

STUDENTS' CORNER LETTER TO THE EDITOR

Increasing incidence of atherosclerosis and its association with cancer development

Syed Daniyal Amir¹, Muhammad Owais Malik², Abdullah Ahmad³

The Editor, Atherosclerosis is one of the major contributors to alarmingly increasing morbidity and mortality rates in developed as well as underdeveloped parts of the world.¹ According to a cross-sectional study conducted in Karachi, the lifetime risk of atherosclerotic cardiovascular disease (ASCVD) among Pakistani individuals without a prior history of the condition was 49.4% for men and 31.9% for women, whereas the 10-year risk was 28.2% for men and 10.6% for women.^{1,2} In the MASALA study by Kandula et al. the predicted 10-year ASCVD risk of 49% for men and 13% for women.²

A recent trial on cardiovascular health was published in American College of Cardiology the link between ASCVD and cancer incidence.³ Over a six-year period, 1,333 (6.2%) cases of ASCVD and 1,793 (8.3%) cases of cancer were recorded. At diagnosis, 1,036 (4.8%) of these cancer cases were non-metastatic, while 757 (3.5%) were metastatic. It was discovered that ASCVD was independently associated with a significantly higher risk of cancer metastasis, even accounting for all the risk variables that the patients in this study shared.

Compared to older individuals (HR:1.11;95% CI:0.78-1.60; $p=0.56$) this connection was more noticeable in middle aged adults (HR:1.64;95%CI: 1.03-2.61; $p=0.036$), with a significant interaction (p interaction=0.039).³

In the light of the aforementioned facts, it is noteworthy that a large population of Pakistani individuals are at risk of developing cancer and particularly elevated risk of developing metastasis when diagnosis is made. This necessitates taking steps to decrease the burden through detailed and well-planned measures, including research,

advocacy, technical support, health communication, and increased intersectoral coordination. NGOs like Heart file are working hard to combat chronic disease by addressing service delivery, as well as cross-cutting overarching policy, regulatory, structural, management, and fiscal parameters within the health sector.⁴ In order to decrease the risk factors, implementing Global Hearts Initiative by WHO is essential, this includes several protocols and initiatives including WHO Framework Convention on Tobacco Control, to increase physical activity, the ACTIVE package, the SHAKE package for reducing salt intake; and finally, the REPLACE package to reduce industrially produced trans fats from Pakistan's food supply. Implementing these policies at the governmental level can help reduce the incidence of cardiovascular disease and subsequent cancer⁵

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^{1,2}5th Year MBBS Student, Combined Military Hospital Lahore Medical College, Lahore, Pakistan; ³Department Of Medicine, Combined Military Hospital Lahore Medical College, Lahore, Pakistan.

Correspondence: Syed Daniyal Amir. e-mail: syed.daniyalamir1@gmail.com

ORCID ID: 0009-0005-5439-9023

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