Impact of social factors on medical illnesses and their management

Dear Editor,

Bush et al.\(^1\) make a comparison of demographic profile, risk factors and in hospital outcome in young and old patients with the acute coronary syndrome at their single-center experience in their original article in February 2021 issue of the journal. They compare demographic and other characteristics in two groups – the young versus the old – and present their findings of risk factors, major adverse cardiac events, and then the relationship between them and draw useful pragmatic conclusions applicable to day-to-day clinical practice.

Table 1 of the article has a heading – Baseline demographic characteristics – and here authors mentioned demographic features of the study subjects. In this table in ‘old’ group, more females are there. That may be because women have a longer life expectancy than men.\(^2\) However the old age group had a lower incidence of atypical angina (16.7% versus 27.1%). Although this group has a higher proportion of women, we expect it to have a higher incidence of atypical clinical presentation of coronary artery disease too.\(^3,4\)

Bashore et al.\(^5\) mention that about one-third of patients with MI have no chest pain per se – these patients tend to be older, female, have diabetes and at higher risk for subsequent mortality. Although in this study of the Journal a higher number of female and diabetic patients are there in the older age group, incidence of atypical angina is less. As this finding is contrary to conventional wisdom, we want to highlight this specific point. As authors underline in ‘Study Limitation’ about small sample size, that may be an underlying factor producing such intriguing results.

Authors write in Table 1 that a greater number of patients with history of previous MI were there in ‘Old’ group (14.6%) versus young ones (6.3%). As these patients after getting their diagnosis are likely to be under intensive pharmacotherapy, their symptoms are not likely to present as those would have been in their natural history. Because of consumption of anti-anginal drugs tailored to their medical condition, they are likely to present with atypical symptoms, and that may be one of the reasons for this complexity of the results.

Moreover, when a medically insured person develops a medical condition, he is likely to avail regular follow-up visits and get his drugs adjusted to his symptoms and other medical and lab parameters. Conversely when the patient pays from his own pocket for everything beginning from his travel expenditure to purchasing drugs, the follow-up visits and drug compliance may not be as much regular. Under these two contrasting conditions when patients develop some complexity, for example, acute coronary syndrome, their presentation may not be similar and we need to analyse the situation not only according to rules of human physiology but also to their socio-economic realities as well to have a better grasp of social determinants of health and their impact on outcomes.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Bush N, Sharma YP, Prasad K, Kumar P, Mehrotra S. Comparison of demographic profile, risk factors, and in-hospital outcome in young and old patients with acute coronary syndrome: A single-center experience. J Family Med Prim Care 2021;10:871-6.
2. Singh A, Shukla A, Ram F, Kumar K. Trends in inequality in length of life in India: A decomposition analysis by age and causes of death. Genus 2017;73:1-6.
3. Pathak LA, Shirodkar S, Ruparelia R, Rajeebhadur J. Coronary artery disease in women, Indian Heart J 2017;69:532-8.
4. Mosca L, Manson JE, Sutherland SE, Langer RD, Manolio T, Barrett-Connor E. Cardiovascular disease in women: A statement for healthcare professionals from the American Heart Association. Writing Group. Circulation 1997;96:2468-82.

5. Papadakis MA, McPhee SJ, Rabow MW. Heart Disease. CMDT McGraw Hill; 2020. p. 383.