

Dashboard: Number of people reached

No. of children 4063

No. of HCPs trained 6240

No. of children camps organised 559

CDiC INDIA Newsletter



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Facing diabetes with determination and discipline

Story of Roshni

She was just four years old when she was diagnosed with diabetes. The whole family had gathered for the naming ceremony of her younger brother. Her mother clearly remembers the girl had vomiting and stomach pain; she felt sick and drowsy and then her uncle took her to the hospital.

The doctor said that the child needed to be hospitalized. At that time her sugar levels were over 500 mg/dL. That is when it was found that she had diabetes. It was a great shock for the family. According to her mother, it was a very difficult time for the family. The family savings had already been spent and there was no money left. Her father, who worked as an electrician, felt helpless. At that time her uncle took care of the girl's insulin expenditure and hospitalization.

The first few months were very tough. Along with the financial burden it was very confusing to understand the management of diabetes. Sometimes the sugars were very high and sometimes very low. At the same time, there was a also little baby who needed to be taken care of.

Then the treating doctor referred them to IGICH hospital. There, Dr Raghupathy enrolled her with CDiC (Changing Diabetes® in Children). According to her mother the program is a real boon as it has given the child and the family the dignity of living and great financial support. Since then, the girl and her mother regularly attend educational programmes and camps about type 1 diabetes. Her mother is quick to learn and helps other mothers in a similar situation.

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Insights

Story of Roshni

She is a 10 year old girl, having diabetes since last 6 years.

Life insights - Child

"I need to take insulin every day, eat healthy and do regular exercise to lead a healthy life and I do not want to be sick and miss school."

Life insights - Mother

"I am proud to have such a brave child. Sometimes things are difficult to manage, but it is her determination and discipline, which motivates me."

Goal of life

"I want to become doctor and find an alternative for insulin injection"

Diabetes requires continuous monitoring and detailed attention at all the times



Editorial desk



Dear Colleagues and Friends,

As we all are aware, India has a huge burden of approximately 69.2 million people with diabetes. More than 95% of these are people with type 2 diabetes, which has led to children with type 1 diabetes mellitus (T1DM) being overlooked, with tragic consequences. The CDiC program was unveiled in India, in September 2011, by our former President Dr APJ Abdul Kalam. It is great news for all of us that the CDiC program will be extended by Novo Nordisk up to 2020 with the best possible support. I shall, therefore, request all of you to make use of this opportunity and ensure that no eligible child less than 18 years should be lost to follow up. At this juncture, we would also need to inform parents and children, that those who are now above 18 years of age will have to support themselves for insulin and other supplies from Jan 2018. They will need to leave the program but may continue as "Young Leaders" for their group and visit their respective Centre from time to time, to encourage their old mates and to enthuse them to achieve better control of diabetes.

There is no doubt that this program has impacted the lives of many children with type 1 diabetes and their families who hail from economically poor strata. We hope this wonderful program creates even stronger impact on the understanding of type 1 diabetes by the medical world, by bringing more scientific literature on care of type 1 diabetes. Let us now focus on data collection and compilation, so that the differences created by our efforts become a milestone for others to follow on our path. Along with this scientific data, it is my earnest desire that we all strengthen our patient group further and highlight their life stories to seek support from the Government bodies for long term sustainability of our program and the lasting benefits therefrom for all these children with type 1 diabetes.

Let's strive together with the best of our ability for changing diabetes and to support and help children with type 1 diabetes. Thanking each one of you for your dedication and commitment.

With regards,
Prof. P. Raghupathy
Chairperson, CDiC



Dear Colleagues

We all understand that management of type 1 diabetes is not a simple task. With your support, the CDiC program has been working constantly for creating better world for children with type 1 diabetes. One more feather is release of the Textbook of Pediatric Diabetes. This first of its kind book written in Indian context adds to this collective effort and aims to touch lives of many more children with type 1 diabetes. I would like to congratulate each one of you for your effort.

Your passion towards these children is unmatched and now is the time that we use this as an opportunity for creating awareness and advocacy. As we head towards the next phase of the programme, I would request you to strengthen advocacy activities and strengthen the collection and publication of scientific data for better management of children with type 1 diabetes. This step is essential for creating an impact on our efforts for long term sustainable care for all children with type 1 diabetes.

Looking forward for your continued support and commitment. Wishing you, your support staff and all the children a healthy and happy festival season.

With Best Wishes,
Prof. Ashok Kumar Das



Dear Friends

Thank you very much for all your commitment and support to Changing Diabetes® in Children (CDiC). It is through your efforts that CDiC has become the largest initiative on type 1 diabetes in the world and the gold standard in paediatric diabetes care.

Hence it is with great pleasure that I take this opportunity to inform you that in line with our vision of patient-centricity and based on the excellent care offered to the children in our programme, NN India along with NNAS wishes to continue its commitment of giving free human insulin for children from economically poor families.

I would also like to thank all of you for the effort and commitment which was reflected when the CDiC textbook of Pediatric Diabetes was released. We look forward to your continued support and guidance in the next phase of the programme as well.

I wish you, your families, your support staff and all the children under your care season's greetings and a very happy Deepawali.

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



Changing Diabetes® in Children programme (CDiC) update

Over the last six years, CDiC has offered focused support for more than 4,000 children with type 1 diabetes from economically disadvantaged families. The positive health outcomes achieved because of comprehensive treatment, awareness creation and capacity building are testimony to the difference made by the CDiC initiative. During the last four months, the program had undertaken several key initiatives focused on the children, their care givers, HCPs and doctors:

- 25 structured children's diabetes camps were conducted, reaching around 1,000 children. The focus of these camps was diabetes self-management. They also helped in having ensuring follow up with registered children.
- To further improve awareness and understanding among parents and children, children's camps were conducted to commemorate Insulin Day. The focus of these camps was correct insulin taking techniques and self-adjustment of the insulin dose. These camps also helped to dispel myths about insulin and to emphasize its importance for every human being.
- Capacity building is a key facet of the program since nurses and diabetes educators are an important constituent of the diabetes care team. This year, Nurses Day was marked by four diabetes educator workshops in May at Bengaluru, Chennai, Hyderabad and Kanpur reaching around 1,200 professionals. One of these was a mega event at Vydehi Nursing College, Bengaluru, which covered over 1,000 nurses. Apart from this we organized a nurses' awareness program at KIMS College

of Nursing in August, reaching more than 500 nurses.

- For doctors, CDiC Type 1 DM updates were conducted at the IGICH Samatvam centres, Bengaluru, and KIDS Bhubaneswar attracting 150 Doctors. These three programs were accredited by the respective medical councils, with credit hours for the participants and faculty. The program gave participants insights into the holistic management of type 1 diabetes.
- Out of these doctors and diabetes educators, 188 were retrained in last 4 months.
- CDiC Textbook on Pediatric Diabetes – a first of its kind book written by Indian authors was launched on August 9 at the prestigious All India Institute of Medical Sciences (AIIMS) at New Delhi.
- It's heartening that the Vydehi Institute of Nursing Sciences & Research Centre, Whitefield has offered free seats to two deserving CDiC children from Bengaluru to pursue their Diploma in Nursing. This is a great gesture and has shown us a way to extend support for children. We hope to see more such offers from other parts of the country in due course.
- CDiC Adboard meeting was conducted on August 6 in which ten CDiC directors participated. Along with sharing best practises and implementation of activities, plans for 2018-2020 were discussed in detail.

21 main 27 satellite
centers pan-India

Doctors >3750
Other HCPs >2500

- 4063 children with type1 diabetes
- Free insulin, syringes, monitoring, diagnostics, consultation



9th Advisory Board Meeting

The 9th Advisory Board meeting was conducted at Hotel Lemon tree, Bangalore on 6 August. Dr AK Das, Dr P Raghupathy, Dr K M Prasannakumar, Dr Archana Sarda, Dr Alok Kanungo, Dr Banshi Saboo, Dr P K Jabbar, Dr J Ram Mohan Chowdhary, Dr Hemanga Barman, Dr Alka Chaddha and Dr Lakshmi Reddy and Mr Melvin D' Souza Managing trustee – NNEF along with CDiC project team participated in the meeting.

On this occasion; it was officially announced that the programme has been extended up to December 2020, with best possible support for the children. This is really good news for all of us.

All the registered children will continue to get Human insulin as prescribed by their doctor.

The key discussions and action points deliberated during the meeting were

- Way forward and sustainability plan – beyond 2017 and beyond 2020
- Current implementation issues – challenges and best practices
- Advocacy and publications plans – essential data points, update process, publications and forums
- Focus on new advocacy platforms – patient advocacy groups





Novo Nordisk India launches first Textbook on Pediatric Diabetes by Indian authors

NNEF is committed to enhancing health care by facilitating awareness and education. In line with this commitment and as part of the CDiC program we are very happy to share with you that we have published a textbook on Pediatric Diabetes. Our new textbook is aimed at building capacity among doctors to manage children with diabetes.

This is a first of its kind book authored exclusively by doctors from India. This unique effort has been made possible due to the unconditional support from all the CDiC centre directors and other authors, who have enthusiastically participated in the creation of this invaluable textbook.. The book covers recent advances in the theoretical and practical aspects of managing children with diabetes. The book was launched at a press conference at the All

India Institute of Medical sciences (AIIMS), New Delhi by Navdeep Rinwa, Joint Secretary, Ministry of Health & Family Welfare, in the presence of Melvin D'souza, Corporate Vice President and General Manager, Novo Nordisk India, Anil Kumble, Changing Diabetes® brand ambassador and leading KOLs. These included Dr Nikhil Tandon, CDiC centre head, AIIMS, Dr P Raghupathy, Chairperson, CDiC, Dr AK Das, convenor, CDiC, Dr Sanjay Kalra, Dr AK Jhingan and Dr Laxmi Reddy.

We are confident that this specialized book will prove to be a great tool in capacity building among doctors and medical students and in guiding them to manage children with diabetes. We are sure that with your support we can change the lives of many children with diabetes.





Children from all three centers from Bangalore at Cubbon park

Children Camps

Dr Elliott P Joslin, the founder of the Joslin Diabetes Center, said way back in 1934, "The diabetic who knows the most lives the longest." Keeping in mind the importance of diabetes education, CDiC centres focus on imparting diabetes education at children's camps along with regular physician visits, so that children learn about diabetes in a friendly environment. This is a key element of the CDiC vision of comprehensive care for children with type 1 diabetes from marginalized families.

Over the last four months, around 25 camps were conducted across India. The following topics were covered in the months of May and June: Hypoglycaemia and Hyperglycaemia – Prevention and Management and Prevention of Complications; and Holidays and Managing Diabetes. This was in addition to the regular topics of living with diabetes as well as your diet and diabetes. Since 30th July happens to be the Insulin discovery day, the children's camps in July and August focused on right insulin taking techniques and the self-adjustment of insulin doses.

Children's camps focus on the overall development of the child along with diabetes self-management education and have enabled us to have good follow-up with registered children and support them for achieving better quality of life



Camp at Aurangabad, Sarda CDiC center



Dr. K M Prasanna Kumar addressing children



Children Camps



CDiC camp at Samatvum, Bangalore



IGICH, CDiC center



CDiC center Chennai, M V Hospital



Pune CDiC center



Child performing at children camp



Dr. Raghupathy talking to children



CDiC camp at KIDS , Bhuvneshwar



CDiC camp at Kalawati Hospital, Delhi



HCP Training



Nurses awareness program at Vydehi Nursing College

The training of healthcare professionals (HCPs), including doctors and diabetes educators, is an integral part of the CDiC program. These trainings are conducted to enhance the capabilities of HCPs in the diagnosis and treatment of children with type1 diabetes. Centre directors have a critical role to play in the running of these programmes.

During the last four months, we have conducted three HCP training programs and three nurse education programs, reaching 118 doctors and 191 nurses and diabetes educators. These programs were conducted by our centre directors and other key opinion leaders. HCP trainings were conducted on 21 May at IGICH, 25 June at Samatvum, and 19 August at Bhubaneswar, Odisha. Both CMEs conducted in Bengaluru were accredited by the Karnataka Medical Council. Diabetes educator workshops were conducted in Chennai, Hyderabad and Kanpur. Apart from this, we had a special one-hour awareness and education session for 1500 nurses on diabetes in children at Vydehi College of Nursing and KIMS College of Nursing.



Nurses training program at MV Hospital Chennai



Nurses training program at Ramdev Hospital, Hyderabad



HCP training program at KIDS, Bhubaneswar

We also had scientific articles from our center directors published in the Journal of Social Health and Diabetes. Through this medium we could reach more than 8 lakh people. Apart from this, we had media coverage appearing in over 40 publications, on the launch of CDiC Textbook of Paediatric Diabetes.



Appeal to include Type 1 Diabetes in Rashtriya Bal Swasthya Karyakram (RBSK)

We are a group of 21 doctors from all parts of India, who are involved in taking care of children with type 1 diabetes since the last fifty years.

Current challenges for type1 diabetes care in India

Despite being the most common chronic disease in children and adolescents, type 1 diabetes does not receive the attention it requires. Many children die of undiagnosed diabetes or shortly after diagnosis because of poor blood sugar control. Many of those who survive lead a poor quality life. Diabetic ketoacidosis (DKA) is the leading cause of mortality and morbidity in children with type 1 diabetes. DKA in children develops quickly and is related to severe morbidity and sequels of medical complications, than in adults. Chronic complications and co-morbidities place a heavy psychological and economic burden on the child and their family, hampering the child's opportunity to a normal life.

The out-of-pocket nature of payment in India for a lifelong disorder places a huge financial burden on economically backward households. As such, this disorder can push many families further into poverty. Many children lose their lives to type 1 diabetes, a disease that can be managed with adequate care.

We would like to congratulate the Government of India for its new Rashtriya Bal Swasthya Karyakram (RBSK) initiative of early identification and intervention for children from birth to 18 years, covering the 4 D's viz. defects at birth, deficiencies, diseases, development delays including disability..

The center directors have collectively made an appeal to the Government for inclusion of type1 diabetes in the list of disorders covered under the RBSK scheme. We request you to include type 1 diabetes in this list. As per the 7th Edition of the IDF Diabetes Atlas, currently there are 70,200 children (of the age group 0-14) with type 1 diabetes. The Rangarajan committee reports that 29.5% of the Indian population lives below the poverty line, which equals around 20,700 children with type 1 diabetes who are below the poverty line. Government support to the children will help them get prompt attention to their needs and lead a better quality of life.

Also you can support us by signing the petition to include type 1 diabetes in the Disability Act as it will help our children to get due benefits and equal rights in the long run.

<https://www.change.org/pl/prime-ministers-office-declare-type-1-diabetes-a-disability-in-india?>

Type 1 diabetes

I have type 1 diabetes. This means that my body does not make insulin, so I need to inject it.



With Insulin, proper diet, exercise and monitoring, I can manage my diabetes and you can do it also.





FAQ

Q1. If the child's insulin dose needs to be increased, does this mean that the child's diabetes is getting worse or that the child is eating sweets?

This may not mean any of these things as every child needs different amounts of insulin according to the types of food, activity and other health parameters. The need of insulin may vary in different situations and increase in temporary situations like:

- Illness such as any seasonal fever, allergy or flu can result in high blood sugar levels
- Stress due to forthcoming examinations or relationship can affect a child's emotional well-being and therefore the blood sugar levels
- Growth spurts

Additionally, in children with type 1 diabetes, the insulin dose increases with increase in height and weight.

Q2. How can diabetic ketoacidosis be prevented in a child already diagnosed with type 1 diabetes?

In a child already diagnosed with type 1 diabetes, Diabetic Ketoacidosis (DKA) can happen when there is less insulin than required. This happens usually when the child is sick or skipping insulin doses.

Appropriate and regular diabetes education for the management of the disorder at home especially in relation to sick day management can prevent many episodes of DKA in a child or a person with type 1 diabetes.

- Regular and more frequent home blood glucose monitoring; every 3-4 hours when sick is essential.
- Parents need to be taught about insulin dose adjustment and taking supplemental short-acting insulin regimens when blood sugar levels are high
- Parents need to be taught that urine ketones need to be checked at home when the child is sick and when sugars are continuously above 240mg/dl for a day.
- Never skipping an insulin dose, even when the blood sugar levels are low. Reducing, rather than eliminating insulin is needed.
- Staying hydrated by drinking extra liquids (low calorie like buttermilk, soup, lemon water) when having high blood sugar levels helps in preventing ketoacidosis.
- Taking rest; when sick and having continuous high blood sugar levels also helps.

Also it is essential to provide patients guidelines on when they should absolutely seek medical attention.

Q3. When one is in no mood to eat, one can skip insulin?

Meals should not be skipped, particularly for those who are on premixed insulin. Skipping meals can upset the balance between food intake and insulin. Even when you have no food, your body needs insulin for the sugars released from muscles and the liver.

When one is on a basal-bolus regimen, then a dose of short-acting insulin can be reduced easily when one wishes to eat less, according to the carbohydrate content of the meal.

Q4. What precautions one must take if a child with type 1 diabetes gets injured while playing?

Like other children; for children with type 1 diabetes, it is essential to clean the wound and give first aid dressing for the child. It is essential to keep the wound clean and do the dressing at regular intervals.

It may become essential to visit the doctor if the child shows any of these symptoms

- Excessive bleeding
- Occurrence of high fever
- Unexplained high blood sugar levels
- Non-healing wound after 5 days.

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Exercise and type 1 diabetes

Principles of Appropriate Exercise



- Physical activity should be encouraged in all children.
- Ideally all physical activities should be fun and be done in safe and supportive environment.
- Ideally the child should check blood glucose values before and after physical activity and if it is not possible, child should be involved in regulated activity at same time every day.
- All strenuous activities should include eating a snack e.g a fruit or 2 biscuits every 30 minutes and additional snack at night to prevent hypoglycaemia.
- It is good to have sufficient water and wear comfortable and appropriate clothes and shoes.



- Advise monotonous, repetitive and boring exercises for children.
- Discourage children from exercising fearing falls, injuries and hypoglycaemia.
- Take insulin on the part actively involved during exercise like at thigh before football match.
- Exercise in the time between injection and meal.
- Exercise when sugars are too high or too low and child is having ketones positive in blood and urine.

Pre-exercise carbohydrate replacement

Plasma blood glucose	Simple carbohydrate (CHO) ¹
< 80mg/dL	Withhold physical activity + ingest 15 g CHO (cereal bar, honey sachets, etc.).
80 to 140 mg/dL	Ingest 1 to 2 g/kg of CHO prior to activity.
> 140 mg/dL < 250 mg/dL	Within safety range; ingest 15 to 30 g CHO after activity.
> 300 mg/dL, no ketonuria	Begin activity. No CHO replacement necessary.
> 300 mg/dL, with ketonuria	Postpone activity until ketone levels return to normal. Take fluids (water). No CHO replacement necessary.

¹. CHO + simple carbohydrate.

Source: Adapted from the Brazilian Diabetes Society (Sociedade Brasileira de Diabetes, SBD).

Key facts

Although exercise does have health benefits, the main reason for exercise should be to enjoy it. Exercise should not be a penance punctuated by hypo or hyperglycaemia.

It is always fun to play with friends



This also helps to keep blood glucose in normal range

All work and no play will not control diabetes in any way.