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Title

Gender Differences in Patients' Experience of Care in the Emergency Department.

Permalink

<https://escholarship.org/uc/item/4r26p8q0>

Journal

Journal of general internal medicine, 37(3)

ISSN

0884-8734

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Publication Date

2022-02-01

DOI

10.1007/s11606-021-06862-x

Peer reviewed

Gender Differences in Patients' Experience of Care in the Emergency Department



J Gen Intern Med
DOI: 10.1007/s11606-021-06862-x
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INTRODUCTION

The emergency department (ED) is a unique healthcare environment, bridging outpatient and inpatient care. Previous work has reported gender differences in diagnosis and treatment in ED settings.¹ However, little is known about gender differences in patient experience in the ED, though such differences are reported in other settings. Among patients discharged from acute care hospitals, women reported worse experiences than men on nine out of ten measures;² in a study of Medicare Advantage enrollees, women reported better experiences than men on measures involving interactions with administrative staff and timely access to care, but worse experiences than men on getting needed care.³

Potential gender differences in ED patient experiences would run counter to recent calls for health equity. Such differences are also important given evidence that better patient experience is associated with better outcomes and better adherence to treatment recommendations.⁴ We used data from a nationwide study of ED patients to examine gender differences in patient-reported experiences with ED care.

METHODS

We analyzed survey data from a nationwide administration of the Emergency Department Patient Experience of Care Discharged to Community survey (which became the ED CAHPS® Survey in March 2020) for ED patients discharged home between January and March 2016. Details regarding the survey instrument, study design, sampling, and item scoring are available elsewhere.^{5,6} Our analytic sample included 3122 eligible survey respondents from 50 hospitals. Gender was characterized as male vs. female and obtained from hospital administrative data. We analyzed eight patient experience measures scored to reflect the percentage of respondents who selected the most positive response option.⁶

We first compared respondent characteristics by gender. Next, we examined ED patient experience by gender using multivariate linear regression models predicting patient experience scores from gender; models were adjusted for mode of survey administration and respondent characteristics known to be associated with patients' survey responses (see Table 2).⁶ Lastly, we added interactions to investigate whether gender differences in patient experience varied by age or the urgency of the condition (captured by patient-reported reason for ED visit and patient-reported importance of getting timely care).

RESULTS

Compared to men, women were younger, less likely to have arrived by ambulance, less often in excellent mental health, and more often had a usual source of care

Prior Presentations: None.
Received November 20, 2020
Accepted April 26, 2021

Table 1 Respondent Characteristics By Gender

Characteristic ^{abe}	Men (N=1196)	Women (N=1926)
Age***		
18–24	111 (9.3%)	246 (12.8%)
25–34	128 (10.8%)	296 (15.4%)
35–44	160 (13.4%)	194 (10.1%)
45–54	172 (14.5%)	285 (14.9%)
55–64	200 (16.8%)	303 (15.8%)
65–74	195 (16.4%)	285 (14.9%)
75–84	162 (13.6%)	209 (10.9%)
85 +	62 (5.2%)	100 (5.2%)
Reason for ED visit***		
Accident or injury	348 (29.7%)	432 (22.9%)
A new health problem	466 (39.8%)	865 (45.9%)
An ongoing health condition or concern	357 (30.5%)	588 (31.2%)
Arrival by ambulance *		
No	943 (79.2%)	1576 (82.3%)
Yes	248 (20.8%)	339 (17.7%)
Self-reported importance of care (0–10 scale)		
0–4 (least important)	155 (13.2%)	213 (11.2%)
5–7	336 (28.5%)	517 (27.2%)
8–9	240 (20.4%)	423 (22.2%)
10 (most important)	447 (37.9%)	749 (39.4%)
Number of ED visits in the last 6 months (including this one)		
1 visit	678 (59.2%)	1013 (54.9%)
2 visits	236 (20.6%)	415 (22.5%)
3 visits	119 (10.4%)	207 (11.2%)
4 visits	56 (4.9%)	99 (5.4%)
5–9 visits	44 (3.8%)	90 (4.9%)
10 or more visits	13 (1.1%)	21 (1.1%)
Patient has a usual source of care ^c ***		
No	194 (16.7%)	170 (9.1%)
Yes	968 (83.3%)	1698 (90.9%)
Number of times patient visited usual source of care ^c in the last 6 months (if patient has a usual source of care)		
None	90 (9.5%)	139 (8.4%)
1 time	218 (23.1%)	332 (20.1%)
2 times	233 (24.7%)	399 (24.1%)
3 times	141 (14.9%)	255 (15.4%)
4 times	85 (9.0%)	181 (10.9%)
5–9 times	128 (13.5%)	240 (14.5%)
10 or more times	50 (5.3%)	108 (6.5%)
Self-reported overall health		
Poor	87 (7.4%)	134 (7.2%)
Fair	253 (21.6%)	395 (21.1%)
Good	371 (31.7%)	628 (33.5%)
Very good	304 (26.0%)	489 (26.1%)
Excellent	155 (13.2%)	228 (12.2%)
Self-reported mental health**		
Poor	40 (3.4%)	61 (3.2%)
Fair	142 (12.2%)	250 (13.3%)
Good	268 (23.0%)	527 (28.0%)

(continued on next page)

Table 1. (continued)

Characteristic ^{abe}	Men (N=1196)	Women (N=1926)
Very good	331 (28.4%)	525 (27.9%)
Excellent	386 (33.1%)	517 (27.5%)
Education*		
8th grade or less	48 (4.1%)	64 (3.4%)
Some high school	113 (9.7%)	161 (8.6%)
High school or GED	378 (32.5%)	578 (31.0%)
Some college or 2-year degree	335 (28.8%)	649 (34.8%)
4-year college graduate	143 (12.3%)	214 (11.5%)
More than 4-year college degree	147 (12.6%)	197 (10.6%)
Race/ethnicity ^d		
Hispanic	120 (10.4%)	203 (11.0%)
Native American	8 (0.7%)	12 (0.7%)
Black	134 (11.6%)	238 (12.9%)
Asian or Pacific Islander	30 (2.6%)	40 (2.2%)
White	791 (68.4%)	1231 (66.9%)
Multi-racial	73 (6.3%)	115 (6.3%)
Language spoken at home		
English	1095 (94.1%)	1750 (94.1%)
Spanish	39 (3.4%)	70 (3.8%)
Other	30 (2.6%)	39 (2.1%)
Proxy used to help complete survey**		
No	1109 (93.6%)	1832 (95.9%)
Yes	76 (6.4%)	78 (4.1%)

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$ ^aPercentages are calculated among applicable non-missing categories only. Variable level missingness ranged from 0.4 to 5.3% amongst women and 0.5 to 4.8% amongst men^bStars reflect results of chi-squared test (excluding missing and screened out categories) to test for differences in characteristic distributions across gender^cDefined as "a doctor's office, clinic, or other place you usually go if you need a check-up, want advice about a health problem, or get sick or hurt" (not counting the emergency room). 8.8% of women and 16.2% of men were skipped out of "Number of times patient visited usual source of care in the last 6 months" because they responded "No" to the question asking if they had a usual source of care^dA patient's race/ethnicity was categorized as follows: if the patient responded that they were of Spanish, Hispanic, or Latino origin or descent, they were categorized as "Hispanic"; if the patient responded that they were of a single race (White; Black or African American; Asian; Native Hawaiian or other Pacific Islander; American Indian or Alaska Native), they were categorized as that identified race; if the patient responded that they were of multiple races, they were categorized as multi-racial^eGender and age were obtained from hospital administrative data, where the provided gender variable only included values of male or female. All other characteristics were collected on the survey

(Table 1). Women reported significantly worse experiences than men for five measures (Table 2): getting timely care (67.0% of women selected the "top-box" (most positive) response vs. 71.4% of men, $p < 0.001$); whether doctors and nurses provided sufficient information about test results (68.2% women vs. 72.6% men, $p < 0.05$); whether someone asked at discharge if they

would be able to get follow-up care if needed (77.3% women vs. 81.4% men, $p < 0.05$); and whether they got care within 30 minutes of getting to the emergency room (77.9% women vs. 81.0% men, $p < 0.05$). Men did not report significantly worse experiences than women on any measures. These differences did not vary by urgency of condition or age.

Table 2 Emergency Department Patient Experience of Care Top-Box Scores by Gender

Measures	Adjusted top-box scores ^a (%)		Adjusted overall difference (SE) from men ^b
	Men	Women	Women
Composites			
Getting timely care	71.45	67.05***	-4.40 (1.33) ***
Doctor and nurse communication	78.46	76.44	-2.01 (1.22)
Communication about medications	81.05	79.61	-1.45 (1.37)
Global measures			
Overall rating	60.67	59.32	-1.36 (1.81)
Willingness to recommend	66.62	65.80	-0.82 (1.77)
Standalone items			
Doctors and nurses provided sufficient information about test results	72.63	68.17*	-4.46 (1.96) *
At discharge, someone asked if you would be able to get follow-up care if needed	81.41	77.30*	-4.11 (1.75) *
Received care within 30 minutes of getting to the emergency room	80.97	77.93 *	-3.04 (1.51) *

* $p < 0.05$ *** $p < 0.001$

^aTop-box scores are adjusted for patient characteristics (age, education, primary language, overall health, reason for the ED visit, arrival by ambulance, importance of getting timely care, whether the patient used proxy assistance to answer the survey, whether the patient used proxy assistance in any other way to help complete the survey, and response percentile) and mode of survey administration (mail only, telephone only, or mixed mode). Response percentile is defined as the rank-ordered number of days between a respondent's discharge date and the date that data collection activities ended for the respondent relative to all eligible patients within ED and mode, scaled from 0 to 1

^bOverall results are from multivariate linear regression models that estimate the difference between women and men adjusting for patient characteristics (listed above) and mode of survey administration where the outcome is the respective top-box scored measure

DISCUSSION

To our knowledge, this is the first study to examine gender differences in ED experiences among patients with diverse medical conditions. These medium-to-large gender differences are larger and less positive for women compared with gender differences observed in inpatient settings² and gender differences identified for measures of "getting needed care" among Medicare beneficiaries.³

ED encounters are brief and sometimes chaotic, with health care providers the patient may have not met before and may not see again. Thus, interpersonal dynamics during ED encounters are fundamentally different than in other care settings, making it critical to be mindful of systematic differences in providers' communications and decision-making. Training to increase awareness of implicit biases and differences in communication styles can support providers' ability to communicate effectively with both men and women in ED settings.

Although men and women do not differ in their overall ratings of ED care, there are important and meaningful gender differences in reported experiences, particularly with respect to communication between patients and providers and ED staff responsiveness that should be addressed. Increased focus on women's

experience of care in the ED has the potential to improve ED care for all patients. Gender disparities in health care damage patient-physician relationships, and ultimately patient outcomes. Increased health equity is essential to high-value patient-centered care.

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Funding This work was supported by the Centers for Medicare & Medicaid Services, Department of Health and Human Services [Contract Number: GS-10F-0275P/75FCMC18F0061].

Declarations:

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Conflict of Interest: The authors have no financial conflicts of interest to disclose.

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Publisher's Note: Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.