

Allan Drash Clinical Fellowship Report

Clinical Fellow	Dr. Wafaa Laymoun MD of pediatrics and a lecturer of pediatric endocrinology and diabetes, Mansoura Faculty of Medicine, Egypt
Mentor	Dr. Catherine Peters Consultant in pediatric endocrinology in University College London Hospitals (UCLH) and Great Ormond Street Children's Hospital (GOSH)
Host center	Pediatric Diabetes Department in University College London Hospitals (UCLH) and Great Ormond Street Children's Hospital (GOSH)
Training Team	Children and Young People's Diabetes Team in UCLH; Consultants (Professor Hindmarsh, Professor Viner, Dr Peters, dr Amin and dr White), Dietitians (Annan and Bull) and Clinical Nurse Specialists.
Duration	8 weeks from 6 th November 2017 to 7 th January 2018

Introduction

It has been an honor and a privilege to be awarded Allan Drash fellowship. I have spent eight weeks in diabetes department in UCLH and GOSH which are ones of the top ranked centers in management of diabetes in children and adolescents in Europe.

On my first day, I met Professor Hindmarsh who discussed with me my objectives of the fellowship and clarified the schedule of the clinics and grand rounds, and then he introduced me to the team. My main objectives were to gain better knowledge about diabetes technology including insulin pumps and continuous glucose monitoring (CGM) modalities which are not widely used in Egypt, and to have a close approach to multidisciplinary team in management of diabetes.

My fellowship experience:

Outpatient clinics:

I have attended different types of clinics for diabetic patients. Firstly, the **consultant clinic** which is usually a full day clinic from 9 a.m to 6 p.m at which blood glucose readings are downloaded and HBA1C is measured then the consultant meets the family to discuss the state of diabetic control, adjust pump settings or insulin injection doses and answer any queries. This clinic is usually attended by a diabetes nurse and a dietitian as well. It was a very good point that diabetic adolescents have separate clinics other than diabetic children clinics as this special age group needs different way of communications, has different concerns, mostly they care for their diabetes themselves and needs to be prepared for transition to adult care.

Secondly, **nurse-led clinic** which provides the patients and their families with more knowledge about diabetes, insulin injections, glucometers, different types of insulin pumps and glucose sensors and showing insertion technique. Moreover, the patient can have a trial of insertion of the pump and/or the sensor and take them at home for one to two days to decide if he will be comfortable with them or no. Also, in this clinic the nurse teaches the patient how to download glucose readings.

Dietitian and exercise clinic was an excellent clinic which was run by the amazing Annan and Bull. Both of them are experts in diet and exercise in diabetes. They teach the patients about glycemic index and carb counting of different foods and how to handle different types of exercise with diabetes. Also, there were **Psychologist clinics** but I did not have chance to attend any of them.

Attending outpatient clinics was a great chance to observe the language among patients, their parents and their diabetic team about living with diabetes. The aforementioned clinics had a varied population in terms of sociodemographics, socio-economic status, glycemic control and cultures. Fortunately, I have seen many interesting cases and discuss their plan of management, similarities and differences in treatment protocols between my center in Egypt and UCLH.

Grand rounds:

There was a weekly meeting in UCLH which is attended by all the diabetic team to discuss the cases admitted in the ward, the challenging outpatient cases and the referral letters from other hospitals. I was happy to be given the chance by the team to present a talk in one of the grandrounds about our experience in Egypt in managing diabetic adolescents who fast Ramadan. Also, there was a weekly grand round in diabetic department in GOSH to discuss diabetic cases who were different to some extent as most of them are cystic fibrosis related diabetes or post transplant patients. It was very beneficial for me to see these different categories of patients.

Inpatient services:

During my observership, I have seen the protocol of management of DKA and the newly diagnosed diabetic cases, how to break the bad news and how to conduct teaching for them by the whole diabetes team. I realized from these teaching sessions the value of team in managing diabetes. I hope I can implement this at my home center.

Diabetes technology:

I have attended two insulin pump schools and continuous glucose monitoring school run by diabetes nurses and dietitians for patients and families. I attended a teaching day arranged by Medtronic-UK about CGM and how to interpret insulin pump and sensor downloads.

Having about 90% of patients on insulin pumps and/or CGM provides me a good opportunity to be familiar with downloading blood glucose readings using Diasend software and adjusting pump settings.

Research:

Being a short period of time, I did not have chance to do research during my stay. However, my mentor; dr. Peters has discussed with me some ideas for future research which I can do at my center and she is happy to help me or to run multicenter studies with my center in the future.

Conferences:

I was able to attend Diabetes Professional Care conference in Olympia, London, November, 2017.

Other experiences:

I have attended a course about how to search the Pubmed and how to use Endnote, arranged by UCL library.

Lessons Learnt

- 1- Multidisciplinary team is the cornerstone in diabetes management.
- 2- I got practical exposure to different types of insulin pumps and CGMs.
- 3- Diabetes education is a continuous process that starts with onset of diagnosis and continues for lifetime.
- 4- Diabetes technology has made life with diabetes easier. However, patients with multiple daily injections of insulin still can have good control and excellent outcome.

Challenges at my center which I will try to solve

- 1- Huge numbers of patients which makes the time given for each patient in the clinic insufficient to do the proper education.
- 2- Lack of well-trained dietitians specialized in diabetes. So, the physician have to do everything about diabetes education including diet, insulin, injection sites, exercise, sick day management and school plans and that makes the quality of care suboptimal.
- 3- Shortage of financial resources to provide sufficient insulin and glucose strips for every diabetic patient.
- 4- Low level of education of many patients which makes it challenging to care for their kids with diabetes.

Finally, I would like to thank ISPAD and JDRF for giving me this precious opportunity to be exposed to the recent advances in managing diabetes in a well-recognized center. Also, I would like to thank my caring helpful mentor dr.Peters and the whole pediatric diabetes team in UCLH and GOSH for being incredibly cooperative, kind, caring and willing to help at all times. They offered me generously

the knowledge and the confidence to the extent that made me feel as one of their great team and really I hope our ways will cross soon.