

# Advanced Certificate Course in Prevention & Management of Diabetes & Cardiovascular Disease (ACMDC)

The world's latest advances in Prevention and Management of Diabetes and Cardiovascular Disease

Monthly weekend contact sessions

The course provides innovative practical training, case-based learning and interactive sessions

**Last Date  
of Enrollment**

**31<sup>st</sup> August, 2024**

**Course starts on**

**September, 2024**

Be a leader in your  
**Clinical Practice!**



Advanced Certificate Course in  
Prevention & Management of  
Diabetes & Cardiovascular Disease

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## Diabetes and Cardiovascular Disease

Non-communicable diseases (NCDs), which include heart disease, stroke, cancer, diabetes and chronic lung disease, are estimated to result in 41 million deaths each year, or 74% of all deaths globally. Of these deaths, about 77% occurred in low- and middle-income countries (LMICs).<sup>[1]</sup>

Cardiovascular diseases (CVD) accounted for the bulk of these deaths, with 33% all deaths globally, where ischemic heart disease (9.1 million deaths) and stroke (6.6 million deaths) made up 85% of the CVD-related deaths. Of the estimated 20.5 million CVD-related deaths in 2021, approximately 80% occurred in LMICs.<sup>[2]</sup> Around 20% of cardiovascular deaths were attributed to uncontrolled hyperglycemia.<sup>[3]</sup>

There were an estimated 536.6 million people with diabetes in the world (10.5% prevalence), a figure likely to reach 783.2 million (12.2% prevalence) by 2045. Around 6.7 million deaths occurred due to diabetes. In India, the estimates were that 74.2 million people had diabetes (9.6% prevalence), projected to rise to 124.9 million by 2045.<sup>[4]</sup>

The National Non-Communicable Disease Monitoring Survey (NNMS) reported a similar prevalence of diabetes of 9.3% across India, whereas the ICMR-INDIAB Collaborative Study Group estimated prevalence of diabetes of 11.4% was higher.<sup>[5],[6]</sup>

Further, the prevalence of impaired fasting blood glucose (IFG) was 24.5% and that of prediabetes was 15.3% in the NNMS and ICMR-INDIAB study respectively.

It is well known that unhealthy diets, physical inactivity and tobacco use, are all risk factors associated with the causation of diabetes as well as CVD.

Associated conditions like hypertension, dyslipidemia and obesity are implicated in increased morbidity and mortality due to diabetes as well as CVD. High rates of hypertension (35.5%), generalized obesity (28.6%), abdominal obesity (39.5%), and dyslipidemia (81.2%) were reported from the ICMR-INDIAB study.

NCDs pose a very high economic burden, both at the macro level, as well as at the household level. It was estimated that over the period 2011-2030, NCDs will cost the global economy more than \$30 trillion, representing 48% of global GDP in 2010.<sup>[7]</sup>

In LMICs, at the household level, a huge financial burden of NCDs was calculated. The average total costs per year to a patient or household in LMICs for CVD, and diabetes were \$6,055.99 and \$1,017.05 respectively.<sup>[8]</sup>

Management of diabetes and CVD poses a major challenge for the healthcare systems due to a shortage of specialists who can treat these conditions. Therefore, there is a need to build the capacity of doctors to address the management of CVD and diabetes, or what is commonly referred to as “cardio-diabetes”.

The “Advanced Certificate Course in Prevention and Management of Diabetes and Cardiovascular Diseases” (ACMDC) is one such effort that aims to strengthen the technical competencies of primary care physicians (PCPs) to better manage diabetes and CVD.

### References:

1. World Health Organization. *Noncommunicable diseases. Key facts.* [updated 16 September 2023]. Available at: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>
2. Di Cesare M, Perel P, Taylor S, et al. *The Heart of the World.* *Glob Heart.* 2024;19(1):11.
3. World Health Organization. *Invisible numbers;* 2022.
4. International Diabetes Federation. *IDF Diabetes Atlas.* 10th ed; 2021.
5. Mathur P, Leburu S, Kulothungan V. *Prevalence, Awareness, Treatment and Control*

*of Diabetes in India From the Countrywide National NCD Monitoring Survey.* *Front Public Health.* 2022;10:748157.

6. Anjana RM, Unnikrishnan R, Deepa M, et al; ICMR-INDIAB Collaborative Study Group. *Metabolic non-communicable disease health report of India: the ICMR-INDIAB national cross-sectional study (ICMR-INDIAB-17).* *Lancet Diabetes Endocrinol.* 2023;11(7):474-89.
7. World Economic Forum and Harvard School of Public Health. *The Global Economic Burden of Non-communicable Diseases;* 2011.
8. Kazibwe J, Tran PB, Annerstedt KS. *The household financial burden of non-communicable diseases in low- and middle-income countries: a systematic review.* *Health Res Policy Syst.* 2021;19(1):96.

## Partners

Advanced Certificate Course in Prevention and Management of Diabetes and Cardiovascular Disease (ACMDC) is a joint certification program designed, implemented and delivered by Public Health Foundation of India (PHFI) and Chellaram Diabetes Institute (CDI), Pune.

## Public Health Foundation of India

PHFI is a public private initiative launched by the then Prime Minister of India. PHFI is a response to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of Public Health. PHFI has adopted a broad integrative approach to public health, following up with the training of numerous Healthcare Professionals under various capacity building initiatives for healthcare professionals since 2010. The division has trained over 41,000 healthcare professionals of which 12,000+ are affiliated to the government sector, through a pool of 108 National Experts, 624 Faculty, 173 Observers, 600+ Training Centres in 127 Cities, and 28 States & UTs across India. We have collaborations with 14 State governments and professional bodies/govt. across 10 Countries in South Asia and Africa.

The division has established a robust system for development of new training programs and standardized delivery & monitoring mechanisms. The division has proven experience of conducting workshops with the government organisations like National Health System Resource centre (NHSRC), Ministry of Tribal Affairs, State Institute of Health and Family Welfare (SIHFW) etc. The division has vast experience of running capacity building programs for healthcare professionals.

## Chellaram Diabetes Institute

Chellaram Diabetes Institute (CDI) is a unit of the Chellaram Foundation, founded by Mr. Lal L. Chellaram. The vision and mission of CDI is to understand the cause of high prevalence of diabetes among Indians, promote measures to prevent or delay the onset of diabetes, and thereby create a huge and lasting impact on diabetes in India, and also globally.

CDI, by focusing on patient care, research, education, and awareness, is geared to create an impact on the alarming diabetes scenario, by providing unique and state-of-the-art services under one roof. CDI also implements an outreach program through mobile diabetes clinics to address the needs of the community in the rural and remote areas around Pune. As part of its commitment to build capacity of health professionals, CDI conducts various training courses, both classroom as well as online courses.

CDI is the academic partner for developing the course curriculum.

For more information on activities at CDI, visit [www.cdi.org.in](http://www.cdi.org.in)

## Merck & Co. (MSD)

MSD, known as Merck & Co., Inc., in the United States and Canada, is unified around its purpose – using the power of leading-edge science to save and improve lives around the world. For more than 130 years, the company has brought hope to humanity through the development of innovative medicine and vaccines.

MSD aspires to be the premier research-intensive biopharmaceutical company in the world – and today, they stand at the forefront of research to deliver innovative health solutions that advance the prevention and treatment of diseases. They foster a diverse and inclusive global workforce and operate responsibly every day to enable a safe, sustainable, and healthy future for all people and communities.

## Objectives of ACMDC

The primary objective of the course is to enhance knowledge, skills and core competencies of primary care physicians to prevent and manage cardiovascular disease manifestations of diabetes. Other objectives include:

- ☞ To build a network of PCPs across the country, to enable early diagnosis and prompt referrals of patients and establish a robust referral linkage.
- ☞ To develop a standard teaching protocol and module for evidence based learning.
- ☞ Update primary care physicians with the latest advancements.

## Program Overview

ACMDC is an on-the-job training program for PCPs conducted across the country with a robust monitoring & supervision strategy.

The journey of ACMDC started in September 2014 with its first cycle. The course ran three cycles conducted at 49 centres covering 38 cities, 19 states & 3 UT's with 10 National Experts, 90 Regional Faculty & 33 Observers. ACMDC has successfully trained 1920 PCPs in its three cycles.

ACMDC has been adopted by Kolkata Municipal Corporation & National Health Mission, Govt. of Tripura to train their medical officers. It has also been accepted internationally by Myanmar Society of Endocrinology and Metabolism (MSEM) & Myanmar Diabetes Association (MDA); East African Diabetes Study Group; Ministry of Health, Govt. of Rwanda; Afghanistan Endocrine Society (AES) and Kabul University of Medical Sciences (KUMS) for training of their healthcare professionals.

## Course Design and Duration

ACMDC is a unique course in terms of evidence based learning and on-the-job training. The total duration of the course is six months with once a month contact sessions which will be scheduled on designated weekend at Regional Centres, across India.

Language of Instruction: English

## Eligibility Criteria\*

MBBS with minimum 3 years of clinical experience

## Contents

The advanced course primarily focuses on the macrovascular complications of diabetes, viz. coronary artery diseases, stroke and peripheral arterial disease. The association between diabetes and cardiovascular risk has been covered in detail. Cardiac testing that aims at cardio-metabolic risk reduction and management at the primary care physician level has been emphasized.

The fundamentals of glycemic management are covered, including use of insulin as well as the newer medications on the horizon. It also addresses the two important comorbidities, viz. dyslipidemia and hypertension.

A highlight of the course is the attention given to important aspects like diet, exercise and tobacco cessation relevant to the management of both diabetes as well as coronary artery disease. Niche areas like bariatric surgery and management of obstructive sleep apnea have been included.

The course addresses several challenging areas to the clinicians, for instance, how to manage diabetes in hospitalized people with heart disease, evaluation and management of people with heart failure and diabetes, management of other cardiovascular comorbidities, etc.

The course would refer to the latest guidelines for management of the conditions discussed above.

## Course Modules

Module 01	The Association between Diabetes and Cardiovascular Disease
Module 02	Vascular Complications and Introduction to Risk Factor Management
Module 03	Management of Glycemia with special reference of CVD
Module 04	Diabetic Dyslipidemia, Hypertension and Introduction to CAD
Module 05	Coronary Artery Disease (CAD), Stroke and Peripheral Arterial Disease (PAD) in Diabetes
Module 06	Special Topics and Summary

## Teaching & Training Methodology

The course will be offered via a module based approach with judicious mix of case-studies, group discussion, activities and direct learning by eminent experts in the field of diabetology, with inbuilt flexibility to accommodate participants' requirements. Complete and comprehensive learning package i.e printed modules will be provided to all participants by the organizers. The course content will be delivered by renowned faculty.

## Evaluation System & Certification Criteria

Participant evaluation will be done through a continuous internal evaluation, course work and performance in written examination. The criteria for successful completion of the course shall be as follows:

- ☞ Presence in at least 5 out of 6 monthly contact sessions (including the pre-test and post-test of each module)
- ☞ Submission of two descriptive assignments based on completed modules to be submitted during III and V module.
- ☞ Appearance in MCQ based exit examination (with Min. 50% marks).

## Course Fee

**Course Fee**  
**INR 12,000**

**Click here to Enrol**

*The candidate completing the certificate course successfully as per the above mentioned criteria shall be awarded certificate, jointly issued by PHFI, CDI & respective Regional Faculty*

### TRAINING CENTRES ACROSS INDIA\*\*

State	Center	State	Center	State	Center	
Andhra Pradesh	Nellore	Haryana	Faridabad	Rajasthan	Jaipur	
	Vijayawada		Gurgaon		Udaipur	
Assam	Guwahati		Hissar		Tamil Nadu	Chennai
Bihar	Bhagalpur		Jharkhand			Panchkula
	Patna	Dhanbad		Erode		
Chandigarh	Chandigarh	Karnataka	Ranchi	Madurai		
			Kerala	Bangalore	Tuticoron	
		Madhya Pradesh		Bhopal	Salem	
			Jabalpur	Hyderabad		
Delhi	Delhi	Maharashtra	Mumbai	Telangana	Deoria	
Gujarat	Ahmedabad		Nagpur		Ghaziabad	
	Surat		Pune		Lucknow	
	Vadodara		Thane		Noida	
Odisha	Puducherry	Berhampur	Uttar Pradesh	Prayagraj		
		Bhubaneswar		Varanasi		
		Puducherry		Kolkata		
Punjab	Ludhiana	West Bengal		Siliguri		



**To Know more about the application forms & process, please contact:**

**Program Secretariat- ACMDC**  
**Public Health Foundation of India**

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**Disclaimer:** PHFI and CDI hereby declare that, this jointly designed "Advanced Certificate Course in Prevention and Management of Diabetes & Cardiovascular Disease" is not a recognized medical qualification, under Section 11(1) of the Indian Medical Council Act, 1956. PHFI and CDI offering this course hereby declare that they are not a medical college or University and are not offering this course in accordance with the provisions of the Indian Medical Council Act/ University Grants Commission Act. Kindly note that ACMDC is not a degree but only a certificate course with the objective to train doctors in the early diagnosis, prevention and management of cardiovascular complications of diabetes. Participants are strongly advised not to affix 'ACMDC' adjacent to their names or in their boards/display.

\*\*The organizers reserve the right to change the program locations and centres.