# **RESEARCH ARTICLE**

# Patient Complaints Emphasize Non-Technical Aspects of Care at a Tertiary Referral Hospital

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### Abstract

**Background:** Patient concerns represent opportunities for improvement in orthopaedic care. This study's objective is to identify the nature and prevalence of unsolicited patient complaints regarding orthopaedic care at a tertiary referral hospital. The primary null hypothesis that there are no demographic factors associated with complaint types was tested. Secondarily we determined if the overall complaint number and types differed by year.

**Methods:** Complaints to the hospital ombudsperson by orthopaedic patients between January 1997 and June 2013 were reviewed. All 1118 complaints were categorized: access and availability, humaneness and disrespect, communication, expectations of care and treatment, distrust, billing and research.

**Results:** Patients between 40 and 60 years of age filed the most complaints in all categories except distrust (more common in patients over age 80) and research. Women were slightly more likely to address access and availability, humaneness, disrespect, and billing compared to men. The overall number of complaints peaked in 1999. The most common issue was access and availability followed by communication, and humaneness/ disrespect.

**Conclusion:** Half of concerns voiced by patients addressed interpersonal issues. The largest category was related to access and availability. Quality improvement efforts can address technology to improve access and availability as well as empathy and communication strategies.

**Keywords:** Communication, Continuous quality improvement, Healthcare quality improvement, Health professions education, Patient satisfaction

## Introduction

#### Background

In many hospitals, patients that are uneasy or have misgivings about their care can contact an ombudsperson or a patient advocate. An ombudsperson can provide constructive feedback to the care team, demonstrate respect for patients, and improve communication between patients and providers (1).

#### Rationale

Medicolegal claims correlate more with unsolicited complaints than with specialty or volume of service (2). An analysis of complaint reports to the hospital ombudsperson could identify important opportunities to improve care and lower malpractice risk (3).

*Corresponding Author:* David Ring, Dell Medical School, University of Texas, Austin, TX, USA Email: David.Ring@austin.utexas.edu Previous studies suggest that effective communication (rapport), access, and treatment consistent with preferences and expectations are useful areas of focus (4-7).

There is a notable discrepancy between orthopaedic surgeon self-perception and patient's perceptions of their interpersonal and communication skills (8). The American Academy of Orthopaedic Surgeons developed the Communication Skills Mentoring Program with the goal of improved patient care and outcomes, reduction in medicolegal claims, and greater patient satisfaction (8-10).

The objective of this study is to identify the nature



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and prevalence of unsolicited patient complaints regarding orthopaedic care at a busy, urban tertiary/ quaternary care teaching hospital in order to inform quality improvement efforts. We tested the primary null hypothesis that there are no demographic factors associated with subgroups of complaint types. Secondarily we determined if the overall number and type of complaints differed year by year.

#### **Study Questions**

We tested the primary null hypothesis that there are no demographic factors associated with subgroups of complaint types. Secondarily we determined if the overall number and type of complaints differed year by year.

#### **Materials and Methods**

After approval of the protocol by the Institutional Review Board, we reviewed 1332 patient reports lodged to the hospital's patient advocate between January 1997 and June 2013.

We excluded 44 complimentary reports (3% of the total) and 143 requests for assistance (11%). Two hundred and fourteen complaints lodged by a health care provider about a patient or in anticipation of a complaint from a patient were removed, leaving 1118 records for analysis. The majority of records reviewed had one complaint (86%), followed by two (13%), three (0.7%) and four complaints (0.3%), resulting in 1288 complaints for review.

The files contained information about the date of event and date of registration, a brief description of the problem and if provided, the solution. The orthopaedic specialty, patients' sex, role of the person who lodged the complaint (e.g. patient, family member, friend) and focus of the complaint were recorded. Using the medical record we recorded age, sex and marital status.

We added a seventh category (research) to the coding system of Hickson and Pichert used to classify patient complaints (11). The original six categories are access and availability, humaneness and disrespect, communication, expectations of care and treatment, distrust and billing. Sub-classifications were created to further characterize the complaint type.

#### **Data Analysis**

The complaints were equally divided among three coauthors for classification. The reviewers independently categorized the complaints. To test the consistency of the coding scheme and to rule out difference among the different researchers, three reviewers coded 30 randomly selected files. We performed an inter-observer agreements Cohen's-Kappa, which showed a strong agreement of 0.84.

The distribution of complaints among the care providers, categories, sub-categories and specification was presented with frequencies and percentages. In order to define trends in the amount of categorical complaints per year, a multivariable longitudinal regression was carried out for the period 1997 through PATIENT COMPLAINTS AND IMPROVING ORTHOPAEDIC CARE

2012. We obtained significant odds ratios less than one for our complaint categories, not including billing and research. Statistical software was used to perform all calculations (12).

#### **Results**

We tested the primary null hypothesis that there are no demographic factors associated with subgroups of complaint types.

Men and women complained fairly equal in the categories of communication, expectation of care and treatment, and distrust [Table 1]. Women reported more complaints in access and availability, humaneness and disrespect, and billing (P=.024). Patients aged 40 to 60 years were more likely to file a complaint in all categories except distrust (most common in patients over age 80) and research (P=.003; [Table 2]).

Secondarily we determined if the overall number and type of complaints differed year by year. The overall number of complaints peaked in 1999 and then generally decreased [Figure 1]. Most complaints concerned the surgeon (58%) or the administrative assistant (32%) [Table 3]. Over half of all complaints were related to interpersonal issues [humaneness/ disrespect (20%), expectation of care and treatment (20%), communication (14%) and distrust (3.6%)] [Table 3].

Multivariable regression identified year-by-year differences in the number of complaints in the categories access and availability, humaneness and disrespect, communication, expectation of care and treatment and distrust [Figure 2]. The most common type of complaint per year from 1997 to 2012 was access and availability except during 2004 when it was humaneness/disrespect [Figure 2].

Table 1. Demographics of those who filed complaints *			
	Mean (sd)	range	
Age, (y), (n=997)	52 (17)	0.4 - 96	
Sex of patient	Ν	%	
Men	467	42	
Women	641	57	
Unknown	10	1	
Marital status			
Married	409	37	
Living with partner	3	0.3	
Single	366	33	
Divorced	113	10	
Widowed	73	3.5	
Other	33	3.0	
Unknown	122	11	

\*n=1118

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Table 2. Bivariate analysis of complaint demographics								
	Access and availability	Humaneness/ Disrespect	Communication	Expectation of care and treatment	Distrust	Billing	Research	P-value
Age, (y)								0.003
0-20	22	4	6	4	0	3	0	
20-40	91	32	25	36	5	11	1	
40-60	201	94	42	76	8	34	1	
60-80	127	28	35	34	5	19	1	
80+	111	23	11	14	9	12	0	
Sex								0.024
Men	193	49	49	71	13	26	2	
Women	260	110	55	72	12	39	1	
Marital status								0.13
Married	164	49	38	49	10	29	1	
Living with partner	0	1	0	1	0	0	0	
Single	145	57	37	53	8	16	2	
Divorced	32	26	11	19	0	5	0	
Widowed	30	7	10	8	4	9	0	
Other	10	3	5	7	0	1	0	



Figure 1. Complaints by Year: Figure represents the summation of total complaints by year.

Table 3. Nature of complaints *		
Complaint about	N	%
Doctor	654	58
Nurse	12	1
Casting service	20	2
Administrative assistant	358	32
Other	74	7
Frequencies		
Single complaint	962	86
Double complaint	145	13
Threefold complaint	8	0.7
Fourfold complaint	3	0.3
Main Category	Ν	%
Access and availability	532	48
Humaneness/ Disrespect	223	20
Communication	153	14
Expectation of care and treatment	227	20
Distrust	40	3.6
Billing	110	10
Research	3	0.3

n=1118\*

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In the access and availability category, accessibility via telephone and email (34%), wait time (24%), and physical absence of clinician/cancellation of appointment (18%) were the three most common sources of complaint [Table 4].

Regarding the category of humaneness/ disrespect, the most common description was unprofessional (38%), then rudeness (34%), and condescending (15%) [Table 4]. Seventy-six percent of communication category complaints were attributed to miscommunication between the patient and surgeon [Table 4], while care and treatment complaints involved disputes about treatment, followed by diagnostic issues, and referrals. Many treatment-related complaints addressed medication (most often opioids) and dissatisfaction with the outcome of surgery [Table 5].

#### Discussion

Review of complaints to an ombudsperson about orthopaedic care can inform policy and communication strategies that might improve the patient experience, bolster staff morale, and limit malpractice risk. We identified a difference in demographic factors gender and age and that the overall number and type of complaints differed year by year. Half of all patient concerns related to interpersonal issues and the largest single category of complaints related to access and availability. This suggests that an emphasis on a better patient experience (optimal communication strategies and customer service) may decrease complaints to an ombudsperson,



Figure 2. Complaints by Categories per Year: Figure represents the summation of complaints in their respective categories by year.

Table 4. Subclassification of complaint categories		
Access and availability	N	%
Accessibility of hospital		0.4
Accessibility via telephone and email	181	34
Physical absence of clinician/ Cancellation of appointment	96	18
Unavailability of supervising physician	34	6.5
Wait time	128	24
Not able to obtain medical record or medical note/ reference letter	86	16
Humaneness/ Disrespect		
Rudeness	74	34
Dismissive	10	4.5
Arrogant	7	3.2
Abuse	6	2.7
Condescending	28	13
Insulting	13	5.9
Unprofessional	83	38
Communication/ Inadequate information		
Interdisciplinary miscommunication	36	24
Communication between patient and care provider	116	54
Care and treatment		
Diagnostic test	31	14
Referral	16	7.2
Treatment	176	79
Research		100

increase patient satisfaction, and perhaps decrease malpractice risk.

Our study has some limitations. The findings might apply best to this hospital or city and might not be representative of the average hospital although they seem fairly representative. The variability of complaints over the years may be due to variability in recording of complaints by different employees at the ombudsperson office, as well as variability in patient awareness of the ombudsperson. It has been estimated for every individual that complains to the medical team, 20-90 unhappy patients may be silent (1). Patients may have the impression the issue would not be addressed and avoid reporting in the first place. Since we don't have a precise denominator (the demographics and diagnoses of who was treated over the study years), its possible that some of the demographic findings may mirror the distribution of the sample. For instance, it's possible that more 40-60 year olds filed a complaint because more 40-60 year olds were treated. One may also take into account that dissatisfaction is only conveyed when a major negative experience is appreciated thus skewing the ratio of complaints to compliments (13, 14).

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Table 5. Specification about communication, care and treatm	ient
Miscommunication	
Intradisciplinary miscommunication	
Interdepartmental miscommunication	20
Wrong file	9
Lost file/ could not find medical record/ x-ray	5
Communication between patient and care provider	
Miscommunication about appointment	95
Information about diagnosis	19
Information about the treatment	13
Information about complications	3
Care and treatment	
Diagnostic test	
Disagreement with chosen diagnostic test	19
Disagreement with outcome	16
Referral	
Disagreement with not receiving a referral	16
Disagreement with referral	10
Nonopeartive treatment	
Disagreement with chosen conservative treatment	17
Unsatisfied with outcome of conservative treatment	10
Nonoperative other	2
Medication	
Disagreement with not receiving medicaiton	43
Disagreement with chosen medication	6
Disagreement with the outcome of the medication	4
Medication - other	4
Surgery	
Disagreement with not receiving operation	14
Disagreement with the chosen surgery	11
Unsatisfied with outcome of surgery	37
Surgery- other	4
Recovery	
Disagreement with the chosen recovery	10
Unsatisfied with outcome recovery	9
Recovery - other	2
Other	17

In our study demographic factors were associated with subgroups of complaint types. Our finding that sex was associated with subgroups of complaint types is consistent with prior studies, some of which found no influence of sex on satisfaction while at least one found

women were less satisfied with their primary care provider, and another found women were less likely to be satisfied following a TKA (15-19). Women are more likely to experience condescending attitudes from physicians and are more likely to switch health care providers (20). The finding that patients aged 40 to 60 years were more likely to file a complaint might relate to burden of disease, sociological factors, or other factors. In general, younger people are often less satisfied with their health care experiences (17, 21-23). This is attributed to younger patients being less compliant with medical advice and older patients not expecting as much information during the medical encounter (24).

Access and availability was the most common source of complaints. The reduction in accessibility complaints over time may be explained by improvements in the phone and email accessibility of the orthopaedic surgeons and staff. For example, patients can login onto a patient gateway to manage their appointments and ask questions about their care. In addition, physicians sometimes give their email address to patients to facilitate access. Previous studies have shown physician availability (measured by time in the office) has a significant relationship with patient satisfaction (11, 25).

Communication and humaneness/disrespect were common sources of complaints as well. This finding is in accordance with other studies that observed complaints about physician rudeness in 13% and 36% of all complaints (4, 6, 7). A recent study demonstrated that patient satisfaction is strongly related to perceived surgeon empathy (26). Efforts to improve surgeon communication strategies and empathy (such as the American Academy of Orthopaedic Surgeons Communication Skills Mentoring Program) merit greater attention. Patients who feel they communicate well with their physician have greater compliance with treatment, are more satisfied with care, and are more likely to share information to help more accurately diagnose their health issues (27-30). As one example, a person considering total knee replacement may believe that they must have no pain in order to be healthy or that they will be fully recovered within 3 months of surgery (31). Patients are most satisfied when the outcomes of surgery align with their goals (32-34). The placement of hope on unrealistic goals may be influenced on brochures and advertisements (35). These are difficult discussions. It's not easy to PATIENT COMPLAINTS AND IMPROVING ORTHOPAEDIC CARE

help a person with knee arthritis to focus on function rather than freedom from symptoms, to prepare for a year-long recovery, or to adapt to the shortcomings of the procedure. The importance of effective communication strategies cannot be over stated. Physicians with better interpersonal skills generate fewer complaints are less likely to be sued (2).

These data suggest that technological and organizational improvements have decreased many of the complaints related to the process of care (scheduling, returning of phone calls, etc.). Patient complaints are now clustered around non-technical skills of orthopaedic surgeons. Patients complain when they don't feel listened to, respected, and appreciated for who they are. This is consistent with the AAOS's own survey as well as national data using CG-CAHPS data showing that orthopaedic surgeons score lowest among specialties on effective communication strategies (8). The internet is now a venue for unfiltered, vitriolic complaints lacking context. With reimbursements increasingly tied to patient satisfaction, it is more important than ever for orthopaedic surgeons to place effort on improving their communication skills.

We set this up as an experiment looking for year-by-year and type-by-type patterns in the complaints. While we found a decrease in complaints related to administrative deficiencies, the complaints related to non-technical skills were rather consistent.

An analysis of complaints to the hospital ombudsperson at an urban tertiary care medical center identified several opportunities for improvement in care. Quality improvement programs that focus on improving access and availability and communication skills might help decrease complaints, improve patients satisfaction, and lower malpractice risks.

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