

Singapore

Diabetes EDUCATORS

ASSOCIATION OF DIABETES EDUCATORS (SINGAPORE) JANUARY 2016 MICA (P) 123/03/2015

Message from President

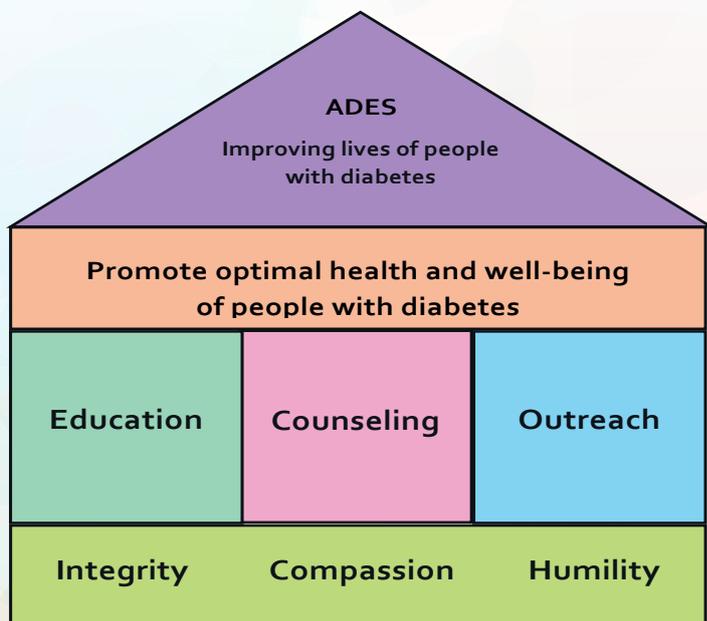
Discovering our true north to stay on track

It is a privilege and honour to serve you and represent all of you in the exciting years ahead. I am humbled and proud of the progress that ADES has made in past years and truly we need to recognize all your unwavering support and the dedicated and passionate leadership of Ms Brenda Lim.

Our mission is to promote optimal health and well-being of people with diabetes through effective education and counseling so as to achieve our vision to improve their lives. To guide us along this mission, we need to discover our true north to help us stay on course. True North is our internal compass, unique to us, representing who we are at our deepest level. Therefore, we need to embed values into our mission and let us adopt these three values – Integrity, Compassion and Humility of International Diabetes Federation (IDF) whom we are proud to be affiliated to.

- Integrity – We will uphold our ethical code, maintain a high standard of personal conduct and embed our values in all that our organization does
- Compassion – We will act with empathy and without prejudice, appreciating the personal impact of diabetes and the necessity for action
- Humility – We will give credit to others, never forgetting that all we do is for the benefit of people with diabetes; we will accept and learn from our errors.

Together we will build ADES from strength to strength focusing on our core pillars of education, counseling and outreach.



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Editorial Team

Aslena Bte Hussain
Sharifah Shahira

Email

ADESeducation@gmail.com

Website

www.ADES.org.sg

MY JOURNEY THROUGH THE IDF YLD TRAINING PROGRAMME

By Heng Pei Yan



The IDF Young Leaders in Diabetes (YLD) training programme took place from 23 November to 29 November 2015, before the World Diabetes Congress, in Vancouver, Canada. This year's training programme saw about 120 young leaders from around 60 different countries gathered together to connect, share and learn.

My journey with the YLD programme started two years ago in Melbourne. Attending the training programme for the first time in 2013, I was unsure of what to expect or how I will respond to the programme. Nonetheless, I was excited for the experience and exposure, having the opportunity to make diabetes friends from various parts of the world. At the beginning, I was quite at a loss with the many ideas in my mind that I wanted to work on for Singapore for my YLD project. Eventually, I decided to start off something small by setting up a Singapore Diabetes Online Community (SGDoc) on Facebook after having experienced

the wonderful support the Australians have with their diabetes online community. SGDoc currently has around 100 members, consisting of people with diabetes of various ages and also caregivers, and I hope that it will continue to grow in strength and support.

My mission and vision follows that of the YLD programme. The young leaders in diabetes are committed to raising awareness for diabetes and we will be the powerful voice for that. Over the next two years, I hope to embark on projects that will help raise the awareness and perception of diabetes both locally and globally. Singapore may not have the best diabetes healthcare polices or plans in place, diabetes medical expenses can be rather high and it is one of the health conditions that is not well understood by the population. Nonetheless, we need to be grateful for the good healthcare system we have in place in Singapore.

The YLD training programme in Vancouver this year has brought a new meaning to my role as a young leader. I am humbled and honoured to be leading the YLD for the next two years in my capacity of the YLD Vice-President. No doubt that this new journey will be filled with challenges, but I believe that this will be an unique and great opportunity for me to gain a deeper insight of the issues and challenges people living with diabetes face globally, and in turn help to strengthen my project ideas. I am sure that it will be an exciting and enriching experience for me over the next two years till Abu Dhabi 2017.

I am grateful to ADES for the nomination and support provided in my YLD journey since Melbourne 2013.



Photo credit: Brit Liggett, Show the Good

Community Outreach: Free Screening and Diabetes Education - Reaching out to the migrant workers and the community in Little India

by Eio Moi Na

On 11 July 2015, ADES partnered with the Worldwide House of Transformation and Singapore Nurses Association reaching out to the migrant workers and community in Little India at 37 Verasamy Road from 3pm – 9 pm. The venue of the health screening is a common area where migrant workers congregate for interactions over weekends.

We were pleased to see a large attendance of 400 migrant workers, passers-by and residents living at Little India at the health screening event. Approximately 10% or 42 participants screened were discovered to have high blood glucose levels of between 15 to 22 mmol/dl and high blood pressure levels of between 150/95 to 200/110 mmHg. Five of them with high blood glucose levels had no previous history of diabetes. These high risk groups were provided counselling and education by ADES volunteers on the optimal levels of blood glucose and blood pressure with the advice to follow up with medical practitioners. Some of the challenges faced by these groups with poorly controlled diabetes and blood pressure included inability to take time off for medical follow-up. Those who expressed financial constraints were suggested to seek support from a charitable clinic – the Karunya Community Clinic situated in Little India at Chander Road.

Ms Brenda Lim, President of ADES said: “It is a privilege for us volunteers to be able to serve our fellow migrant workers who in the past and present had contributed greatly to Singapore’s development. We hope there are more support from the employers and the continual provision of free medical services for the migrant workers.”



Volunteers with ADES , Worldwide House of Transformation & Singapore Nurses Association.

Report of idf-western pacific region 2015

By Lim Pei Kwee from idf-wpr council meeting on 29 november 2015



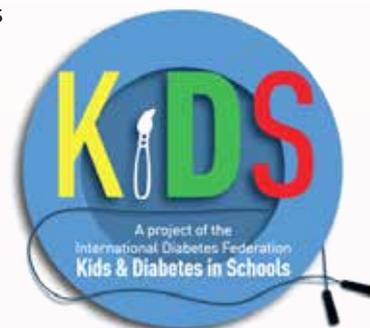
As a member of International Diabetes Federation (IDF), we are privileged to access and benefit from the guidelines, resources and activities of this global organization. I am pleased to update that Prof Nam-Han Cho, Chair of Western Pacific Region (WPR), was elected to be President-Elect of IDF at General Assembly on 30 November 2015 in Vancouver, Canada. He shared that he gave an apron to each regional Chair as a symbol of commitment to serve and “clean up mess” in IDF.

IDF-WPR has developed various programs and proud to launch the WPR Disaster Program (www.idf_wpr.org) to help and save the lives of people with diabetes in times of natural disasters. It aims to help each country to develop disaster preparation and medical care strategies, and minimize the effects of disaster events on the lives and health of diabetes patients.

Western Pacific Declaration of Diabetes (WPDD) is a joint project with WHO and activities include WPR Diabetic Foot Care Project which is ongoing, Diabetic Retinopathy, Gestational Diabetes and Diabetes in the Older Population.

- Diabetic Retinopathy – A pilot program over 3 years is developed to provide an imaging service for funduscopy where a retinal scan in a remote area transmits the scan via the internet to the Wisconsin Retinopathy Tool server which sends back a report / diagnosis.
- Gestational Diabetes – Currently there are 3 different criteria being used for diagnosis of gestational diabetes and no consensus reached to use which criteria. A committee of regional experts with input on Asian data is established to discuss the issues and developed some guidelines
- Diabetes in the Older Population – It was recommended that the IDF Global Guidelines for Managing Older People with Type 2 Diabetes include insulin therapy, hypoglycaemia and nutrition. A committee is developing consensus report for recommendation.

An exciting new development is the Train-the-Trainer Education Program. The curriculum is multidisciplinary and module based for healthcare professionals. This 3 day workshop will be launched at next IDF-WPR Congress on 27-30 October 2016 in Taipei, Taiwan.



We hope to bring back this program to benefit all of you so look out for the registration next year.

We are proud to nominate Ms Puja Sharda to Young Leaders in Diabetes (YLD) program at IDF Vancouver Congress 2015 and Ms Heng Pei Yen to IDF Melbourne Congress two years ago. Pei Yen also attended the YLD in Vancouver and was elected as Vice-President of YLD. Our group of young adults with diabetes are mentored and encouraged to contribute back into the diabetes community.

The Young Leaders are committed to raising awareness of diabetes by being a powerful voice for prevention, education, access to quality care, improved quality of life, and the end of discrimination worldwide.

In June 2013, IDF, in collaboration with the International Society for Paediatric and Adolescent Diabetes (ISPAD) and Sanofi Diabetes, launched the Kids and Diabetes in Schools (KIDS) project. KIDS aims to foster a safe and supportive school environment for children with diabetes to manage their diabetes and fight discrimination. KIDS also aims to raise awareness of diabetes and promote healthy diet and exercise habits in the school community.

Our young leaders are excited and committed to support and help launch KIDS initiative in the local schools in 2016.



Young Leaders in Diabetes Programme 2015 - Vancouver Canada

by Puja Sharda

Last year, I was nominated by the Association of Diabetes Educators Singapore (ADES) to attend the International Diabetes Federation (IDF) Young Leaders in Diabetes (YLD) training programme in Vancouver, Canada. The programme was held from the 23rd till the 29th of November 2015. As a first time participant of the YLD programme, I had no idea what the programme was all about or what to expect.

The YLD had its first programme in Dubai in the year 2011 with 70 people from around the world attending the programme. In the year 2015, it had its third training in Vancouver with approximately 120 participants from 60 different countries. It was like a huge mega Diabetes Camp!

I was quite overwhelmed to see so many people of different ages, different cultures, different languages, different professions, different duration of diabetes sharing the same condition as

me. We all had Type 1 diabetes and we were all in this together as one. It was a whole different atmosphere altogether. I do meet a lot of people with diabetes, both Type 1 and Type 2 but, I meet them as a health care professional or sometimes as a person with Diabetes. I also do attend and organize diabetes camps and activities together with the KKH Diabetes Support group. However, this time I was a participant instead of a Leader or organizer. I was in an environment where I could hear insulin pumps beeping, people checking their blood sugars, people carbohydrate counting, treating hypoglycemias, people talking about their hyperglycemias and the list could just go on.

Overall, it was a pleasant and memorable experience. It made me realize even more how fortunate I am to be able to receive the best medical care and to be able to access the basic necessity in Type 1 diabetes, Insulin. Together with all these, I also made new friends!





Diabetes Care in Elderly Seminar

CDE Certificate Presentation Ceremony

18th Annual General Meeting

Successful diabetes care in the aging population requires an understanding of the physiological of aging and also recognition of the special issues facing the elderly. This session covered the diabetes management, management priorities and treatment choices in elderly patient with diabetes.

Programme highlights.....



Vaccinations in Elderly by Dr. Ang Cheng Bin

Head & Senior Family Physician , Family Medicine Service, KK Women's and Children's Hospital

'Vaccines are important in protecting elderly patients with diabetes against serious disease. Types of vaccines such as Influenza, Herpes zoster, Hepatitis B, Tetanus Toxoid, and Pneumococcal vaccine can be recommended'



Diabetes Care in Elderly by Dr. Adeline Chuo

Senior consultant, Tan Tock Seng Hospital

'Elderly diabetes patients are at high risk for polypharmacy, functional disabilities, and common geriatric syndromes that include cognitive impairment, depression, urinary incontinence and falls'



ADES CDE Certification Presentation Ceremony 2015

 <p>Certification</p> <ul style="list-style-type: none"> ■ Loh Yoke Chan Dorcas ■ Masdiana Bte Mohd Yusoff ■ Molly Eu Ai Choo ■ Nur Shahidah Bte Hamid ■ Sharifah Shahira Bte Syed Mohamed Shariff ■ Song Guoying ■ Xu Xia Hong ■ Yan Jie 	 <p>■ Recertification</p> <ul style="list-style-type: none"> ■ Jasmine Shew Sew Hong ■ Lim Soo Ting Joyce ■ Lin Xueli ■ Pushpavalli D/O Selayah ■ Salimah Bte Abdullah
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18th Annual General Meeting

Nominations of members in main and sub committee for ADES 2015-2016

New roles:

President – Ms Lim Pei Kwee

President – Ms Brenda Lim (project)

Vice president – Ms Winnie Poh



93 nurses had attended the event. The audiences were eager to learn about elderly care and preventive medicine such as vaccination. The Q & A sessions at the end of the each session proved to be highly interactive and fruitful with the audience actively raising some common misconceptions and queries which the speakers were delighted to answer and clarify



Footnote:

ADES made a difference in 2015 .

Instead of the usual commercialised items, each member at the AGM received a handmade fabric tote bag as door gifts. With the purchase, ADES had contributed to the TTSH Charity Fund.

Two of the lovely volunteers with the Diversional Therapy Unit based in TTSH in support of TTSH Charity Fund.



Proud CDE graduands receiving their certificates from Guest of Honour – Dr Winston Kon from TTSH

Community outreach - ADES collaboration with the Lions Club of Singapore Paterson.

by Ms Noorani Othman

On 11 December 2015, Saturday, ADES was invited to participate in the Charity Food & Fun Fair held at Hong Lim Park and organised by the Lions Club of Singapore Paterson (LCS) for the financially challenged families. A booth was manned by a team of 14 ADES members to provide diabetes education and create awareness on diabetes care.

About a thousand residents who live in different residential areas came in busloads to attend the event. Most of them were senior residents living alone in rented HDB flats or nursing homes. ADES members were privileged for the opportunity to interact with the senior citizens and gained a better understanding of the elderly's daily coping skills and especially those living with some medical conditions.

"We are aware that several seniors residents shared their reluctance to participate in health screenings for fear of discovering some medical conditions. We hope that something could be done to allay and overcome these concerns and fears", said Ms Brenda Lim, vice president (special projects) of ADES.

"Interacting with the senior residents requires much patience, and communicating in the open area to provide education could be a great challenge too", said Ms Eio Moi Na, ADES committee member.

The event started at 10 am and ended at 4 pm just before the rainfall.



ADES diehard volunteers



An elderly participating in a health survey conducted by ADES



A participant in the health screening



Some of ADES members in the event



The crowd of mainly senior citizens enjoying the bazaar

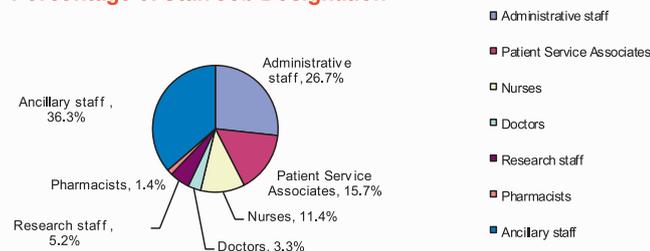
AWARENESS OF DIABETES MELLITUS RISK FACTORS AND COMPLICATIONS AMONG HEALTHCARE STAFF IN NATIONAL SKIN CENTRE

B Lim, BY Wong, KY Kong, KLTan, D Seah, M Leow
Nursing Department, National Skin Centre, Singapore

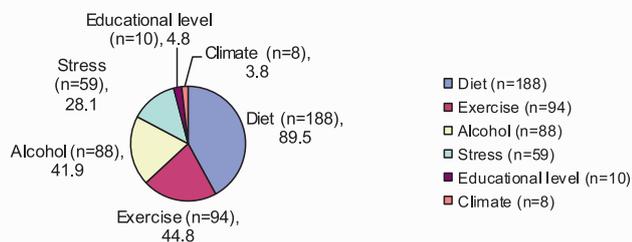
BACKGROUND

The prevalence of diabetes mellitus (DM) has risen rapidly in developing countries. Much effort has been devoted to educating the public about diabetes through various types of media. People who work in the healthcare setting are at equal risk of contracting diabetes mellitus. It is expected that healthcare workers in general may have higher levels of knowledge on diabetes mellitus as they are exposed to medical knowledge in the healthcare setting on top of the media.

Percentage of Staff Job Designation



% of Staff on Knowledge of Factors Affecting DM



OBJECTIVE

The study aims to understand the level of awareness of DM and its complications among healthcare staff in National Skin Centre.

METHODOLOGY

A cross-section study using convenience sampling was conducted during the health screening in National Skin Centre on 28 Nov 2013 in conjunction with World Diabetes Day. Surveys were obtained through self-administration or interviews. Participants answered 10 questions on the risk factors and conditions associated with DM complications.

RESULTS

Two hundred and nine participants completed the survey. 26.7% were administrative staff, 15.7% were Patient Service Associates, 11.4% were nurses, 3.3% were doctors, 5.2% were research staff and 1.4% were pharmacists, and 36.3% of ancillary staff such as health attendants, pharmacy technicians and others. 43.8% were Chinese, 24.8% were Malay, 28.6% were Indian and others. Only 28.6% (n=60) of the participants were aware that Indians are at the highest risk for type 2 diabetes. 72.2% of staff were aware of the normal fast blood glucose values (4-6mmol).

Majority of the participants believed that diet could alter a person's blood glucose level (n=188, 89.5%), followed by the exercise (n=94, 44.8%), alcohol consumption (n=88, 41.9%), stress level (n=59, 28.1%), and others such as educational level (n=10, 4.8%) and climate (n=8, 3.8%). 76.2% (n=160) of the participants were aware of the recommended amount of daily exercise (15-30min daily). 88.1% of the staff knew that people above age 40 years are at higher risk of type 2 diabetes in Singapore. 73.8% of staff were aware that delayed wound healing is one of the complications of diabetes, and 42% aware that kidney failure, vision loss, nerve problem and heart failure could be resulting from DM complications. Only 65.8% (n=134) knew of someone with diabetes or pre-diabetes. 63.8% (n=134) of staff answered correctly on the body mass index (BMI) that considered as obese (BMI of 30 and above). 82.9% (n=174) of staff were aware of high blood pressure is a risk factor for diabetes. 80.5% of staff were aware that insulin injection could be used for the treatment of DM.

There was a relationship between participants' designation and knowledge that activity/exercise ($\chi^2=26.55$, $p=0.02$), and consumption of alcohol ($\chi^2=35.19$, $p=0.001$) could alter a person's blood glucose levels, race ($\chi^2=74.63$, $p=0.049$) and high blood pressure ($\chi^2=28.93$, $p=0.007$) being a risk factors for diabetes, and insulin injections being used for treatment of type 2 diabetes ($\chi^2=30.62$, $p=0.004$). Knowledge on complications of DM such as nerve problems ($\chi^2=57.44$, $p=0.000$) and vision loss ($\chi^2=27.76$, $p=0.02$) was also associated with their designation.



CONCLUSION

Healthcare staff are generally well informed of the risks of diabetes, although job designation was found to influence knowledge. A further education to strengthen the knowledge of staff is required.

Impact of self monitoring of blood glucose (SMBG) learning contract on patients' adherence and diabetes control

S.S. Binti Syed Mohamed Shariff¹, X.L. Lin¹, T.L. Tay¹, A. D/O Manikam¹, S.R. Binte Masjum¹, C.W.M. Chan¹, S.K.J. Chua¹, P. L. Lee¹, N.S. Binte Hamid¹, G. Song¹.

¹Eastern Health Alliance - Changi General Hospital, Diabetes Centre, Singapore, Singapore.

Background

Self-monitoring of blood glucose (SMBG) is a cornerstone of good glycemic control in insulin-requiring diabetes (DM) patients. Ministry of Health (MOH) Singapore (2014) suggest testing 2 to 3 times a day on 2 to 3 days a week but non-adherence in SMBG still arises.

Aims

The purpose of the study is to explore whether collaborative learning contract between patients and Diabetes Nurse Educators (DNEs) improves adherence to SMBG which translates better glycemic control.

Method

This is a prospective pretest-posttest pilot study with 55 patients were recruited at Changi General Hospital Diabetes Centre during clinic visit between April to October 2013.

All patients were on insulin therapy and able to perform SMBG independently. The learning contract include discussion on the usage of glucometer, frequency and targets of their blood glucose monitoring and problem solving in managing their blood glucose levels. Blood for HbA1c was performed at baseline.

Patients were on regular contact with DNEs for reporting of blood glucose and insulin titration. Patients were then reviewed at one month by DNEs to help in problem solving. At the third month, patients were then reviewed by the DNEs and physician with HbA1c done. All data were analyzed in an intention-to-treat manner using SPSS version 19.

Results

55 patients agreed to collaboration. The mean age in our cohort was 50.9 years (± 14 years), predominantly females 56.4% (31). Of the 55 patients, 24 (43.6%) were non-adherence to the collaborative learning contract (Figure 1).

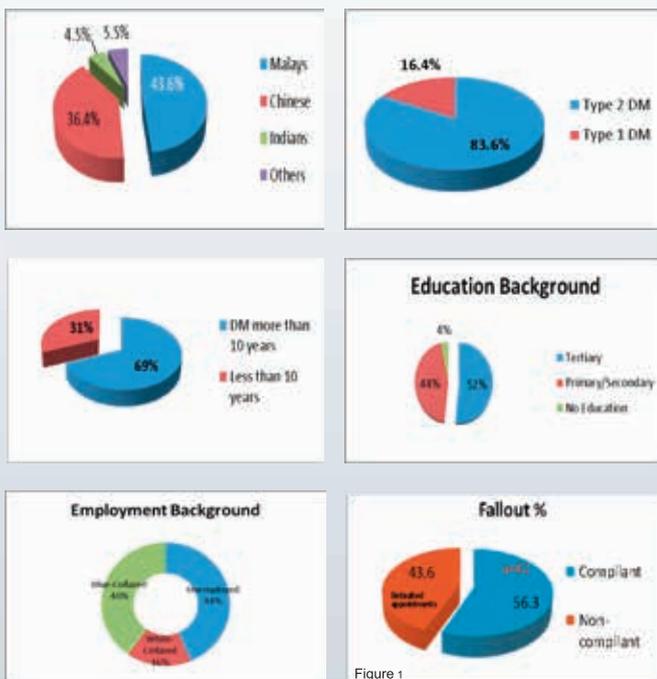


Figure 1

There was significant increase ($p=0.016$) in median SMBG frequency from baseline of once per week to thrice per week in the third month (Figure 2).

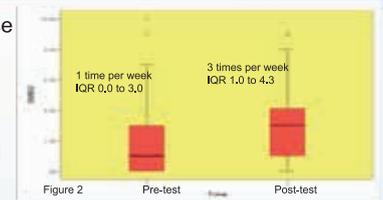


Figure 2

There was a significant increase ($p<0.001$) in average HbA1c from 10.2% to 9.3% (Figure 3).

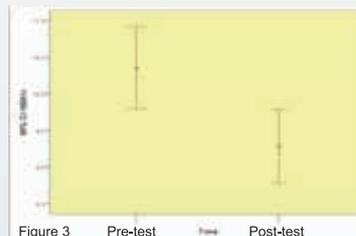


Figure 3

HbA1c taken at 6th month (9.28 ± 1.74) was statistically significantly lower (mean difference = 0.91 , 95% CI $0.43 - 1.38$, $p<0.001$), compared to baseline (10.19 ± 2.03)

There was no statistically significant difference ($p=0.903$) on median frequency of hypoglycemia (Figure 4).

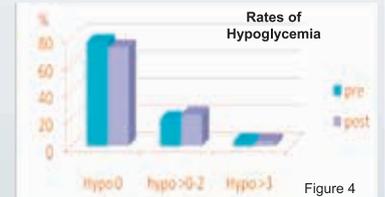


Figure 4

There is no significant reduction in Total Daily Dose of Insulin (TDD) ($p=0.137$) (Figure 5).

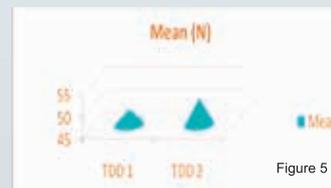


Figure 5

There was no significant difference which predict subjects who were non-compliant (Figure 6).

Variables	Compliant (n=24)	Non-compliant (n=31)
Gender		
Male	10 (41.7%)	11 (35.5%)
Female	14 (58.3%)	20 (64.5%)
p -value	0.700	
DM		
Type 1	3 (12.5%)	3 (9.7%)
Type 2	21 (87.5%)	28 (90.3%)
p -value	0.730	
DM duration		
<10 years	12 (50.0%)	12 (38.7%)
≥10 years	12 (50.0%)	19 (61.3%)
p -value	0.320	
Education		
Primary/Secondary	12 (50.0%)	18 (58.1%)
Tertiary	12 (50.0%)	13 (41.9%)
p -value	0.320	
Employment		
Unemployed	12 (50.0%)	17 (54.8%)
Self-employed	12 (50.0%)	14 (45.2%)
Other	0 (0.0%)	0 (0.0%)
p -value	0.850	

Figure 6

Discussion

Our results suggest that collaborative learning contract was a useful tool to improve SMBG frequency and problem solving, leading to improve HbA1c result. Although the total daily dose of insulin did not change from baseline, HbA1c reduction is likely due to heightened awareness of diet and activity impacting blood glucose. This is evident that regular contact with DNEs to problem solve that translated to lifestyle modifications thus improve glycemic control.

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Dyslipidemia in Children with Diabetes

Lim Pei Kwee¹, Vasanwala Rashida², Cheng Tuck Seng², Hui Yuen Ching Angela¹, Lim Soo Ting Joyce¹, Lek Ngee², Yap Fabian²

¹Division of Nursing, KK Women's & Children's Hospital, Singapore

²Endocrinology Services, KK Women's & Children's Hospital, Singapore

Background

Available data on prevalence and distribution of dyslipidemia in children with diabetes is limited

Studies have shown that lipid abnormality tracks from childhood to adulthood and contributes to the atherosclerotic process, therefore initial assessment and follow up is essential¹

Aim

To study the prevalence and comparison of dyslipidemia in children with type 1 diabetes (T1D) and type 2 diabetes (T2D) in a tertiary children's hospital

Method

A cross-sectional sample of diabetes patients, age 7-18 years on active follow-up between 1st January to 31st December 2014 were recruited

Fasting blood samples were analysed for glycated haemoglobin (HbA1c), total cholesterol (TC), high density lipoprotein (HDL), triglycerides (TG) and low density lipoprotein (LDL)

Measurements of TC, HDL and TG were performed on Abbott Architect c8000 platform and LDL was calculated with Friedwald's equation

Dyslipidemia was defined as TC \geq 5.2 mmol/L, HDL \leq 1.0 mmol/L, TG \geq 3.4 mmol/L or LDL \geq 3.4 mmol/L²

Children's demographic characteristics and biochemical data were compared between T1D and T2D using Fisher's exact test and independent sample t-test.

Gender- and age-adjusted mean BMI of patients were computed using Analysis of Covariance (ANCOVA).

Results

Total 165 patients (T1D: n=115; 69.7%, T2D: n=50; 30.3%) were recruited

T1D were diagnosed at younger age and average age was 7.75 \pm 3.39 as compared to 12.50 \pm 2.43 in T2D (p= <0.001) as shown in Table 1

T2D had higher BMI (27.70 \pm 0.60 vs 19.81 \pm 0.40 kg/m²; p=<0.001)

The prevalence of any dyslipidemia in children with diabetes was 46.1% (n=76) and higher in T2D than T1D (68.0% vs 36.5%, p=<0.001)

T2D had higher TG (1.60 \pm 0.90 vs 1.00 \pm 0.65 mmol/L; p=<0.001) but lower HDL (1.17 \pm 0.21 vs 1.51 \pm 0.36 mmol/L; p=<0.001) than T1D.

There was no significant difference in LDL between T1D and T2D (3.01 \pm 1.06 vs 2.92 \pm 0.86 mmol/L; p=0.560)

16.5% (n=19) of T1D had LDL \geq 3.4 mmol/L (Table 2)

A large proportion of T1D (n=76, 66.1%) were found to have higher than acceptable LDL level (ISPAD and ADA recommended acceptable LDL levels of <2.6 mmol/L)

Discussion

In this study, 58 children with diabetes (35%) have TC \geq 5.2mmol/l. This is consistent with 39% of children with diabetes and double that of school children without diabetes (17%) in a UK study³

Higher than acceptable LDL level was highly prevalent in T1D (66.1%) whom had no family history of lipid disorder (83.5%) may suggest that T1D children are taking higher intake of food products containing saturated fatty acids and cholesterol as snacks or substitute to avoid higher carbohydrate intake

Screening for fasting blood lipids may need to commence at diagnosis among T1D and annually for early interventions if abnormal

Conclusions

A significant proportion of children with T1D showed higher than acceptable LDL (2.6 – 3.3 mmol/L) but not frankly elevated LDL (\geq 3.4) level and no family history of lipid disorder. Further research on the reasons for this LDL pattern is recommended

Table 1 : Children's Characteristics

	Type 1 (n = 115)	Type 2 (n=50)	p value
Gender (n,%)			0.613
Male	54 (47.0)	26 (52.0)	
Female	61 (53.0)	24 (48.0)	
Ethnicity (n,%)			0.036
Chinese	81 (70.4)	30 (60.0)	
Malay	12 (10.4)	13 (26.0)	
Indian / Others	22 (19.2)	7 (14.0)	
Family history of lipid disorder (n,%)	19 (16.5)	10 (20.0)	0.657
Current Age (years)	13.61 \pm 2.58	15.36 \pm 2.00	<0.001
Age at diagnosis (years)	7.75 \pm 3.39	12.50 \pm 2.43	<0.001
Duration of diabetes (years)	5.85 \pm 3.69	2.82 \pm 2.12	<0.001
Prevalence of dyslipidemia (n,%)	42 (36.5)	34 (68.0)	<0.001
Mean HbA1c (%)	8.98 \pm 1.96	7.90 \pm 2.27	0.095
Mean BMI adjusted to gender & age (kg/m ²)	19.81 \pm 0.40	27.70 \pm 0.60	<0.001
Mean TC (mmol/L)	4.88 \pm 1.11	4.96 \pm 1.24	0.663
Mean HDL (mmol/L)	1.51 \pm 0.36	1.17 \pm 0.21	<0.001
Mean TG (mmol/L)	1.00 \pm 0.65	1.60 \pm 0.90	<0.001
Mean LDL (mmol/L)	2.92 \pm 0.86	3.01 \pm 1.06	0.560

Table 2: Comparison of Dyslipidemia in Type 1 and Type 2

	Type 1 (n, %)	Type 2 (n, %)	p value
TC \geq 5.2 mmol/L	35 (30.4)	23 (46.0)	0.075
HDL \leq 1.0 mmol/L	5 (4.3)	6 (12.0)	0.091
TG \geq 3.4 mmol/L	13 (11.3)	21 (42.0)	<0.001
LDL \geq 3.4 mmol/L	19 (16.5)	19 (38.0)	0.004

References

- Kwiterovich PO, *Journal Clinical Endocrinology Metabolism*, 2008, Nov; 93(11): 4200-4209; Recognition and management of dyslipidemia in children and adolescents
- National Cholesterol Education Program (NCEP): Highlights of the report of the expert panel on blood cholesterol levels in children and adolescents, *Paediatrics*, 1992; 89:495-501
- Azard K, Parkin JM, Court S, Laker MF, Alberti KGMM, *Archives of Disease in Childhood* 1994; 71: 108-113; Circulating lipids and glycaemic control in insulin dependent diabetic children



Obesity & Bariatric Surgery Seminar

Date: Saturday, 12 March 2016
Venue: SGH Block 6 Level 9, Lecture Theater
Cost: \$10 (Members) \$20 (Non- Members)

Register at adm.ades@gmail.com by 1 March 2016.
Please indicate full name, NRIC, SNB registration no.
Institution, member or non-member

Programme:	
1.00pm	Lunch (Booth display)
2.00pm	Pediatric Obesity Dr Oh Jean Yin (KK Women's & Children's Hospital)
2.45pm	Weight Management Programme Dr Nitish Mishra (Raffles Hospital)
3.30pm	Bariatric Surgery Dr Shanker Pasupathy (Mount Elizabeth Hospital)
4.15pm	Q&A
4.30pm	End of Programme

Organised by:



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UPCOMING EVENTS

12 March 2016	Obesity & Bariatric Surgery Seminar
28 May 2016	Diabetes Prevention & Control Seminar
23 July 2016	Self-Monitoring Blood Glucose Flipchart Workshop
20 August 2016	Diabetes Conversation Map Workshop
17 September 2016	Mind Matters Seminar & Annual General Meeting