

# Integrated 3 in 1 Siriraj Diabetes School Camp: Views, reflections and lessons learned by participating healthcare professionals

Siriraj Diabetes Summer Camp, which was first organized in 1990 and has been held every 2 years since<sup>1,2</sup>, was the first diabetes camp for children and adolescents with type 1 diabetes in Thailand. Since the 11th camp, this biennial event has been called the 3 in 1 Siriraj Diabetes School Camp, because it includes children with type 1 diabetes (campers), their parents and healthcare professionals (HCPs), including endocrine fellows, nurses and dietitians. As a result of the relatively low incidence of type 1 diabetes in Thailand, our HCPs often have less experience in type 1 diabetes management. Therefore, we had a pre-camp session to teach HCPs about type 1 diabetes management based on the international recommendation<sup>3,4</sup>.

The 3 in 1 Siriraj Diabetes School Camp 2019 included 30 children and adolescents with type 1 diabetes, 35 parents, 15 endocrine fellows from different university hospitals, nine nurses and five dietitians. The participating campers, HCPs and endocrinologists were divided into four groups, and they lived together for 5 days. HCPs took care of campers from breakfast to bedtime. Fellows taught and supported the campers to adjust prandial insulin based on capillary blood glucose and carbohydrate counting. They managed hypo/hyperglycemia episodes under the supervision of endocrinologists. Nurses ensured insulin injection technique, and dietitians confirmed the carbohydrate counting skill. Our staff carried out a reflective session

with HCPs every day to ensure that they had learnt and managed patients correctly. Furthermore, this was the first time we introduced diabetes technologies, including real-time continuous glucose monitoring and insulin port, to the camp, which was a great opportunity for both patients and HCPs to learn about these new devices.

On the last day, HCPs reported topics of interest and the benefits that they gained from the camp. In an outpatient setting, HCPs see only blood glucose, glycated hemoglobin and some behavior problems. On the contrary, living with patients with type 1 diabetes for 5 days under supervision of endocrinologists provided a great deal of understanding and valuable experience for HCPs, as describe below:

- 1 Improvement of HCPs' knowledge of various topics including:
  - Dynamic of glucose change in real life that was affected by insulin dose, insulin injection technique, food, exercise and emotion
  - Reviewing carbohydrate counting, and applying it to insulin calculation using the insulin carbohydrate ratio and insulin sensitivity factor
  - Preparation before exercise, and management after exercise
  - Learning about new diabetes technologies. They valued the benefit of real-time continuous glucose monitoring, such as preventing hypoglycemia, and also realized the limitations, such as the requirement for capillary glucose confirmation for clinical judgment.
- 2 Better understanding of psychological issues of patients and parents, because HCPs had direct responsibility for the camper during the camp

- 3 Gaining more confidence in insulin management for type 1 diabetes patients (for endocrine fellow)
- 4 Knowledge transfer among the multi-disciplinary team. Medicine fellows learned how to approach children and adolescents from pediatric fellows, and pediatric fellows learned about the adult diabetes service system. Furthermore, the value of the multidisciplinary approach was confirmed.






In conclusion, HCPs developed more confidence in type 1 diabetes management, and a better understanding of patients and parents by attending and participating in the diabetes camp.

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## DISCLOSURE

The authors declare no conflict of interest.

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