

# Dyslipidemia & Homoeopathy

Tridibesh Tripathy<sup>1\*</sup>, Shankar Das,<sup>2</sup> Rakesh Dwivedi<sup>3</sup>, Niranjana Mohanty<sup>4</sup>, D.P. Singh<sup>5</sup>, Byomakesh Tripathy<sup>6</sup>, D.R. Sahu<sup>7</sup>, Mohini Gautam<sup>8</sup>, Umakant Prusty<sup>9</sup>, Pramod Bihari Pradhan<sup>10</sup>, Jeevan Krushna Pattanaik<sup>11</sup>, S.N. Pandey<sup>12</sup>, Sanskriti Tripathy<sup>13</sup> and Ranvijay Singh<sup>14</sup>.

<sup>1</sup>Homoeopathic & Public Health Expert, Visiting Professor, Master of Public Health (Community Medicine) program, Department of Social Work, Lucknow University, Lucknow, UP, India.

<sup>2</sup>Pro Vice Chancellor, Tata Institute of Social Sciences, Mumbai & Former Director, IIMR, Delhi in India

<sup>3</sup>HOD, Department of Social Work, Co-ordinator, Master of Public Health (Community Medicine) program, Department of Social Work, Lucknow University, Lucknow.

<sup>4</sup>Former Principal-cum-Superintendent, Dr. A.C. Homoeopathic Medical College & Hospital, Bhubaneswar, Government of Odisha in India.

<sup>5</sup>Dean, School of Research Methodology, Tata Institute of Social Sciences, Mumbai in India.

<sup>6</sup>Academic Director, Indira Gandhi National Tribal University, Vice Chancellor, Utkal University of Culture, Bhubaneswar in India.

<sup>7</sup>HOD, Department of Sociology, Lucknow University, Lucknow

<sup>8</sup>Assistant Professor, Faculty, Department of Social Work, Guru Ghasidas University, Bilaspur, Chhatisgarh in India.

<sup>9</sup>Research officer (Homoeopathy), Regional Research Institute (Homoeopathy), Puri, Odisha under Central Council for Research in Homoeopathy, Ministry of AYUSH, Government of India.

<sup>10</sup>Nodal Officer (Homoeopathy), Directorate of AYUSH, Government of Odisha, Bhubaneswar in India.

<sup>11</sup>Medical Officer attached to Dr. A.C. Homoeopathic Medical College & Hospital, Government of Odisha, Bhubaneswar in India.

<sup>12</sup>Former District Homoeopathic Officer, Government of Uttar Pradesh, Lucknow, UP, India.

<sup>13</sup>III<sup>rd</sup> year student, B. Tech in Biotechnology, Bennet University, Greater Noida, Uttar Pradesh in India.

<sup>14</sup>Field Work Organizer, Department of Social Work, Lucknow University, Lucknow.

**Corresponding Author:** Tridibesh Tripathy, Homoeopathic & Public Health Expert, Visiting Professor, Master of Public Health (Community Medicine) program, Department of Social Work, Lucknow University, Lucknow, UP, India.

Received: 📅 2024 Aug 25

Accepted: 📅 2024 Sep 15

Published: 📅 2024 Oct 01

## Abstract

The article looks at the issue of dyslipidemia & its associated public health issues. It draws from the Lancet study on diabetes in India. The article highlights the new guidelines on investigation of lipid profile not in empty stomach but after food. Till 2024, the practice was to do the lipid profile in empty stomach.

Having discussed the modalities of public health in dyslipidemia in the context of diabetes, it proposes the integration of homoeopathy in to the domain of dyslipidemia. The article also proposes a treatment protocol based on homoeopathic therapeutics to deal with dyslipidemia.

**Keywords:** Dyslipidemia, Homoeopathy, Materia Medica, CVS, HDL, LDL.

### 1. Introduction

The term dyslipidemia refers to altered lipid levels. Cholesterol means the fat in the diet received from animal sources. When it is derived from the plant, it is called as phytosterol. Cholesterol is a waxy substance made by the liver. It is necessary for producing hormones, vitamin D & bile salts. The bile salts have a role in digestion especially the fat. It is carried as lipoproteins & these are High Density Lipoprotein (HDL) & Low-Density Lipoprotein (LDL). HDL is known as the good cholesterol & LDL is known as the bad cholesterol. The target is to keep the LDL low levels [1-9].

The cholesterol spike in the young is because of the poor life style & the poor dietary choices. The habit of picking up a chips packet as a result of high prevalence of processed & fast foods, high in saturated fats & trans fats that has dramatically increased in recent times. The triad of Unhealthy dietary habits, sedentary lifestyle & lack of physical activity propels the cholesterol build up in the body. The liver neither can manage this overload fat nor flush it out. Added sugars also come through readymade sugary drinks & snacks. This process decreases the HDL while increasing the LDL. This imbalance increases the risk of heart disease & related issues [1-9].

In addition to that, the family history of diabetes leads to diabetic dyslipidemia that also contribute to increase in LDL

& decreased HDL. As mentioned above, it is a silent killer & an invisible threat as it shows no symptoms. Further, the condition progresses unchecked until serious issues arise. Deposition of cholesterol leads to a gradual build up of plaques in the arteries. This condition is known as atherosclerosis. Thus, narrowing of the arteries occur which restrict the blood flow & heart attacks, strokes & other issues of Cardio Vascular System (CVS) occur. It is to be noted that the damage caused by LDL to the arteries is cumulative & irreversible.

### Literature Review

Cardiologist Society of India (CSI) new guidelines recommend lipid profile screenings starting at the age of 18 years with non fasting measurements now considered as the standard. This recommendation is based on the ICMR-INDIAB study that was published in the Lancet in 2023. The guidelines come in response to India's high rate of dyslipidemia & its unique lipid profile focusing on early detection & life style changes to combat Cardio Vascular Diseases (CVD) [3].

Elevated Low-Density Lipoprotein Cholesterol (LDL-C) is the primary target & patients with high triglycerides (>150mg/dl), Non-High-Density Lipoprotein Cholesterol (N-HDL-C) is the focus. The following table gives the standard lipid testing panels & targets for various risk groups. All values are in mg/dl.

**Table 1: Standard Lipid Testing Panels & Targets for Various Risk Groups (Values in Mg/Dl).**

Lipid Profile	Desirable Levels of Various Lipid Fractions in Various Risk Groups			
	Low Risk	Medium Risk	High Risk	Very High Risk
LDL-C	<100	<100	<70	<55
Non HDL-C	<130	<130	<100	<85
HDL-C	>40 in males >50 in Females	<40 in males >40 in females	>40 in males >50 in females	>40 in males >50 in females
Triglycerides	<150	<150	<150	<150
Lipoprotein (a)	<50	<50	<50	<50

The vital statistics of the lipid profile as per New York Times (NYT), Cleveland clinic regarding lipid profile is given below [3].

**Table 2: vital statistics regarding lipid profile (values in mg/dl).**

Types of Lipid	Healthy level	Risk level	Dangerous level
LDL	Below 100	100-159	160 & above
HDL	60 & above	40-59	Below 40
Triglycerides	Below 150	150-199	200 & above
Total Cholesterol	Below 200	200-239	240 & above

### Epidemiology

Till date, diet & physical activity have been the twin pillars for a safe lipid profile. The GEO health study showed us that reducing air pollution is equally important in reducing hypertension & diabetes. The GEO health study is done by a project called Geo health since 2016. It is collaboration between the Centre for Chronic Disease Control (CCDC) & Harvard School of Public Health (HSPH). In India, the study was conducted by the CCDC, Public Health Foundation of India (PHFI) & All India Institute of Medical Sciences (AIIMS), Delhi. The study had already established the link between pollution & hypertension in the year 2020 & pollution & diabetes in the year 2023 [4,5].

The study was conducted in Delhi & Chennai cities. It found that the exposure to ambient Particulate Matter (PM) 2.5 or fine PM of 2.5 microns or smaller in diameter was associated with an increase in Low Density Lipoprotein (LDL) & triglycerides. There was a corresponding fall in High Density Lipoprotein (HDL) among 21,000 participants followed since 2010-2011. Exposure to diesel exhaust erodes the antioxidant, anti inflammatory & protective properties of HDL. The study was a longitudinal association between ambient PM2.5 exposure & lipid levels in two Indian cities with 21,000 participants followed since 2010-2011. There were four variables in lipid profiles & these are High Density Lipoprotein- Cholesterol (HDL-C), Low Density Lipoprotein- Cholesterol (LDL-C), Total Cholesterol (TC) & Triglycerides. Against these variables, the average predicted lipid levels in mg/dl were compared with ambient PM2.5 exposure in  $\mu\text{g}/\text{m}^3$ . The analysis included the average population patterns & 'uncertainty estimates' being affected by pollution through their altered lipid profile patterns [5].

The significance of the study reflects that the effects of pollution are not just short term or confined to respiratory distress. The effects are long term & can cause chronic diseases. If someone already has hypertension, over a period of time, the person could develop diabetes as well as other co-morbidities. The study shows that air pollution is a ubiquitous risk factor. Moving further, the common problem of diet & physical activity has affected the younger population & not the older groups as previously thought. The problem is that high cholesterol is a silent killer. The cholesterol buildup could have begun at a younger age in the teens but are revealed in the 20s. This is the reason why young people report heart attacks caused by plaques as a result of high cholesterol in the blood [1-7].

### CVS Program in India

Government of India implements the National Program on Cancer, Diabetes, Cardiovascular accidents & Stroke (NPCDCS) since 2010. In this program, young adults 20 years & older are advised to get their cholesterol levels checked every five years even if they look fit. Similarly, if these young people show a tendency, their cholesterol levels are to be checked every year. There is universal rule to say that high cholesterol is linked to obesity always. Even thin people can have high cholesterol. After identification of high cholesterol levels, the program advises appropriate life style modifications, medical interventions that can reduce the risk of long-term complications. [10].

### Burden of NCDs In India

As per the Lancet-ICMR-INDIAB study of 2023, the overall weighted prevalence of diabetes in India is 11.4%. The prevalence of pre diabetes is 15.3%. The prevalence of hypertension is 35.5%. The prevalence of generalized obesity is 28.6%. The prevalence of abdominal obesity is 39.5%. The prevalence of dyslipidemia that the current article deals with is 81.2%. It was also found that all metabolic Non-Communicable Diseases (NCD) except prediabetes were more frequent in urban than rural areas. In many states with a lower Human Development Index (HDI), the ratio of diabetes to pre diabetes is less than

### The Future

People need to focus on a balanced diet rich in fruits, vegetables, whole grains & lean proteins. Regular physical activity & maintaining healthy weight are crucial factors towards managing cholesterol levels. Addressing risk factors like smoking & alcohol consumption does help in the management of cholesterol levels. All these factors contribute to improvement in CVS health [6-10].

The effort of GOI through the Ayushman Arogya Mandir (AAM) which are the improved version of Health & Wellness Centres (HWC) which are the improved versions of the erstwhile Sub Centres (SC). Government of India (GOI) renamed the ABHWCC as 'Ayushman Arogya Mandir (AAM) with the tag line 'Arogyam Parmam Dhanam' on 29th November 2023. AAM is an attempt to move from a selective approach to health care to deliver comprehensive range of services spanning preventive, promotive, curative, rehabilitative & palliative care [11].

### Perspective of Homoeopathy

The concept of dyslipidemia comes under the domain of 'Sycosis' miasm in homoeopathy which has creates a tendency

for 'proliferation' in the body. Miasms in homoeopathy are the disease-causing dynamic influences that are infectious in nature. The whole phenomenon of atherosclerosis is through extra deposition of bad fat in the arteries. This deposition is extra for the arteries thus narrowing them. The same miasm also applies for extra visceral fat in the body as well. The homoeopath has to prescribe anti-sycotics through homoeopathic evaluation for all dyslipidemia or NCD cases For Arterio Sclerosis in which as mentioned above severe damage is done to the arteries, the drug is 'Sumbul' [12-18].

Similarly, in dyslipidemia for the complications & as well as to prevent complications, the drugs that act on fatty degeneration are 'Arsenic', 'Aurum', 'Cuprum', 'Kali Carb', 'Lycopodium', 'Manganum', 'Merc Sol', 'Phosphorus', 'Vanadium'. The drugs for increased level of cholesterol are 'Calcarea Carb', 'Chloroformum', 'Cholesterinum', 'Cortisone', 'Dulcamara', 'Insulin', 'Lycopodium', 'Mag Flour', 'Persia Americana', 'Sulphur', 'Thyreotropinum'. As the whole process involves arteries, the drugs for arteritis need to be considered as well. These are 'Antim Tart', 'Arnica', 'Arsenic', 'Baryta Carb', 'Calcarea Carb', 'Cuprum', 'Haemamelis', 'Kali Carb', 'Kali Iod', 'Lachesis', 'Natrum Iod', 'Pulsatilla', 'Spigelia', 'Sulphur' [13-16].

As dyslipidemia is related to poor eating habits, there are drugs that can be prescribed depending upon this behavior. The drugs are 'Calcarea Carb' for eating too much eggs as there is a desire to eat drugs in the individual, for 'meat craving, drugs like 'Phosphorus', 'Allium Sativa', 'Lilium Tigrinum'.<sup>17</sup>

Similarly, when the individual is not able to digest certain fat items, issues related to fat digestion ensues. The drugs are 'Arsenic' if issues emerge after eating bad sausages, 'Antim Crude' if after eating bread & pastry, 'Arsenic' if after eating strong cheese. Among Bowel Nodoses, drugs like 'Morgan Bach' can be prescribed for 'Congestion' as it is a congestion in the body. 'Gartner Bach' for malnutrition as dyslipidemia comes under the domain of malnutrition. It is to be noted that these drugs improve the gut health & should be given in addition to the leading drugs mentioned above [17-20].

On these lines, the appropriate Bio-Chemic salt & the appropriate Bach Flower remedy can be prescribed to deal with the physical & mental issues. Homoeopathy has already proved itself during the recent pandemic. There is an AYUSH policy in place in India which advocates integration at national level. Studies suggest that more than 10% of population use homoeopathy currently in India. The death rate in India is 19.5/1000 population & currently NCDs are a prime cause of mortality as mentioned from the prevalence above. The diabetic endemic in India is also depicted by large surveys like National Family Health Surveys (NFHS). The Essential Medicine (EM) properties as mentioned in the documents of the central government will only be a catalyst in this process [21-29].

## 2. Conclusion

With new dyslipidemia cases being an obstacle & no effective cure, it is time to look into the homoeopathy

system of Ministry of AYUSH that addresses the unreached areas of the current intervention. A long-term cost effective, therapeutically effective with no side effects approach can be in place on integration of homoeopathy into the domain of Non-Communicable Disease (NCD) related interventions.

The integration of homoeopathy into the NCD related interventions will not only help India but also it will be a successful pilot to deal with NCD at the global level through adoption of the pilot especially in the NCD endemic countries like India. India can set an example in this regard. The intervention related to homoeopathy of AYUSH can also be initiated with the leading stake holders or development partners in India that work on various aspects of NCDs. As homoeopathy has become a part of the culture in India, the intervention will help to deal with the related poor life style & poor dietary evils of NCDs.

## Acknowledgement

The lead author thanks all the coauthors who are Homoeopaths for their contribution in the Homoeopathic section & all other coauthors for their contribution in the non-Homoeopathic section. Professor Shankar Das was the Ph.D. guide of the lead author at Tata Institute of Social Sciences, Mumbai during 2011-2018. Dr. D.P. Singh was the teacher of the lead author at Tata Institute of Social Sciences, Mumbai during 1995-1997. Prof. Mohanty was the teacher of the lead author during his Homoeopathic graduation days in Bhubaneswar, Odisha from late 1986 to 1993 beginning.

## Declaration

The lead author declares that the Homoeopathic protocol given here is only suggestive in nature.

## Funding

There was no funding received for the article.

## Conflict of Interest

There is no conflict of interest regarding the article.

## References

1. Anjana, R. M., Unnikrishnan, R., Deepa, M., Pradeepa, R., Tandon, N., Das, et al. (2023). Metabolic non-communicable disease health report of India: the ICMR-INDIAB national cross-sectional study (ICMR-INDIAB-17). *The Lancet Diabetes & Endocrinology*, 11(7), 474-489.
2. Jaiswal A, Cardiologists suggest First Lipid Profile at 18, Non-Fasting Tests, TOI, Lucknow Edition, Times Nation, Saturday, July 06, 2024, Page 09.
3. Health Care Radius, CSI releases dyslipidemia management guidelines, 5th July 2024, <https://www.healthcareradius.in>. 5th July 2024.
4. New York Times, Cleveland clinic, national Heart, Lungs & Blood Institute, <https://myclevelandclinic.org>
5. <https://www.itc.nl/global-impact/geo-health/>
6. Tripathy, T. (2024). D & D Dealt with H-Diabetes & Dehydration Dealt with Homoeopathy. *Gha alt Med Jrnl*, 5(3), 61-66.
7. Sudarshan, M. K., Bhanderi, D., Choudhary, S. K.,

- Akoijam, B. S., Thangjam, N. D., et al. Public Health Law 207 PH. Ananthanarayanan Special Article Introducing Intradermal Rabies Vaccination in India: Paradigm Shift for the Better 209.
8. Tripathy, T. (2023). Health Economics in Homoeopathy. *Sch J Econ Bus Manag*, 8, 191-193.
  9. Tortora, G. J. (1992). Sandra RJ, Principles of Anatomy & Physiology.
  10. GOI, MOHFW, DGHS, NPCDCS, 2010, <https://dghs.gov.in>
  11. AAM, <https://ab-hwc.nhp.gov.in>
  12. Sarkar, B. K. (1955). Organon of Medicine by Hahnemann, M. Bhattacharya & Co.
  13. Phatak, S. R. (2004). Concise Repertory of Homoeopathic Medicines. B. Jain Publishers.
  14. Tripathy, T., Das, S., Prusty, U., Mishra, M. M., Pattanaik, J. K., Pradhan, P. B., ... & Gautam, M. (2023). Prostatic issues and Homoeopathic Approach. *South Asian Res J Med Sci*, 5(3), 78-83.
  15. Tripathy, T. (2024). Homoeopathy in Renal Stones. *SAS J Med*, 5, 438-441.
  16. Boericke, W. (2002). New manual of homoeopathic materia medica and repertory. B. Jain Publishers.
  17. c Allen, H. (1993). Keynotes and Characteristics with Comparisons of Some of the Leading Remedies. M. Bhattacharya and Company.
  18. Waugh, H. R. (2001). Life of Christian Samuel Hahnemann, B.
  19. Tripathy, T. (2023). Bowel Nosodes of Homoeopathy in Colorectal Cancer and Auto Immune, Metabolic, Neuro Psychiatric disorders. *Scholars J Appl Med Sci*, 11(9.014).
  20. Tripathy, T. (2023). Bowel Nosodes of Homoeopathy in Colorectal Cancer and Auto Immune, Metabolic, Neuro Psychiatric disorders. *Scholars J Appl Med Sci*, 11(9.014).
  21. Cornelia, B., Richardson-Boedler, C. (2021). Applying Bach Flower Therapy to the Healing Profession of Homoeopathy. B. Jain Publishers.
  22. Phatak, D. S., & Phatak, S. R. (2006). Repertory of the Bio-chemic medicines, B.
  23. Tripathy, T., Das, P. S., & Dwivedi, D. R. (2021). Homoeopathy in COVID-19, A treatment protocol for second and third wave. *Sch Int J Tradit Complement Med*, 4(6), 86-90.
  24. IIPS and ICF. 2021. NFHS 4 & 5, 2015-16 & 2019-2021: India: volume 1, Mumbai: IIPS.
  25. GOI, SRS Bulletin, v55no.1, reference year 2020, May 2022
  26. Popularity of Homoeopathy in India, [bjainpharma.com/blog/popularity-of-homoeopathy-in-India](http://bjainpharma.com/blog/popularity-of-homoeopathy-in-India), 2023.
  27. Prasad Raekha, Special Report on Homoeopathy, v370, 17th November, 2007.
  28. NLEM, GOI, PIB, 13th September 2022, <https://pib.gov.in>
  29. GOI, Ministry of AYUSH, NLEAM, 8 February, 2022.