



Lifestyle Medicine in Action: Bridging the Gap Between Evidence and Cardiology Guidelines

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Abstract

Despite growing evidence supporting lifestyle medicine and plant-based diets (PBDs) in the prevention and reversal of cardiovascular disease (CVD), major cardiology societies, such as the American College of Cardiology (ACC) and the European Society of Cardiology (ESC), have not prominently incorporated these approaches into their clinical guidelines. This article examines potential reasons for this reluctance, including the prioritization of pharmaceutical-grade evidence, conflicts of interest resulting from industry sponsorship, the political influence of agribusiness, and systemic limitations within medical education and clinical culture. It also highlights the seven-year experience at Bethsaida Hospital in Indonesia, led by Prof. Dasaad Mulijono, where implementing PBDs and lifestyle medicine has helped reverse atherosclerosis, mitigate restenosis rates, and effectively treat many chronic diseases caused by unhealthy lifestyles. The role of artificial intelligence (AI), including tools such as ChatGPT, is also acknowledged as a valuable adjunct in educating and empowering patients to adopt and sustain lifestyle changes, thereby validating our clinical approach. Looking forward, AI has the potential to democratize medical knowledge and challenge the dominance of politically influenced guidelines, particularly as the public becomes more aware of the conflicts and incentives that drive current medical policy. The article calls for greater transparency and reform in guideline development to reflect the full spectrum of evidence-based care.

Keywords: Plant-based diet; Lifestyle medicine; Cardiology guidelines; Bethsaida hospital; Prof. Dasaad mulijono; Medical education; Cardiovascular prevention; Artificial intelligence; ChatGPT

Introduction

Cardiovascular disease remains the leading cause of death globally [1-3], with lifestyle factors playing a predominant role in its pathogenesis [4-9]. Multiple studies have demonstrated the efficacy of PBDs and comprehensive lifestyle interventions in halting or even reversing the progression of CVD [10-24]. Yet, major cardiology guidelines favour pharmacological and procedural interventions [25-29] over dietary and behavioural strategies. This paradox raises critical questions about the decision-making processes underlying the formulation of guidelines.

Evidence-Based Medicine and the Hierarchy of Evidence

Guidelines prioritize data from large-scale randomized controlled trials (RCTs) and meta-analyses. Although smaller-scale studies, such as Ornish et al.'s Lifestyle Heart Trial [24] and Esselstyn's long-term follow-up cohort

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[10], have shown unprecedented regression of coronary atherosclerosis with plant-based dietary patterns, they are often deemed insufficiently robust due to their size or design.

However, rigid adherence to RCT hierarchies may neglect real-world effectiveness and mechanistic plausibility. Lifestyle changes are inherently challenging to blind and randomize over long durations, and such constraints may unfairly disadvantage non-commercialized interventions in guideline consideration [30-34].

Conflicts of Interest and Industry Sponsorship

A significant portion of funding for cardiology societies and their annual congresses comes from the pharmaceutical and medical device industries [35-43]. These financial ties can lead to real or perceived conflicts of interest, potentially influencing which therapies are emphasized in guidelines.

For instance, long-term statin therapy, antihypertensives, and newer lipid-lowering agents generate ongoing revenue for sponsors, whereas PBD poses no such commercial advantage. The structural dependency on industry funding may create disincentives to recommend interventions that reduce medication reliance.

Political and Agribusiness Influence

In the United States and parts of Europe, agricultural policies and dietary recommendations are shaped by lobbying from the meat and dairy industries. These industries receive extensive subsidies and influence national nutritional guidelines, as well as public health messaging [44-47].

Advocating for PBDs at a medical society level may provoke opposition from these industries, leading to political and economic pressure. The result is often vague dietary language in guidelines (e.g., "heart-healthy diet") that avoids recommending specific patterns, such as PBDs.

Educational and Clinical Culture Gaps

Most medical education programs offer minimal training in nutrition and lifestyle counselling. As a result, many clinicians lack confidence in guiding patients toward behaviour change. Even when guidelines suggest lifestyle modification, implementation remains poor due to cultural and systemic barriers [48-53].

Moreover, the prevailing biomedical model prioritizes acute intervention over preventive care. Lifestyle medicine requires time, patient engagement, and interdisciplinary support—elements often undervalued in current practice environments.

Bethsaida Hospital: A Real-World Breakthrough in Lifestyle-Based Cardiac Care

At Bethsaida Hospital in Indonesia, we believe in the early observational studies by Ornish and Esselstyn, despite their limitations within the traditional evidence hierarchy.



Over the past seven years, we have pioneered the clinical implementation of PBDs and lifestyle medicine as core components of cardiovascular care. Our journey has been met with scepticism and resistance from peers and within the broader medical community.

Many colleagues pointed out that PBDs and lifestyle medicine were not yet included in international cardiology guidelines, so they should not be considered essential or credible. This perspective has been a significant barrier to broader adoption. This line of reasoning motivated us to write this article so that the medical community can understand the deeper reasons these interventions are not in the guidelines and may never be, due to the systemic and political barriers previously outlined.

Despite the lack of endorsement from significant societies, we have witnessed remarkable clinical outcomes. Patients have experienced regression of atherosclerotic disease, reduced need for medication, improved metabolic parameters, and enhanced quality of life. We have also observed a significant reduction in restenosis rates and a reversal of various chronic diseases associated with poor lifestyle choices.

A key enabler in supporting our patients has been the integration of AI, including tools like ChatGPT, which helped patients validate and understand the scientific basis for adopting PBDs and lifestyle medicine. This AI-powered guidance reinforced their confidence and adherence, serving as an accessible educational resource that aligned with our clinical goals. It demonstrated how emerging technology can empower individuals to take charge of their health and embrace preventive strategies that align with evidence-informed, yet guideline-overlooked, interventions [54-62].

By sharing our experience, we hope other clinicians will be inspired to explore and adopt these powerful tools. By having faith in the noble pursuit of proper health promotion, the benefits for individual patients and public health are too significant to ignore.

Recommendations for Reform

To better integrate lifestyle medicine and PBDs into cardiovascular care, the following actions are recommended:

1. **Expand research funding** for lifestyle intervention trials with adequate controls and long-term follow-up.
2. **Increase transparency** in guideline committee disclosures and decision-making processes.
3. **Revise evidence evaluation frameworks** to accommodate complex interventions that defy traditional RCT structures.
4. **Reform medical education** to include robust training in nutrition, motivational interviewing, and behaviour change strategies.
5. **Encourage independent funding sources** to reduce reliance on commercial sponsorships.

Conclusion

The continued exclusion of PBDs and intensive lifestyle changes from cardiology guidelines reflects deeper systemic issues rather than a lack of scientific support. Addressing these political, economic, and cultural barriers is essential to achieving a more comprehensive, patient-centred, and sustainable cardiovascular care model. The Bethesda experience stands as living proof that transformative change is possible—and urgently needed. As the general public becomes increasingly aware of the political interests, financial conflicts, and cultural inertia embedded within traditional guideline-making processes, the role of AI may grow even more powerful. Tools like ChatGPT can empower patients and practitioners to access unfiltered, evidence-based perspectives and catalyse a grassroots shift toward healing rather than chronic disease management. Ultimately, AI may challenge and surpass current guideline authorities in shaping the future of ethical, data-driven medical care.

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