Title Page

Day surgery patients’ perceptions of risk: a qualitative research study

A.Mottram

School of Nursing, Midwifery and Social Work, College of Health and Social Care, University of Salford, Frederick Road Campus, Salford, Greater Manchester M6 6PU

Accepted for Publication:

Abstract:

**Aim:** The aim of the study was to gain new insight into the perceptions of day surgery patients.

**Method:** 145 patients aged 18-70 years and 100 carers were recruited from the pre-operative assessment clinics in 2 public hospitals in the United Kingdom. They participated in semi-structured interviews on 3 occasions over a two year period.

**Findings:** Patients’ preferred day surgery because they saw it as a form of risk management. Fears of cross-infection and neglect in in-patient care generated by high profile press reports made them believe day surgery was a less risky option for surgical care. They also needed “to have a say” in their treatment options especially in relation to anaesthesia.

**Conclusion:** Patients are no longer passive recipients of health care but wish to have a say in their treatment options. Risk is linked to trust so day surgery personnel must ensure that full information, welcoming attitude and pleasant environment is presented to patients.

This study was funded by the University of Salford.

Keywords: Risk, Trust, Day Surgery, Qualitative research, Patient Perceptions.

Corresponding author;-A.Mottram –Tel +44 0161 295 2721 ; Fax: + 44 (0) 161 295 2963

E-mail :a.mottram@salford.ac.uk
INTRODUCTION

Internationally day surgery as proved to be a popular choice for patients. It is perceived to be efficient, speedy and causes less disruption to personal lives (1, 2). However the study below presents new insights into patient perceptions of day surgery in that they perceive day surgery as a form of risk management.

This paper, discusses how sensationalist media reports of poor health care may cause considerable anxiety and influences perceptions of risk. It also demonstrates the importance of patients developing trust with service providers and gaining the confidence to ‘have a say’ in their treatment options. An appreciation of the intricate nature of risk perception is appropriate to enable day surgery professionals to provide holistic patient care for their patients.

Alaszewski & Manthorpe [3] define risk as the chance that a particular course of action will not accomplish its preferred effect but instead some unwanted outcome may ensue. The modern environment is considered to be riskier than ever before. Indeed, writing towards the end of the twentieth century, Douglas wrote that ‘risks clamours for attention; probable dangers crowd in from all sides, in every mouthful and in every step’ [4].

It has been suggested that risk awareness has arisen as a consequence of the dissolution of traditional societies which has prevented their customs and habits being passed down through the generations [5,6,7,8]. These shaped peoples lives and gave them meaning and purpose. Now globalization has led to an increase in anxiety because much of the power to act effectively has moved away from localities to an uncontrolled global arena. In the face of this uncertainty, trust in institutions and experts has diminished and their legitimacy questioned [7]. This sense of fear and risk
aversion has been accentuated by the international financial crisis of recent years and has led to a state of permanent anxiety [7]. A result of this anxiety is the motivating force to attempt to calculate every action in order to predict the gains and losses of any proposed activity under conditions of extreme uncertainty [8]. It has been suggested that individuals often manage risk in two, often overlapping, ways: by searching for scientific facts for reassurance, the so-named ‘rational actor model’; and other non-rational ways such as superstition, faith and trust [8].

Role of the Media

Particular attention has been paid to the role of the media in constructing representations of risk which sometimes results in creating hysteria and panic. Petts et al [9] in a major study of the influence of the media on public perception of risk found that the reporting of the tabloid newspapers was image-intensive, sensationalist and incited emotions. The editorial content of these newspapers looks for causes and apportions blame whether personal, organisational or political. Internationally the top risk stories reported in the media are medical risks. Lurid newspaper headlines may incite fear in prospective patients: ‘Despicable and chaotic-Coroners verdict on hospital.’ This damning newspaper report concerning reported episodes of neglect in a local hospital caused fear and led to patients requesting to go elsewhere for treatment [10].

As well as newspapers, the entertainment media may also influence individuals’ perceptions of risk. Internationally television dramas are often accused of delivering inaccurate and demeaning portrayals of nursing and medical personnel [11]. Recently the internet has become a source of health information and advice with a wide range of material available. However a considerable number of unregulated
internet sites may display unreliable information; and may offer sensational images of surgical errors [12].

In health care, concrete lay experiences may provide a powerful source of evidence for risk beliefs, hence anecdotal stories of poor care may influence others’ decisions to request a different location, different practitioner or different treatment modality. The existing day surgery literature examines risk largely from a bio-medical perspective. This is essential to ensuring the safety of the patient undergoing day surgery. However they rarely examine the wider influences of patients’ risk perception and implications for practice. This paper therefore seeks to make a modest contribution to the day surgery literature by considering these factors.

Method

A qualitative study which involved interviewing patients on three occasions over a two year period, took place in two day surgery units in two urban public hospitals in the United Kingdom. A sample of 145 patients and 100 carers agreed to take part in the study. Patients were recruited from the orthopaedic, ear nose and throat and general surgical lists (see table 1). They were aged between 18 years of age and 75 years and from various socioeconomic backgrounds (see table 2 for employment characteristics). The patients had not undergone day surgery before; but several of them had experienced in-patient care.

A qualitative research design was chosen because it is the preferred method for investigating thoughts, feelings and attitudes which are not easily measured by controlled trials and statistical analysis (13).
The study received ethical approval from the local research ethics committee and patients were given an information leaflet explaining the study and their right to
withdraw at any time. They then signed a consent form, agreeing to take part in the study.

Data collection involved the tape recording of semi-structured interviews which took place on three occasions: before surgery, 48 after discharge and finally 4 weeks following discharge. It was considered necessary to interview patients at intervals to gain as much information as possible concerning the day surgery patient journey.

After completion of interviews, data were transcribed and stored in a secure database. Interviews were semi-structured and usually lasted between 30-60 minutes. Interviews were designed to be as loosely structured as possible to allow the patients space to elaborate upon their concerns (see table 3 for a sample of questions that may be asked). Analysis of the interviews took place by reading the transcripts on many occasions and line by line examination in which lists of key words and phrases were noted. This process was reviewed by experienced researchers independent of this study and some patients who had participated.

### Table 3
1st Interview (recruitment) in Pre-Operative Assessment Clinic

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>After welcome and introduction of researcher:</td>
</tr>
<tr>
<td>What do the words “day surgery” mean to you?</td>
</tr>
<tr>
<td>Are you happy to be having day surgery?</td>
</tr>
<tr>
<td>Would you prefer to be admitted to an in-patient ward?</td>
</tr>
<tr>
<td>Have you had hospital care before?</td>
</tr>
<tr>
<td>In-patient? Day Surgery? Out-Patient?</td>
</tr>
<tr>
<td>Are your family happy for you to have day surgery?</td>
</tr>
<tr>
<td>Who will be looking after you after discharge?</td>
</tr>
<tr>
<td>How long do you think you may be away from work/college?</td>
</tr>
<tr>
<td>Have you got any help with the children?</td>
</tr>
<tr>
<td>How long have you been suffering from……..?</td>
</tr>
<tr>
<td>How has it affected your everyday life?</td>
</tr>
</tbody>
</table>
Findings

All patient names have been changed to protect anonymity.

A major finding to emerge from this study was that patients felt that undergoing surgery in a day surgery unit was a less risky enterprise than undergoing surgery as an in-patient in hospital. They saw day surgery as a form of risk management. Patients perceived anaesthesia, surgery and the associated assault on their bodies as a ‘risky business’. However they appeared to desire day surgery as a means of managing this risk. The perceived risk to their personal autonomy; risk of anaesthetic and risk to their families, if they were to be separated for a long period, were all thought, by the patients, to be minimised if they could have day surgery as opposed to in-patient care.

Rational Actor Model

Many patients demonstrated the ‘rational actor’ model of risk management in that they asked directly for statistical information to support their choice of undergoing surgery in a day. When asked was he happy to undergo day surgery, David, a physics teacher, enquired as to how many patients had died undergoing day surgery since the unit had opened 7 years previously. When told that none had died in this time he replied: ‘What do I have to be frightened of then?’

With news of hospital acquired infections caused by Methicillin Resistant Streptococcus Aureus and C-Difficile receiving copious amounts of press coverage many patients asked for evidence to demonstrate that stringent precautions existed to prevent cross –infection. This group of patients saw day surgery as minimising the risk of acquiring hospital infections.
Minimising risk of loss of personal autonomy

Many patients had been hospital in-patients before and feared the risk of losing their personal autonomy. Their ability to make their own choices was threatened when receiving in-patient care.

When asked whether he would prefer to have day surgery as an in-patient Karl replied:

I can just about manage to be in for one day. Any more than that and I would just flip! You are not in control of anything, even your own body when you are in hospital. I mean you have to get up at a certain time, wear certain clothes. If I couldn’t have it done by day surgery then I wouldn’t bother having at all even though it is so painful.

(Male, Achilles tendon repair age 37)

Personal habits and routines are very important in the maintenance of a sense of self and creation of ‘ontological security’ a business as usual approach to life [5]. When these are taken away feelings of deep anxiety may prevail.

Having a Say- Anaesthetic choices

By far the biggest risk, expressed by patients, was their fears of anaesthesia. These included: the risk of waking up in the middle of surgery, or never waking up again, dislike of the anaesthetic mask covering the face, fear of needles, the risk of sustaining brain-damage during anaesthesia and the risk of nausea and vomiting. As well as this many patients were worried in case their bodies would act outside of their control, causing them embarrassment. As Smith et al (1) state, in the United Kingdom patients expect to have a general anaesthetic and the patients in this study were no exception to this. However even though, on the morning of surgery, the anaesthetist spent time explaining anaesthesia – a practice that was valued highly by patients-
anaesthesia still appeared to be a mysterious process to them. They pondered over their vulnerability whilst under anaesthesia:

I mean you are asleep but not really asleep. I really wonder what happens inside your brain when you’re under……. It seems to me to be like being dead… only you are not.  (female age 25, excision breast fibroma)

Several patients recalled cinema films where patients were murdered by the administration of the wrong anaesthetic gases. Although these comments were raised in a jocular fashion they could not hide the underlying fear of death or mutilation. These fears, it could be said, were of the non-rational. They were not based upon sound bio-medical evidence but ideas constructed from a non-scientific narrative of cinema and lurid tabloid press. Patients needed the staff to disavow these films as mere entertainment and to give them some concrete evidence of safety. In an attempt to cope with these fears and minimise the perceived risk, the patients often wished to negotiate certain aspects of anaesthetic practice. They appeared to feel they had more bargaining power when they were undergoing day surgery than when they were having in-patient care. Many used the pre-operative assessment clinic as the site for securing their preferences. Some patients confided that they had come to pre-operative assessment specifically to ask for a certain mode of anaesthesia:

I am here for one thing only. That is to make sure I am going to have a general anaesthetic. It was so painful last time under local anaesthetic.  (female, excision anal abscess age 50).

Patients expressed a choice of anaesthesia based on previous experiences. Colin requested a general anaesthetic because of previous in-patient surgery where he had undergone a spinal anaesthetic which he had not liked at all:
I thought that I would never get the feeling right in my legs. They were numb for days. I don’t want that feeling again. I would rather have the pain. (male, hernia repair age 44).

As well as a fear of pain during surgery, patients feared the risk that their bodies may act in a way over which they had no control. They did not want to suffer the humiliation of uncontrollable events which may cause them embarrassment. If they were asleep they would not be aware of these embarrassing events of which the body was capable. Thus Pat, a patient who was about to undergo a procedure on her lower bowel said she ‘pleaded’ with the consultant ‘to let me have it done under a general anaesthetic’, because she was so embarrassed about the large amount of flatulence exuded from her bowel during previous bowel surgery:

It was something for which I had absolutely no control. I never anticipated it at all. The pain was bad but that was even worse. I never felt so humiliated. At least if they put me to sleep I won’t be aware of it. I cannot risk it happening again. (female, age 60, removal of rectal polyps)

Margaret, a retired schoolteacher, was undergoing an examination of her oesophagus. She too had come to ensure that she would be having a general anaesthetic after the previous examination, as an in-patient, had to be abandoned due to her inability to swallow the tube:

I felt terrible. I just could not swallow it. Oh …and the saliva! That was terrible. It kept coming and coming. I felt quite desperate. I couldn’t swallow and I could not stop the flow of saliva. I thought this is what it must be like drowning. (female, age 70).

She had been assured after the previous attempt to examine her had failed; that she would have it performed this time under a general anaesthetic. That was some weeks
ago. Now, in the pre-operative assessment clinic, she needed to reassure herself that the promise still held.

Patients reported that they felt reassured when they left the pre-operative assessment clinic that their anaesthetic choices would as far as possible be respected. They expressed an optimistic outlook which Giddens [5] says is a way of coping with a stressful situation and is an adaptive reaction to risk. This sense of optimism is engendered by the belief that rational scientific thought and technology offers a sense of safety to them and trust in the institution of which they will surrender themselves.

*Risk to Families*

A forceful reason for preferring day surgery was caring responsibilities patients felt towards significant family members. 11 of the patients interviewed were over the age of 66 years. Several of these had either ill partners or dependant parents. Although they had been in pain for some time they had delayed surgery because of concern for their loved ones’ well being. As well as caring for the elderly, the worry of caring for young children was also a strong reason for choosing day surgery:

```
I’m leaving him with his dad.
Just for the day. He’s not reliable at the best of times.
But he should be able to manage a day!
(female, anterior cruciate ligament repairage 42)
```

*Trust*

The patients in this study had developed trust in the day surgery units. This trust began to be developed when they attended the pre-operative assessment clinic:

```
That’s why I came to that clinic... to suss it out.
I wanted to see if I could trust my body to it.
(male, repair achilles tendon, aged 33)
```
It was not just trust in the ability of the staff to care for the patient but in the environment as well:

My eyes were everywhere. I even asked to go to the toilet to see if it was clean. When I was in hospital last time it was filthy. How can you trust them to look after patients if they can’t keep the place clean.

(female, age 70).

Ethel suggested that, as far as health care is concerned, patients have no choice but to trust their providers:

You have no choice really. You have to trust your doctors and nurses. What else can you do? But I must say I feel far readier to trust the staff in day surgery than the main part of the hospital. Things can be missed there. Here the staff seem so much more prepared to listen and discuss with you.

(female, sinus washout and removal of nasal polyps aged 53).

Patients commented that feelings of trust were engendered in them by the friendliness of the staff and general “chit-chat” as well as a calm and relaxing environment.

DISCUSSION

Risk and Trust.

The inter-connectedness of risk and trust are one facet of the complex character of risk perception and was an important underlying theme which emerged in this study. Luhmann [14, 15] suggests that trust reduces uncertainties and enables the individual to feel more secure. This security is threatened when unusual circumstances occur and routines are threatened. Then an individual must place their trust in individuals or institutions outside of their control. Giddens speaks of the development of trust in these ‘expert systems’ being influenced by encounters at ‘access points’ where individuals assess the trustworthiness of the experts [5]. For the day surgery patient,
this access point occurs in the pre-operative assessment clinic. Here the staff in both units worked very hard at what Goffman calls ‘face work’. Here interactions are guided by the image a professional displays whereby they may make a good impression of themselves and the profession they represent [16]. In this situation the formation of trust would begin in the patient. This was certainly demonstrated in the patient narratives described above. The nurses and medical staff in both day surgery units had a very positive ‘face’. Cheerful and professional in their demeanour they welcomed the patients warmly. Time was given for the patients to express their concerns and ask questions. Risks of unexpected events concerning their treatment were explained. They were invited to explore the environment which was warm, calm and inviting. Information leaflets were given. The impression given was that there was nothing to hide here.

Strategies for managing risk have been seen as a dichotomy between cognitive rationality – a belief in scientific objective facts, the so called ‘rational actor’ model of risk assessment and other non-rational strategies such as hope, trust, belief and faith [8]. It has been demonstrated in this study that patients often used a combination of the two strategies when assessing the risk of their forthcoming surgery. However the professionalism of staff was of vital importance in the development of trust in the day surgery patient.

However where trust and risk are concerned alternate courses of action are always considered by individuals and decisions made on the basis of which course appears to present the least risk to an individual. As has been suggested, these included rational gathering of information, though not always from reputable sources, and the arguably more assertive demand for their choice of anaesthesia. They appeared to feel more comfortable requesting their preferences in the day surgery unit in contrast to the in-
patient wards were they felt that, because of the pressures placed upon the staff by emergency admissions, their preferences could not be respected.

As a defence against risks of health care interventions the development of evidence based medicine has led increasingly to care planned on the basis of guidelines and codes of behaviour; in other words according to ‘rules’ to be used from context to context. However patients in this sample appeared increasingly to use a new-found autonomy in negotiating variations of these treatment procedures in order to manage their own perceptions of intervention risk. This could be seen as a new era of collaboration in which a balance is struck between lay and professional expectations.

Day Surgery personnel need to be aware of these perceptions to plan care accordingly. The environment in the two day surgery units under study encouraged this negotiation of care by listening to the patient fears, the provision of good information, effective inter-personal skills, therapeutic use of self and calm environment. The two day surgery units in this study succeeded in creating an environment that the patients trusted.

In health care an understanding of the concept of risk is central to the provision of good quality care. Often within healthcare, and in the general population, risk is viewed with negative connotations. However it is important to recognize that risk is not always a negative concept as without risk creative developments and practical improvements to health and everyday living would not occur.

Risk perception is based on many different assumptions and experiences and it is important to try to understand these. It is therefore of paramount importance within the short space of time day surgery nurses and medical staff have to spend with patients that a trusting atmosphere is created so patients can confide their worries and express their treatment options.
Study Limitations

The study took place in only two day surgery units in two hospitals in an urban area in the United Kingdom. Therefore the findings may not be applicable to rural areas or to day surgery taking place outside the UK. Patients were selected from only three surgical specialities; moreover the sample selected did not represent diverse ethnic groups. However the researcher is confident that the data gives a vivid and reliable account of patients’ perceptions of day surgery in the current economic and cultural climate.

Conflict of Interest

No conflict of interest has been declared.

Funding

The study was funded by the University of Salford. UK

References
