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National survey of hospital patients

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Abstract

Objective—To survey patients' opinions of their experiences in hospital in order to produce data that can help managers and doctors to identify and solve problems.

Design—Random sample of 36 NHS hospitals, stratified by size of hospital (number of beds), area (north, midlands, south east, south west), and type of hospital (teaching or non-teaching, trust or directly managed). From each hospital a random sample of, on average, 143 patients was interviewed at home or the place of discharge two to four weeks after discharge by means of a structured questionnaire about their treatment in hospital.

Subjects—5150 randomly chosen NHS patients recently discharged from acute hospitals in England. Subjects had been patients on medical and surgical wards apart from paediatric, maternity, psychiatric, and geriatric wards.

Main outcome measures—Patients' responses to direct questions about preadmission procedures, admission, communication with staff, physical care, tests and operations, help from staff, pain management, and discharge planning. Patients' responses to general questions about their degree of satisfaction in hospitals.

Results—Problems were reported by patients, particularly with regard to communication with staff (56% (2824/5020) had not been given written or printed information); pain management (33% (1042/3162) of those suffering pain were in pain all or most of the time); and discharge planning (70% (3599/5124) had not been told about warning signs and 62% (3177/5119) had not been told when to resume normal activities). Hospitals failed to reach the

standards of the Patient's Charter—for example, in explaining the treatment proposed and giving patients the option of not taking part in student training. Answers to questions about patient satisfaction were, however, highly positive but of little use to managers.

Conclusions—This survey has highlighted several problems with treatment in NHS hospitals. Asking patients direct questions about what happened rather than how satisfied they were with treatment can elucidate the problems that exist and so enable them to be solved.

Introduction

The Patient's Charter and the review of the NHS highlighted the need for providers of hospital care to assess and improve the quality of care they offer and to continue expanding their use of questionnaires and surveys.^{1,2} Patients are aware of health issues to the extent that they have been described as "expert witnesses" to the health care process,³ so it is important that managers and clinicians plan their services to reflect the needs of patients.

Previous surveys of patients' opinions have been criticised as being unclear in their objectives,⁴ being administered haphazardly,⁵ using a wide variety of incompatible methods^{4,6} that often focused on easily measured elements of care, particularly hotel aspects such as food and amenities,⁷ and having a poor response rate.^{8,9} Patient satisfaction may be an important predictor of compliance with treatment,⁷ and the psychological happiness of the patient is an important part of recovery.¹⁰ Patients' satisfaction ratings are, however, invariably high despite evidence to the

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contrary¹¹⁻¹³ and are of little use to managers in helping them to locate and solve problems. This suggests that asking detailed questions about the patient's care and what actually happened may be more useful to managers than asking general questions about satisfaction. This approach has been adopted in the United States in a survey that used patient discussion groups to identify the following key aspects of care: communication, patient preferences, emotional support, physical comfort, pain management, education, family participation, discharge planning, and financial information.¹⁴ A questionnaire was designed covering these dimensions using specific, detailed questions. This has been developed further by St Mary's Hospital Medical School and Social and Community Planning Research for use in England. It aims at measuring and monitoring patient care in a way more useful to managers both locally and nationally. This questionnaire has been administered in a random sample of English hospitals.

Patients and methods

The survey was of acute NHS hospitals in England with 200 beds or more. Private hospitals were omitted because only two were of sufficient size. Medical and surgical specialties and subspecialties were included, with paediatrics, maternity, psychiatric, and geriatric wards specifically excluded.

A systematic random sample of 108 of the 278 eligible hospitals in England was selected, with stratification by size (number of beds), region (north, midlands, south east, south west), and type of hospital (trust or directly managed, teaching or non-teaching). The second hospital selected and every third selected thereafter constituted the core sample of 36 hospitals. The two selections either side of each core hospital were reserved as substitutes in anticipation of possible refusals. Twenty two of the core 36 hospitals agreed to take part, so 14 of the first substitutes were approached. Five of these refused and were replaced by second substitutes. Thus, 55 hospitals were approached to gain cooperation from 36. The reasons for inability or refusal to take part were: too many or similar surveys being conducted locally (eight hospitals), ward closures or major building work (five), refusal of permission to take part by ethics committee (one), disagreement with methodology (one hospital thought that participating in the survey would be too taxing for patients), and no reason (four).

An additional 22 hospitals were nominated by regional health authorities and surveyed, but they were excluded from the main analyses.

The sample size of patients from each hospital was decided by calculating the number of achieved interviews per hospital giving varying levels of precision. With a sample size of 140 we would be 91% certain to identify significant differences of 10% or more and, conversely, there would be a 9% chance of observing differences of 10% or more when none exists. This level of precision was considered to be sufficient. The random sample of patients from each hospital was achieved by recruiting for interview 160 consecutively discharged patients. Starting on a randomly selected day, the ward sister in each ward was asked every morning to identify patients who were likely to be discharged on that day. These patients were invited to participate in the survey and, if they agreed, their name, address, and telephone number were recorded. This was repeated daily until 160 patients had agreed to participate.

Patients were interviewed by trained interviewers at home or their place of discharge two to four weeks after discharge. The interviews were carried out between October 1992 and June 1993.

The questionnaire was a modified form of the

American survey instrument and covered the following subjects: preadmission, admission, communication with staff, physical care, tests and operations, help from staff, pain management, discharge planning, patients' views on hospital treatment, sociodemographic factors, and other items on the Patient's Charter.

Rather than focus on whether patients were satisfied with their care, we asked a series of specific questions such as: Did a doctor explain your condition or treatment to you? Was the purpose of the tests explained to you by a doctor or other staff? The purpose of the questionnaire was to find out patients' views of their treatment and of what happened to them in hospital. We did not compare patients' perceptions against what actually happened as their reports were viewed as carrying strong face validity.

The questionnaire took, on average, 47 minutes to complete. An average of 143 patients were interviewed in each hospital (range 126-160, SD 7.3). The response rate among patients who could be interviewed—that is, after exclusion of the 18% of patients who died, returned to hospital, or could not be traced—was 86%, with 5150 patients being interviewed from the random sample.

We sent the hospitals results comparing their hospital with the aggregated results from the random sample. Although we do not report the results for individual hospitals in this paper, hospitals are free to publish the results pertaining to them.

Results

We weighted the results discussed in this paper to ensure that they were representative both of hospitals within the sample and of patients within each hospital.

An overview of the national results is presented below. The contrast between answers to satisfaction-type questions and those to direct questions was appreciable. Patients give highly positive responses to satisfaction questions (table I) despite the problems highlighted by more direct questions (table II).

The principal problems reported by patients concern communication, pain management, and discharge planning, although patients report problems with all aspects of care. The standards of the Patient's Charter were rarely met. Much of the survey concerned communication between staff and patients.

TABLE I—Responses to questions asking about patients' satisfaction

Response	Proportion (%) responding
Very or fairly easy to understand:	
Explanation of condition or treatment	3874/4152 (93)
Purpose of drugs	2983/3044 (98)
Side effects of drugs	754/ 766 (98)
Purpose of tests	1376/1415 (97)
Results of tests	1062/1123 (95)
Explanation of operation	2231/2289 (98)
Answers to questions about operation	1010/1055 (96)
Explanation of results of operation	2850/3033 (94)
Very good, good, or average:	
Cleanliness of room	5018/5140 (98)
Comfort of room	5025/5139 (98)
Courtesy of doctors	4977/5135 (97)
Helpfulness of doctors	4893/5135 (95)
Courtesy of nurses	5084/5140 (99)
Helpfulness of nurses	5071/5141 (99)
Courtesy of other staff	4838/5136 (94)
Helpfulness of other staff	4768/5139 (93)
Other:	
Very or fairly satisfied with room or ward	4928/5144 (96)
Very or fairly satisfied with decisions made about care given	4832/5148 (94)
Understandable answers from doctors all or most of the time	2363/2591 (91)
Understandable answers from nurses all or most of the time	1793/1939 (92)
Very or fairly confident in ability of the doctors	4869/5138 (95)
Overall rating of care excellent, very good, or good	4848/5130 (94)
Standard of hygiene on ward excellent	4538/5127 (89)
Quality of food excellent, very good, or good	4020/5139 (78)

TABLE II—Responses to questions asking what happened to patients in hospital

Response	Proportion (%) responding
Admission:	
Admission cancelled by hospital	259/2656 (10)
More than two years on waiting list	82/2090 (4)
Reasons for admission not explained beforehand	574/4784 (12)
Communication:	
Not told about daily routine	2393/5150 (46)
Not given written/printed information	2824/5020 (56)
No explanation from doctor about condition	847/5146 (16)
There were things patients should have been told that they were not	545/5021 (11)
Doctors said one thing and nurses something different	525/5149 (10)
Patients felt that staff were keeping information from them	286/5145 (6)
Patients given information in an upsetting way	275/5147 (5)
Treated/examined by someone who did not explain what he or she was doing	275/5148 (5)
Physical care:	
No one doctor in charge of care	1119/5146 (22)
No one nurse in charge of care	3314/5141 (64)
Not enough privacy while discussing condition	453/5147 (9)
Not enough privacy while being examined	139/5119 (3)
Pain management:	
Suffered pain	3163/5150 (61)
Of those suffering pain:	
Pain was present all or most of the time	1042/3162 (33)
Pain was severe or moderate	2755/3157 (87)
Pain was worse than expected	182/1051 (17)
Had to ask for drugs	1085/2589 (42)
Drugs did not arrive immediately	455/1085 (41)
Tests and operations:	
Purpose of tests not explained	313/1752 (18)
Not told results of tests	593/1753 (34)
Operation cancelled by the hospital	326/3004 (11)
Not given explanation of operation	554/3008 (18)
No explanation from anaesthetist about what would be done	519/2653 (20)
Risks and benefits of operation not explained	843/2974 (28)
Worries or fears of operation not discussed	937/2972 (32)
Discharge planning:	
Difficulty getting home	278/5078 (5)
No discussion with doctor about discharge	2260/5134 (44)
Not told about foods to eat/not eat	3707/5111 (73)
Not told about activities to do/not do	3085/5125 (60)
Not told when to resume normal activities such as returning to work	3177/5119 (62)
Not told of any warning signs to look for	3599/5124 (70)
Family and friends not given enough information	1451/5119 (28)

Patients were often not given important information about the hospital and its routine, their condition or treatment, and particularly about tests and operations they had had. Often when patients were given this information it was given in an upsetting way or with little respect for privacy. Of the 3163 (61%) patients who suffered pain, 1042 (33%) were in pain all or most of the time and 2755 (87%) had severe or moderate pain. Many patients were discharged without having been given information about returning home and how to help their recovery. An appreciable number of patients (278/5078 (5%)) had problems getting home.

CHARTER STANDARDS

Patient's Charter rights were not met on four points.

- A clear explanation of the treatment proposed, including risks and options—847/5146 (16%) patients had no explanation of their condition or treatment, 554/3008 (18%) no explanation of what would be done during surgery, and 843/2974 (28%) no discussion with staff about the risks and benefits of surgery
- Access to health records—2363/5147 (46%) patients did not know they had the right to look at their records
- Choosing whether they wish to take part in student training—695/1651 (42%) patients examined or treated by medical students were not asked for permission first
- Being guaranteed admission within two years of being placed on the waiting list—82/2090 (4%) patients were not admitted within two years.

National Charter standards were not met on five points.

- Respect for privacy, dignity, religious, and cultural beliefs—139/5119 (3%) patients were not given enough privacy while being examined and 453/5147 (9%) while discussing their treatment, whereas 222/3811 (6%)

patients thought that their religious practices were not respected

- Relatives and friends being informed of progress—674/4836 (14%) patients thought that their families were given too little information and 1451/5119 (28%) that they were not given enough information to help their recovery

- Operations—326/3004 (11%) patients had their operation cancelled

- Named nurse—3314/5141 (64%) patients thought that there was not a named nurse in charge of their care

- Decisions being made concerning continuing care after discharge—413/803 (51%) patients who were worried about leaving hospital thought that they had not got any help from staff.

Local Charter standards were not met on signposting in hospital; 690/3919 (18%) patients thought that signs could be improved.

PREVALENCE OF PROBLEMS

The percentage of problems reported by patients on 40 key questions was calculated. The mean percentage of responses indicating that there were problems for all hospitals was 15.9% (SD 1.5%), with hospitals ranging from 13.2% to 18.8%. Analysis of variance was used to determine differences in problems reported between hospital types and patient groups with percentage of problems as the dependent variable and hospital or patient characteristic as the independent variable. Results are shown in table III. The south west and

TABLE III—Percentages of patients reporting problems according to hospital and individual characteristics

	% Of patients reporting problems*	No of problems/ No of key questions asked	P value†
<i>Hospital characteristics</i>			
Area:			
North	15.5	8 029/51 800	} < 0.001
Midlands	15.3	9 388/61 360	
South east	16.4	10 496/64 000	
South west	16.8	4 838/28 800	
Type:			
Trust	16.0	13 811/86 320	} 0.36
Directly managed	15.8	18 903/119 640	
Teaching	16.0	5 644/35 280	} 0.64
Non-teaching	15.9	27 138/170 680	
<i>Patient characteristics</i>			
Type of admission:			
Emergency	16.7	19 773/118 400	} < 0.001
Waiting list	14.8	12 237/82 860	
Tests:			
Yes	17.7	12 447/70 320	} < 0.001
No	15.0	19 962/133 080	
Operations:			
Yes	16.5	14 012/84 920	} < 0.001
No	15.5	18 718/120 760	
Age (years):			
16-44	18.0	10 246/56 920	} < 0.001
45-64	16.0	10 060/62 880	
≥ 65	14.5	12 429/85 720	
Sex:			
Male	15.1	15 474/102 480	} < 0.001
Female	16.7	17 281/103 480	
Marital status:			
Married	15.7	20 096/128 000	} < 0.001
Separated	17.8	634/3 560	
Widowed	15.0	5 406/36 040	
Divorced	17.6	1 978/11 240	
Single	17.4	4 628/26 600	
Ethnic group:			
White	15.8	31 018/196 320	} < 0.001
Not white	18.1	1 534/8 840	
Social class:			
I (Professional)	16.3	939/5 760	} 0.049
II (Managerial)	16.1	6 653/41 320	
III (Skilled non-manual)	16.5	7 214/43 720	
III (Skilled manual)	15.2	7 472/49 160	
IV (Partly skilled)	16.4	6 258/38 160	
V (Unskilled)	15.3	2 772/18 120	
Income (£ per annum):			
< 10 400 pa	16.0	15 891/99 320	} 0.53
10 400-20 799	16.6	6 560/39 520	
≥ 20 800	16.1	2 685/16 680	

*For each group of patients the number of problems is given as percentage of number of key questions asked. For example, 2562 men were asked 40 key questions—total of 102 480 questions. Problems were reported with 51 474 (15.1%).

†Analysis of variance.

Clinical implications

- Surveying the experiences and views of patients can provide usable data for planning health care
- This study asked patients detailed questions about what happened during their stay in hospital; the problems with care highlighted would not have been shown by asking general questions about satisfaction
- Hospital doctors and managers have found this kind of data helpful in setting targets for improving care, as well as in helping them to fulfil the responsibilities set out in the Patient's Charter
- Much could also be learnt from comparing these results with the results of similar surveys in North America, where fewer problems are reported in most areas of care

south east (16.8%, 16.4%) showed significantly higher problems than the north or midlands (15.5%, 15.3%). No significant differences were found when comparing type of hospital (trust or non-trust, teaching or non-teaching). Patients admitted as emergencies (16.7%) reported significantly more problems overall than those from a waiting list (14.8%). Patients who had operations (16.5%) reported significantly more problems than those who did not (15.5%). Women (16.7%) reported significantly more problems than men (15.1%) and elderly patients significantly fewer problems than younger patients (age 16-44, 18%; 45-64, 16%; ≥ 65 , 14.5%). There were no significant differences by social class, socioeconomic group, or income. White patients (15.8%) reported significantly fewer problems than those who were not white (18.1%).

Discussion

"THE GOLD STANDARD"

This survey has the advantages over similar surveys of being national, run independently of the participating hospitals, having a response rate of 86% within participating hospitals, and interviewing patients face to face away from the hospital. Additionally, the methods of the survey were designed to give an unbiased, representative sample of patients in English hospitals, using random samples of hospitals and patients. For individual hospitals the survey results can indicate to managers where problems lie at the hospital level only: it is not possible with such a sample size to identify reliably problems in particular wards or with particular consultants.

As discussed, the non-response rate of patients was quite low, with most non-response being by hospitals. Because of the way the random sample of hospitals was selected, substitute hospitals would be from the same area and of a similar type and size, so we do not believe that the sample suffers from much non-response bias. Moreover, if there is any bias, it is likely to underestimate the problems patients reported for two reasons: better hospitals would be more likely to agree to participate in the study and patients who were not interviewed were more likely to come from groups (seriously ill, senile, ethnic minorities) that experienced more problems than average.

SPECIFIC QUESTIONS BETTER THAN SATISFACTION QUESTIONS

The results of this national survey have strengthened the view that asking questions about satisfaction or asking consumers to rate a service produces highly positive results which can hide problems that exist. With one exception (quality of food) all such questions showed a satisfaction rating of over 89%, in contrast with the problems reported by patients when asked about specific aspects of their care. This suggests that

results from satisfaction questions should be viewed with suspicion and not used in isolation.

USE AT A TIME OF CHANGE IN THE NHS

Health services in the United Kingdom face the challenge of adapting to a changed environment in patient expectations and the complexity of treatment. Additional pressures of rising workload with increased admission rates¹⁵ can lead to a narrowing of personal involvement with patients.

There has been intermittent interest in improving communication with patients over the past few years, but it has rarely been a key issue for managers. The problem is to find a means of identifying problems and achieving change. One approach has been through top down league tables of hospital performance, although these have to be limited to issues easily recorded such as waiting times in clinics and cannot cover many personal or clinical areas of care. Our patient centred survey covers aspects of care that are not easily measured in league tables. This approach provides a tool which can be used to improve patient care.

PROBLEMS

Many of the problems found in this survey relate either directly or indirectly to communication. Before they arrive at hospital, patients often receive no information about the hospital. When admitted to hospital they may be told little about their daily routine. During their stay in hospital they are often not informed about their condition or treatment or about tests and operations, and they are given little opportunity to discuss these matters with staff. Pain management is highlighted as a major problem, which again is linked to poor communication—patients should be monitored more closely. At discharge patients are rarely given information about how they should continue with their lives when they reach home.

ACHIEVING CHANGE

The survey results can be used locally for informing, motivating, and helping staff to bring about change. Staff have to be made aware that these problems exist, and responsibility has to be taken to ensure that the patients receive the information that they are not getting. Patients should be made aware that they have a right to this information.

Similar data have been developed in the United States¹⁴ and Canada.¹⁶ Comparisons of the results, discussed in detail in further publications, show that similar problems with the care process occur in all three countries, although in most aspects of care more patients report problems in England than in the United States or Canada.

This survey aimed at establishing a benchmark with which national and international standards can be developed and compared. Although the problems highlighted by this survey may not be easy to solve, at least with detailed information from patients about the existing problems managers can start to tackle these issues, and this could form the basis of a new process of centring care on patients.

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Choice of antidepressants: questionnaire survey of psychiatrists and general practitioners in two areas of Sweden

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Abstract

Objective—To identify factors that affect physicians' choice of specific antidepressant drugs in order to evaluate the validity of epidemiological studies of the risks (particularly suicide) and benefits of different compounds.

Design—Questionnaire survey of 264 psychiatrists and general practitioners in an urban area and a rural area of Sweden with validation of data by independent prescription surveys.

Setting—Urban area of greater Stockholm and rural county of Jämtland, Sweden.

Subjects—228 physicians (86%) who answered the questionnaire.

Main outcome measures—The drugs used as first line drugs of choice, as drugs of choice in particularly severe depression, and as drugs of choice for disorders other than depression.

Results—Amitriptyline was the most common first line drug of choice among both psychiatrists and general practitioners. The patterns of choice of antidepressants in the two areas accorded with prescribing patterns in two independent prescription surveys. Amitriptyline was chosen even more frequently for severe depression and depression with severe insomnia. Clomipramine was chosen comparatively more often for depression with severe anxiety. Low toxicity compounds (mainly lofepramine, mianserin, and moclobemide) were more often the drug of choice in depression associated with overt risk of suicide. Amitriptyline and clomipramine were used extensively for disorders other than depression (40% and 54% of prescriptions, compared with 13-19% for some other major antidepressants).

Conclusion—Patient groups treated with different antidepressant compounds may not be comparable with respect to diagnoses and severity of disease. In particular, lofepramine, mianserin, and moclobemide, and possibly amitriptyline, seem to be chosen more often for patients prone to suicide.

Introduction

Fatal toxicity indices have been calculated for antidepressants by relating deaths from overdose to prescription rates of the respective substances. Some antidepressants—for example, amitriptyline—have been associated with lethal overdoses significantly more often than others. A few newer antidepressants—for example, mianserin and lofepramine—have been associated with lethal overdoses less frequently.^{1,2} In a recent Swedish study mianserin and moclobemide were detected at necropsy twice as often as amitrip-

tyline when all methods of suicide were included.³ It was not known in any of these studies, however, whether patients treated with the different antidepressants were comparable with regard to diagnoses or severity of the disease.^{4,5}

The purpose of this study was to investigate whether the variation in the risk of different antidepressants being associated with a lethal outcome may partly be due to suicide prone patients being selected for certain drugs. We conducted a survey of psychiatrists and general practitioners in two areas of Sweden in order to evaluate factors that may affect their choices of antidepressants. Independent prescription data in the two areas were available for validation of the survey information.⁶

Subjects and methods

A questionnaire was devised asking which antidepressants doctors prescribed for depression and other disorders (see appendix). It included all 13 antidepressant compounds on the Swedish market in 1991. The questionnaire was mailed to all psychiatrists and general practitioners as well as to residents (licensed physicians in training) in psychiatry or general practice in two areas of Sweden. One was the catchment area of Huddinge University Hospital (300 000 population) in the urban area of southern greater Stockholm. It included 20 primary health care units (74 general practitioners, 43 residents) as well as two psychiatric inpatient units and seven psychiatric outpatient departments (39 psychiatrists, 21 residents). The second area was the rural county of Jämtland (135 000 population). It included 29 primary health care units (59 general practitioners, 19 residents) as well as one psychiatric department for both inpatients and outpatients (11 psychiatrists, two residents). Two of us (GI and IR) as well as two general practitioners in Huddinge, who served as a reference group, were excluded.

The study group comprised over 3% of all Swedish doctors in psychiatry and general practice, serving about 4.5% of the Swedish population. The questionnaire was posted in September 1991 for return within two months. Two reminders were sent.

Data on drug prescription rates were obtained from two independent sources. All pharmacies in the Huddinge catchment area (n=20) monitor purchases of prescription drugs during one month each year.¹⁰ Similar data were obtained from the individual based drug monitoring survey in Jämtland, which has been in progress since 1970.¹¹ These two sets of data were compared with the corresponding questionnaire responses by using Spearman's rank correlation test for

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