

Diabetes Camp for Children and Young People with Type 1 Diabetes in Thailand: An Invaluable Experience

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Living with diabetes is not easy. The young person with type 1 diabetes, whose life depends on daily injections of insulin, has to balance hypoglycemia, with its unpleasant and sometimes dangerous consequences, and has to live with the threat of acute and chronic complications. The management for type 1 diabetes, therefore, needs self management education to go parallel with intensive therapeutic regimen.¹ Educating people with diabetes is an active process through which people come to learn about diabetes for their own survival and life quality. Diabetes education should begin immediately at hospital's outpatient clinic and may be done in a group setting, or one-on-one basis depending on each care-provider's system. However, its success comes not because of any particular treatment strategy, but through individualized treatment determined by an extraordinarily close working relationship between the physician, diabetes nurses, educators, dietitians with patients and their families, focusing on self-care decisions.^{1,2,3}

Since Leonard F.C. Wendt MD started the first diabetes camp in Michigan in 1925, the concept of specialized residential camp for children with diabetes has become widespread throughout the US and many parts of the world. The mission of the camp for children and youth with diabetes is to allow them to enjoy the camping experience in a safe environment. The camp setting is an ideal situation for the specialized medical staff to teach diabetes self management skills to the campers. Another important goals are to allow children with diabetes to meet one another, share their experiences and also to be more responsible for their medical problems.^{2,3}

The incidence of type 1 diabetes in Thai populations is relatively low when compared to the Caucasian populations as described in details in the previous section of this issue. The number of patient with type 1 diabetes in Thailand is relatively small when compared to type 2 diabetes, therefore a multidisciplinary team of type 1 diabetes experts has been difficult to establish country-wide. Most diabetes education programs have focused exclusively on the techniques for insulin injection and how to control diet far more than any other aspect of the entire education program.

Diabetes summer camp for children and young adults

with type 1 diabetes in Thailand was first organized by Siriraj diabetes education program, Faculty of Medicine Siriraj Hospital during 23-27 April 1990 at the Primary Healthcare Training Center, Chonburi province. The committee and medical staff (47 persons) consisted of pediatric and adult endocrinologists, nurses, dietitians, psychiatrists, psychologists, physical therapists, laboratory technicians and volunteers. There were thirty-one campers (13 males and 18 females) who came from six hospitals in Bangkok and one hospital in Chonburi. Their age ranged from five to nineteen years old, and their mean age was 13.4 years. Owing to insufficient knowledge in diabetes care, the main purpose of the camp was to provide diabetes self management education including insulin action, monitoring of blood and urine glucose, acute and chronic diabetic complications, self-care on special occasions, dietary control and exercise. Another goal was to allow them to learn more about life skills such as psychosocial adjustments, and how to cope with others (friends, family, etc). All activities included active learning style, outdoor activities, direct self experience and/or group sharing. The educational activities were structured to give fun, happiness and friendship. Social program included sight-seeing, visit to Ocean World and a farewell party. All campers learned more about diabetes, self care and joyfully sharing with their diabetes friends. The mean score of pre- and post-test was found increased from 76 to 80 percents. Five of them who never had injection themselves gained sufficient confidence to do it for the first time. Post three-month camp meeting was held for half-a-day follow up. Mean HbA1c pre-and post- camp (3 months apart) found 5 percents decreased in males and 3 percents decreased in females. All first campers and families expressed their appreciation in our camp activities and enthusiasm to join the next camp. The committee and medical staff achieved the main purpose and gained more experience in working with people with type 1 diabetes especially in psychosocial aspects.

The following camps were organized as demonstrated in details on table 1. In the 4th camp, we had several former campers who came to visit on the fourth day and joined the party night. After the 2nd camp, we recruited volunteers from former campers, medical students (yr 4-6)

TABLE 1. Detail of 1st - 9th Siriraj diabetes camp for young people with type 1 diabetes in Thailand.

Diabetes camp, date, place, name of director and secretariat of each camp	No. campers	No. medical staffs and support team	No. volunteers Former diabetes campers /medical Students /young G. P.	No. Observers
1 st camp during 23-27 April 1990, Primary health care training center, Choburi Prof. Chanika Tuchinda MD. Prof. Wannee Nitiyanant MD.	31	47	- / - / -	-
2 nd camp during 21-25 October 1991, Primary health care training center, Choburi Prof. Chanika Tuchinda MD. Prof. Wannee Nitiyanant MD.	39	37	- / - / -	-
3 rd camp during 17-22 October 1993, Lanna resort, Chaing-Mai Prof. Kitti Angsusingha, MD. Prof. Wannee Nitiyanant MD.	35	32	6 / - / -	-
4 th camp during 24-28 April 1995, Primary health care training center, Choburi. Prof. Kitti Angsusingha, MD. Prof. Wannee Nitiyanant MD.	46	36	4 / - / -	-
5 th camp during 28 April- 2 May 1997, Third training center, cooperative promotion department, Nakhonratchasima. Prof. Kitti Angsusingha, MD. Prof. Wannee Nitiyanant MD.	47	41	10 / - / -	14
6 th camp during 26-30 April 1999, Training center, Kasetsart University Kamphaengsaen Campus, Nakhon Pathom Prof. Kitti Angsusingha, MD. Prof. Wannee Nitiyanant MD	64	42	7 / - / 1	2
7 th camp during 16-20 April 2001, Buddists Practice Center, Phranakonsiyutthaya Prof. Kitti Angsusingha, MD. Prof. Wannee Nitiyanant MD.	64	51	5 / 8 / 2	6
8 th camp during 7-11 April 2003, Srinakarin Dam, Khanchanaburi Prof. Wannee Nitiyanant MD. Assoc.Prof. Supawadee Likitmaskul MD.	65	49	3 / 7 / 3	2
9 th camp during 18-22 April 2005, Erawan Lake Resort, Srinakarin Dam, Khanchanaburi Prof. Wannee Nitiyanant MD. Assoc.Prof. Supawadee Likitmaskul MD.	70	63	4 / - / 4	7

and young general practitioners who attended as group leaders and some were involved in preparing the activities which made camp activities more interesting, enthusiastic and knowledgeable. The physical activities in the following camps have been adapted and applied such as mini-olympic, hiking, walk rally and Thai traditional culture water-festival, ngan-wat and almsround. The daily record of the camper's progress has been adjusted by the success of the former campers. Diabetes self management skills have been added more and more, such as in 8th, 9th diabetes camp, a small group discussion in each morning, consisting of 8-12 campers, an endocrinologist, a nurse, a dietitian and a diabetes leader about interaction of insulin, diet, activities, emotion etc, on their glucose control. During the 9th diabetes camp, a parallel family camp including 18 diabetic family members from 10 families was arranged nearby for 3 days and they joined some camp activities. The campers got along very well. Approximately, 400 children and young people with diabetes in Thailand have attended our camp. Several of them have progressed to become counselors and role models for new younger campers. Recently, they and their families set up a "Thai Diabetic Child and Adolescent Support Club", yearly

journal "Sugar Free" and web site "www.thaidiabetes.com" which they can share, meet and discuss with their peer-group under the supervision of Siriraj Diabetes Education Team. So far, thirty-one medical staff members from five diabetes clinics of tertiary care hospitals and one diabetes clinic of a private hospital in the country joined our 5th-9th camp activities as observers. They have extended camp/group activities at their hospitals. Several medical experiences and outcomes from the camp have been published as shown in table 2. A multidisciplinary diabetes care team and intensive education program for newly diagnosed type 1 diabetes has been provided regularly in Siriraj Hospital since 1996 by our team experts.⁴

Camping for children and young people with type 1 diabetes is a useful experience for helping them cope with their disease more comfortably as well as promoting the sense of well being. For medical personnel, experienced from the camp, gave them the opportunities to understand behavior and thoughts of children with diabetes better. Thus, in countries especially with a low incidence of type 1 diabetes, the diabetes education in a camp situation is a most valuable environment for not only people with diabetes, but also the medical staff.

TABLE 2. Lists of authors, topic on medical issue and journal published regarding to Siriraj diabetes camp.

Authors	Topic: Medical issue and Journal publication
1. ชนิกา ตูจินดา, วรณิ นิธิยานนท์, กิตติ อังสุสิงห์, สุทิน ศรีอัยภูพร, สุภาวดี ลิขิตมาศกุล, คัทรี ชัยชาญวัฒนากุล.	การจัดค่ายฤดูร้อนผู้ป่วยโรคเบาหวาน: รูปแบบใหม่ของการให้ความรู้โรคเบาหวาน. ใน กิตติ อังสุสิงห์ และคณะ (บรรณาธิการ). คู่มือประกอบการเข้าค่ายเบาหวาน. กรุงเทพฯ : เรือนแก้วการพิมพ์; 2534; 83-97.
2. ชนิกา ตูจินดา, ขวัญใจ ธนกิจจารุ.	Diabetes Education Program and Diabetes Camp รายงานในการประชุมฟื้นฟูวิชาการประจำปีครั้งที่ 33 คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล. 2535 หน้า 171 - 81.
3. ขวัญใจ ธนกิจจารุ, ชนิกา ตูจินดา, วรณิ นิธิยานนท์, กิตติ อังสุสิงห์, เหลือพร ปุณณกันต์, สุภาวดี ลิขิตมาศกุล, คัทรี ชัยชาญวัฒนากุล.	การจัดค่ายเบาหวานสำหรับผู้ป่วยเด็กและวัยรุ่นครั้งที่ 2 (21-25 ตุลาคม 2534). รายงานในการประชุมฟื้นฟูวิชาการประจำปี ครั้งที่ 33 คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล 2535 หน้า 729-30.
4. สายนา คิชฐนารี.	วิทยานิพนธ์ กรณีศึกษาผลของการควบคุมระดับน้ำตาลต่อระดับไขมันชนิดต่าง ๆ ในเลือดเด็กและวัยรุ่นที่เป็นเบาหวานชนิดพึ่งอินซูลิน : ก่อนและหลังการเข้าค่ายเบาหวาน. วิทยาศาสตร์มหาบัณฑิต (สาธารณสุขศาสตร์) สาขาวิชาเอกโภชนาวิทยา. 23 พฤษภาคม 2537.
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7. Bunnag A, Sriussadaporn P, Sukcharoen B, Preungvate O.	A follow up study of diabetic camp achivity on perceived self -efficacy and self care behaviors in diabetic children. Siriraj Hosp Gaz 2003;55:158-66.
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