



Contents lists available at ScienceDirect

American Journal of Preventive Cardiology

journal homepage: www.journals.elsevier.com/american-journal-of-preventive-cardiology

Holistic approach to preventive cardiology: Where tradition meets innovation (Fellow's Voice)

ARTICLE INFO

Keywords:

Ayurveda
Cardiovascular disease
Charak samhita
Diet
Healthcare
Lifestyle
Meditation
Prevention
Religion
Spirituality
Yoga

Coming from a family of physicians, my passion for medicine has been deeply rooted from an early age. However, it was my late grandfather, a revered physician, devout *sikh*, and *yogi*, who inspired my interest in preventive cardiology. Anecdotally, we share the same birth date, which I see as a connection that strengthens my commitment to his philosophy for preventive and promotive health. He was a pioneer in preventive medicine, who was known for healing his patients through an integrated approach that combined physical, mental and spiritual well-being.

During my clinical rotations in community medicine as a medical student, I spent time in many rural areas of western India where I witnessed stark disparities in access to healthcare. Many patients belonging primarily from marginalized communities had very limited access even to basic medical resources. The mobile medical dispensary units were essentially the only healthcare they received. While I was posted in one such mobile unit, I met *Ajibai*, a 98-year-old woman, a farmer, who travelled long distances bare-foot just to receive her routine medicines. Although she showed resilience, her frail outlook and loss of hope for the future reflected the suffering she had endured in her life. She shared with me about her two sons, both of whom also had heart disease. She also told me that she prayed daily so that her grandchildren do not go through the same fate. She asked me two questions- could I give her a medicine that would protect her grandchildren from developing heart disease? And why, despite the advancements in medical science were people still suffering and dying from preventable heart diseases? I found myself at a loss for words at that moment, but that encounter completely transformed my understanding of preventive medicine. I came to realize

the gap in health literacy and lack of awareness about preventive measures at the grass-root level. As an early career professional, I feel this is the perfect time to start being mindful about prevention. I strongly feel that empowering medical students, residents and fellows-in-training in initiatives focused on preventive cardiology can significantly impact public health. The enthusiasm of the young professionals fueled with the latest medical knowledge and technology can foster innovative strategies to promote a heart-healthy and balanced approach to life. This is especially true for low- to middle- income countries where cardiometabolic diseases are epidemic. Limited access to basic medical resources and healthcare facilities add to this burden. Positive efforts in this direction could eventually decrease the burden of cardio-metabolic diseases in these communities.

Cardiovascular disease (CVD) remains the leading causes of mortality and morbidity worldwide. As a medical student with a keen interest to pursue cardiology, I have encountered numerous patients suffering from CVD, many of whom could have avoided their conditions via earlier risk assessment, lifestyle practices, and/or preventive medications. Cardiometabolic diseases, often silent and chronic in nature, incubate over years before manifesting as life-threatening complications. Despite efforts to address traditional risk factors such as hypertension, hyperlipidemia, obesity, and diabetes, and promote the 'essential eight' in combating CVD [1,2], a significant gap remains, highlighting the need for more effective strategies to enhance cardiovascular health. Many protective lifestyle habits such as physical activity, yoga, meditation, dietary habits, optimal sleep, mental health, interpersonal relationships, and role of emotions- compassion,

Abbreviations: CVD, Cardiovascular disease.

<https://doi.org/10.1016/j.ajpc.2024.100891>

Received 6 November 2024; Accepted 7 November 2024

Available online 15 November 2024

2666-6677/© 2024 The Author(s). Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

gratitude, mindfulness, and purposefulness are often overlooked, not discussed adequately and/or pushed toward the periphery in modern clinical practice [3–5]. The term ‘lifestyle interventions’ is commonly used by clinicians to encompass all non-pharmacologic preventive strategies, however, not only may this term oversimplify the impact these interventions can have, but it may also limit the individual attention each intervention requires for conferring risk reduction.

Based on clinician-patient shared decision-making, an additional aspect of preventive care may include spirituality and religion [6,7]. While these practices are sometimes included in palliative care, they are hardly ever included in mainstream medical practice, despite many physicians using these to cope up with the stressors of daily living themselves. A paucity of research in this domain may limit our ability to validate the potential benefits of these methods on patient outcomes [8, 9]. However, we should strive to personalize preventive care based on patient characteristics and preferences, including the consideration of mindfulness approaches such as yoga, meditation and spirituality.

A holistic approach to prevention is not limited to a heart-healthy lifestyle, it also extends to positive thinking and balanced behaviors. Traditional medical literature including the *Charaka Samhita* and *Ayurveda* have clearly described the benefits of *rasayana* (promotive treatment) as the only way of attaining a disease-free life [10,11]. The philosophy of preventive medicine is based on four pillars- character (*achaara*), thoughts (*vichaara*), eating habits (*ahaara*), and interpersonal dealings (*vyaavahaara*). Human emotions of faith, hope and compassion, though impossible to quantify in clinical trials, seem to have a strong impact on patient well-being. Understanding the importance of the roles played by each team member- the physician, the nurse, family members, and the patient themselves can enhance the healing process. While modern medicine has achieved remarkable advances in CVD management, these solutions often come too late for patients already suffering from the disease or its complications. Patients who reach this stage require treatment for their symptoms and to prevent further complications (secondary and tertiary prevention), and not to reverse the course of the illness which could have been done earlier (primordial and primary prevention). Thus, there is an urgent need to prioritize preventive and promotive cardiometabolic health. This also fuels a greater need to revive and invest in research on traditional practices as lifestyle and non-pharmacological preventive strategies. Such efforts will not only validate the effectiveness of these preventive practices but will also complement the achievements of modern medicine. The convergence of tradition with innovation is the call-of-the-hour to transform the future of cardiology and impact millions of lives across the globe. By doing so, I aim to provide *Ajibai* and countless others with not just hope, but also a clear path ahead to protect future generations from CVD in the years to come.

CRedit authorship contribution statement

Amanpreet Singh Wasir: Conceptualization, Project administration, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Funding

None.

References

- [1] Arnett DK, Blumenthal RS, Albert MA, Buroker AB, Goldberger ZD, Hahn EJ, et al. 2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease: a Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Circulation* 2019;140(11):e596–646.
- [2] Lloyd-Jones DM, Allen NB, Anderson CAM, Black T, Brewer LC, Foraker RE, et al. Life's Essential 8: updating and Enhancing the American Heart Association's Construct of Cardiovascular Health: a Presidential Advisory From the American Heart Association. *Circulation* 2022;146(5):e18–43.
- [3] Maria Emília Figueiredo Teixeira M, PHD; Sidney C. Smith, MD, MACC. The Feel Trial: spirituality Intervention on Blood Pressure Control, Central Hemodynamics and Endothelial Function [Internet]; August 06, 2024. Podcast: 11:03. Available from: <https://www.acc.org/Latest-in-Cardiology/Articles/2024/08/06/16/07/accel-lite-06aug2024>.
- [4] Saarinen AIL, Keltikangas-Järvinen L, Hintsala T, Pulkki-Råback L, Ravaja N, Lehtimäki T, et al. Does Compassion Predict Blood Pressure and Hypertension? The Modifying Role of Familial Risk for Hypertension. *Int J Behav Med* 2020;27(5): 527–38.
- [5] Cohen R, Bavishi C, Rozanski A. Purpose in Life and Its Relationship to All-Cause Mortality and Cardiovascular Events: a Meta-Analysis. *Psychosom Med* 2016;78(2): 122–33.
- [6] Chinnaiyan KM, Revankar R, Shapiro MD, Kalra A. Heart, mind, and soul: spirituality in cardiovascular medicine. *Eur Heart J* 2021;42(31):2965–8.
- [7] Brewer LC, Bowie J, Slusser JP, Scott CG, Cooper LA, Hayes SN, et al. Religiosity/Spirituality and Cardiovascular Health: the American Heart Association Life's Simple 7 in African Americans of the Jackson Heart Study. *J Am Heart Assoc* 2022; 11(17):e024974.
- [8] Levine GN, Lange RA, Bairey-Merz CN, Davidson RJ, Jamerson K, Mehta PK, et al. Meditation and Cardiovascular Risk Reduction: a Scientific Statement From the American Heart Association. *J Am Heart Assoc* 2017;6(10).
- [9] Tobin RS, Cosiano MF, O'Connor CM, Fiuzat M, Granger BB, Rogers JG, et al. Spirituality in Patients With Heart Failure. *JACC Heart Fail* 2022;10(4):217–26.
- [10] Katiyar CK, Mukherjee PK. Some excerpts from *Charaka Samhita* - An ancient treatise on Ayurveda & healthy living. *J Ethnopharmacol* 2017;197:3–9.
- [11] Agrawal M, Byadgi PS, Dwibedy BK. Importance of Ayu Pareeksha for the Management of Diseases. *J Clin Diagn Res* 2017;11(1). Oe01-oe4.

Amanpreet Singh Wasir

Intern, Bharati Vidyapeeth University Medical College, Pune, India

E-mail address: amanpreet.wasir@gmail.com.