constituting a problem. This hypothesis is supported by the data that showed no significant difference between the responses medical students from UK and Germany received (p=0.084). It is likely that previous experience of PIs with people from the same countries, or its absence, may be important. Also, in the perceived outlook of these countries, the very high-quality research output is likely to play a role (7). It is my opinion that from an external validity point, the observed difference in the responses gathered from PIs could be explained by and generalized to medical students from other countries (like Turkey) where similar political–social turmoil and cultural and religious problems are observed. The observed problems are, to some extent rightly, very likely to affect the decisions PIs make. But, overall, for one reason or another, medical students from Turkey were much less likely to be considered for internship positions in the US compared to medical students from Germany and UK.

In this era, considering the effects of automation and artificial intelligence, the importance of higher education becomes clearer. Consequently, it seems essential for Turkey and other countries, where the quality of education is not so good, to follow China's lead and start providing scholarships to their successful students to go abroad and get some real exposure to scientific environments and mindsets. Otherwise, people who graduate from universities that are not in science-oriented communities/cultures/countries could be incompatible with the requirements of the jobs of the future, and this in turn could result in further opportunity inequalities, aggravating the problem.

🆔 **Bahadir Simsek**
Visiting Medical Student, Johns Hopkins University School of Medicine; Baltimore, MD-*USA*
Medical Student, İstanbul University, Cerrahpaşa Medical School, English Medical Program; İstanbul-*Turkey*

References

1. Charting Outcomes in the Match for International Medical Graduates, Characteristics of International Medical Graduates Who Matched to Their Preferred Specialty in the 2016 Main Residency Match, 2nd Edition. Prepared by National Resident Matching Program. Available from: URL: http://www.nrmp.org/wp-content/uploads/2016/09/Charting-Outcomes-IMGs-2016.pdf
2. Cotton J, O'Neill BS, Griffin A. The "Name Game": Affective and Hiring Reactions to First Names. Journal of Managerial Psychology 2008; 23: 18-39.
3. Tajfel H, Billig MG, Bundy RP, Flament C. Social categorization and intergroup behaviour. European Journal of Social Psychology 1971; 1: 149-78.
4. Bertrand M, Mullainathan S. Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination. The American Economic Review 2004; 94: 991-1013.
5. Laham SM, Koval P, Alter AL. The name-pronunciation effect: Why people like Mr. Smith more than Mr. Colquhoun. Journal of Experimental Social Psychology 2012: 48; 752-6.
6. Kalist D, Lee D. First Names and Crime: Does Unpopularity Spell Trouble?. Social Science Quarterly 2009; 90: 39-49.
7. Nature Citation Index, updated on 2018 June 7. Prepared by Springer Nature. Available from: URL: https://www.natureindex.com/annual-tables/2018/country/all

Address for Correspondence: Bahadir Simsek,
246 McAllister Street,
Vantaggio Abigail, San Francisco,
CA, USA 94102
San Francisco-*United States*
Phone: +1 415 412 76 93
E-mail: bahadirsimsekk@gmail.com

Evaluation of renal dysfunction after ST-elevation myocardial infarction

To the Editor,

We have read with great interest the article entitled "Prognostic impact of renal dysfunction on long-term mortality in patients with preserved, moderately impaired, and severely impaired left ventricular systolic function following myocardial infarction" recently published in Anatol J Cardiol 2018; 20: 21-8 (1). In this study, the authors aimed to evaluate the prognostic impact of renal dysfunction (RD) on long-term overall mortality at admission to hospital in patients with STEMI.

The authors calculated GFR only at admission to hospital before performing PCI. There is no data on post-PCI GFR. All patients who were included in the study had PCI. Maybe, patients had acute kidney injury after PCI due to contrast injury or low cardiac output, and they did not require dialysis. Furthermore, it is possible that patients had better GFR levels after discharge from hospital compared with those at admission. Therefore, we think that there is a need to include more data on post-PCI creatinine levels. It would be better to add creatinine data obtained form a 6 year follow-up period. The investigation of RD and mortality according these results will increase the confidence of the study. We observed a similar lack of assessment of ejection fraction in the patients. Only one echocardiography examination was performed on patients during the study period. We think there is also a need to include standardized data on amount of contrast used during PCI between all ejection fraction groups. In table 1, we noted that there was significant difference between the three ejection fraction groups in terms of age and gender. Older patients had decreased GFR levels in all groups and patients who had GFR levels >60 mL/min were mostly male. RD is affected by age and gender differences, which is indicated in the GFR calculation formula. There is a need to standardize age and gender differences between all groups to exclude

these factors affecting the association between ejection fraction and RD during the first admission of patients with STEMI to the hospital. We think these lacks of the study may affect the results.

ⓘ **Şahin İşcan,** ⓘ **Börteçin Eygi,** ⓘ **Yüksel Beşir,** ⓘ **Orhan Gökalp**
Department of Cardiovascular Surgery, Katip Çelebi University İzmir Atatürk Training and Education Hospital; İzmir-*Turkey*

Reference

1. Savic L, Mrdovic I, Asanin M, Stankovic S, Krljanac G, Lasica R. Prognostic impact of renal dysfunction on long-term mortality in patients with preserved, moderately impaired, and severely impaired left ventricular systolic function following myocardial infarction. Anatol J Cardiol 2018; 20: 21-8. [CrossRef]

Address for Correspondence: Dr. Şahin İşcan,
Katip Çelebi Üniversitesi,
Atatürk Eğitim ve Araştırma Hastanesi,
Kalp ve Damar Cerrahisi Anabilim Dalı,
İzmir-Türkiye
Phone: +90 505 488 20 90
E-mail: sahiniscan@gmail.com

Author`s Reply

To the Editor,

We would like to thank the authors for their interest in our study (1). Renal dysfunction (RD) at admission can be an indicator of a chronic state or acute deterioration. We agree that the lack of information on renal function during a 6-year follow-up is a study limitation, as stated in the section "Study limitation." The change in renal function over time (including acute kidney injury during hospitalization) can potentially add predictive information to the baseline measurement. However, in the literature, there are many studies that investigated the prognostic impact of renal function on long-term outcomes after ST-elevation myocardial infarction (STEMI) by analyzing only baseline estimated glomerular filtration rate (eGFR) (2-4). Left ventricular systolic function (and EF as one of its measures) in patients with STEMI can change after the acute phase, especially in the first few months. Despite that, many clinical trials so far have used only one measurement of EF (often baseline EF, before primary PCI) to analyze long-term prognosis in patients with STEMI (2). Furthermore, baseline RD and baseline EF are parameters included in risk assessment scores for predicting mortality in patients with STEMI (e.g., CADILLAC score) (5). It is a well-known fact that aging leads to the decrease in the values of eGFR, and therefore, age of the patient one of the most important independent predictors for RD. Women with acute myocardial infarction are generally older than men; however, it is a common finding that the female gender is also an independent predictor

of RD (6). The patient's age and gender are included in the MDRD formula for GFR assessment. Regardless of that, in our study, age was included in the multiple Cox analysis, and age (years) remains to be a strong independent predictor of mortality in patients with preserved and moderately reduced EF but not in patients with severely reduced EF. When we analyzed predictors of mortality in the whole cohort (not shown in the paper) and in each group separately, gender was not a predictor of mortality (univariate analysis) and was not included in the multiple Cox analysis. Finally, our main objective was to show that strong and negative prognostic impact of baseline RD may differ in patients with STEMI depending on EF. Further investigations should be conducted to verify these findings.

ⓘ **Lidija Savic,** ⓘ **Igor Mrdovic,** ⓘ **Milika Asanin,**
ⓘ **Sanja Stankovic*,** ⓘ **Gordana Krljanac,** ⓘ **Ratko Lasica**
Clinic of Cardiology and Coronary Care Unit, *Center for Medical Biochemistry, Clinical Centre of Serbia, Emergency Hospital; Belgrade-*Serbia*

References

1. Savic L, Mrdovic I, Asanin M, Stankovic S, Krljanac G, Lasica R. Prognostic impact of renal dysfunction on long-term mortality in patients with preserved, moderately impaired, and severely impaired left ventricular systolic function following myocardial infarction. Anatol J Cardiol 2018; 20: 21-8.
2. Moukarbel GV, Yu ZF, Dickstein K, Hou YR, Wittes JT, McMurray JJ, et al. The impact of kidney function on outcomes following high risk myocardial infarction: findings from 27 610 patients. Eur J Heart Fail 2014; 16: 289-99.
3. Hawranek M, Gierlotka M, Gasior M, Hudzik B, Desperak P, Cislak A, et al. Renal function on admission affects both treatment strategy and long-term outcomes of patients with myocardial infrction (from Polish Registry of Acute Coronary Syndromes). Kardiol Pol 2017; 75: 332-43.
4. Campbell NG, Varagunam M, Sawhney V, Ahuja KR, Salahuddin N, De Palma R, et al. Mild chronic kidney disease is an independent predictor of long-term mortality after emergency angiography and primary percutaneous coronary intervention in patients with ST-elevation myocardial infarction. Heart 2012; 98: 42-7.
5. Halkin A, Singh M, Nikolsky E, Grines CL, Tcheng JE, Garcia E, et al. Prediction of mortality after primary percutaneous coronary intervention for acute myocardial infarction: the CADILLAC risk score. J Am Coll Cardiol 2005; 45: 1397-405.
6. Sederholm Lawesson S, Tödt T, Alfredsson J, Janzon M, Stenestrand U, Swahn E. Gender difference in prevalence and prognostic impact of renal insufficiency in patients with ST-elevation myocardial infarction treated with primary percutaneous coronary intervention. Heart 2011; 97: 308-14.

Address for Correspondence: Lidija Savic, MD,
Clinic of Cardiology and Coronary Care Unit,
Clinical Centre of Serbia,
Emergency Hospital; Pasterova 2 11000,
Belgrade-*Serbia*
Phone: +381 11 3662331
E-mail: lidijasavic2007@gmail.com