Changing Landscape of Interventional Cardiology Practice in COVID-19 Era: A Middle Eastern Perspective

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L-2 | Impact of optimal medical care for ambulatory peripheral artery disease on inpatient care costs associated with hospitalizations for secondary cardiovascular complications: a report from the pad go pro quality program

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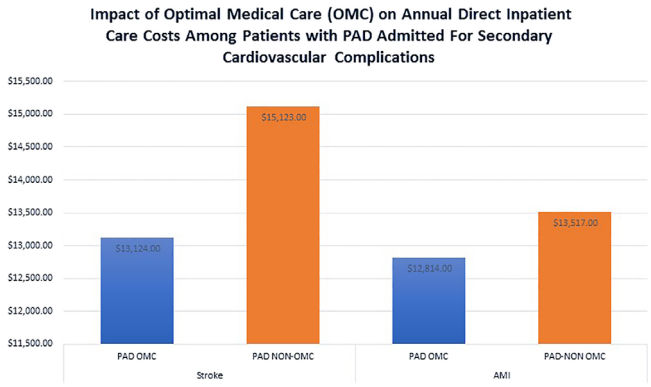
Background: Guideline-directed optimal medical care (OMC) for peripheral artery disease (PAD) is known to reduce secondary cardiovascular and cerebrovascular complications, although the provision of OMC among the population with PAD remains poor. Whether OMC is associated with differences in annual inpatient direct care costs among patients with PAD suffering secondary cardiovascular complications is unknown.

Methods: From a single-system quality improvement registry, we evaluated annual direct care costs among patients with PAD admitted for secondary acute myocardial infarction (AMI) or cerebrovascular accident (CVA) according to the provision of ambulatory OMC. OMC was defined as use of an antiplatelet agent, statin, angiotensin-converting enzyme inhibitor or angiotensin II receptor blocker if hypertensive, and tobacco abstention if smoking.

Results: Among 16,987 outpatients with PAD, the mean age +/- standard deviation (SD) was 73.5 +/- 12.1 years, 46.1% were female, and 85.8% were primarily insured by Medicare. Among the PAD population admitted with AMI, those prescribed OMC as outpatients had lower mean (SD) inpatient costs of care relative to those receiving non-OMC ($12,814 +/- $14,360 vs $13,517+/- $35,018, P<0.01). Similarly, patients with PAD admitted secondarily for CVA treated with OMC as outpatients had lower annual inpatient care costs ($13,124+/- $13,220 vs $15,123 +/- $19,771, P<0.01).

Conclusions: OMC of ambulatory PAD was associated with reduced annual inpatient care costs and less variability among those costs when such patients were hospitalized for secondary AMI or CVA complications.



Disclosures: M. C. Bunte *Nothing to disclose.* S. Vupputuri *Nothing to disclose.*

L-3 | Changing Landscape of Interventional Cardiology Practice in COVID-19 Era: A Middle Eastern Perspective

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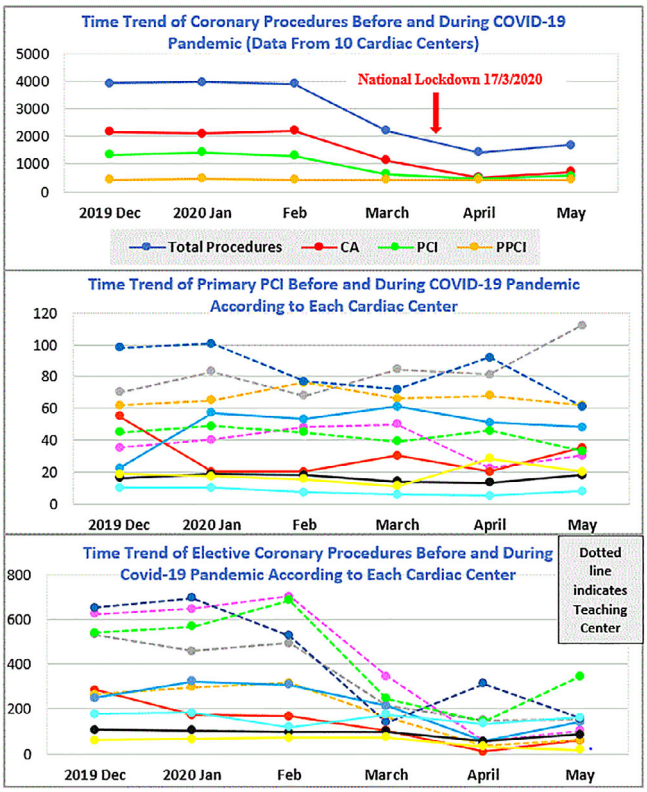
Background: Since WHO declared COVID-19 as pandemic, the healthcare system is moving into a new era. There is only limited data globally in general and from the Middle East in particular regarding impact of this crisis on interventional cardiology practice. In response, this study sought to investigate the impact of COVID-19 on coronary procedural profile.



Methods: Number and type of all coronary procedures done in 10 Iraqi cardiac centers were retrospectively collected for period of 6 months. From December 2019-February 2020 represents the prior to COVID-19 period while from March-May 2020 represents during COVID-19 period in Iraq

Results: A total of 17184 procedures were done in recruited centres,68.9% before pandemic vs 31.1% during pandemic; with highest reduction of procedures seen in April (after lockdown initiation). Highest drop observed in coronary angiography (CA) by 63.5% while elective PCI and primary PCI (PPCI) reduced by 58% and 2.6% respectively. Five out of 10 centers are teaching centers. With respect to teaching centers, total procedures dropped by 60.5%, elective procedures reduced by 67.2% and PPCI reduced by 4.5% while in non-teaching centers total procedures and elective procedures reduced by 37.4% and 43.1% respectively and PPCI increased by 2%

Conclusions: All coronary procedures dropped in COVID-19 era mainly the elective procedures. Teaching centers had more drop in total and elective procedures while PPCI only partially affected. This provides insight to impact of pandemic on cardiac healthcare services and called for action to provide necessary intervention without breaching pandemic protocols to improve cardiovascular outcomes

Disclosures: Z. A. Dakhil *Nothing to disclose*. H. A. Farhan *Nothing to disclose*. F. AlObaidi *Nothing to disclose*. A. J. Mirza *Nothing to disclose*. A. AlHaideri *Nothing to disclose*. A. N. Rgeeb *Nothing to disclose*. A. Alshamari *Nothing to disclose*. E. K. Benjamin *Nothing to disclose*. G. Al-Tamimi *Nothing to disclose*. H. Hassan *Nothing to disclose*. H. A. Nassar *Nothing to disclose*. H. AlKenzawi *Nothing to disclose*. K. I. Amber *Nothing to disclose*. M. Kadhim *Nothing to disclose*. W. Tajuldin *Nothing to disclose*.

L-4 | 30-Days readmission after percutaneous coronary intervention (PCI) with drug-eluting stents (DES) in patients with active cancer: Outcomes and predictors.

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Table 1. Top 10 causes of readmission after PCI with DES in patients with cancer.

Diagnosis	n (%)
Sepsis	11.8
Ventricular fibrillation	6.6
Recurrent STEMI	5.5
Hypertensive heart disease	3.8
Malignant neoplasm of bronchus	3.7
Candida sepsis	3.7
Prostate neoplasm	3.7
Non-traumatic subdural hemorrhage	3.6
Inferior wall STEMI	3.2
Anemia with excess blasts	2.5

Table 2. Most common type of cancer in patients readmitted after PCI with DES.

Diagnosis	n (%)
Gastrointestinal	11.5
Breast	7.5
Gynecologic	2.3
Male reproductive	19.8
Urologic	8.9
Hematologic malignancy	46.1
Central nervous system	0.6
Thyroid	1.0
Head and neck	2.4

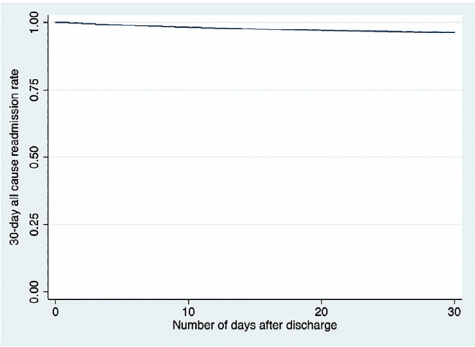

Figure 1. Kaplan-Meir curve for 30-day all-cause readmission among patients PCI with DES and malignancy.

Table 3. Independent Predictors of 30- Day readmission after PCI with DES in patients with cancer.

Variable	Adjusted OR (95% CI)	P value
Female	1.16 (1.05-1.35)	0.049
Age	1.00 (0.99-1.01)	0.59
Disposition		
Home	Reference	Reference
Short-term hospitalization	1.62 (0.65-3.99)	0.29
Skilled nursing facility	1.56 (1.17-2.07)	<0.01
Home Health Care	1.75 (1.48-2.07)	<0.01
Against medical advice	0.99 (0.24-4.01)	0.99
Insurance Provider		
Medicare	Reference	Reference
Medicaid	1.23 (0.88-1.73)	0.21
Private	0.93 (0.71-1.20)	0.59
Uninsured	1.09 (0.54-2.20)	0.79
Median income in patient zip code		
$1 - 42,999	Reference	Reference
$43,000-53,999	0.88 (0.56-1.39)	0.61
$54,000-70,999	0.99 (0.65-1.50)	0.96
$>71,000	1.08 (0.71-1.64)	0.69
Hospital volume quintile		
1 (lowest)	Reference	Reference
2	0.98 (0.54-1.76)	0.94
3	1.01 (0.60-1.64)	0.96
4	0.94 (0.56-1.58)	0.82
5 (highest)	0.93 (0.55-1.54)	0.75
Charlson Comorbidity Index Score		
0	Reference	Reference
1	0.55 (0.04-4.02)	0.64
2	0.62 (0.06-5.83)	0.68
≥3	0.66 (0.07-5.88)	0.71
In-Hospital Procedures		
Hemodialysis	1.44 (1.06-1.96)	<0.01
Transfusion of blood products	1.18 (0.91-1.54)	0.19
IABP	0.65 (0.39-1.07)	0.09
IMPELLA	0.89 (0.58-1.37)	0.61
ECMO	0.73 (0.90-5.92)	0.77
Pericardiocentesis	1.82 (0.59-5.60)	0.29
Comorbidities		
Metastasis	1.10 (0.90-1.34)	0.33
HTN	0.87 (0.72-1.04)	0.13
CKD	1.19 (0.96-1.48)	0.10
Alcohol use disorder	1.06 (0.63-1.78)	0.82
Opioid use disorder	1.42 (0.66-3.08)	0.36
Tobacco use disorder	1.03 (0.52-2.05)	0.92
Hospital size		
Small	Reference	Reference
Medium	0.98 (0.69-1.39)	0.98
Large	0.83 (0.59-1.17)	0.29
In-Hospital Complications		
Shock	0.89 (0.58-1.27)	0.46
Acute kidney injury	1.18 (0.96-1.43)	0.09
Mechanical ventilation	1.09 (0.76-1.56)	0.61
Pleural effusion	1.16 (0.83-1.63)	0.36
Sepsis	0.58 (0.22-1.49)	0.26
VTE	2.17 (1.43-3.29)	<0.01
Major bleeding	1.53 (0.89-2.64)	0.11
Teaching hospital	1.05 (0.87-1.26)	0.60
Urban hospital	1.04 (0.86-1.26)	0.62
Length of stay	1.01 (1.01-1.02)	<0.01