

IDF Recognized “Certified Diabetes Educator-India” Programme Administered by Manav Seva Foundation, USA.

About Manav Seva Foundation

Manav Seva Foundation, Inc. (MSF) was founded in 2006. It is a not for profit organization registered in the state of Missouri, USA. Our mission is to provide diabetes care and education to marginalized people in Northern India. (For more information, please follow the link [Manav Seva Foundation 121614](#).)

The founders are physicians at Washington University School of Medicine in St. Louis, Missouri: Jitendra K Gupta MD, FACC (USA), MRCP (UK) is a board certified cardiologist, with a special interest in diabetes affecting the heart, and Santosh Gupta MD, FAAP (USA), MRCP (UK); CDE (USA) is a board certified pediatric Endocrinologist and a certified diabetes educator.

Ramakrishna Mission Sevashram (RKMS) is a charitable hospital and a branch center of Ramakrishna Math and Ramakrishna Mission, Belur Math, India. Founded in 1907, it is a 165 bed multi- specialty hospital with a nursing school which started in 1980; the school is recognized by the nursing council in New Delhi and the UP state medical faculty. It has a total of 60 students who enroll in a 3 1/2 year diploma course. After completing their diplomas all work for a minimum of 2 1/2 years as staff nurses at RKMS hospital. Many of them go on to pursue the BSc degree in nursing. http://rkmsvrind.org/Medical_Work.html

Background of Certified Diabetes Educator Program at RKMS in Vrindaban

In 2012 MSF started Certified Diabetes Educator India (CDEI) program at RKMS School of Nursing in Vrindaban, India. However, the program has its roots in the work of MSF at the Ramakrishna Mission (RKM) hospital in Haridwar, another branch center of Ramakrishna Mission, Belur Math, India.

In 2006 MSF started treating children with type one diabetes (T1DM) at RKM hospital in Haridwar using multiple dose injections (MDI) of insulin based on the basal/bolus concept and carbohydrate counting (CHO) tailored to local diet, developed by Dr. Santosh Gupta. Prior to 2006 no child with T1DM in that region had ever survived beyond one year from diagnosis. By 2015 our program now has over 60 children with A1C's between 7 and 8% and normal growth and development, and the number of these children continues to grow. Diabetes Self-management Education (DSME) is the backbone of the program. The program is supported by grants from the International Diabetes Federation (IDF) Life for a Child (LFAC) and Insulin for Life, USA and Australia. Realizing the critical need for professional diabetes educators, MSF started CDEI program at Vrindaban.

Based on several years of first-hand experience working in India, Drs. Gupta concluded that a team-based approach incorporating individualized patient education, environmental assessment, and social support facilitates the safe and effective implementation of a diabetes management program.

Since medicine in India is mediated through the cultural context, the physician alone, howsoever competent and committed he/she is, cannot be an effective fighter against this devastating disease. In order to reach a larger proportion of the patient population and in order to increase the likelihood of compliance by the patients, diabetes treatment in India must cease to be physician-centric and strive to become team oriented. This is why diabetes educators need to play a key role.

In order to bring about desired changes in both the behavior and life style of patients, we must recognize the social, cultural, economic, educational, and psychological context of our patients. This involves awareness of and sensitivity to many factors: caste and class lines; the hierarchies of roles and status; family dynamics; norms, values, and beliefs as well as customs and rituals. All of this must be taken into consideration.

This is where the diabetes educator comes in and is critically needed. This role, however, is woefully under-recognized and unappreciated by both physicians and patients. We see a huge need to change this mindset and create a respected and well compensated place for specialized diabetes educators. Diabetes education is a potent means of empowering patients in diabetes self –management education. A recognized educator needs to be an indispensable ally in a campaign to combat diabetes, which is vastly under-diagnosed, unreported, and untreated disease in India.

Objectives

We wish to create professional diabetes educators who have medical knowledge, and effective interpersonal communication skills. They will educate patients and their families in diabetes self –management education as well as provide support to infuse hope and optimism which results in necessary behavioral changes.

Title of the course

Certified Diabetes Educator India (CDEI)

Duration of the course

One year.

Certificate

Participants will be awarded with the IDF recognized certificate stating that they have met the academic, professional, and experiential requirements and successfully passed the examination of special competency in diabetes education all of which merits the designation of CDEI duly signed by MSF and RKMS Vrindaban.

Eligibility Criteria

Since the inception of the program, staff nurses with diplomas or a BSc in nursing who are working at RKMS are candidates. During this one year program they are available on a daily basis for learning the course material and getting hands-on experience providing care to patients with diabetes.

Future Objective

We wish to partner with other institutions in India that have nursing schools to establish similar models of CDEI programs and eventually develop a national program.

Delivery Format

Our two main methods of delivering the education are; online lecture and interactive learning at RKMS, Vrindaban. With the online method, students use video conferencing to connect with instructors in USA. This entails the following:

- Twice a week, candidates present cases to Dr. Santosh Gupta, which is followed by group discussion.
- Candidates will watch lectures of presentations covering the International Diabetes Federation's modules and American association of diabetes educator's -7 behaviors.
- Candidates will receive instructions about Nutrition from Mrs. Prajakta Khare-Ranade MSc, RDN, and L.D using food models sent to India from USA by MSF.

- Dr Jitendra K Gupta will cover topics such as cardiovascular complications of diabetes, metabolic syndrome and risk factors.
- Candidates will participate in monthly internet support group meetings connecting with diabetics in USA via www.penpalsunited.org.

Learning at RKMS, Vrindaban, India includes:

- The Diabetes Health Educator Center which has computers, books, journals, and posters. The computers have a variety of learning materials such as presentations of IDF modules, AADE recorded webinar and lectures. Students are provided with personal e-books that are loaded with the above topics to study in their own time.
- The room for patient teaching has food models, meters, syringes, insulin, and posters for DSME as well as a CDEI instructor who supervises the candidates.
- At RKMS Hospital students are required to accumulate 200 hours providing diabetes care to patients under the supervision of the program director, an instructor, and the physician in charge.
- Candidates get involved with community work related to diabetes as appropriate and when possible.

Course outline

Module 1	Overview of diabetes as a growing public health problem, and its human and financial impact on families living with the disease.
Module 2	Role of the Diabetes Health Professional. The science of diabetes self-management education
Module 3	Pathophysiology of diabetes, diagnosis and classification. Self-monitoring of blood glucose and A1C measurement.
Module 4	Glucose lowering medications. Insulin types, action, delivery devices and storage.
Module 5	OHA and complimentary medications for co-morbidities.
Module 6	Use of food models for teaching balanced diet, CHO counting & nutrition during pregnancy.
Module 7	Assessment of diet, making healthy choices, for prevention of obesity, metabolic syndrome, hypertension and dyslipidemia.
Module 8	The art of Diabetes Self-management Education (DSME): Assessment, goal setting, planning, implementation, monitoring & evaluation of outcome.
Module 9	Assessment of literacy level, cognitive functions and learning style
Module 10	AADE7 Healthy eating, being active, monitoring, taking medication, problem solving, healthy coping, and reducing risk. Developing the skills needed for behavior change
Module 11	Combating non-compliance through understanding barriers, family support, learning styles and use of role models.
Module 12	Gestational diabetes, pre-existing diabetes and pregnancy and neonatal outcome.
Module 13	Community education, screening and educational poster making for World Diabetes Day.
Module 14	Acute complications of diabetes: diabetic ketoacidosis, hypoglycemia, use of glucagon and sick day management.
Module 15	Chronic complications of diabetes: macro and microvascular, retinopathy and nephropathy.
Module 16	Peripheral neuropathy, peripheral vascular disease, foot care and oral health.

Requirements to be eligible for Certifying Examination

- *Academic requirements:* Presentations on various topics from the Modules, case presentations and discussion.
- Candidates are given 40 multiple choice questions (MCQ) every 4 months related to the topics covered in the Modules.
- *Clinical requirement:* 200 hrs of direct patient care including 15 patients they are assigned to follow and document care.

Certifying Examination

This consists of 100 multiple choice questions and a practical examination involving case presentation and answering questions from examiners, one of whom is an endocrinologist/diabetologist from a reputable external institution.

If a candidate is unsuccessful in passing the exam, they must repeat the written and or practical part of examination within 6 months.

Year-end program evaluation

Candidates will provide input on how best to facilitate their learning process. Instructors will discuss with them what additional tools and means of learning can be added to make the process enjoyable and build professional leadership qualities.

Support of CDEI alumni

Create a network to facilitate in finding employment as professionals in diabetes education. Organize an association of CDEI and provide CME to keep up with changes in their field.

Contact us

www.manavseva.org

Pictures from Programme



Online teaching. Video conferencing with instructors in USA.

Interactive learning at RKMS diabetes education center and hospital



Diabetes Center



Food models for CHO counting s



Teaching by Dr. Santosh Gupta



Bedside teaching by instructor



Teaching use of devices



Group nutritional teaching



Lecture in RKMS Auditorium



Candidates taking exam