



01

DR. MOHAN'S INTERNATIONAL
DIABETES UPDATE -2020

03

Diabetes and Mental Health
Mrs.Vidyulatha Ashok
Clinical Psychologist

06

Help at Hand Always

08

Prof.K.P.Bhargava Memorial Award

08

Importance of Nutrition in Field of
Diabetes
Dr.R.Guha Pradeepa
Senior Scientist and Head
Research Operations

11

Diabetes Diet Recepte -
BAJRA KITCHIDI

12

FAQ

13

Hinduja Newsletter -13.05.2020

DR. MOHAN'S INTERNATIONAL DIABETES UPDATE -2020

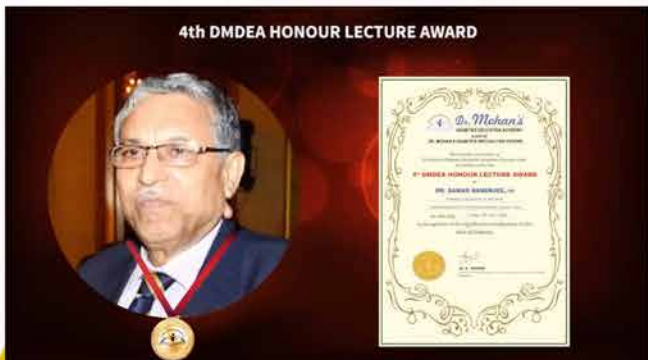
The 7th edition of Dr.Mohan's International Diabetes Update-2020 was held from 24th to 26th July 2020. This year for the first time, this update was organized virtually due to COVID 19 pandemic to benefit the health care professionals as there is newer advancements seen in the field of diabetes. The three day deliberations featured high-level speakers from India and rest of the world representing reputed institutes and medical centres, who shared their knowledge and expertise, adding an essential touch of local flavour to the academic proceedings. This Update enabled participants to keep abreast of the latest and exciting innovations in the field of diabetes management and research. For this edition, more than 20000 delegates had registered and we had over 75 National and International Faculty working in the field of diabetes contributed to the scientific programme.

The Inaugural function of the 7th Dr. Mohan's International Diabetes Update-2020 was held on Friday, 24th July at 8.45 am. On this occasion, the "Guests of Honour" at the

function were **Dr.Ashok Kumar Das**, Consultant, Department of Medicine & Endocrinology, Pondicherry Institute of Medical Sciences, Puducherry, **Dr.A.Muruganathan**, Governor, American College of Physicians (ACP), India Chapter, **Dr. Shashank Joshi**, President, Indian Academy of Diabetes, **Dr.S.R.Aravind**, President, Diabetes India, **Dr.Anil Bhoraskar**, Scientific Secretary-Diabetic Association of India and **Dr.Banshi Saboo**, President of Research Society for the Study of Diabetes in India (RSSDI).



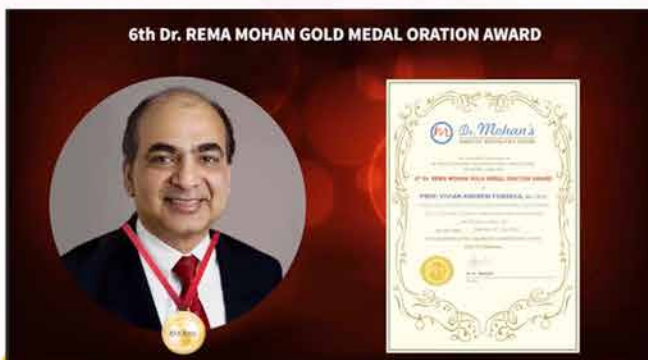
During the occasion four prestigious Gold Medal Oration awards were conferred. The recipients of the orations were **Dr.Samar Banerjee**, Professor, Department of Medicine and Specialist Diabetes Clinic at Vivekananda Institute of Medical Sciences, Kolkata, India, 4th DMDEA honour lecture award, **Dr. Alka Kanaya**, Professor, Department of Medicine, Epidemiology and Biostatistics, University of California San Francisco, San Francisco, USA., 5th DMIDU Gold medal Oration Award, **Dr.Vivian A.Fonesca**, Professor of Medicine and Pharmacology, Assistant Dean for Clinical Research, Tulane University Health Sciences Center, New Orleans, LA, USA, 6th Dr.Rema Mohan Gold Medal Oration and **Dr. Paresh Dandona**, Head, Division of Endocrinology, Distinguished Professor of Medicine and Pharmacology, The State University of New York at Buffalo, New York, USA, 14th MDRF lifetime Contribution Oration Award



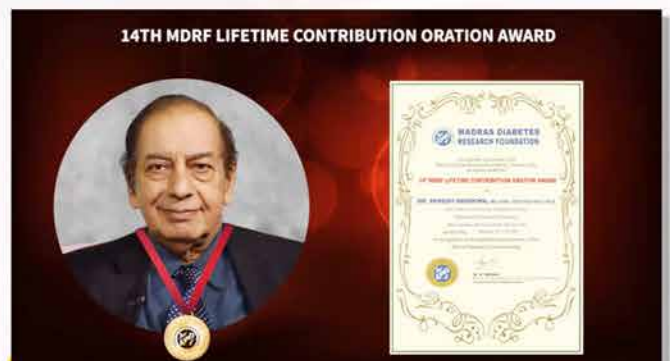
Dr.Samar Banerjee, being honoured with 4th DMDEA Honour Lecture Award



Dr. Alka Kanaya, being honoured with 5th DMIDU Gold Medal Oration Award



Dr.Vivian A.Fonesca, being honoured with 6th Dr.Rema Mohan Gold Medal Oration Award



Dr. Paresh Dandona, being honoured with 14th MDRF lifetime Contribution Oration Award



DIABETES AND MENTAL HEALTH

Mrs. Vidyulatha Ashok

Clinical Psychologist

Dr. Mohan's Diabetes Specialities Centre, Chennai

Diabetes is a chronic health condition proving to be a major health challenge on the national and international level. There is growing evidence that points to an association between chronic diseases and poor mental health. Mental health has been defined as "a state of well being", which enables a person to cope with the daily stresses of life, realize his potential, work productively and make a contribution to their community. Mental health problems operate at the cognitive, emotional and behavioral level, to make a person feel dysfunctional enough to interfere with daily life and productivity.



Since diabetes is a lifestyle related disorder, psychosocial and behavioral factors are critical for diabetes management, among which stress plays an important contributory role. Most mental health issues arise due to discrepancy between demands of the situation and resources of the individual. There is a wide spectrum of mental disorders ranging from episodic stress to chronic mental health conditions.

Individuals with diabetes are under stress from the time of diagnosis due to the constant demands for compliance with regimen, monitoring of sugars, and continuous restraint placed on them with regard to diet, apart from managing the family and work demands. Diabetes is associated with increased risk of depression, anxiety and stress, due to its debilitating nature and subsequent complications. It is estimated that 41% of the patients with diabetes have psychosocial problems out of which only 10% receive appropriate psychosocial care.

Diabetes Attitudes, Wishes and Needs (DAWN) study, which has undertaken its second study across 17 countries and 4 continents, revealed that 44.6 % of individuals had diabetes reported diabetes related distress, and 12.2% reported poor quality of life, out of which only 48.8% received education to manage diabetes more effectively. Individuals with diabetes should be regularly screened for psychological disorders. There are diabetes specific questionnaires to identify the problem areas and address them, such as PAID (Problem areas in diabetes),

DSMQ (Diabetes self-management questionnaire, HRQL (Health related quality of life), and ADDQoL (Perceived impact of diabetes on quality of life), which may also be used by the medical team to focus on coping strategies.

Psychological disorders are widespread among diabetes patients. Previous studies have mainly focused on depression and diabetes, especially major depressive disorder, whereas dysthymia, stress and distress, are far more common. However, the prevalence of other mental health illness is largely under reported. Psychological distress negatively affects the course of the disease by exacerbation of harmful health behaviors. Hence, stressors affect glycemic control indirectly through adverse health care practices such as smoking, alcohol, disordered eating, and lack of physical activity, as well as directly by activation of the neuroendocrine system. There is an important association between chronic high glucose levels and complications

Early detection and appropriate treatment is the key to managing mental health issues. However, physicians may not be able to recognize mental health issues due to time constraints and work overload. Education by mental health teams to facilitate referrals could help in solving the aforesaid problem. Instruments such as PHQ 9, SCL 90, HADS and DASS 21 are preferred due to their brevity, and maybe used by the clinical team for assessment of anxiety and depression. Apart from these, certain 'high risk groups' may be identified thus:-

- History of recurrent hyperglycemia/hypoglycemia
- Newly detected individuals
- Type 1 children and adolescents
- Those with brittle diabetes
- Stress reactive individuals
- History of poor compliance

Assessment to identify the stress level of the patient may be done thus:-

- Low stress – Psychosocial education/family support.
- Low/moderate stress – Monitor stress, emotional distress and risk factors. Provide interventions specific to symptoms and needs.
- Moderate/high stress (clinical) – Provide trauma specific interventions, and address impact on mental health.

Counseling and psychological care coordination may suffice in the first two categories; however, intervention by psychiatrists and clinical social workers is warranted in the last category.

Mental health disorders co occurring with diabetes include generalized anxiety disorder, panic disorder, post traumatic stress disorder, and adjustment disorder to name a few. Eating disorders among women, especially, those with type 1 diabetes are getting wide spread attention of late due to contraindications with the insulin regimen, and emergencies such as diabetic ketoacidosis and hypoglycemia. Co morbid psychiatric disorders such as schizophrenia and bipolar disorder are also common among diabetes patients.

Inadequate and timely intervention are lacking due to several reasons:-

- Limited access to health care
- Lack of education and awareness
- Lack of family and social support
- Financial constraints
- Lack of insight, denial and fear
- Dissatisfaction with the treatment
- Role of stigma in seeking help

Low rates of detection lead to higher health costs, poor quality of life, complications, and higher rates of absenteeism. 45% of mental disorders go undetected. Apart from these, symptoms such as delusions, delirium and hallucinations complicate physical issues and treatment.

Management of psychological disorders and diabetes should be a collaborative effort, which involves the following aspects:-

- Professional help.
- A combination of cognitive behavior therapy and medication has found to be effective in combating mental conditions.
- Social support from family, friends and support groups help in lessening feelings of isolation.
- Proper adherence to the diabetes regimen in the form of healthy diet, regular medication and physical exercise.
- A more patient centered approach by imparting information regarding illness and treatment, and involving them.
- Regular assessments by the medical team as well as mental health professionals have the twin benefits of alleviating feelings of poor psychological well being as well as controlling sugars.

The WHO states that “there is no health without mental health”. Good practice protocols for identification of mental disorders, development of communication and interviewing skills by the staff, will help reduce the psychological and physiological burden of diabetes. Hence, care should be taken to integrate physical health care with mental health care for better outcomes for people with diabetes

HELP AT HAND ALWAYS

The virulent attack by the deadly corona virus all over the globe has been likened to World War III. It seems like an invisible enemy that everyone is trying to fight both physically and mentally. What are the 'weapons' we can use to counter this virus? How does one emerge from this unscathed, as it does not seem to discriminate between the young and the old, the rich and the poor, the healthy and the unhealthy, so to speak? Of course, those with better immunity seem to be able to ward it off or even fight it better.



The surprising factor in this situation is that it seems to have taken its toll on most people mentally even if they have not actually been afflicted with it. Anxiety levels are on the increase due to insecurities, such as financial, employment, future, and family worries, apart from health. People, who can afford to, are hoarding like never before, be it essentials, medicines or non-essentials., while the financially weak sections are clamouring for one meal a day. Those who are depressed are probably becoming worse due to the negativity shrouding the entire humanity.

Individuals with chronic illnesses such as diabetes, cardiovascular disease, chronic kidney disease, chronic pulmonary obstructive disease and most cancers are affected that much more due to their compromised health status. Following a healthy lifestyle and physical activity which is highly recommended for these conditions may not be possible in the present scenario. People are forced to stay indoors and even following a healthy diet may be challenging due to lack of accessibility.

Lack of mental diversions, such as going for work, socializing, going to the gym, pursuing a hobby, have all come to a standstill due to the current lockdown. In fact, Dr.Elke Van Hoof has termed the lockdown as the 'world's biggest psychological experiment'. The uncertainty regarding the situation is adding to everyone's stress levels. What one needs to worry about is the extent to which the corona virus has affected and will continue to affect people's mental health.

The Lancet on has published many studies regarding the psychological impact of the quarantine, and what is happening in households, which can be viewed as a universal phenomenon. They recommend a multidisciplinary approach where the clinical, behavioural, psychological, social and neurological sciences come together to provide support to those affected by COVID 19.

The media reports violence is on the rise, especially against women. Work load for women is increasing when everyone is at home, and not going for work as usual. At one end of the spectrum, alcoholics are getting frustrated and experiencing withdrawal symptoms, compounding the issue further, due to which physical and mental abuse are on the increase. Those who are used to working are worried about getting back to work, and about their financial stability. However, there may be more absenteeism, as people are scared to go for work fearing the worst.

In such a scenario, one wonders how people are coping with their physical ailments as well as emotional distress. Those with diabetes are especially vulnerable, physically, mentally and financially. Keeping blood sugars under check is a huge challenge even at the best of times. Poor compliance with the regimen due at a time like this is understandable but does not help the situation, as it may lead to more emergencies, increased hospitalizations and health costs. Those with co-morbidities and complications are probably in the high risk category.

To summarize, those at high risk for mental health issues include:

1. Children and individuals below 30 years of age.
2. The elderly population.
3. Health care workers and front line officials.
4. Those suffering from chronic illnesses or have disabilities.
5. Chronic alcoholics and smokers.
6. Those who have pre-existing mental health issues such as mood disorders, anxiety and depression.

What about psychological help for those who cannot leave their houses to consult a mental health specialist? If you are experiencing any of the following symptoms: extreme irritability, insomnia, irrational fears or anxiety, low mood, mental exhaustion or feeling drained out, help is at hand. Those who are elderly, disabled, depressed or even parents who maybe struggling with children who have type 1 diabetes, please reach out to us. We are here to help you and alleviate your suffering. Strict confidentiality will be maintained, so be assured. We are only a phone call away.

Meanwhile, some self-help interventions include:

1. Deep-breathing or pranayama.
2. Keeping physically active at home.
3. Taking constant breaks from social media and news updates which are probably adding to one's stress.
4. Sleeping well.
5. Eating a nutritional, well-balanced diet.
6. Following a structured lifestyle.
7. Positive thinking, and the reality that this too shall pass, and the sun will shine again as usual.

Hearty Congratulations to Our Chairman, Dr.V.Mohan
For being conferred with the Prof.K.P.Bhargava Memorial Award for the year 2020,
from the prestigious Indian National Science Academy.



Importance of Nutrition in Field of Diabetes

Dr.R.Guha Pradeepa

Senior Scientist and Head, Research Operations
Madras Diabetes Research Foundation



The nutritional approach to diabetes forms an important pillar and dietary treatment is the baseline of therapy. The importance of nutrition in achieving desired blood glucose goals is well known. Adherence to nutrition and meal planning principles is one of the most challenging aspects of diabetes care. For this to be effective, diabetic patients should not only have adequate information and education but also translate them into behavior changes. Achieving nutritional goals and self management requires an expert team consisting of diabetologists, nutritionists, dietitians, nurses and educators.

Nutritional also plays an important role in achieving optimal serum lipid levels (cholesterol and triglycerides). The nutritional approach has to be very much individualized and ideas may have to be tailored for different types of diabetes. The diabetic with complications certainly requires special dietetic supplemental advice especially in patients with diabetic nephropathy with chronic renal failure. Thus diabetes and nutrition have been formed as a superspeciality of its own. Therefore nutritionists and dietitians play a major role as paramedical staff in the fields of medicine.



A diabetic nutrition plan in a balanced diet helps to attain and maintain normal weight, control and maintains blood sugar, and also give a feeling of wellbeing and satisfaction. The teaching of good dietary principles is the key to successful diabetic treatment. Elimination of simply rapidly absorbed sugars is the minimum initial requirement for all patients with diabetes.

Diabetes often associated with over nutrition may be prevented or ameliorated by avoiding excess weight. The recommended dietary guidelines used in conjunction with a good nutritious diet form the basis for dietary modification for diabetic individuals.

Diet in Diabetes

Diabetic diet need not be a complete deviation from the normal diet. The nutritional requirements of a diabetic are the same as in the non diabetic. However, the nutrient intake have to be tailor-made to the individual based on the age, sex, weight, height, physical activity, physiological needs and current dietary history of patient. Based on these facts, the total daily requirements of calories are calculated

Calories:

The calculated calorie requirement should allow the patient to lose or gain weight as required and maintain body weight 10% lower than the ideal body weight.

Goals of Medical Nutrition Therapy for Diabetic Individuals include:

1. Maintain near normal blood glucose levels
2. Achieve optimum serum lipid levels
3. Promote adequate calories to calories to promote reasonable weight for adults, allow normal growth and development for children and adolescents, meet increased needs of pregnancy, lactation or recovery from catabolic illness.
4. Prevent, delay or treat nutrition related risk factors or complications.
5. Improve overall health through optimal nutrition.

Constant motivation through nutrition counseling and education imparted in an appropriate way goes a long way in achieving these nutritional goals.

Goal of diet therapy is to attain an ideal body weight by consuming desired amount of calories.

Distribution of Calorie Nutrients

The total daily intake of calories from carbohydrates, proteins and fats in the diet for a diabetic should be distributed as depicted.

Carbohydrates

Generally in Indian diets carbohydrates provide 60-70% of the total calories. Diabetic individuals

need not restrict but can alter the type of carbohydrate in the diet. Cereals and pulses contain complex carbohydrates which are broken into simple sugars before they are absorbed from the gut, while sugar, honey, jiggery and jam contain simple sugars which are directly absorbed. These are refined carbohydrates and are not recommended for diabetes because they cause a rapid rise in blood sugar. 60-65% of calories from carbohydrates is recommended for a diabetic. The total amount of carbohydrate should be divided into 4-5 equal parts since the blood sugar level depends mainly on the intake of carbohydrates. One third (33%) of the diet is served during lunch and another one third (33%) during dinner. Of the remaining one third, 25% is served during breakfast and the rest 9% during evening tea or at bed time. Type 1 diabetic patients who are on slow acting insulin need additional carbohydrates before bed time to prevent early morning hypoglycaemia.



Proteins

Proteins are broken down into amino acids before absorption into the blood, Children, pregnant and lactating women require more protein. The recommended dietary allowance is 0.8 gm/kg body weight, and in diabetes with associated renal problems, protein is restricted to 0.6 gm/kg body weight. 15-20% of total calories is derived from protein and for children the recommended dietary allowance is 1-1.5 gm/kg body weight.



Fats

Fats like ghee, butter, vanaspathi and coconut oil are rich in saturated fats that are likely to increase the serum cholesterol, and therefore should be taken in small quantities. The vegetable fats such as sunflower oil contain polyunsaturated fatty acids, and monounsaturated fatty acids present in groundnut oil, palm oil, olive oil are not harmful to the body. These are visible fat. Far from cereals, pulses, milk and milk products, eggs, flesh foods and nuts are invisible fats. The quantity as well as the type of fat influences the serum lipids and could increase the risk for heart disease. Diabetic individuals have to be careful since serum lipids are generally raised. Non-vegetarian diabetics can consume fish or chicken without the skin instead of egg, mutton; liver and brain which are high in cholesterol. Fatty acids present in fish are particularly helpful. Linoleic (n6) and linolenic (n3) essential fatty acids (PUFA) from eicosanoids. It is recommended that the ratio of n6/n3 should be around 5 to 10 because the eicosanoids form from n3 fatty acids have more antithrombotic and vasodilator properties than n6 fatty acid. Fish contains n3 fatty acids which have beneficial effect on platelet aggregation and triglycerides. Other rich sources

of 03 fatty acid (alpha linolenic acid) and wheat, bajra, black gram, cow pea (lobia), rajmah, soya, green leafy vegetables, fenugreek, mustard, mustard oil and soya bean oil. It is recommended that 15-25% of the total calories can be derived from fat, and persons with high serum lipids or obesity should restrict their fat consumption particularly of saturated fats.

Vitamins and Minerals

Vitamins are protective factors which are found in green leafy vegetables, milk and dairy product, fresh fruits, cereals and meat. Daily intake of these foods can provide enough vitamin and minerals. Diabetic individuals during infection

and other complications may require higher amount of vitamins and minerals in the form of supplements.

Food Fads and Fallacies

All cereals (rice, wheat, ragi, bajra) contain 70% starch, but the quantity and the quality is important. The total quantity should be restricted and preferably half of the grain should be of whole grain. Total fasting is not good for patients who are on insulin or oral hypoglycaemia gents, because it may result in hypoglycaemia. The diabetic should not skip a meal assuming that it can be made up by consuming extra food at the next meal.

INGREDIENTS:

Bajra (Pearl millet) -100 g
Onion -50 g
Tomato -100 g
Green Peas - 50 g
Green Chilly-2 Nos
Turmeric powder -½ tsp
Mustard - 1 tsp
Ginger - A piece
Coriander & Curry leaves - few
Salt To taste

METHOD

1. Dry roast broken bajra in a tawa.
2. Add hot water and keep aside.
3. Cut onion and tomato into small pieces.
4. Heat oil in a pan and add mustard seeds.
5. When mustard seeds crackle, add curry leaves, green chilly, chopped onion, tomato, chopped ginger, green peas turmeric powder.
6. Saute for a minute and add water.
7. Cook and add salt.
8. Add bajra and cook stirring in between.
9. Remove from fire.
10. Garnish with coriander leaves and serve hot with chutney.

BAJRA KITCHIDI



Nutritive Value

Calories - 197 Kcal	Protein - 5.6 g
No.of.serving - 3	Fat- 6.7 g
Portion size - 1 bowl.	Fibre - 1.4 g

FREQUENTLY ASKED QUESTIONS

1. What are the early signs and symptoms of diabetes?

One of the most important things to remember is that diabetes does not always produce symptoms until the disorder is more advanced. Common symptoms are: excessive urination, increased thirst and hunger, weight loss, fatigue, irritability, blurry vision, tingling or numbness in the hands or feet, frequent skin, bladder or gum infections, wounds that don't heal and itching in the genital areas. The symptoms for type 1 diabetes are more sudden and severe. Children with diabetes complain of tiredness and weakness and may sometimes exhibit irritable behaviour.

2. Why are regular eye tests so important?

Diabetes can affect the eyes and vision in a number of ways. It may lead to frequent fluctuations in vision, cataract in young age, decreased vision due to involvement of optic nerve, temporary paralysis of the muscles controlling the movement of eyes and thus double vision. The most significant complication of diabetes in eye is diabetic retinopathy and its complications. Most of the complications of diabetic retinopathy that cause vision loss are preventable, provided they are detected early and treated. As you may not realize any problem in your vision initially, it is important that you have periodic checkups with an ophthalmologist. This helps in preventing the vision threatening complications of diabetic retinopathy.

3. What is the difference between "self-monitoring of blood glucose" and continuous glucose monitoring"?

Self-monitoring of blood glucose (SMBG), refers to home blood glucose testing in individuals with diabetes using a glucose meter. SMBG provides only snap-shots of blood glucose concentration, and is limited by the number of finger-sticks a patient is willing to perform per day. While, continuous glucose monitoring (CGM) automatically tracks blood glucose levels, throughout the day and night. CGM measures glucose in the tissue fluid throughout the day and night, about every five minutes, and sends the collected data to a receiver, phone, or insulin pump. Both SMBG and CGM can provide information on how the glucose levels are trending, which can help with the appropriate scheduling of food, activity, and medication.

4. Can menstrual cycle and/or going through menopause affect glucose levels?

Yes, menstrual cycle or going through menopause can affect glucose levels. Different stages of the menstrual cycle may have different effects on the blood glucose levels and the effect can also vary from person to person and from time to time. The hormones estrogen and progesterone fluctuate during menstrual cycle/ menopause and can affect how the body responds to insulin. Whenever there is hormone imbalance, weight can change as well. So it is especially important to keep track of weight changes during pre menopause and menopause as too much weight gain puts women at a higher risk of developing type 2 diabetes. If diabetes is uncontrolled, there is a higher risk for developing diabetes complications. Hence women with diabetes should do regular monitoring of blood glucose while going through menopause.



HINDUJA FOUNDATION

MAY
2020



T1D Program newsletter: A look at the year gone by

Supporting Type 1 Diabetes patients through treatment, therapy and beyond



From a Club One KEM event in support of those living with T1D

T1D is a Champion Cause for the Hinduja Foundation. Through our T1D Program, we seek to improve the lives of underprivileged children suffering from the disease who are unable to afford treatment, as well as create awareness and add on scientific knowledge about the disease. The Hinduja Foundation T1D Program will focus on providing treatment support via partner hospitals. This will include doctor consultations, lab investigations, insulin, syringes and needles, and glucometers and strips. At the same time, we will invest in research to improve our collective understanding of the disease progression of Type 1 Diabetes. Finally, we are committed to improving education and awareness through upskilling and training healthcare professionals, as well as aiding peer-to-peer learning and conducting outreach to reduce stigma around the disease in the community.

Type 1 Diabetes (T1D) is an autoimmune disease resulting in progressive destruction of beta-cells of the pancreas and results in total insulin deficiency. Treatment involves taking insulin injections several times a day for the remainder of the person's life.

It is estimated that more than 542,000 children worldwide have Type 1 Diabetes.

Even with treatment, the life expectancy of people with Type 1 Diabetes is estimated to be, on average, 12 years lower than the general population. Moreover, India-specific data on the natural history of T1D is extremely sparse.

Three factors make Hinduja Foundation's T1D Program unique:

It covers the largest group of T1D patients under a single philanthropic program in India

It raises awareness on a relatively lesser-known and stigmatised condition

It will create a one-of-a-kind registry of T1D patients and support India-focused research





The Power of Partnership

This ambitious journey to build a unique multi-centric registry is being fulfilled through the strength of our partnerships with some of the leading diabetologists of the country. We are profiling the principal investigators in each of the centres below:



Padma Shri Dr V Mohan, Chennai:

Madras Diabetes Research Foundation is widely recognized as an eminent centre for diabetes treatment and research in South Asia, with a long history of successful cohort tracking, international collaborations and peer-reviewed research in diabetes. It is headed by Padma Shri Dr V Mohan, a world-renowned diabetologist.



Dr Chittaranjan Yajnik, Pune:

The Diabetes Centre at the KEM Hospital in Pune is led by Director, Dr Chittaranjan Yajnik. Dr Yajnik is a world-renowned clinician and researcher and well-known in the field of diabetes, especially for his research on the "Thin-Fat Indian" and the neonatal origins of adult-onset non-communicable diseases.



Quality and ethics in patient care



P. D. HINDUJA HOSPITAL
& MEDICAL RESEARCH CENTRE

Dr P Chauhan, Mumbai:

PD Hinduja Hospital is an ultramodern tertiary care hospital in Mumbai offering world-class healthcare treatments and services. The hospital has a state-of-the-art centre for all endocrine problems, and is led by three consultants: Dr PH Chauhan [Head of Section and principal investigator], Dr NF Shah and Dr Manoj Chaddha. Through this project, the centre is further strengthening the capacity towards T1D care in Mumbai.

All the centres are committed to this partnership, where there will be an exchange of best practices and ideas, towards developing the capacity at each of the centres. Data will be collected in a common proforma / data template, and samples will be bio-banked to support ongoing research.

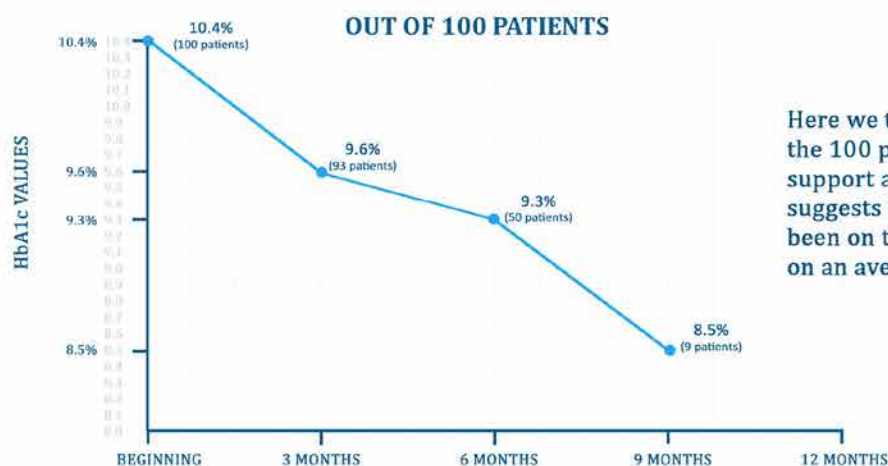




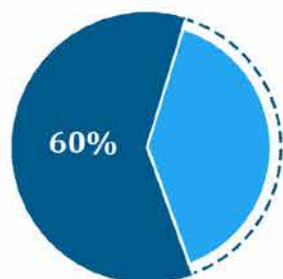
Measuring Impact: 400 patients and counting

Successes to be proud of — and so much more to do

We have plotted below some of the success we have been able to garner. Reduction in HbA1c, which indicates average blood glucose levels over the last three months, is an important indicator. It is well established that 1% reduction in HbA1c significantly reduces mortality and complications.



Here we track the average HbA1c of the 100 patients on treatment support at KEM, Pune. The graph suggests that patients that have been on the program for longer, have on an average lower HbA1c levels.



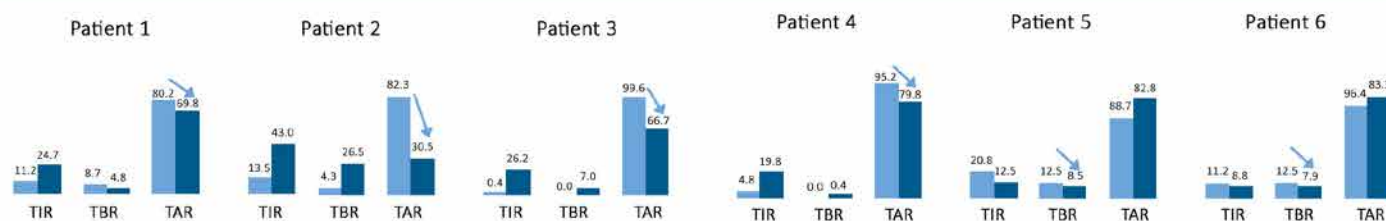
At MDRF, all the patients who had HbA1c more than 10% (n=38); 2/3rd have shown an average reduction of 2.6%

OUT OF 38 PATIENTS

A significant intervention for these patients is providing them with an ambulatory glucose profile monitor to further fine-tune the treatment. Our intervention has helped patients double the time that they are in their target HbA1c range (2X time in range).

We plot below the change in the Ambulatory Glucose Profile [AGP] data for six patients at MDRF, clearly demonstrating the significant impact of our treatment support.

Ambulatory Glucose Profile: Details of 6 patients with follow-up data



TIR: Time in Range; TBR: Time Below Range; TAR Time Above Range

Pre Post





Tech support

On 14th December 2019, Diabetes Unit, KEM Hospital Research Center, Pune launched the Madhuraksha Application for T1D patients and caregivers. This Android app provides precise information on basic survival skills for a person with T1D, ranging from insulin injection technique to tips while traveling. This app has inbuilt calculators for insulin dose adjustment and carbohydrate counting. It also contains FAQs about T1D, a number of articles on various aspects of T1D written by KEM's expert team and a list of authentic reference websites and books. Madhuraksha is all the T1D support you need in one place.



Dr. Mohan (L) giving insulin pump to young Amar Raj, accompanied by his parents

Pumped up

In some patients where the blood glucose continues to remain brittle, we are now providing insulin pumps to support their diabetes management. As a pilot project, we distributed insulin pumps to five families through our partner Dr Mohan's clinic in Chennai.

It's a known fact that in some patients, despite repeated calibrations of insulin dosage, blood glucose control remains poor, with extreme swings. They frequently go into low- and high-sugar comas. Such patients do well with an insulin pump.

Testimonials

The impact of our program is best understood through the experiences of our patients:

“ I am an 18-year-old, Type 1 Diabetes patient from a poor family background. A year ago, I had to leave my studies and work to be able to afford my medications and treatments. Today, I am extremely happy and grateful as Dr Mohan's hospital has provided me with insulin, AP and glucometer all free of cost, funded by the Hinduja Foundation. ”
- Stephen

“ When my son was one-and-a-half years old, he was diagnosed with Type 1 Diabetes. When I got the news the ground under my feet sank, as this is an expensive disease and we are quite poor. Then I came to know about the treatment at KEM Hospital. Today, my son gets treatment free of cost and we are regularly updated about his health status. I am grateful to the Hinduja Foundation for this noble and timely help. ”
- Ganesh Ghule

Let's turn our focus to some great highlights of the year gone by...





Highlights of the year



Parenting diabetes

Renowned child psychiatrist and psychotherapist Dr Bhooshan Shukla spoke about parenting strategies in the management of Type 1 Diabetes at KEM Hospital in Pune on January 25, 2020. Parenting is a complex job, which becomes even more challenging when the child has T1D. Parents have to manage dietary complexities, daily injections, sugar monitoring, hypoglycemic events and more. On top of this, children can be stubborn, refuse to take insulin or insist on eating junk food.

In this case, parents have to juggle between being loving guardians and providers of medical help. This can be stressful. To address these common challenges, KEM's Diabetes Unit organised this interactive session under the T1D patient engagement program funded by Hinduja Foundation. Dr Shukla interacted with parents and patients of T1D on day-to-day concerns and how to overcome them. He stressed on the role of the 'family team' in managing diabetes successfully by giving various everyday examples. At the end of the session, there was a lively exchange of questions and



Happy trails

On November 14, World Diabetes Day, MDRF in Chennai hosted a motivational talk by Brais Dacal, a T1D patient, international cyclist and brand ambassador for Novo Nordisk, a pharmaceutical company specialising in diabetes care.

Running free



KEM Club One, Pune on their first anniversary

KEM Club One is a support group for T1D patients and caregivers. As part of its activities, KEM Hospital Pune organises a monthly run to fight stigma and increase confidence among patients.





High spirits

On a cloudy Saturday evening last June, over 55 Type 1 Diabetics and their families and friends gathered to scale a 50-foot artificial wall at the Raje Shivaji Climbing Wall in Shivaji Nagar, Pune. They were led by national-level climbers in this event organized by KEM Club One, Pune. It was the first climbing event of its kind in Pune, especially for people with diabetes. Earlier in the year, Club One members went on a very fun trek to Sinhgad Fort. The ages of the enthusiastic climbers ranged from 7 to 45 years.



Triumph over T1D

MDRF in Chennai hosted a motivational lecture by R L Ravichandran, former managing director of Royal Enfield and a long-term T1D patient. Mr Ravichandra has lived with Type 1 Diabetes for over 40 years, and he spoke to the young people in the audience about how he manages his condition. He encouraged the children to participate in sports, school activities and day trips. He also emphasised how training themselves to follow a daily routine could help them adapt well to changing environmental conditions. He shared tips on how he keeps his schedule of diet, medications and physical activity going, and reassured the children that T1D never stood in the way of his career goals. Finally, Mr Ravichandran emphasised that confidence plays a major role in triumphing over the disease.



Published by:

Dr. V. Mohan,
M.D., F.R.C.P (UK), F.R.C.P (Glasg), Ph.D.,
D.Sc., FNASc.,
&
Dr. R. M. Anjana,
M.B.B.S., D.O., Ph.D., FABMS., FMSF

on behalf of DIRECT,
a Charitable Trust for diabetes.

Promoted by:



Correspondence:

Dr. R. Pradeepa, M.Sc., Ph.d.
Editor

Mrs. K.S. Chella, M.Phil, MBA.,
Co- Editor

Diabetes Monitor,

6B, Conran Smith Road,
Gopalapuram,
Chennai - 600 086.

Ph : (044) 28359048 - 53

Fax : (044) 28350935

Email : drmohans@diabetes.ind.in

Website : drmohans.com

Designed by:

Department of Information Technology
Dr. Mohan's DSC, Chennai

