BRIEF COMMUNICATION

Bringing Lipid Conversations to Center Stage

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ABSTRACT

Atherosclerotic cardiovascular disease (ASCVD) is the leading cause of mortality across the world. Though effective drugs are available for management of dyslipidemia, our achievement of lipid targets is far from optimal. In this multidisciplinary opinion piece, we call for greater attention to lipid health in metabolic care. We suggest various reasons, both patient-centric and physician-centric, which must be tackled to improve lipid care. Social marketing, strengthening of primary health care, continuing medical education, user-friendly teaching, and motivational therapeutics may help improve lipid management. "Lipid conversations", such as this communication, will help improve the lipid legacy, or lipid karma, of our population, and contribute to "Lipid longevity".

Keywords: ASCVD, atherosclerosis, cardiovascular disease, cholesterol, dyslipidemia, LDL cholesterol

LIPID LADEN CHALLENGE

Atherosclerotic cardiovascular disease (ASCVD) is the leading cause of mortality across the world[1]. Ischemic heart disease and stroke are now the top two causes of death in most countries. Dyslipidemia is one of the major determinants of these conditions. While the concepts of "hit early, hit hard" and glycemic legacy are well acknowledged and appreciated, the adverse effects of cumulative low-density lipoprotein (LDL) exposure are not widely understood, and are therefore underrated. Data from across the world shows suboptimal prescription of statins, and far from optimal achievement of LDL targets[2]. This state of affairs is true not only for general practices, but also for specialist care, which focuses on people living with diabetes or with high-risk ASCVD patients.

The INTER-HEART and INTERSTROKE studies demonstrated that lipid abnormalities are a much stronger contributor to acute myocardial infarction and stroke than other diseases such as diabetes, hypertension, and obesity[3,4]. Unfortunately, less attention is paid to lipid health in metabolic circles. Relatively more emphasis is laid on glucose, blood pressure, and weight in the metabolic clinic. This is a paradox, because dyslipidemia is generally considered an easier disease to tackle, and eulipidemia, an easier target to achieve.

DECIPHERING THE DISCORDANCE

This may be explained by various biopsychosocial factors. The asymptomatic nature of ASCVD (until the first vascular event occurs) differentiates it from hyperglycemia and hypertension, which present with multiple symptoms and signs. A diagnostic label of diabetes or heart failure generates various emotions, both positive and negative, which influence health care seeking and adhering behavior. Such emotions do not occur with dyslipidemia. Social factors play a role, too. There is a translation for sugar in every language of the world, but not for cholesterol. In Asian languages, therefore, high cholesterol is presented as an artificially constructed phrase, which may not have the desired impact. Even when cholesterol is discussed, it is considered part of nutritional counseling, rather than a pharmacological target[5].

Biopsychosocial factors impact health care, too. The spirit of person-centered care is often used to focus on patient-expressed priorities[6]. Such priorities are usually linked to symptoms, such as pain or discomfort, or to readily identifiable disease states, like diabetes and obesity. Dyslipidemia does not lead directly to any of

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these. On the contrary, it is possible that conventional lipid-lowering therapy may cause discomfort, pain, or worsening of glucose control.

There is relatively less focus on lipid biology in continuing medical education programs. This may be because of competing topics, such as contemporary developments in obesity, diabetes, and cardio-reno-hepatic pharmacotherapeutics. These academic factors, coupled with personal and peer attitudes regarding the desirability of degree of lipid control, contribute to therapeutic inertia regarding lipid management. The everchanging definitions of eulipidemia, and controversies in risk stratification, add to the suboptimal treatment of lipid levels[7,8].

LIPID-SMART SOULTIONS

Understanding the barriers to intensive lipid management is necessary if one has to build bridges to improve lipid health. Table 1 lists various reasons, both patient-centric and physician-centric, which influence attitudes towards metabolic health. These attitudes, in turn, inform our behaviors and choices.

MACRO LEVEL

Social marketing strategies are important in enhancing community awareness of lipid health. These should be clubbed with existing efforts at metabolic health optimization[9]. It may be prudent to list high cholesterol or abnormal cholesterol as a distinct disease, along with coronary artery disease, diabetes heart failure, and obesity, while crafting awareness campaigns. Community medicine specialists need to be involved during such planning. This will also facilitate active usage of lipid-lowering drugs, such as statins, at primary health care level. These, and other strategies, are listed in Table 2. We need to create a lipid registry in high-risk population like individuals with diabetes, hypertension, cerebrovascular accident, coronary artery disease, and chronic kidney disease. Such registry can act as a critical tool to identify the management gaps, personalize the lipid care and strategize evidence-based policy reforms and quality improvements (Table 3).

Table 1. Attitudes to Metabolic Therapy: An A-Plus Model

Person-Centered	Physician-Centered
Awareness of disease	Awareness of disease and therapy: Academic empowerment
Ability and alacrity in seeking health care	Appreciation of person-centered needs and preferences
Availability and affordability of resources	Affability and authenticity in communication
Anticipation of benefits	Ability to prescribe and monitor
Assistance (encouragement) from family and friends	Availability of assistance from peers, if needed
Agreement retarget and technique	
Adherence to therapy	

Table 2. Suggested Strategies and Solutions for Lipid Advocacy

Macro Level

Social ecosystem

- Encourage discourse on lipid health and ill-health
- Use social marketing techniques to promote awareness of lipid health
- Find celebrity brand ambassadors to champion the cause of lipid health
- Discuss low-fat/low-cholesterol dietary options at appropriate platforms

Health care ecosystem

- Ensure inclusion of lipid-lowering drugs in lists of essential medicines
- Ensure listing of cholesterol assays, including point of care devices, in lists of essential diagnostics
- Create multidisciplinary lipid clinics in tertiary health care centers
- Spread community awareness about lipids and dyslipidemia
- Lipid registry

Meso Level

- Incorporate lipidology in curricula and continuing medical education agenda
- Explain the dynamic nature of definitions of eulipidemia, as well as risk stratification
- Create networking between all relevant disciplines, including cardiology, endocrinology, neurology, nephrology, and internal medicine

Micro Level

- Evaluate and discuss lipid levels with the patient and their caregiver
- Explain the importance of lipid-lowering for long-term health
- Highlight the contribution of lipid-lowering therapy towards holistic well-being
- Demonstrate the financial savings accrued by the prevention of vascular events
- Use person-friendly terms such as “lipid legacy” and “lipid longevity” to foster confidence in lipid-lowering therapy

Table 3. Conceptual Framework for Lipid Registry

	Lipid Registry
Definition	• A systematic, longitudinal database that collects real-world data on lipid profiles, treatment patterns, and clinical outcomes across diverse patient populations.
Objectives	• Track prevalence and treatment gaps in dyslipidemia across high-risk groups (CKD, diabetes, ASCVD, CVA, hypertension) • Monitor adherence to lipid-lowering therapies and clinical guidelines • Enable outcome-based quality improvement and benchmarking across centers
Genetic Integration	• Incorporation of genetic markers (e.g., ApoE, PCSK9, familial hypercholesterolemia mutations) • Personalized lipid management and risk stratification
Collaborations Required	• Multidisciplinary engagement (cardiologists, endocrinologists, nephrologists, geneticists, clinical labs) • Health informatics experts • National NCD programs • Biopharma partners for real-world evidence generation
Challenges	• Lack of standardized Electronic Medical Records in LMICs • Limited physician awareness or prioritization of lipids beyond cardiology • Inconsistent lipid testing and follow-up • Data privacy and interoperability issues • Funding and manpower for registry upkeep
Advantages	• Evidence-based, cross-specialty lipid management • Identifies undertreated high-risk patients and regional variations • Supports policy formulation, drug procurement, and clinical research • Acts as a platform for education, audit, and innovation in preventive care

CKD = Chronic kidney disease; ASCVD = Atherosclerotic cardiovascular disease; CVA = Cerebrovascular accident; ApoE = Apolipoprotein E; PCSK9 = Proprotein convertase subtilisin/kexin type 9; NCD = Noncommunicable disease; LMICs = Low- and middle-income countries.

MESO LEVEL

While social marketing is necessary to optimize societal attitudes at a macro level, medico-marketing is required to sensitize health care professionals to the need for lipid control. Lipid biology and lipid management should be discussed at all relevant continuing medical education programs.

These include those that cater not only to cardiology, endocrinology, and internal medicine, but neurology, nephrology and related specialties as well.

MICRO LEVEL

Lipid therapeutics can be made more interesting, and user-friendly, by using simple analogies and similes to explain lipid physiology and pathology. Proverbs and metaphors can be utilized to encourage timely usage of lipid-lowering therapy. We must remind ourselves that is it the vasculature, and its cholesterol layer, which links these seemingly disparate organs, in health as well as disease.

Best practices on motivational therapeutics may be taken from obesity and diabetes management. These will include mastering "lipid conversations", encouraging adherence to therapy, and handholding individual patients as they journey towards healthier metabolic health. Concepts such as lipid legacy, lipid karma, and cholesterol cutting, similar to glycemic memory, metabolic karma, and cost cutting, can be used to encourage proactive efforts towards lipid control. All these will lead to a state of optimal health, which we describe as "Lipid longevity".

SUMMARY

We need action to fight ASCVD, and the morbidity and premature mortality that it is associated with. One simple way is to ensure healthy lipid levels for all. We call for bringing lipid health to the center stage of metabolic health, at both preventive and curative levels. Successful advocacy for lipid health will automatically translate into comprehensive cardiometabolic health for our fellow citizens.

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