeholders with evidence-based knowledge and understanding of patients' perceptions and expectations of and preferences for particular facilities and estates provision in NHS hospitals.

Introduction

This study forms part of a broader programme of research, which examined the factors that influence the attitudes and perceptions of patients to NHS hospital built environments. Researchers in the USA and Canada suggest that there are clear links between patient health and wellbeing and the environment of hospitals. There is some evidence that the built environment of the hospital can influence the healing process and that it can have a direct impact on patient outcomes including for example reducing levels of anxiety and stress,^{1,2} shortening recovery periods following surgery through enabling views of nature,³ increasing social interaction through improved positioning of furniture^{4,5} and significantly decreasing pathological behaviour through creation of a supportive, stabilized environment for patients.⁶ There is little history of research work in the UK concerning patients' perceptions of the internal areas of hospitals. However, emerging findings from Lawson and Phiri⁷ appears to support the assertion of US studies of a link between good surroundings and positive patient outcomes. There is a need to explore the issues surrounding patients' perceptions of and attitudes to hospital environments and to determine factors that contributed to their experience within that environment.

The research was carried out at Salford Royal Hospitals NHS Trust (SRHT), a large acute teaching hospital in Salford, Greater Manchester that provides local, regional and national services. It currently has approximately 900 beds and employs 3500 staff. Victorian buildings, outmoded ward stock and piecemeal on-site redevelopment with a combination of poor infrastructure and outdated design typify the overall quality of the built environment of the Trust. These factors may influence patients', visitors' and stakeholders' perceptions, their experiences and subsequent views and opinions of the environment of the hospital. The hospital is about to be redeveloped under the Salford Health Investment for Tomorrow (SHIFT) project. This £190 million

project will involve substantial redevelopment of the main hospital site and provision of primary care centres at locations across the city of Salford, as well as a 'shift' in health care delivery, which will bring together a range of primary, community and social care services and facilities. In light of these planned developments, it is timely to ascertain patients' perceptions about the built environment of hospitals so as to influence future design and planning.

This paper reports on the qualitative data generated through face-to-face interviews with current hospital in-patients. It details patients' accounts of, and views about, their perceptions and the experiences of their families and visitors in the hospital environment.

Aims and objectives

The main aim of this research was to explore patients' feelings about the environment of NHS hospitals, using SRHT as a case study, in order to gather information about what is best for the patient using the service and to identify what they and their families need. The objective of the research was to help to develop design excellence, to improve the built environment of hospitals so as to make future hospitals places and spaces responsive to patient needs. The study focused on the following question areas:

1. What are patients' understandings of what makes a patient-friendly hospital environment?
2. What is the nature of their experience of the environment and what is their and their families' response, how does it affect them?
3. In their experience, what are the most important aspects of the built environment that support or hinder what they want/need to do?
4. What are their suggestions for making future hospital designs more patient-friendly?

Literature survey and research review

A number of studies, particularly from North America, have discussed the notion of healing

environments in which the influence of the immediate surroundings helps people to get better. Such healing environments shorten people's post-operative recovery period and help to return them to a good state of mind and physical health.^{3,8} In one of the earliest studies of the important role of hospitals as healing environments, Ulrich⁹ suggested that stress was a major obstacle to healing and that the wellbeing and recovery of patients was directly related to the physical environment of the hospital and its health care facilities. Later studies suggest that the hospital environment is itself a 'healing landscape' that has a distinct effect on the health and recovery of patients.^{10,11}

A number of authors have discussed the relationship between mental stress and the healing effect of the natural and urban environment.¹²⁻¹⁶ Ulrich *et al.*¹³ have shown that exposure to natural and urban environments has a direct impact on recovery from stress. Accordingly, the physical environment of a hospital has significant effects on patients' mental processes and their social wellbeing. Ulrich's¹⁴ ideas of supportive designs for health care environments suggest that hospitals should take steps to enhance the features of the patients' surroundings to hold their attention and interest without creating further difficulties that add to their fatigue and distress. Within the UK, Francis *et al.*¹⁶ discussed the fundamental shift that is taking place in the way that health professionals define health and evaluate health care buildings and pointed to the emergence of therapeutic environments as a factor which contributed positively to the healing process. Furthermore, Francis and Glanville,¹⁷ in considering a vision for future health care, pointed to the significance of the quality of design in the therapeutic environment. Research reviewed suggests that the built environment of a hospital influences the healing process and has a direct effect on patient health outcomes. A healing environment can help to reduce the stress that patients encounter during a period of hospitalization and thereby help them in their personal recovery and recuperation.

Methodology

The research was explorative and qualitative in nature. Individual exploratory interviews were conducted with hospital in-patients at SRHT during the period November 2001 to January 2002. For the interviews, it was important that the patients and their carers had the opportunity to raise issues of relevance and concern to them. For this reason, the interviews held with patients were both flexible and interactive. The researchers used prompt guides to help to shape the discussion. The guides were used flexibly to allow each patient to give their own accounts so that their perspectives would emerge through informal discussions.

Sample selection

Patients were selected to provide diversity both in terms of their length of experience as a hospital in-patient and the type of specialty area across the four major clinical divisions of the hospital. These were general surgery, general medicine, care of the elderly and maternity. Patients were eligible to take part in the study if they had a length of in-patient hospital stay of 5 days or longer and were well enough to take part in a 15-min interview. A major implication of conducting research in hospital wards is the higher degree of control over selection of potential respondents that must be devolved to others (i.e. clinical staff) than would be normal in many research studies. For ethical purposes, the judgement about patients' 'fitness for interview' has to be a clinical rather than a research one. Thus, eligibility was established through consultation with ward managers. However, this condition did not raise a problem, given that the research imperative was qualitative, which allowed the study to reflect the *range* of patients' views and experiences rather than assess the relative importance of them among a *representative* sample of the hospital's in-patient population. However, the researchers sought to interview a range of patients comprising the young, middle aged and elderly; male and female; white and non-white.

The particular characteristics of the group of patients actually interviewed were periodically reviewed throughout the fieldwork process to help to ensure an appropriate sample structure. There were no restrictions imposed on the type or nature of clinical condition that necessitated the patients' hospital admission. Eighty-three patients were initially contacted and invited to participate in the study. Of those contacted, 15 subsequently became too ill for interview. Fifty of the remaining 68 eligible patients agreed to proceed to interview, a study acceptance rate of 74%. Of the 50 interviewees, 32 were female and 18 male. Their ages ranged from 18 to 82 years. The length of time they had been in hospital at the time of interview ranged from 5 to 133 days. Saturation determining sample size was not applicable in this situation of a qualitative study.

Study design

The requirements of the local ethics committee were followed, which necessitated obtaining permission from consultants, ward staff and the patient before the interviews could commence. All patients that were invited to participate in the study were given a patient information sheet 24 h before interview. This contained information about the study, which explained its purpose and what was involved during the one-to-one interviews. The intention was to conduct the interviews at the patients' bedside using tape recorded sessions for subsequent transcription and analysis. It became clear during the piloting of interviews that some patients were apprehensive about the use of a tape recorder. Others in adjacent beds also found it intrusive. Furthermore, during the pilot it was found that the background noise of the ward compromised the quality of the recordings. For these reasons two ward researchers were used to carry out the interview process. This had the advantage of allowing free-flowing conversations between patients and the interviewer and importantly reduced the danger of loss of detail in the data recorded as the other researcher carried out the task of taking detailed notes of the interviews.

Analysis

Interview notes were written up as soon as possible following interview and analysis was undertaken from these written transcripts. The text was systematically indexed and charted on a case-by-case basis using a common thematic framework for documentation, as described by Ritchie and Spencer.¹⁸ For each interview, a summary sheet was produced which provided a brief synopsis of the main points and thoughts for fast reading. From these interview transcripts and summary sheets, it was possible for the researchers to become familiar with the data. This allowed the researchers to review the data and to develop master charts to provide a descriptive display of the data set. Following the thematic framework approach as suggested by Miles and Huberman,¹⁹ emerging themes were identified, refined and charted. From these charts the researchers were then able to identify patterns and emerging themes. Although initially time-consuming, this process helped to make sense of the vast amount of data collected and it formed the basis for later analysis. All mention made by the patients of issues that affected them, their thoughts, feelings and events were coded inductively. This revealed the breadth and complexity of patients' views on the environmental surroundings they found themselves in and emphasized the importance that they attributed to that setting.

Findings

Across all four clinical areas of surgery, medicine, maternity and care of the elderly, the study found that there was much similarity in priorities, issues and concerns raised by patients. However, respondents' accounts did reveal that in each area, individuals attached more significance to those factors that immediately impacted on them personally. An overview will be presented from each of the four clinical areas identifying patients reported attitudes and perceptions of the hospital environment and major themes, which have emerged from the data will be identified and discussed.

Surgery

A total of 21 individual interviews were conducted with patients on acute surgical wards. Twelve of the interviewees were female and nine were male, ranging in age from 18 years to over 65 years.

Patient friendly

Interviewees were asked how they would describe a 'patient-friendly' environment. Their accounts revealed that, from the patient's perspective, the essence of a patient-friendly environment has more to do with what the place is like to be in, how it feels, rather than what it looks like *per se*.

It's patient-friendly when there's something to occupy your mind during the day – a room to go and have a sit and a drink. (Female, 55–64 years)

A patient-friendly hospital is made by the staff being nice. The facilities here are fine and the grounds adequate. The visual appearance is OK and the hospital no longer has that awful smell when you walk in. (Female, 65 years)

In contrast, wards were considered not to be patient-friendly when facilities were not easily accessible and usable or when the physical layout hindered communication and connection with others. For example, one interviewee considered her ward was not patient-friendly because:

I had to hop on crutches from the bottom of the ward and down a corridor every time I needed to use the toilets and the patients had to inform staff of what confused patients were doing because staff could not see into bays from the station. (Female, 55–64 years)

Most important factor

Interviewees reported that they felt safer and greatly appreciated it when the layout of the ward was able to provide reassurance and allay worries. They reported that this gave them a sense of security and comfort. One of the most important aspects was being able to feel at home and to look after oneself in relative privacy.

If you're confined to bed, privacy is the most important thing and the reassurance that you can see a nurse. You don't expect the Ritz but four to a room is OK. (Female, 55–64 years)

The most important thing is to be able to get a cup of tea when you feel like it – like at home – or have a smoke (in a special smoking room inside the hospital). On the maternity wards they have little kitchens – toaster/microwave/kettle – which would be OK. I know I am repeating myself but these little things are the most important for patients. (Female, 55–64 years)

Individuals who felt that these basic needs were not being met reported feeling very vulnerable and exposed:

Privacy is very important and I don't feel I get it here. There needs to be something more than just shutting the curtains around your bed as all the ward can still hear. (Female, 35–44 years)

A number of the patients interviewed had been in hospital for several weeks or even months. Two of these long-stay patients highlighted the priorities for people who are hospitalized for long periods, often far from their families:

The most important things are: privacy – it's embarrassing for people when they are asked a really personal question on a mixed ward ... and it's difficult to easily go to the loo; food – I don't mind paying for decent food; and the relatives' room – visitors travel a long way and they need to stay over. (Female, 45–54 years)

Having Mum to stay close on the ward, which is OK. (Female, 18–24 years)

Mum: When she has had surgery I like to be close-by.

Similarly, one interviewee from an ethnic minority community highlighted the value for her of cultural sensitivity – for example, the importance of receiving treatment with or being treated by members of the same sex, and the availability of appropriate specialist food and accommodation for prayer sessions for herself and her visitors.

There was an overall acceptance that funds were limited, perhaps as highlighted by recent media coverage of problems within the NHS nationally, and a general cultural acceptance that the NHS can afford to provide only basic necessities. This led many of those

interviewed to express their priorities in terms of what they considered as essential for their recovery. Nevertheless, interviewees were generally able to express considerable knowledge about their perceptions and attitudes towards the current provision of facilities, buildings and design.

What do you miss?

When identifying what facility they missed most during their period of hospitalization, interviewees in general focused on a feeling of loss of independence and loss of control. They explained that they felt restricted by not being able to choose when to have a drink or deciding what to watch on TV, and by not being able to freely contact their family and friends. In particular, people who had an existing disability reported that they felt their loss of independence acutely in hospital buildings, where they felt very dependent on others for even the most basic of daily needs. The following extracts are representative:

I miss being in my own environment. I am disabled so very dependent; at home everything is set up for me with all my equipment and my wife looking after me. (Male, 68 years)

The environment is very different to home; you feel a loss of independence. I cannot even contact friends because they have mobiles and they cannot get through on the ward phone. (Male, 42 years)

Effects of physical design on patient actions/concerns

Several interviewees provided examples of how particular design features had an effect on their personal behaviour and freedom to remain independent during their stay in hospital. For example, one interviewee explained:

The door on the bay toilet is very heavy and difficult to open, especially being on crutches. I would rather walk further down the ward to use the other toilets. I don't like asking to have the curtains closed when I want to get dressed/undressed. I think there should be some kind of pulley so patients who are immobile can shut their own curtains independently. (Female, 44 years)

Medicine

Nine interviews were conducted with individuals who were currently in-patients on medical wards. Four of those interviewed were male and the remaining five were female, ranging in age from 35 years to over 65 years. The medical wards where interviews took place were mostly long, open wards in rather old Victorian buildings, in contrast to the surgical wards, which in general were mostly newer and were divided into single rooms and bays of four to seven beds per bay.

Patient friendly

As before, each interviewee was initially asked what they would describe as a 'patient-friendly' hospital environment. Replies again focussed on the general atmosphere and feelings associated with being there. For example:

Doesn't matter about being patient-friendly. You just need to get better ... walking round, like having the TV close to me. It's a very relaxed atmosphere on the ward. (Male, 35-44 years)

Thus, again, environment is not something that is viewed or perceived in isolation by the patient but as part of an overall 'package'. However, they can identify specific factors which they perceive as being important in contributing to their experience, as in this case having the TV close by them, and being able to walk around within the setting of a relaxed regime on the ward. Thus, attitudes and perceptions to the built environment were influenced to a large extent by the general 'atmosphere'.

Most important factor

Many interviewees had been in-patients in hospital for some weeks and also had experience in different hospital settings, some even from childhood. They used this experience to make comparisons with changes in hospitals over time and then based their considerations on these. Interviewees reported that the most important factors about the built environment were having privacy, a homely environment, considerations for the needs of physically disabled people, being able to see outside, to get fresh air and having

things to occupy their minds. Many appeared to feel tension between expectations and costs and highlighted the public perception that improved design and additional facilities within hospital settings could only be considered at the expense of clinical care. The following extracts are illustrative:

It's a struggle sleeping at night, but you can't do anything about it; single rooms for everybody is not a practical option. (Male, 55–64 years)

You accept that you're in a long open ward; it would just cost too much to be in a smaller room; it could be a bit bright I suppose but it's a hospital. (Male, 65+ years)

Effect of physical design on patient actions/concerns

Because several of the respondents had been in hospital for a number of weeks, this influenced their perception of what facilities would assist in making their stay better and allowed them the opportunity to compare different ward settings and layouts. Thus, one lady explained that she felt that the four-bed bays were fine but the five-bed bays felt a 'bit cramped', and also, that adjacent bays had long floor-to-ceiling windows, which were much nicer than high windows that let in light but offered no view of outside.

Interviewees consistently reported that they had little or nothing to do during the day. There was little recreational facility or diversional activity available. The result of this was that they got fed up and bored. Suggestions for improvement included adapting the layout of beds to facilitate improved social interaction between patients and also provision of recreational facilities both on the ward itself in terms of an afternoon entertainer, a library or social (tea) room and wider facilities across the site. A cinema, games room, cafes and leisure facilities were popular suggestions.

Care of the elderly

Nine individual interviews were held with in-patients on the care of the elderly wards. Five of these patients were male and four female,

ranging in age from 65 to 82 years. All had been in hospital for a period of at least 5 days when the interviews were conducted and several had been in hospital for a period of weeks.

Patient friendly

These interviewees considered a hospital environment to be patient-friendly when it allowed people to engage in social interaction with others and to have a sense of control over their actions, and also, where it provided positive distractions, and where there was a generally welcoming and secure environment.

Most important factor

All respondents stated their overall satisfaction with the care received. Causes of dissatisfaction tended to centre on difficulties encountered with maintaining a sense of normality, and the sense of depersonalization that they felt due to having a lack of control over daily activities. Typical comments were:

I'd be willing to pay for newspapers coming round on a trolley. (Male, 65+ years)

I'm more than satisfied with the treatment here, very, very good. The loud radio is very irritating though ... it's non-stop talking. I could listen all day to music but not to this, but it's not for me to complain. I can't grumble at my age. The really good thing is the alarm button for the nurses. (Male, 82 years)

Effects of physical design on patient actions/concerns

Factors related to physical aspects of the built environment were perceived as either assisting or hindering patients' daily activities in terms of accessibility and usability. This might be in terms of getting from one area to another by use of lifts and walkways or actual personal ability to retain independence by provision of 'aids' which assisted independence, e.g. well designed hand rails, chairs at the correct height, space to manoeuvre wheelchairs or walking frames and doors that could be easily opened. Lighting was also an important factor where many patients expressed their fear of falling should they leave

their beds to go to the bathroom, due to their perception that the lights reflecting on the shiny floor made it look wet.

Maternity areas

Twelve interviews were held with in-patients on the maternity wards. As expected, these patients were in general younger than those interviewed in any of the other three clinical areas used, ranging in age from 18 to 44 years.

Patient-friendly environment

Again, patients on the maternity wards were asked to describe what they felt made an environment 'patient-friendly'. Their reports of patient-friendly environments were that:

It's patient-friendly because all four beds are visible to talk to everybody and if privacy is required the curtains allow you to be separated from the other three beds. (Female, 26 years)

To be patient-friendly the ward needs to be redecorated and more personal space provided, with bigger cupboards for belongings for mother and baby. When you decorate a baby's room you do it in bright colours. (Female, 25 years)

Most important factor

Patients on maternity wards are generally in hospital for shorter periods of time than other groups and have specific needs. This was apparent from the issues they raised as priority when asked what they considered the most important factor about the physical/built environment. Responses focused particularly on the need for the built environment of the hospital to provide privacy for themselves, intimacy with their family and facilities for visiting children. They also stressed the need for better and flexible visiting arrangements, cleanliness and good security. The following extracts are illustrative:

The most important thing is definitely having a single room. I'm glad about it ... for the privacy. (Female, 34 years)

Most important thing is cleanliness. The colour of the paintwork doesn't matter; we're not in here very long. Most important thing for me is privacy. (Female, 25 years)

What do you miss?

Several women spoke of difficulties fitting in with ward regulations that did not match their or their families' wishes and preferences. For example, visiting hours were arranged around ward requirements, which caused difficulties for families and patients themselves. Typical examples can be found in the following extracts:

My husband would like to be in a lot longer than the six hours allowed; there are times when he doesn't want to go home, and if he'd had the option of staying overnight he would have done. (Female aged 25 years)

Longer and more flexible visiting hours for partners and children as 2 pm–8 pm isn't suitable for everybody. My children are asleep at 2 pm until teatime, so they don't visit until 6 pm-ish, which only leaves two hours. It would be better if they could visit me in the morning so their routine doesn't need to be affected. (Female, 34 years)

Effect of physical design on patient actions/concerns

Every maternity patient interviewed raised the need for privacy as an important factor for them. Four of the patients were actually in single room accommodation; the remainder were in four-bed bays. There was general agreement that four beds was the maximum that they would like. A facility for visitors and children was identified as a major requirement for mothers on the maternity ward. As pointed out by one of the interviewees:

There are obviously more kids on maternity wards than elsewhere and it's a long time for kids to be here with nothing to do. If you have children visiting you there should be an area where they can play even if this area is in a separate room. Children get bored easily and can start to get restless which may cause distress to other patients in your bay. (Female, 25 years)

Material from all interviews were indexed within the broad categories identified and were then used to construct thematic charts for each clinical division. These charts have been assembled together and are presented in Table 1.

Table 1 Common and specific themes identified by area of care

| | Surgery | Medicine | Care of the elderly | Maternity |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A sense of personal space (confidentiality and privacy) | Confined to bed-privacy most important Privacy with visitors Privacy for communication | Confidentiality – talking with doctor Separate room to talk to your visitors Space around bed | Draw curtains for privacy with visitors Prefer single room-create single units for more privacy Maximum of four beds per bay | Should have a choice of single room or four-bed bay (Max) Larger family centred rooms Feel isolated at times in single room Nowhere to go for a private conversation |
| A homely welcoming atmosphere | Dull dayrooms Inspid paint work More homely-not on schedule Dark, cold miserable Being in appropriately designated ward –self and others Noise – especially at night | Being able to walk around Homely vs. clinical Pictures/art Brighter decoration Cosy café with pictures on wall Not homely-looks blank Noisy at night | Homely Controls at bedside for lighting, TV, radio, window shade and curtains | Proper regulation of temperature is important it gets stuffy for the baby Drab – not stimulating-baby’s room bright colours needed Ward décor old and dated Surroundings not relaxing |
| Meeting needs of visitors and family members | Car parking & signage Adequate supply of chairs Room to meet with visitors – not day room Overnight facilities especially for long stay patients Facilities for children | Car parking and time to park Access to public transport Chairs for visitors Patient/visitor room Play area for kids – somewhere for them to go Drinks machine for visitors | Signage confusing Inadequate bus service More disabled parking Porter at entrance to assist visitors with breathing or mobility difficulties Map at reception and age concern people to help with directions | Restricted visiting Facilities for visitors to eat Children’s play area Better facilities for families Overnight stay facilities for fathers Tea/coffee facilities for visitors Bigger room for visitors |

Table 1 (Continued)

| | Surgery | Medicine | Care of the elderly | Maternity |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Physical design (usable, accessible, controllable) | Wheelchair access especially on corridors | Lack of physical space to move about | Equipment to be low enough and in the right position | Proper reception area |
| | Wheelchair access to bathrooms | Storage for personal belongings | Grab rails usable | Fixed partition between beds |
| | Larger space around beds with adequate storage space | Space to move about with equipment | Space around bed for frames and wheelchairs | Accessibility to light switches from bedside |
| | Access through doors Patient control of environment from bedside – lights, shade, ventilation and temperature | Enough lifts spaced correctly Accessible appropriate hand rails | Security Lockers cramped – not enough room | Cramped when visitors come Bathrooms and toilet need to be more private |
| Access to external areas | | Effective heating & draught proofing | Would like a little wardrobe | Each bay needs own bathroom and toilet |
| | | | Moving walkways along corridors | |
| | Light, views and fresh air | Communal gardens | Lifts to be near to reception | View-good at night-can see Trafford centre |
| | See outside | Somewhere to walk | Windows low enough to see out | Need better ventilation – only get fresh air by opening windows very cold |
| Support effective communication (staff, patients, relatives, outside) | Balcony access – fresh air Windows | Near a window-fresh air/view Windows too high-light but no view | Need balcony-long way to get outside Long corridor nice but moving walkway along would help | |
| | Water feature Nature pictures on walls | Distance to outside | Pictures of nature on walls | |
| | Position of beds | Being able to talk to people | Use TV a lot | Relatives not able to call in from outside |
| | ‘See’ nursing staff Telephone, radio, e-mail internet | Central nurses station Bed layout to allow chatting with others | Telephone facility to call out Good thing-alarm button for nurses | Telephone facility poor Flexible visiting |
| | PC facility and internet access for educational and recreational use | Long open ward – easy to call nurse | Can’t hear the TV | |
| | | | Patient to have control over TV/radio | |

Table 1 (Continued)

| | Surgery | Medicine | Care of the elderly | Maternity |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Facilities for recreation and leisure (something to occupy mind) | Tea/coffee facilities gym, Jacuzzi Video library Café bar & cyber café Afternoon entertainment & cinema Large shopping plaza Prayer room crèche | Mobile hair salon Ward entertainer Ward washing facilities Shopping mall Games room Library Cinema & video hire Chapel | Drinks tea/coffee for patients and visitors Class for keep fit Painting class Easy to operate TV and radio Delivery of daily newspapers Chapel-prayer room Space for painting, art, music | Shops close to ward Food for visitors Access to drinks machine and chilled water Access to alternative therapies Mobile hair and beauty treatment Daily newspapers Nursery on the ward Cinema, swimming pool, video hire |

Discussion

The role of 'place' in the creation and maintenance of health has recently been acknowledged and studied.^{9,12,20} Researchers are increasingly noting that factors such as perception of and the nature of social relationships that occur affect health.^{2,5,21,22} Findings from this study suggest that the design of the built environment of the hospital can have a major effect on the degree of 'social interaction' that takes place. Some interviewees describe this in relation to the importance of the positioning of beds or furniture within a ward that make it easier for patients to interact with each other. For others, it meant having places to go either alone or where they could mix socially with others. For many, this idea of homeliness was defined by the presence or provision of places that they could offer visitors a cup of tea, or for long stay patients, somewhere they could go for a meal with friends or family. Their suggestions for how this could be addressed in future design models included provision of café bars, restaurants, gardens and leisure facilities that they could use with families and friends.

In this study, the need to have a sense of control over their own activity was raised by interviewees in all areas of the hospital. Interviewees expressed their desire to be able to have a sense of control over their actions, facilitated by good design to enable them to move around the ward area, open and close curtains, control lights and temperature, and access external areas of the building facilitated by good design which aided rather than hindered their ability to retain a sense of normality. This finding supports previous studies, which have reported how fostering a sense of control, providing information and allowing patients to take responsibility for aspects of their care reduces helplessness and improves other outcomes.^{8,11,23-26} This is an area requiring further research in respect of the potential to improve patient outcomes through introducing innovative design ideas that support and increase patients personal control.

A further finding from this study was that there was not a universal desire for single room

accommodation. Some patients stated a preference for four-bed bay accommodations. This finding concurs with results from Lawson and Phiri⁷ and also earlier work by Stevens *et al.*²⁷ Some respondents sought the social interaction and support that they received from interaction with staff and neighbouring patients. Indeed, patients reported that individual preference could change over time often in response to changes in their state of health, change in circumstances or changes in their expected health outcomes. The key issue was that each individual should have a choice in terms of which type of accommodation they prefer.

Conclusion

A central aim of this study was to explore patients' perception and attitudes to hospital environments and to determine the factors that contributed to their experience. Findings revealed the breadth and complexity of patient's views on the environmental surroundings and emphasized the importance that they attributed to that setting. The research also pointed to the vital link that exists between the environment and the organizational culture within a hospital. Hospital environments include a coalition of values and support behaviours that reflect the cultural norms at departmental levels and across wards. It is necessary to recognize the critical importance of this broader context within which quality health care environments need to be situated. The findings from this research point to the similarity of priorities and issues raised by all patients but also highlight the importance of specific factors that immediately impacted on patients or their families personally. Of particular interest is the finding that patients perceived the built environment of the hospital as a supportive health environment.

The research is limited by both the relatively small sample size and restriction to one hospital. However, similar findings emerging from wider strands of this research appear to support the findings reported here.²⁸ The findings and recommendations will provide NHS Estates and other relevant stakeholders with evidence-based

knowledge and understanding of patients' perceptions and their expectations of and preferences for particular facilities and estates provision in NHS hospitals. The intentions are that good practice guidelines developed will be incorporated into all new and rebuild hospital developments. These findings add to the growing body of evidence that will inform the development and creation of patient-focused health care environments for the future and if linked to supportive organisational behaviours can contribute to desired therapeutic outcomes for patients, and patient and family satisfaction.

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