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Gender Differences in the Rate of 30-Day Readmissions after Percutaneous Coronary Intervention for Acute Coronary Syndrome

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A B S T R A C T

Background: It has been reported that women have higher 30-day readmission rates than men after acute coronary syndrome (ACS). However, readmission after percutaneous coronary intervention (PCI) for ACS is a distinct subset of patients in whom gender differences have not been adequately studied.
Methods: Hawaii statewide hospitalization data from 2010 to 2015 were assessed to compare gender differences in 30-day readmission rates among patients hospitalized with ACS who underwent PCI during the index hospitalization. Readmission diagnoses were categorized using an aggregated version of the Centers for Medicare and Medicaid Services Condition Categories. Multivariable logistic regression was applied to evaluate the effect of gender on the 30-day readmission rate.
Results: A total of 5,354 patients (29.4% women) who were hospitalized with a diagnosis of ACS and underwent PCI were studied. Overall, women were older, with more identified as Native Hawaiian, and had a higher prevalence of cardiovascular risk factors compared with men. The 30-day readmission rate was 13.9% in women and 9.6% in men ($p < .0001$). In the multivariable model, female gender (odds ratio [OR], 1.32; 95% confidence interval [CI], 1.09–1.60), Medicaid (OR, 1.48; 95% CI, 1.07–2.06), Medicare (1.72; 95% CI, 1.35–2.19), heart failure (1.88; 95% CI, 1.53–2.33), atrial fibrillation (OR, 1.54; 95% CI–1.21–1.95), substance use (OR, 1.88; 95% CI, 1.27–2.77), history of gastrointestinal bleeding (OR, 2.43; 95% CI, 1.29–4.58), and chronic kidney disease (OR, 1.78; 95% CI, 1.42–2.22) were independent predictors of 30-day readmissions. Readmission rates were highest during days 1 through 6 (peak, day 3) after discharge. The top three cardiac causes of readmissions were heart failure, recurrent angina, and recurrent ACS.
Conclusions: Female gender is an independent predictor of 30-day readmission after ACS that requires PCI. Our finding suggests women are at a higher risk of post-ACS cardiac events such as heart failure and recurrent ACS, and further gender-specific intervention is needed to reduce 30-day readmission rate in women after ACS.

Reducing early hospital readmissions is considered an important goal for health care systems, as readmission rate is often proposed as a marker for quality of care (Ashton, Del Junco, Souchek, Wray, & Mansyur, 1997; Ashton, Kuykendall, Johnson, Wray, & Wu, 1995; Ashton & Wray, 1996; Jencks, 2010). Acute coronary syndrome (ACS) is a crucial target in this effort because it affects approximately 625,000 people each year in the United States, of whom an estimated 363,000 are men and 262,000 are women (Benjamin et al., 2017; Berger et al., 2009). ACS patients

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who are readmitted within 30 days have higher morbidity and incur greater health care costs than patients who are not readmitted (Dharmarajan et al., 2017; McManus et al., 2012). There have been substantial recent efforts to identify ACS patients who are at risk for 30-day readmission (O'Brien et al., 2017; Ranasinghe et al., 2014), in the hope that identifying these patients in advance of discharge can improve outcomes, decrease costs, and improve health care quality.

Gender differences in outcomes such as mortality, length of stay, and readmission after ACS have been previously described, with a higher rate of readmission in women when compared with men (Dreyer, Dharmarajan, Kennedy, et al., 2017; Dreyer et al., 2015; Hess et al., 2017; Izadnegahdar et al., 2014; O'Brien et al., 2017). However, these studies include a heterogeneous population of ACS patients regardless of whether percutaneous coronary intervention (PCI) was performed during the index hospitalization. PCI use defines a subset of patients with relative homogeneous pathophysiology, including potentially treatable lesions and sufficiently good health to be a candidate for the procedure. Therefore, we sought to assess gender differences in the rate of 30-day readmission in patients with admission diagnosis of ACS who required PCI.

Methods

We received approval from the University of Hawaii Institutional Review Board to conduct a retrospective study on all patients hospitalized in the state of Hawaii between January 1, 2010, and December 31, 2015. The data were obtained from the Hawaii Health Information Corporation. Hawaii Health Information Corporation compiles patient-level discharge data for all acute care hospitalizations in Hawaii by all payers. The dataset included patient demographics (such as insurer, age, gender, and home address), *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9) primary diagnosis, secondary diagnosis, and procedure codes. Race/ethnicity information was categorized based on self-report.

Inclusion criteria for this study consisted of patients with a discharge ICD-9-CM primary diagnosis code of acute myocardial infarction and/or ACS (ICD-9-CM 411.1x and 410.xx). Patients with ICD-9-CM codes of 410.x2 were excluded, because these codes indicate an old myocardial infarction. For inclusion, patients must have also undergone PCI during the index hospitalization, which was defined as an ICD-9-CM code of 00.66, 36.01, 36.02, 36.05, 36.06, and 36.07. All inpatients in the state of Hawaii discharged with the diagnosis of acute myocardial infarction/ACS who received a PCI between January 1, 2010, and December 31, 2015 were identified.

We excluded patients who were hospitalized at the Department of Defense hospital in Hawaii because detailed race/ethnicity data were not available. Patients who were not residents of Hawaii were also excluded from this study, because we expect that many of these patients would return to their home state or country after discharge from the initial hospitalization and therefore be lost to follow-up. Patients who died during the index hospitalization or were transferred to another facility or hospice were also excluded.

Control Variables

The following factors were selected a priori to be included in the multivariable models: age (<50 years old, 50–79 years old, and ≥80 years old), insurance (Medicaid, Medicare, private, and others), race/ethnicity (Chinese, Filipino, Japanese, Native Hawaiian, Pacific Islanders, White, and other race), discharge diagnosis of hypertension, hyperlipidemia, diabetes mellitus, cigarette smoking, obesity, coronary artery disease, coronary artery bypass grafting, heart failure, atrial fibrillation, peripheral artery disease, depression, other mental illness, gastrointestinal bleed, chronic kidney disease, pneumonia, stroke, and coronary artery bypass grafting surgery during the index hospitalization. The risk factors for coronary artery disease at presentation of the index hospitalization were derived from the secondary discharge diagnosis codes. Other mental illness is defined as psychoses, neurotic disorders, personality disorders, other nonpsychotic mental disorders, and mental disorders related to pregnancy (ICD-9-CM code 295.xx–302.xx, 306.xx–314.xx, and 648.4x).

Outcome Variables

Thirty-day readmission was defined as the first admission occurring within 30 days from the index hospitalization for any cause. Additional hospitalizations within the 30-day period were not counted as additional readmissions. Subsequent hospitalizations occurring after 30 days from the index hospitalization were counted as a separate independent index admission if the inclusion criteria are met (ACS with PCI). The readmission principle diagnoses were also derived from the ICD-9-CM codes from the readmission hospitalization. The diagnoses were then recategorized into 30 modified condition categories, using an aggregated version of the Centers for Medicare and Medicaid Services Condition Categories, which assemble the diagnoses into more meaningful clinical categories. The timing of readmission was calculated from the day after discharge.

Statistical Analysis

Baseline characteristics were compared using χ^2 tests or Fisher's exact tests for demographic and clinical variables. Multivariable adjusted odds ratios (ORs) and their 95% confidence intervals (CIs) were obtained with a logistic regression model. To assess potential gender differences in the timing of 30-day readmission, a log-rank test was performed and a multivariable Cox proportional hazards regression model was used to control the demographic or clinical factors. A secondary analysis assessed whether there was an interaction between gender and age group. All data analyses were performed in SAS 9.3 (SAS Institute Inc, Cary, NC). A two-tailed p value of less than .05 was regarded as statistically significant.

Results

We evaluated 5,354 patients with index hospitalizations with the diagnosis of ACS who underwent PCI. The clinical characteristics of the 5,354 patients are shown in Table 1. Of the 5,354 hospitalizations, 1578 (29%) were among women and 3,776 (71%) were among men. Women in this study were older than men (≥80 years, 19.2% vs. 10.1%; 50–79 years, 70.3% vs. 74.6%; <50 years, 10.5% vs. 15.3%; $p < .0001$). There were also more Native Hawaiian women (18.9% vs. 12.4%) and fewer Caucasian women (23.5% vs. 32.6%; χ^2 of racial/ethnic groups, $p < .0001$). Women also had a higher prevalence of hypertension (82.5% vs. 73.6%; $p < .0001$), diabetes mellitus (47.9% vs. 35.6%; $p < .0001$), obesity (16.6% vs. 13.7%; $p = .006$), heart failure (21.2% vs. 15.9%; $p < .0001$), depression (3.4% vs 2.2%; $p = .01$), other mental illness (9.1% vs. 6.6%; $p = .002$), and chronic kidney disease (20.7% vs.

Table 1
Clinical Characteristics, by Gender

	Female (n = 1,578), n (%)	Male (n = 3776), n (%)	p Value
Age (y)			<.0001
<50	166 (10.5)	578 (15.3)	
50–79	1,109 (70.3)	2,816 (74.6)	
≥80	303 (19.2)	382 (10.1)	
Insurance			<.0001
Private	396 (25.1)	1,487 (39.4)	ref
Medicaid	192 (12.2)	432 (11.4)	<.0001
Medicare	907 (57.5)	1,505 (39.9)	<.0001
Others	83 (5.3)	352 (9.3)	.3700
Race			<.0001
White	371 (23.5)	1,231 (32.6)	ref
Chinese	64 (4.1)	167 (4.4)	.1300
Filipino	290 (18.4)	634 (16.8)	<.0001
Japanese	295 (18.7)	710 (18.8)	.0004
Native Hawaiian	298 (18.9)	469 (12.4)	<.0001
Pacific Islander	89 (5.6)	218 (5.8)	.0029
Other race	171 (10.8)	347 (9.2)	<.0001
Medical history			
Hypertension	1,302 (82.5)	2,781 (73.6)	<.0001
Diabetes	756 (47.9)	1,343 (35.6)	<.0001
Hyperlipidemia	1,175 (74.5)	2,793 (74.0)	.7066
Smoking	570 (36.1)	1,652 (43.8)	<.0001
Obesity	262 (16.6)	517 (13.7)	.0059
Coronary artery disease	1,475 (93.5)	3,509 (92.9)	.4745
History of CABG	56 (3.5)	167 (4.4)	.1445
Heart failure	335 (21.2)	599 (15.9)	<.0001
Atrial fibrillation	177 (11.2)	444 (11.8)	.5725
Peripheral artery disease	24 (1.5)	57 (1.5)	.9752
Depression	53 (3.4)	82 (2.2)	.0115
Other mental illness	144 (9.1)	251 (6.6)	.0016
Substance use	39 (2.5)	197 (5.2)	<.0001
History of GI bleeding	18 (1.1)	34 (0.9)	.4138
Chronic kidney disease	326 (20.7)	629 (16.7)	.0005
Index hospitalization			
CABG procedure	15 (1.0)	52 (1.4)	.2005
Stroke	17 (1.1)	23 (0.6)	.0697
Pneumonia	64 (4.1)	147 (3.9)	.7802

Abbreviations: CABG, coronary artery bypass grafting; GI, gastrointestinal.

Table 2
Clinical and Demographic Characteristics, by Readmission Status

	No 30-Day Readmission (n = 4,771), n (%)	30-Day Readmission (n = 583), n (%)	p Value
Gender			<.0001
Female	1,359 (28.5)	219 (37.6)	
Male	3,412 (71.5)	364 (62.4)	
Age (y)			<.0001
<50	690 (14.5)	54 (9.3)	
50–79	3,506 (73.5)	419 (71.9)	
≥80	575 (12.1)	110 (18.9)	
Insurance			<.0001
Medicaid	557 (11.7)	67 (11.5)	
Medicare	2,055 (43.1)	357 (61.2)	
Others	400 (8.4)	35 (6.0)	
Private	1,759 (36.9)	124 (21.3)	
Race/ethnicity			.1362
Chinese	203 (4.3)	28 (4.8)	.2168
Filipino	821 (17.2)	103 (17.7)	.1956
Japanese	884 (18.5)	121 (20.8)	.0443
Native Hawaiian	669 (14.0)	98 (16.8)	.0162
Other race	472 (9.9)	46 (7.9)	.6513
Pacific Islander	273 (5.7)	34 (5.8)	.4063
Caucasian	1,449 (30.4)	153 (26.2)	ref
Medical history			
Hypertension	3,604 (75.5)	479 (82.2)	.0004
Diabetes	1,810 (37.9)	289 (49.6)	<.0001
Hyperlipidemia	3,558 (74.6)	410 (70.3)	.0269
Smoking	1,968 (41.2)	254 (43.6)	.2835
Obesity	689 (14.4)	90 (15.4)	.5197
Coronary artery disease	4,438 (93.0)	546 (93.7)	.5694
History of CABG	195 (4.1)	28 (4.8)	.4143
Heart failure	737 (15.4)	197 (33.8)	<.0001
Atrial fibrillation	502 (10.5)	119 (20.4)	<.0001
Peripheral artery disease	63 (1.3)	18 (3.1)	.0009
Depression	117 (2.5)	18 (3.1)	.3558
Other mental illness	335 (7.0)	60 (10.3)	.0044
Substance use	198 (4.2)	38 (6.5)	.0086
History of GI bleeding	36 (0.8)	16 (2.7)	<.0001
Chronic kidney disease	760 (15.9)	195 (33.4)	<.0001
Index hospitalization			
CABG procedure	64 (1.3)	3 (0.5)	.0857
Stroke	33 (0.7)	7 (1.2)	.1779
Pneumonia	169 (3.5)	42 (7.2)	<.0001

Abbreviations: CABG, coronary artery bypass grafting; GI, gastrointestinal.

16.7%; $p = .0005$); and a lower prevalence of smoking (36.1% vs. 43.8%; $p < .0001$) and substance use (2.5% vs. 5.2%; $p < .0001$).

There were 583 thirty-day readmissions in this study (11% of subjects). The readmission rate for women was 13.9% compared with 9.6% for men ($p < .0001$). In univariate analyses (Table 2), a higher proportion of patients with 30-day readmission were 80 years old and above (18.9% vs. 12.1%; $p < .0001$). Also, a higher proportion of patients with 30-day readmission had Medicare insurance compared with other types of insurance coverage (61.2% vs 43.1%; $p < .0001$). No statistically significant differences were seen between race/ethnicity in 30-day readmission after ACS. Patients with 30-day readmission had higher prevalence of hypertension (82.2% vs 75.5%; $p < .0004$), diabetes mellitus (49.6% vs 37.9%; $p < .0001$), heart failure (33.8% vs 15.4%; $p < .0001$), atrial fibrillation (20.4% vs 10.5%; $p < .0001$), peripheral artery disease (3.1% vs 1.3%; $p < .001$), chronic kidney disease (33.4% vs 15.9%; $p < .0001$), gastrointestinal bleeding (2.7% vs 0.8%; $p < .0001$), substance use (6.5% vs 4.2%; $p = .0086$), and other mental illness (10.3% vs 7.0%; $p = .0044$) than those who did not have 30-day readmission.

In the multivariable model, as shown in Table 3, female gender (OR, 1.32; 95% CI, 1.09, 1.60), Medicaid (OR, 1.48; 95% CI, 1.07, 2.06), Medicare (OR, 1.72; 95% CI, 1.35, 2.19), heart failure (OR, 1.88; 95% CI, 1.53, 2.33), atrial fibrillation (OR, 1.54; 95% CI, 1.21, 1.95), substance use (OR, 1.88; 95% CI, 1.27, 2.77), gastrointestinal bleeding (OR, 2.43; 95% CI, 1.29, 4.58), and chronic kidney disease (OR, 1.78; 95% CI, 1.42, 2.22) were independent predictors of 30-day readmissions. There was no significant interaction between gender and age groups ($p = .80$).

A list of the reasons for readmission, categorized into 30 modified condition categories, is shown in Table 4. The top three cardiac causes of readmission were heart failure, chronic angina, and recurrent ACS. Cardiac-related diagnoses accounted for 49.7% of the 30-day readmission diagnoses. The distribution of the causes of readmission differed by gender ($p = .044$). As shown in Figure 1, readmission rates were highest during days 1 through 6 (peak, day 3) after discharge, accounting for 43.1% of the 30-day readmissions. However, we did not find any significant difference of the timing of the 30-day readmissions between women and men ($p = .98$ from log-rank test; $p = .42$ from a Cox regression model).

Discussion

In this study, we compared the 30-day readmission rates between women and men of all ages after ACS hospitalization who required PCI. The overall 30-day readmission rate in our study

Table 3
Multivariable Analyses for 30-Day Readmission

	OR	95% CI	
Female	1.32	1.09	1.60
Age group (y)			
<50	0.78	0.51	1.17
50–79	0.93	0.72	1.21
≥80 (reference)	—	—	—
Race			
Caucasian (reference)	—	—	—
Chinese	1.18	0.76	1.85
Filipino	0.97	0.73	1.28
Japanese	1.10	0.84	1.43
Native Hawaiian	1.13	0.84	1.50
Pacific Islander	0.89	0.58	1.37
Other race	0.83	0.58	1.18
Insurance			
Private (reference)	—	—	—
Medicaid	1.48	1.07	2.06
Medicare	1.72	1.35	2.19
Other insurance	1.21	0.81	1.80
Medical history			
Hypertension	1.00	0.78	1.27
Diabetes	1.15	0.94	1.40
Smoking	1.15	0.96	1.38
Obesity	1.01	0.78	1.31
Coronary artery disease	0.93	0.65	1.34
History of CABG	0.90	0.59	1.37
Heart failure	1.89	1.53	2.33
Atrial fibrillation	1.54	1.21	1.95
Peripheral artery disease	1.65	0.94	2.88
Depression	1.21	0.72	2.05
History of substance use	1.88	1.27	2.77
History of GI bleeding	2.43	1.29	4.58
Chronic kidney disease	1.78	1.42	2.22
Index hospitalization			
CABG procedure	0.33	0.10	1.07
Stroke	1.05	0.45	2.45
Pneumonia	1.16	0.80	1.68

Abbreviations: CABG, coronary artery bypass grafting; CI, confidence interval; GI, gastrointestinal; OR, odds ratio.

Table 4
Top 15 Condition Categories for 30-Day Readmission

Diagnosis Categories	Total ($N = 583$), n (%)	Female ($n = 219$), n (%)	Male ($n = 364$), n (%)
Other	90 (15.4)	38 (17.4)	52 (14.3)
Heart failure	83 (14.2)	36 (16.4)	47 (12.9)
Chronic angina and coronary artery disease	74 (12.7)	21 (9.6)	53 (14.6)
Acute coronary syndrome	70 (12.0%)	31 (14.2)	39 (10.7)
Arrhythmias and conduction disorder	37 (6.4)	10 (4.6)	27 (7.4)
Chest pain	34 (5.8)	13 (5.9)	21 (5.8)
Gastrointestinal hemorrhage	24 (4.1)	11 (5.0)	13 (3.6)
Pneumonia	23 (4.0)	3 (1.4)	20 (5.5)
Septicemia/Shock	23 (4.0)	7 (3.2)	16 (4.4)
Complications of care	22 (3.8)	7 (3.2)	15 (4.1)
Acute stroke/ transient ischemic attack	16 (2.7)	7 (3.2)	9 (2.5)
Renal disorders (renal failure	12 (2.1)	4 (1.8)	8 (2.2)
Cardio-respiratory failure	9 (1.5)	4 (1.8)	5 (1.4)
Cellulitis	8 (1.4)	5 (2.3)	3 (0.8)
Diabetes and its complications	8 (1.4)	6 (2.7)	2 (0.6)
Other lung disorders	8 (1.4)	2 (0.9)	6 (1.7)
Other peripheral vascular disease	8 (1.4)	6 (2.7)	2 (0.6)

was 11%, which is consistent with prior studies (Dreyer et al., 2015; Dunlay et al., 2012; Nuti et al., 2016). Our results suggest that, after adjusting for confounders, women have a higher 30-day readmission rate compared with men in all age ranges, as supported by the lack of interaction between gender and age groups in the secondary analyses. Our analyses demonstrate that a higher proportion of those belonging to the older age group among women was not the major contributor for the higher readmissions among women. This is consistent with a number of previous studies (Dreyer et al., 2015; Khera et al., 2017). Overall, our analyses show that female gender is an independent predictor for 30-day readmissions after ACS that requires PCI.

The top three diagnoses of readmissions (excluding the other category) were heart failure, recurrent angina, and recurrent ACS. In our data, women exhibited a higher rate of heart failure and recurrent ACS readmission diagnoses compared with men. This finding supports the possibility that women are at a higher risk for recurrent acute cardiac events after PCI for ACS. These cardiac events resulting in readmissions are likely from either natural sequelae after ACS and complications from PCI procedures. For example, a delay in PCI resulting in ventricular dysfunction could lead to a heart failure readmission within days after discharge for ACS. Complications from PCI, such as coronary dissection or stent underexpansion, can result in recurrent ACS readmission, also within days after discharge for ACS. Indeed, some studies suggest women are more likely to have delayed PCI (Nguyen, Saczynski, Gore, & Goldberg, 2010) and PCI complications (Numasawa et al., 2015) for ACS. These findings also support other studies that showed a trend towards increasing length of stay and in-hospital mortality from recurrent cardiac events among women after ACS compared with men (Mehta et al., 2016; Gupta et al., 2014).

Early readmission is an important concern in the United States health care system today, because national initiatives are focusing on improving quality of care by reducing preventable readmissions (Jencks, 2010; Kocher & Adashi, 2011). In our study, we found a peak of readmission during the first week out of hospital at day 3 for both women and men, which is similar to previous studies (Dharmarajan et al., 2013; Dreyer, Dharmarajan, Hsieh, et al., 2017). In our study, approximately one-half of the readmission diagnoses were cardiac related. Early postdischarge intervention such as postdischarge follow-up by telephone may help to decrease post-ACS readmissions (Harrison, Hara, Pope, Young, & Rula, 2011). This study suggests, however, that earlier intervention within 3 days of discharge is critical in preventing readmission after ACS.

Our findings may be due to the health care disparities in care for women after ACS with PCI that other investigators have reported. Women have been shown to be more likely to delay seeking medical care longer than men (Nguyen et al., 2010), which may result in delays in revascularization and, subsequently, a higher rate of post-ACS complications and readmissions. After ACS with PCI, women are also less likely to receive angiotensin-converting enzyme inhibitors, beta-blockers, and statins on discharge (Shah et al., 2015). Women are also less likely to adhere to medications compared with men after ACS (Lauffenburger, Robinson, Oramasionwu, & Fang, 2014). These health care disparities are potential targets for health care systems to decrease rates of readmission after ACS and provide a higher quality of care.

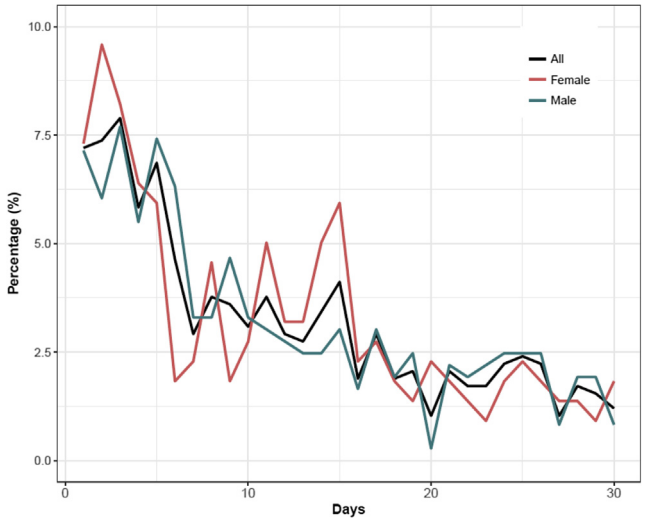

Figure 1. Timing of readmission after acute coronary syndrome and percutaneous coronary intervention between men and women.

This study has several limitations. First, the diagnoses of ACS and comorbidities were derived from an administrative database, which may include inaccuracies in diagnostic coding. Many of the ICD-9-CM codes used to identify comorbidities have not been verified by chart review and may have resulted in inaccurate representation. Further in-depth clinical observational studies may elucidate the reasons for gender differences in readmission after ACS. Second, the patient's risk factors for coronary artery disease were derived from the secondary discharge diagnosis codes, which may not necessarily reflect the patient's risk factors upon admission. However, we speculate that most risk factors present at discharge are chronic conditions that are likely present on admission as well. Third, our data are limited to the state of Hawaii, which is composed of an unusually diverse multiethnic population and may not be generalizable to the mainland United States or other countries. At the same time, the diverse population in Hawaii provides useful evidence for an increasingly multicultural U.S. population, particularly including often understudied heterogeneous Asian and Pacific Islander populations. Fourth, readmissions occurring outside of Hawaii were not captured and thus additional readmission cases were potentially not included in the model. However, we speculate that these numbers are relatively small, and the exclusion of non-Hawaii residents from the study would not influence the generalizability to Hawaii residents. Fifth, without outpatient data, we could not assess the effects of outpatient accessibility and medication adherence factors in our model. Sixth, planned readmissions for coronary artery bypass grafting and staged PCI cannot be excluded because they are not identified separately in our data. However, we speculate that the number of planned readmissions is relatively small compared with unplanned readmissions. Finally, variables that could have affected 30-day readmission rate, such as medication at the time of infarction and treatment for cardiac comorbidities, cannot be accounted for.

Conclusions

Female gender is an independent predictor for 30-day readmissions after ACS that requires percutaneous intervention. This difference persists after extensive adjustment for clinical variables. Our finding suggests women are at a higher risk of post-ACS cardiac events such as heart failure and recurrent ACS, and that further gender-specific intervention is needed to reduce the 30-day readmission rate in women after ACS.

Implications for Practice and/or Policy

The readmission rate is frequently used by hospital administrations as an indicator of the quality of inpatient care. Early readmission, typically defined as readmission within 30 days of index hospitalization, is frequently equated with relatively low/substandard quality of care. However, our findings suggest that gender plays a role in readmission rate. This finding complicates the use of readmission rates as the sole parameter of the quality of care provided by inpatient practitioners, as practitioners who see a higher percentage of women may have a higher readmission rate. The study also highlights potential health care disparities in the care of women diagnosed with ACS undergoing PCI. Prompt referral to cardiology for PCI revascularization, appropriate medical treatment at discharge, and improvement in medication adherence through early postdischarge follow-up within 3 days are some potential targets for improving quality of care and reducing 30-day readmission after ACS for women.

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