Patients' perceptions of discrimination during hospitalization

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Abstract

Objective To identify sources of perceived discrimination during hospitalization and examine the relationship of perceived discrimination to patient and hospital stay characteristics, and to patient ratings of care.

Background Patient experiences of discrimination within the healthcare system are associated with delays in care seeking, non-adherence to medical advice and poorer health status. Most research to date has focused on race and ethnicity-based discrimination, and few studies have included hospitalized patients.

Methods Questions about patients' experiences of discrimination were added to a regular patient opinion survey conducted at the Geneva University Hospitals. Participants were 1537 adult residents of Switzerland discharged from the hospital between 15 February and 15 March 2007.

Results A total of 171 (11.1%) respondents reported at least one source of discrimination. Most (93, 54.4%) reported a single cause of discrimination. The most frequent causes of discrimination were language, age, nationality and having a disease that is viewed negatively by others. Fifteen percentage of non-European respondents reported at least one of the following types of discrimination: language, nationality, religion and skin colour. Reporting discrimination from any cause was associated with higher Picker Patient Experience problem scores, and patients who reported discrimination were less likely to describe their care as very good or excellent and less likely to recommend the hospital to others.

Conclusions Patient experiences of discrimination during hospitalization are relatively frequent and are associated with lower patient ratings of care. Collection of data on patient experiences of discrimination may contribute to the development of interventions aimed at ensuring respectful, quality care for all patients.

Introduction

Patient experiences of discrimination, both within the health-care system and in everyday life, are not uncommon and are associated with delays in care seeking, non-adherence to medical advice and poorer health status.[1-6]

Potential sources of discrimination are wide-ranging but most research to date has focused on race and ethnicity-based discrimination. Numerous studies have found that racial and ethnic minorities are less likely to receive the same care as Whites even after controlling for health status, access to health care and patient preferences. These findings suggest that prejudice, stereotyping and bias within the health-care system may contribute to observed racial and ethnic disparities in quality of care.[7-9] Furthermore, several studies have found an association between patients' perceptions of racism within the health-care system and their satisfaction with care.[10-14]

Less is known about patient experiences of other types of discrimination (e.g. discrimination based on age, sex, obesity, sexual orientation or disease-specific stigma) and their relationship to health-care quality and patient satisfaction with care. A few studies have explored patients' experiences of ageism and various types of stigma within the health-care system[15-19] but these have not examined their relationship to quality of care or to patient satisfaction with care.

Despite these gaps in the literature, it appears that patient anticipation and/or experiences of discrimination within the health-care system can have important consequences for access to and satisfaction with care, suggesting that hospitals should collect data on patient experiences of care, including perceptions of discrimination.

The purpose of this study was to explore patients' experiences of discrimination during their hospitalization, identify sources of perceived discrimination, and examine the relationship of perceived discrimination to patient and hospital stay characteristics, and to satisfaction with care.

Methods

This study was part of a regular patient opinion survey conducted at the Geneva University Hospitals in Geneva, Switzerland. These surveys[20,21] are exempted from formal review by the hospital research ethics committee as they entail minimal risk to participants.

Sample and data collection

Participants were adult residents of Switzerland discharged from the hospital between 15 February and 15 March 2007. Participants were identified from the hospital administrative database, which contains the following information: name, sex, address, birth date, hospital admittance date, discharge date, care unit at the time of discharge and discharge destination. A total of 2840 patients were identified. Patients excluded from the final sample included: 76 patients transferred to another hospital institution, 74 patients who had multiple discharges during the study period, one maternity patient whose baby died, one patient from the prison medical service and two paediatric patients. The questionnaire was sent to 2686 patients, of whom 2385 were eligible for participation. Causes of ineligibility were death (25, 0.9%), address unknown (81, 3.0%), patient does not understand French (61, 2.3%) and patient is too sick to respond (134, 5.0%).

The questionnaire plus a cover letter and business reply envelope were sent to patients' homes, followed by two reminders, between 4 April and 7 June 2007. Patients were invited to send the questionnaire back empty if they were too sick or otherwise unable to fill it in, did not understand French sufficiently or did not wish to participate.

Questionnaire

The core of the questionnaire consisted of the 50-item Picker Patient Experience (PPE) survey[22] translated into French.[23] Patients were also asked about their age, sex, nationality, level of education and current health, using two

items from the Short-Form 36 Health Survey.[24,25]

We added questions whose purpose was to explore patients' experiences of discrimination during their hospitalization (Table 2). These questions were written *de novo* by the authors, based on a review of the literature.[26–31] Our aim was to explore the role of a broad range of potential sources of discrimination,[32] while avoiding the terms 'race' and 'ethnicity',[33,34] which tend to be less well-defined in the European context as compared with the USA.[35]

We introduced this section with the following statement: 'Sometimes groups of people are treated in an unjust and unfavourable manner based on prejudice (discrimination)'. Then the question: 'During your hospital stay, did you experience any discrimination due to your …' was followed by a list of 15 possible causes of

Table 1 Sources of perceived discrimination reported by patients

During your hospital stay, did you experience any discrimination due to your	Yes (often or sometimes)	
	n	%
Age	47	3.1
Language	47	3.1
Nationality	43	2.8
Disease that is viewed negatively by others	42	2.7
Job or activity	23	1.5
Religion	22	1.4
Physical appearance	22	1.4
Physical or mental handicap	21	1.4
Other causes	21	1.4
Level of education	19	1.2
Marginal lifestyle	16	1.0
Income level	12	0.8
Skin colour	9	0.6
Sex	8	0.5
Sexual orientation	8	0.5
Discrimination related to immigration[†]	74	4.8
Discrimination related to age or sex[‡]	48	3.1
Discrimination related to physical/sexual characteristics[§]	65	4.2
Discrimination related to social/economic position[¶]	51	3.3

[†]Nationality, language, religion and skin colour.
[‡]Age and sex.
[§]Sexual orientation, disease, handicap and appearance.
[¶]Income, education, job and lifestyle.

discrimination, arranged in a tabular form (Table 1). The possible answers were: 'Yes, often; Yes, sometimes; or No'.

Statistical analysis

We first compared respondents who skipped the discrimination questions to those who answered them. We then computed the frequency of each source of perceived discrimination. We examined the proportion of persons who reported any cause of discrimination across subgroups of respondents, and used chi-squared tests to compare proportions. For ordinal predictors, we also obtained chi-squared tests for linear trend. To identify independent risk factors for discrimination we used logistic regression, first for univariate analysis, and then in a multivariate model in which only significant predictors were included. We also constructed four variables, which grouped causes of discrimination by theme: (i) immigration-related (nationality, language, religion and skin colour); (ii) age or sex; (iii) physical/sexual characteristics (sexual orientation, physical appearance, disease that is viewed negatively by others and handicap); and (4) social/economic status (job or activity, education level, income level and marginal lifestyle). These variables were set to 1 if at least one of these causes of discrimination was reported, 0 otherwise. These variables were also examined across respondent subgroups, using chi-squared tests and logistic regression.

We then examined the relationships between discrimination and the patients' experiences of care reflected by a summary score, their perception of having been always treated with respect and dignity, their rating of health care as excellent or very good and their intent to recommend the hospital to others. To assess patients' experiences of care globally, we used the PPE-15 problem score, which is a subset of questions derived from the longer form Picker in-patient survey that measure patients' experiences of in-patient care.[36] These 15 items cover all key aspects of a hospitalization and the summary score provides an overall measure of quality of care. Lower PPE-15 scores indicate

fewer problems encountered by patients and therefore better overall quality of care. Comparisons between those who did and did not experience discrimination were conducted by means of a Mann–Whitney test (for PPE-15 problem scores) and chi-squared tests (for dichotomous ratings). Finally, we explored whether the presence of specific types of discrimination (related to immigration, age or sex, physical/sexual characteristics and social/economic status) were related to patient perceptions, using general linear regression models (for PPE-15 scores) and logistic regression (for dichotomous ratings).

We used SPSS version 15 (SPSS, Inc., Chicago, IL, USA) for this analysis.

Results

Respondent characteristics

Of 2385 eligible patients, 1654 (69.2%) returned the questionnaire. Among them, 1537 (92.9%) answered at least one of the 15 discrimination items. When respondents checked one or several positive answers but left other items blank we recoded the missing items to 'No'.

The 117 (7.1%) respondents who skipped this section were older than those who answered (mean 68.3 vs. 55.5 years, $P < 0.001$) but were similar in terms sex, self-reported health status, previous hospitalizations, education category, country of origin (Switzerland, Europe, outside Europe) and global evaluation of health care received (on excellent–poor scale).

Perceived discrimination

Among the respondents, 171 (11.1%) reported at least one source of discrimination. Most (93, 54.4%) reported a single cause of discrimination, 35 (20.5%) reported two, 18 (10.5%) reported three, 10 (5.8%) four and 15 (8.8%) reported five or more. The most frequently quoted causes of discrimination were age, language, nationality and a disease that is viewed negatively by others – each of these causes was reported by more than 1 of 40 patient (Table 1). In contrast, discrimi-

nation due to sexual orientation, sex, skin colour and income level was reported by only a handful of respondents each.

Association with patient characteristics

Discrimination was reported more frequently by women than by men, not only by younger patients but also by the very old, by non-Europeans, by those in poorer health, by patients hospitalized in a 'public' ward, those hospitalized for extended periods, and by those hospitalized in geriatrics and psychiatry departments (Table 2). In contrast, there was little variation in terms of education level, smoking status and body mass index. In multivariate logistic regression analysis, all predictors except the length of stay and hospital department remained statistically significant.

We repeated the subgroup analyses using the four subsets of discrimination items – immigration, age/sex, physical/sexual characteristics and social/economic status (Table 3). Discrimination related to immigration issues (nationality, language, religion, skin colour) predominated among patients from non-European countries – 15% of them reported this form of discrimination – and was more frequent among women. It was also more frequent among younger patients and those who were overweight or obese (not shown). In multivariate analysis (not shown in detail), immigration remained significantly associated with non-European country of origin and higher body mass index.

Discrimination related to age or sex did not differ by sex, but was common among young patients, those with long lengths of stay, and was seen only on public wards. In multivariate analysis, only age and length of stay remained as significant risk factors.

Discrimination related to physical/sexual characteristics was more frequent among younger and sicker patients, those hospitalized for a month or more, psychiatry patients and smokers. Only age and health status remained significant in multivariate analysis.

Discrimination related to social/economic position was more evenly distributed, as it varied significantly only by country of origin and

Table 2 Respondent characteristics associated with the report of at least one cause of discrimination

	n (column %)	Reported discrimination % (n)	P-value (χ² test)	Univariate odds ratio (95% CI)	Multivariate odds ratio (95% CI)
Sex (3 missing)					
Men	650 (42.4)	8.5 (55)	0.014	Reference	Reference
Women	884 (57.6)	13.1 (116)		1.6 (1.2–2.3)	1.5 (1.0–2.2)
Age (3 missing), years					
18–24	79 (5.1)	30.4 (24)	<0.001	5.3 (2.9–9.5)	9.6 (4.8–19.3)
25–44	459 (29.9)	13.7 (63)	Linear trend: <0.001	1.9 (1.3–3.0)	2.1 (1.3–3.5)
45–64	440 (28.7)	8.6 (38)		1.1 (0.7–1.8)	1.1 (0.7–1.9)
65–84	473 (30.8)	7.6 (36)		Reference	Reference
≥85	83 (5.4)	12.0 (10)		1.7 (0.8–3.5)	1.7 (0.7–3.9)
Country of birth (32 missing)					
Switzerland	775 (51.5)	8.4 (65)	<0.001	Reference	Reference
Other European country	491 (32.6)	10.2 (50)		1.2 (0.8–1.8)	1.2 (0.8–1.9)
Non-European country	239 (15.9)	20.1 (48)		2.7 (1.8–4.1)	2.3 (1.5–3.6)
Highest education (70 missing)					
Elementary school	400 (27.3)	13.3 (53)	0.35	1.6 (0.9–2.8)	Not included
Vocational training	467 (31.8)	10.1 (47)	Linear trend: 0.07	1.2 (0.7–2.0)	
High-school diploma	123 (8.4)	10.6 (13)		1.2 (0.6–2.6)	
Professional school	234 (16.0)	9.4 (22)		1.1 (0.6–2.1)	
University	243 (16.6)	8.6 (21)		Reference	
Current health status (48 missing)					
Excellent	110 (7.4)	10.0 (11)	<0.001	Reference	Reference
Very good	257 (17.3)	9.3 (24)	Linear trend: <0.001	1.2 (0.5–2.6)	1.2 (0.5–2.6)
Good	708 (47.5)	7.9 (56)		1.4 (0.7–3.0)	1.4 (0.7–3.0)
Fair	289 (19.4)	14.5 (42)		3.9 (1.8–8.6)	3.9 (1.8–8.6)
Poor	125 (8.4)	21.6 (27)		6.5 (2.8–15.2)	6.5 (2.8–15.2)
Length of stay (3 missing)					
≥2 but <10 days	1132 (73.8)	10.2 (115)	0.038	Reference	Not included
≥10 but <30 days	328 (21.4)	12.8 (42)	Linear trend: 0.014	1.3 (0.9–1.9)	
≥30 days	74 (4.8)	18.9 (14)		2.1 (1.1–3.8)	
Type of ward (3 missing)					
Public	1398 (91.1)	12.1 (169)	<0.001	9.2 (2.3–37.6)	15.1 (2.1–110.5)
Private	136 (8.9)	1.5 (2)		Reference	Reference

health status. Both predictors remained significant in multivariate analysis.

Association with assessment of care

Experiencing discrimination from any cause was associated with higher PPE-15 problem scores, which were on average twice as high as scores of patients who did not experience discrimination (Table 4).

Similarly, patients who experienced discrimination were less likely to describe their care as very good or excellent, less likely to recommend the hospital to others and less likely to state that they were always treated with respect and dignity.

All four types of discrimination were associated with higher PPE-15 problem scores in multivariate linear regression analysis, i.e. immigration-related discrimination (+10.2, $P = 0.001$), discrimination related to age/sex (+15.6, $P < 0.001$), to physical/sexual characteristics (+19.4, $P < 0.001$) and to social/economic status (+6.9, $P = 0.051$). All types of discrimination were also significantly associated

with the report of not having been always treated with respect and dignity. However, immigration-related discrimination was less-strongly associated with the rating of health care as excellent or very good, and with the intent to recommend the hospital, than the other types of discrimination (details not shown).

Discussion

Our study found that slightly more than 1 of 10 patients experienced some form of discrimination during their hospitalization. The most common perceived sources of discrimination included the patient's language, age, nationality and having a disease viewed negatively by others. On a positive note, discrimination due to skin colour, sexual orientation, sex and income level was reported by very few respondents. We also found that experiences of discrimination during hospitalization were strongly associated with lower ratings of care.

We do not know how these results compare with patient experiences of discrimination elsewhere, because to our knowledge this is the

Table 3 Reporting of four types of discrimination across patient subgroups

	Discrimination related to							
	Migration		Age or sex		Physical/sexual characteristics		Social/economic status	
	% (n)	P-value (χ^2 test)	% (n)	P-value (χ^2 test)	% (n)	P-value (χ^2 test)	% (n)	P-value (χ^2 test)
Sex								
Men	3.2 (21)	0.013	2.5 (16)	0.20	3.5 (23)	0.24	3.8 (25)	0.33
Women	6.0 (53)		3.6 (32)		4.8 (42)		2.9 (26)	
Age (years)								
18–24	8.9 (7)	0.011	15.2 (12)	0.001	7.6 (6)	0.043	5.1 (4)	0.24
25–44	7.0 (32)	Linear trend: <0.001	2.4 (11)	Linear trend: 0.048	6.1 (28)	Linear trend: 0.018	3.7 (17)	Linear trend: 0.07
45–64	4.5 (20)		1.6 (7)		3.0 (13)		4.3 (19)	
65–84	2.7 (13)		3.0 (14)		3.0 (14)		1.9 (9)	
≥85	2.4 (2)		4.8 (4)		4.8 (4)		2.4 (2)	
Country of birth								
Switzerland	1.0 (8)	<0.001	3.1 (24)	0.60	4.3 (33)	0.77	2.3 (18)	0.025
Other European	5.1 (25)		2.4 (12)		3.9 (19)		3.5 (17)	
Non-European	15.1 (36)		3.8 (9)		5.0 (12)		5.9 (14)	
Highest education								
Elementary	6.5 (26)	0.18	4.0 (16)	0.52	5.0 (20)	0.64	2.5 (10)	0.78
Vocational	3.2 (15)	Linear trend: 0.37	2.8 (13)	Linear trend: 0.18	4.3 (20)	Linear trend: 0.12	3.4 (15)	Linear trend: 0.92
High school	4.1 (5)		2.4 (3)		4.1 (5)		4.1 (5)	
Professional	3.4 (8)		3.4 (8)		3.0 (7)		2.1 (5)	
University	4.9 (12)		1.6 (4)		2.9 (7)		2.9 (7)	
Health status								
Excellent	4.5 (5)	0.005	3.6 (4)	0.33	1.8 (2)	0.001	2.7 (3)	0.006
Very good	5.8 (15)	Linear trend: 0.13	2.3 (6)	Linear trend: 0.21	0.8 (2)	Linear trend: <0.001	2.3 (6)	Linear trend: 0.005
Good	3.0 (21)		2.4 (17)		3.0 (21)		2.0 (14)	
Fair	4.8 (14)		3.5 (10)		6.9 (20)		5.2 (15)	
Poor	10.4 (13)		5.6 (7)		14.4 (18)		7.2 (9)	
Type of ward								
Public	5.2 (72)	0.058	3.4 (48)	0.018	4.6 (64)	0.025	3.6 (50)	0.081
Private	1.5 (2)		0.0 (0)		0.7 (1)		0.7 (1)	

Table 4 Impact of discrimination on patient perceptions of care

	Did not report any discrimination	Reported any discrimination	*P*-value
Picker Patient Experience score,[†] mean (SD)	27.6 (22.1)	50.8 (26.4)	< 0.001 (Mann–Whitney test)
Rated health care as very good or excellent (*n*)	63.4% (842)	33.7% (55)	< 0.001 (chi-squared test)
Would certainly recommend the hospital to others (*n*)	72.2% (953)	40.6% (65)	< 0.001 (chi-squared test)
Was always treated with respect and dignity (*n*)[‡]	88.2% (1155)	52.4% (86)	< 0.001 (chi-squared test)

[†]Lower is better.
[‡]This item is part of the Picker Patient Experience score.

first study to examine the prevalence and perceived causes of discrimination during a specific hospitalization. A few studies have looked at public perceptions of discrimination within the health-care system,[1,37,38] but as Kressin *et al.*[30] point out in their review, most studies that look at actual experiences of discrimination ask about any prior experiences of perceived discrimination within the health-care system, and most focus on race-based discrimination within the US context. Another reason that comparison is difficult is that racial categories used in the USA are not meaningful in the Swiss context. For this reason, we tried to 'unpack' the different sources of discrimination that might be related to race but that had more relevance for our context (nationality, skin colour, language, socioeconomic status).

It is interesting that language was one of the two most common sources of discrimination, given that the questionnaire was administered only in French and therefore probably excluded those patients experiencing the greatest language barriers at the hospital. Only 61 (2.3%) patients returned the questionnaire indicating that they did not speak French, but it is likely that many more non-francophone patients were among the non-responders given the high proportion of these in the Geneva population (about 25%). It may be that patient experiences of language-based discrimination are actually more frequent than the present results suggest. More generally, because dissatisfied patients are less likely to return satisfaction questionnaires,[21] the frequency of all forms of discrimination may have been underestimated by this study.

When we grouped together language, nationality, religion and skin colour ('immigration-related discrimination'), we found that 15% of non-European patients (as compared with 5% of European patients) experienced this form of discrimination. Interestingly, this type of discrimination was less-strongly associated with ratings of care. We do not know why this is the case, but anecdotal evidence from discussions with immigrant patients suggests that those from countries with weak health-care systems are grateful to have access to good health care and are generally satisfied with care, possibly despite experiencing discrimination on the part of health-care workers.

Another interesting finding is that perceived discrimination was virtually absent among patients discharged from 'private' hospital wards. Patients in these wards have a higher level of health insurance coverage, which entitles them to a private room and medical care from senior staff physicians. We do not know why these patients do not experience discrimination, but it is likely a result of two factors: the private wards are designed to be particularly attentive to patients' needs (sufficient, competent staff; increased access to one's health-care team, etc.) and experiences of discrimination may be less likely in such an environment. Second, private ward patients may be more highly educated, more familiar with the health-care system, more likely to speak French and to be generally perceived as 'easier' patients by health-care staff, and therefore less likely to be subjected to prejudice. Although these are only hypotheses that merit further investigation, the minimal level of discrimination reported for 'private' wards does suggest that eliminating discrimination

throughout the hospital may be an achievable objective.

A potential weakness of our study is the way in which we measured the experience of discrimination. We defined discrimination as unjust and unfavourable treatment based on prejudice, and asked patients whether they had experienced such treatment during hospitalization, but we did not explore what actually happened. We chose to focus on the perception of discrimination rather than the objective event itself because different patients may experience similar events differently, and thus the effect of those events on the individual may differ. However, our approach does not provide information on the specific nature of discrimination during hospitalization, which is necessary if we are to develop interventions to eliminate discrimination in health care.

In conclusion, our study suggests that patient experiences of discrimination during hospitalization were fairly common and are associated with lower ratings of care. Systematic data collection on patient experiences of discrimination could potentially contribute to the development of interventions aimed at ensuring respectful, quality care for all patients, although further work is needed to determine how best to ensure that feedback on patient experiences leads to improvement in hospital care.[39,40] In the context of growing linguistic, social and cultural diversity, it is increasingly important for health-care institutions to identify and respond to social, linguistic and cultural needs of patients, eliminate discrimination and ensure safe, effective and respectful care for all patients.

Conflict of interest

The authors declare they have no conflict of interest.

Funding

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