Integrating Preventive Cardiology into Routine Clinical Practice: Are We Doing Enough?

Cardiovascular disease is the most common cause of mortality in the world with almost 17.9 million deaths every year, most of which are preventable. Prevention cardiology includes lipid-lowering treatment, hypertension management, diabetes management, smoking cessation, lifestyle change, and cardiac rehabilitation that are supported by strong evidence and endorsed by the American College of Cardiology/American Heart Association (ACC/AHA) and European Society of Cardiology (ESC) guidelines.[1,2] There is, however, an enduring, well-reported gap between what is recommended, and what patients get. Although numerous preventive frameworks are available, compliance is still suboptimal and the difference between evidence-based recommendations and real-life practice still cost lives.[3]

South Asia bears a disproportionate share of this burden. South Asians experience coronary artery disease earlier frequently before age 50 with a more aggressive phenotype driven by insulin resistance, central obesity, elevated lipoprotein(a), and tobacco use.[4] In Pakistan, Tertiary cardiac centers receiving large numbers of patients with acute coronary syndrome (ACS) daily, proper preventive cardiology services are infrequent, cardiac rehabilitation enrolment is minimal, and post-discharge secondary prevention treatment is often discontinued after several months. The question this editorial poses is not rhetorical: are we doing enough? The answer, plainly is no.

Why Are We Failing?

The failure to integrate preventive cardiology into routine practice is not a knowledge deficit; it is a systemic and behavioral one. In a 2025 review in the European Journal of Preventive Cardiology, a Consolidated Framework for Implementation Research identified barriers that acted at five domains, including: intervention complexity, structure of the healthcare systems, institutional culture, individual clinician behavior and patient factors.[3]

Cardiac units in LMICs are designed at the system level in a way that is biased towards acute intervention. Outpatient clinical units are high-volume and time-compressed, leaving no room for structured risk assessment or rehabilitation referral. Most institutions do not have Secondary Preventive cardiology units. Follow-up after discharge the important secondary prevention period is coordinated inconsistently.[5]

Cardiac rehabilitation most clearly exemplifies this gap. Although the Class I recommendation is found in both ACC/AHA and ESC guidelines, CR post-ACS participants had lowers five-year all-cause mortality by up to 34% and hospital readmissions by 31% as well as cardiac deaths by 26-28%.[6,7] But the enrolment in LMICs goes near negligible. Language limitation, fatalistic attitudes towards chronic disease, family structure, and insufficient programs are some of the barriers to specific groups of South Asians.[8]

On the patient level, the impairment of engagement is caused by low health literacy, economic restrictions, and discontinuous care pathways. And there is no specific owner of the preventive agenda not the interventional cardiologist, nor is the dialectologist, nor the general practitioner, Preventive care often missed because responsibility is not clearly passed between doctors at different stages.

A Crisis Demanding Urgency

The South Asian cardiovascular crisis demands urgency. The defaulting application of White ethnicity parameters in standard risk calculators, such as the AHA/ACC Pooled Cohort Equations, mimic an underestimation of ASCVD risk in South Asians.[4] This mislabeling is a factor that leads to the failure to have preventive therapies initiated at an early stage in a group that would most be benefiting with an early intervention. The 2016 European Society of Cardiology prevention guidelines and the 2018 American Heart Association/American College of Cardiology cholesterol guidelines acknowledge the South Asian ethnicity as a risk-enhancing factor a welcome but long overdue recognition.[9] Nevertheless, it has limited clinical effects in case clinicians do not know about it or do not integrate the consideration into their practice.

The World Heart Federation Roadmap to Secondary Prevention in Pakistan places as critical such aspects as guidelines that suit the national situation, affordable preventive drugs, and health system infrastructure that ensures that adherence becomes a key component of care.[2] Each of these conditions is not currently scale-wise met. The result is a type of patients, who have survived their first

coronary incident, but are poorly protected against their second.

What Needs to Change?

The prevention gap means that the solution must be structural, educational, and policy-level interventions working together.

Specialized preventive cardiology services: All tertiary cardiac units should have a preventive cardiology unit; cardiologist, pharmacist, dietitian, physiotherapist, offering organized risk assessment, lipid control, enrolment in rehabilitation, and lifestyle counseling.

Documentation of Systematic Risks: A standardized cardiovascular risk factor checklist should be filled out and acted upon at each cardiologist review. This can be scaled using electronic decision-support tools within the clinical workflow.[3]

Expansion of Cardiac Rehabilitation: CR initiatives should not be restricted to tertiary centers, but expanded to district hospitals, with home-based and online-delivered models implemented where it is not feasible to attend facilities. The support of home-based CR in resource-constrained settings is strong and increasing.[7]

Task-shifting to Nursing staff and Pharmacists: The trained nursing staff and clinical pharmacists can take care of medication titration, adherence, and lifestyle counseling in high-volume settings, releasing physicians to concentrate on more complicated clinical decisions.

Policy and advocacy: Cardiology societies should advocate to include preventive medications in essential medicines lists, subsidize access to statins and antihypertensives, and have national NCD strategies to include indicative cardiovascular prevention goals.

The Clinicians Role

Systemic change requires institutional will but it starts with individual clinicians re-conceptualizing their professional duties. All cardiologists are preventive cardiologists. ACS management is not complete after successful percutaneous coronary intervention but when the patient is on an optimized secondary prevention, on rehabilitation, all modifiable risk factors have been managed and a structured follow-up plan is in place.

A 2024 assessment of the quality of cardiovascular care identified the ongoing evidence-to-clinical practice divide as the primary issue, and highlighted the urgent need to better educate clinicians and hold them accountable.[10] The 2024 ASPC Congress underscored the critical role of improving clinician education and accountability in the tightening of the evidence-to-clinical practice.[11]

Prevention should not be a discharge checklist. It should be the framework through which every patient interaction is conducted. That cultural change of reactive to proactive is shifting the emphasis of treatment to prevention the change that we can most significantly effect in modern cardiovascular practice.

For institutions such as the Armed Forces Institute of Cardiology (AFIC), which serves both military and civilian populations across a broad geographic catchment, the opportunity to integrate systematic cardiovascular risk assessment, preventive prescription, and structured follow-up into every clinical assessment is both achievable and imperative. This requires investment in clinician education, standardized care pathways, electronic health record-based risk factor tracking, and robust patient education programs delivered in locally relevant languages.

The science of cardiovascular prevention is not the limiting factor. The facts are evident, the principles are strong, and the possible impact is immense. The missing element is implementation; organized responsible, culturally-responsive provision of secondary preventive care to all patients who require it.

The need to act is urgent in Pakistan and throughout South Asia, where the premature onset of coronary artery disease has a massive human and economic toll. The use of preventive cardiology in a routine clinical practice is not an objective of a future health system. It is an obligation of the one we have today. The time for action is now.

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Dr. Khurram Akhtar
Dy Comdt/Dy Dir-I (P&A)
Armed Forces Institute of Cardiology/National Institute of Heart Diseases/National University of Medical Sciences (NUMS)
Rawalpindi, Pakistan