



## Reaching out dashboard

No. of children 4063

No. of hcps trained 6975

No. of children camps 617

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# Facing diabetes with courage

## Story of maitry pancholi

### Goal of life

"Live my life to fullest every day"



Maitry is a diabetes educator and CDiC project coordinator. She works to spread awareness about type 1 diabetes amongst caregivers, children and schools. Maitry was 12 years old when both she and her brother fell sick. While her brother got better, Maitry's condition deteriorated. Medicines had no effect on her. That is when the doctor advised Maitry's mother to get the child's blood glucose tested. Maitry's sugar level was over 400 mg/dL and she was told that she was having an episode of diabetic ketoacidosis at that moment.

It was a very difficult time for her family and for her. Her father had just passed away and the family was still coping with this grief and loss. The news that she had type 1 diabetes shattered the family. The first few months were very tough and confusing. Maitry's mother, Mrs Jigisha Pancholi, was shocked, but she was determined to bring positivity back into her child's life. She took charge of the situation, and met Dr. Bansi Saboo, who enrolled her in the CDiC program.

Since then, she has regularly attended educational programmes, camps etc about type 1 diabetes.

In fact, it was because of this support from her mother and Dr. Saboo that Maitry, who loves traveling, was able to take on the T1D Challenge to White Mountains in Crete. Mrs Jigisha Pancholi's "go-getter attitude" played a big part in pushing her to complete the trek successfully. It's been a journey of hope for Maitry and her mother.

## Insights

### Story of Maitry Pancholi

Maitry Pancholi is a confident and lively 20-year-old. She has had diabetes for the past eight years. She works as a diabetes educator at the Ahmedabad CDiC centre and is an avid trekker.

### Life insights

"Life can be exciting despite and beyond diabetes. All one needs to do is to take insulin on time and have a proper diet. If we lead a disciplined lifestyle, we also can fulfil our dreams and live life to the fullest." - **Maitry**

"I am proud to be Maitry's mother. Type 1 kids require support and not sympathy. The condition may look like a problem, but in reality, it is yet another opportunity to demonstrate strength of body and mind." - Mrs Jigisha Pancholi, Mother



## Editorial desk



**Dear Colleagues,**

Wishing you and your family a very happy new year 2018!

In my entire clinical practice of nearly 50 years, working for the CDiC program has given me the most satisfaction. It is because of this program that we all have been seeing children with type 1 diabetes from the poorest economic backgrounds growing into adults and confident young professionals. Apart from comprehensive free treatment including insulin, monitoring and diagnostic tests, the addition of educational scholarship for deserving children to make them more confident and self-reliant has further strengthened the initiative into a unique programme.

The programme has been designed to support children from poorer families till adulthood. As the programme enters its third phase, we now have our first group of young adults who have completed their journey with CDiC and we prepare to welcome new children to our fold. Let us utilize this opportunity to register all eligible children from poor families who will really benefit from this program.

It is essential that we put our minds together to find ways to keep improving our programme. The first is creating comprehensive publications on the lessons from our program. In this connection I once again request all of you to strengthen the registry entries on a regular basis. Let's work to come up with path-breaking scientific literature which will help enhance our understanding and the proper management of children with type1 diabetes.

Another area can be to seek support from Government bodies for the long term sustainability of our programme and the lasting benefits therefrom for all the children with type 1 diabetes.

Thanking each one of you for your dedication and commitment,

**With regards,  
Prof. P. Raghupathy  
Chairperson, CDiC**



**Dear Colleagues,**

I would like to appreciate each one of you for your wholehearted support and commitment towards the proper care of all the children registered in the CDiC program. I would also like to congratulate you for making the CDiC textbook on Pediatric Diabetes a reality, your presence at RSSDI and for all the wonderful programmes conducted in relation to World Diabetes Day. We now need to work upon two key things: the long-term sustainability of this project by rationalizing care and coordinating the release of more scientific papers on the management of children with type1 diabetes in the long run.

Looking forward to your continued wholehearted commitment in the New Year and many more years to come.

Wishing you and your families a very happy and prosperous New year 2018!

**With Best Wishes,  
Prof. Ashok Kumar Das**



**Dear Friends,**

Wishing you, your families, your support staff and all the children under your care season's greetings and a very Happy New Year 2018.

Thank you very much for your dedication and support to the Changing Diabetes® in Children (CDiC) program. Your passion and backing has helped shape this large initiative for more than 6 years and has been vital to making a positive impact to the lives of thousands of children in India. In fact, I am confident and proud that the CDiC programme is the best initiative for the care of children with type1 diabetes in India.

As we embark on the next phase of the program from 2018, we are sure you will extend your wholehearted support for this initiative as you have for so many years. We are sure with your support and guidance we will be able to find lasting sustainable solutions for the care of the children with type1 diabetes coming from poor families.

Thank you very much for your leadership and guidance.

**Melvin D'souza  
Managing Trustee NNEF  
CVP and MD, Novo Nordisk India Pvt Ltd**



## 6 years of care and commitment

CDiC vision - to initiate and strive for comprehensive diabetes care for the children with T1DM below 18 years from economically underprivileged families.



### Awareness

- Special media and digital initiatives reaching to > 10 million people
- Focused type1 diabetes initiatives during World Health Day, Nurses Day, Insulin Day, Teachers Day and WDD
- Periodic Newsletters and magazines
- Advertorial campaign in leading weekly

### Capacity building

- Accredited CMEs on management of children with type1 diabetes, reaching > 7000 Drs and other HCPs across India
- First textbook on "Pediatric Diabetes" written by Indian authors
- ISPADs textbook on Diabetes in Children and Adolescents translated to Hindi
- Ready reference Handbook for Diabetes Educators and Nurses



### Treatment

- Infrastructure for care through 21 centers for 4063 registered and other children with type1 diabetes
- Three National level and five State level advocacy programs for improving specific care
- Introduction of important care elements of treatment for students with type1 diabetes (CBSE and JEE)
- Deliberations at RSSDI 2017 national diabetes conference, for better treatment and care

## What's happening in CDiC currently?

**CDiC came to India in September 2011. Over the last six years, CDiC has offered focused support for more than 4000 children with type 1 diabetes from economically poor families. It is great news for all of us that the program has been extended to 2020. As the programme enters its third phase, we now have our first group of young adults who have attained 18 years of age. We wish all of them good luck and welcome new children to our fold.**

Comprehensive treatment, awareness creation along with capacity building are the key components of the CDiC initiative. The program undertook the following activities focused on children, care givers, HCPs and doctors over the last four months.

- Teachers are a key target audience among the non-medical groups that interact consistently with children with Type 1 diabetes. Hence on the occasion of Teachers' Day, a special email campaign was run to create awareness for teachers.

More than 3700 e-mailers were sent including 1200 to teachers.

- Capacity building is a key facet of the programme. Two workshops focused on type 1 diabetes and the need for holistic care were organized at RSSDI 2017, Bhuvaneshwar and Diabetocon 2017 at Vijayawada. Apart from this, "CDiC Type 1 DM Updates" were conducted at Rajarajeshwari Medical College and Samatvum diabetes center reaching to 391 doctors and 290 educators.
- Education which is fun makes a lasting impact. An animated version of the traditional game "Snakes and Ladders" has been developed to help users learn about managing diabetes in a manner that is fun and interactive.
- More than 75 camps and other activities were conducted for World Diabetes Day to reach more than 20,000 people including > 2500 CDiC children.





## CDiC at the national diabetes meet - RSSDI 2017, Bhubaneswar

The 45<sup>th</sup> annual meeting of Research Society for the Study of Diabetes in India (RSSDI) took place during 3-5 November at Bhubaneswar this year. CDiC organized two workshops which focused on type 1 diabetes and the need for education and holistic care.



The first workshop was titled "CDiC Novo Nordisk Workshop on Diabetes Patient - Family and Public Education". It focused on diabetes education and empowerment and included information on tele counselling, digital health education and the role of public health and awareness. The second workshop titled "Care and conquest of type 1 diabetes: Insulin, technology and beyond" dealt with the human aspect of living with type 1 diabetes.

Dr. Alok Kanungo presented various learnings from the CDiC programme at the first workshop. Leading doctors such as Dr. HB Chandalia, Dr. S Srikanta and Dr. Anju Virmani and experienced Diabetes Educators discussed the special care needed for children with type 1 diabetes.



## The joy of giving week – celebrated for children by children

The Joy of Giving week-Daan Utsav - is celebrated in India every year from 2-8 October. During this week, individuals/ organisations across India donate material for the underprivileged. The CDiC team put 2 key themes to work for this event, viz.,



**1. Education essential to win in life and win over diabetes .**

**2. Give up inactivity for a healthier future.**

Posters motivating employees to be a part of this noble cause were put up in Head office, GSC and Zonal offices along with all CDiC centers.

Novo Nordisk employees responded by donating notebooks, pencils, pens along with few school bags and geometry boxes. The donated items were sent to support 250 members of the Novo Aid programme and CDiC-registered children at seven centres. In addition, the CDiC team also conducted three major activities-aerobics dance classes and a walkathon-at the Bangalore Diabetes Hospital CDiC centre, MV CDiC centre, Chennai and SPAD CDiC centre, Kanpur.



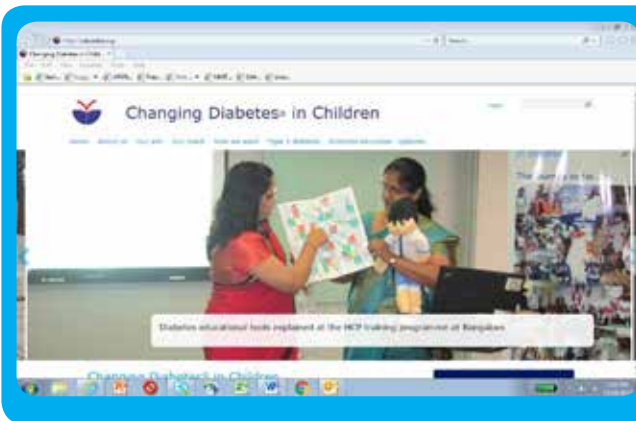
Bangalore



Chennai



## CDiC website adds excitement to learning - adds a unique gaming app

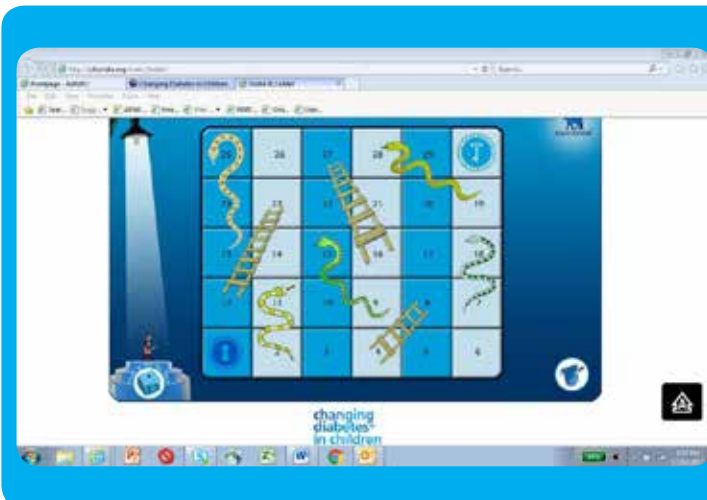


<http://cdicindia.org/> is unique website as it is the one of the very few website in India totally dedicated to children with type 1 diabetes. Along with getting information on type 1 diabetes, living with diabetes and managing diabetes, one can get their BMI and interpretation of HbA1c. Health care professionals, children with diabetes and their families can ask their questions at Ask the expert and Ask Mishti. Along with this, website provide glimpses of what is being done through CDiC program . One can get through this information in Our aim , Our reach and How we work.



In Diabetes education section , there is special sections for doctors , parents and educators and children where books, useful education material can be downloaded. Audience can find easy tips on diet, exercise, insulin and monitoring in Managing Diabetes section and tips on management of diabetes while in school, during traveling and while sick in Living with diabetes section.

Website can also be reached at <http://nnef.in/changing-diabetes-in-children> or at <http://cdicindia.org/>



CDiC has introduced a unique and interactive way to help children with diabetes and their caretakers better understand how to manage diabetes. Based on the traditional game of "snakes and ladders", the app invites players to help Mishti – a character used in our patient education materials – reach the top of the board. Players have to click on the "roll a dice" icon, and answer a question related to diabetes. Correct answers allow Mishti to move forward and climb up the ladder, while wrong answers make her slip down a few squares. It can be played multiple times as it has many set of questions. So, as the child plays the game many times, child learns more about diabetes.

The game requires an active internet connection and is available online at [http://cdicindia.org/snake\\_ladder/](http://cdicindia.org/snake_ladder/).







Sarda Center, Aurangabad

## CDiC WDD 2017 - empowering the girl child

The theme for World Diabetes Day 2017 is “women and diabetes”. It is a known fact that girls with diabetes do face stigma and discrimination. This year most of our activities were focused around the the girl child and on the role of women (mothers) in supporting children with diabetes.



DERF, Delhi



Delhi



Girls with diabetes do suffer from a lack of access to resources.

Let's provide access to essential education for all.

EMPOWER GIRLS PROTECT OUR FUTURE



Control diabetes early, save lives. Talk to your doctor today.

changing diabetes® in children

changing diabetes®







## CDiC WDD 2017 - empowering the girl child



Totall, Indore

### 75 activities involving around 2500 children with type 1 diabetes across India

75 children camps and other activities have been conducted as part of the CDiC-World Diabetes Day programs across the country, reaching out to more than 20,000 people including > 2500 CDiC children across centres. The key objective of this year's campaign was focus on the "Girl Child" and it revolved around:

- Creating awareness about diabetes in children in general public.
- Emphasizing on education to empower children especially girls to live successful lives.

This year along with CDiC centres and satellite centres, we have many other doctors who conducted camps for children with type 1 diabetes. This will help to create more awareness and spread advocacy really for long term sustainable support for children with type 1 diabetes.



IGICH, Bangalore



KIMS Hospital, Mumbai



Diacare, Ahmedabad



Mothers care Hospital, Vellore



Diacare, Ahmedabad





## CDiC WDD 2017 - empowering the girl child



DRS, Hyderabad

### Diabetes education classes, fun activities and painting competition marked the day

To create awareness about Diabetes and its complications, most of the centres and other participating doctors conducted diabetes education sessions on diet, exercise and living with diabetes. Along with that painting competitions and other cultural activities were undertaken. The main aim was that every child with type 1 diabetes is more motivated to accept and control diabetes and have a better world to live in.



Bhopal



Wadia hospital, Mumbai



BDH, Bangalore



Trivandrum



PMCH, Patna



SPAD, Kanpur



Samatvum, Bangalore





## CDiC WDD 2017 - special education scholarship for girls

Educational scholarships for 34 girls with type 1 diabetes registered in CDiC programme across India were given to support their academic or other skill development expenses. The idea is to motivate them to become self-reliant and independent.



Bangalore



Ahmedabad

## Type 1 diabetes is different - awareness program for nurses

Nurses are an important part of health care team. Nurses are the one who develop care plan, working collaboratively with physicians and the patient and their families. Treating children with diabetes is different from treating adults with diabetes in many aspects. Due to huge burden of type 2 diabetes; it was found that sometimes nurses do confuse between management of type 1 and type 2 diabetes. To fill the gap; a special awareness plan containing one hour of learning on type 1 diabetes was created and delivered to 1800 nurses at

- Vydehi College of Nursing
- KIMS College of Nursing
- St John Hospital and College of Nursing



Vydehi College of Nursing



St John Hospital and College of Nursing



## Innovative patient education material for diabetes education

### Mishti digest

Vol -1 – 2017 was released. This comic book titled – Mishti is a super girl contains 3 stories which explain how exercise can be made fun, how to enjoy with diabetes during festival and being ready for every emergency. This is to motivate children with diabetes to learn about diabetes and be independent while remaining a child. It is a unique book which not only contains stories but riddles, joke and activity page so that children can both enjoy and learn.



### Foot poster

This poster tells about signs and symptoms of foot problems in initial stage. This is to make children and parents aware that if they observe any of these symptoms; it is essential to visit doctor and get prompt treatment.







## FAQs

### Q1 How is type 1 diabetes different from type 2 diabetes? Can type 1 diabetes change into type 2 diabetes?

Although, both type 1 and type 2 diabetes are characterised by a higher blood sugar levels, the cause and development of the conditions are different.

**Type 1 Diabetes** is an autoimmune disorder (body's own immune system attacks and destroys the insulin-producing cells in the pancreas) that mostly affects children and young people. A person diagnosed with type 1 diabetes needs to take insulin injections from the beginning and for a lifetime. If the diagnosis or treatment is delayed because of any reason, the severe lack of insulin can result in a life-threatening condition called diabetic ketoacidosis (DKA). While the cause for type 1 diabetes is still not entirely understood, there is nothing one can do to prevent or get rid of it.

**Type 2 Diabetes** is usually seen in older people. Nowadays due to sedentary lifestyle and higher obesity, it is increasing in young people, even in children and adolescents. Most people with type 2 diabetes mellitus are overweight or obese and have a family history of type 2 diabetes. In this form of diabetes, the pancreas still produces some insulin. Treatment includes diet control, exercise and in some cases oral drugs or insulin. It is a progressive disorder and treatment keeps on changing. Although, we cannot change our family history, one can definitely delay and to some extent prevent type 2 diabetes, by adopting the right lifestyle. Right lifestyle which includes a balanced diet, a physically active life and keeping one's weight in the normal range.

Type 1 diabetes cannot be converted into type 2 diabetes. Although; when children with type 1 diabetes grow up and if they have family history of type 2 diabetes, they can face issues related to insulin resistance and may need OAD along with insulin.

### Q2 What precautions should one take to prevent hypoglycaemia in a child with type 1 diabetes?

The term hypoglycaemia is a term to describe low blood sugar (glucose) level below 54 mg/dl\*. Although it may not be possible to prevent hypoglycaemia totally in children and people with type 1 diabetes, it can be prevented to a great extent and managed efficiently in most cases by following these steps

- Taking food on time and in relation to insulin taken as prescribed by the physician.
- Taking right dose of insulin at the right time.
- Consuming extra carbohydrates especially when involved in strenuous exercises like playing or any unusual physical activity like shopping, dancing or cleaning the house.
- Carrying something to eat always especially while traveling or visiting any one, as there are chances that food may be delayed.
- Having easily digestible food like porridge, juice, fruit when unable to eat like during illness.
- Carrying glucometer and candies / juice always with you to treat hypoglycaemia if it happens.

### Q3. While taking a shot of insulin sometimes blood oozes out. Does that have any effect on the insulin?

Bleeding occurs from the injection site, if the needle accidentally punctures a small blood vessel. This is somewhat common and in most cases does not compromise the insulin's ability to lower blood sugar effectively. Still, it is always better to check blood sugar levels approximately 2 hours later and take appropriate action in consultation with your doctor.

\* - American Diabetes Association. Implications of the United Kingdom prospective diabetes study. Diabetes Care. 2003;25(suppl 1):s28-s32, McCall AL. Insulin therapy and hypoglycemia. Endocrinol Metab Clin North Am. 2012;41:57-87.

## Taking diabetes in school

**HYPOGLYCEMIA**  
(Low Blood Glucose)

### SYMPTOMS:



SHAKY



FAST HEARTBEAT



SWEATING



DIZZY



ANXIOUS



HUNGRY



BLURRY VISION



WEAKNESS OR FATIGUE



HEADACHE



IRRITABLE

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**Hypoglycaemia**, also known as low blood glucose levels, occurs when blood glucose drops below normal levels (less than 54 mg/dL)\*. If addressed in time, it is an easily treatable emergency.

It is essential to treat hypoglycaemia: Check, confirm and treat. If in doubt, even then you can treat with

- Fruit juice/sugar containing soft drink
- Hard candies - 3-4
- Sugar: 2-3 teaspoons

(Symptoms mostly disappear in 10-15 minutes. Stay with the person and follow up with additional food such as biscuits, fruit or sandwich.) If the child has a fit or is unconscious, get an emergency help. This may happen only on rare occasions.

**Support children with diabetes, manage diabetes while at school**

changing diabetes® in children

Issued in public interest by NNEF  
For any further clarification you can write to  
CDiIndia@novonordisk.com





## A special note

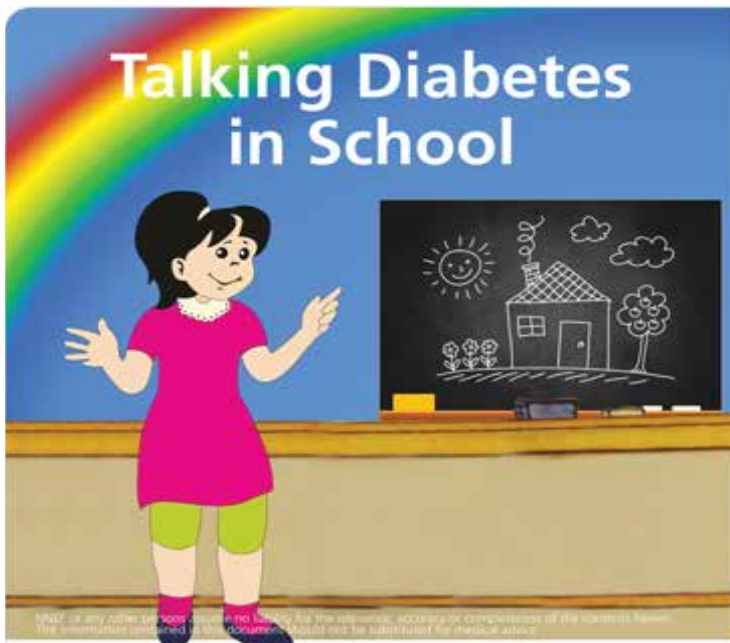
### School and diabetes



- Parents need to inform about their child's diabetes to teachers.
- Teachers must have information about the child's insulin and food timing
- Teachers should have an understanding of how to manage hypoglycaemia in a child with type 1 diabetes
- It is good for the school/ teachers to have candies, juice or glucose, handy to help the child during hypoglycaemia.
- Emergency contact numbers of parents and doctor should be readily available with school, in case of an emergency.



- Parents, hiding the fact, that their child is having diabetes from teachers and friends.
- Discriminate the child from participating in any activity like sports day, annual day or school trips
- Delayed treatment of hypoglycaemia because of non-availability of glucometer
- Not having appropriate knowledge for helping a child with type 1 diabetes
- Leave the child on its own when he/ she is behaving differently, grades are falling and child is being bullied.



Every child has the right to education and equal opportunity. Your support can make a big difference

#### Permit the child with diabetes :

- To eat a snack to prevent hypoglycaemia (**low blood glucose**)
- To use the restroom for frequent urination in case of acute hyperglycemia (**high blood glucose**)
- To check blood glucose levels and take insulin when needed

**Support children with diabetes, manage diabetes while at school**

### Key facts

Diabetes needs to be managed 24/7. It is very important, that a safe and supportive school environment is available for every child with diabetes.

Parents and doctors need to make sure that the teachers and other support staff in the school are educated on various aspects of medical care of diabetes. This should be done on a regular basis as the child goes from one class to another.