2023 ISPAD "Allan Drash" Clinical Fellowship Report

Recipient: Didem GUNES KAYA, PhD – Turkey **Duration:** 6 weeks (March 18th – April 26th)

Host Center: Children's Hospital of Philadelphia (CHOP), US

Fellowship Supervisor: Dr. Brynn Marks

Introduction

I am a pediatric dietitian in the Department of Pediatrics at Istanbul University-Cerrahpasa Faculty of Medicine. In addition to my clinical responsibilities, I am actively involved in research. Our diabetes center is one of the largest and most prominent centers in both Turkey and Istanbul, treating approximately 600 children and adolescents with Type 1 diabetes (T1D). Our team consists of one pediatric endocrinology professor, two associate professors, four pediatric endocrinology fellows, four pediatric residents, two pediatric diabetes nurses, and one pediatric diabetes dietitian. We work closely with other departments to support our patients and continuously strive to optimize care and enhance our skills.

The invaluable opportunity provided by ISPAD has significantly contributed to improving our diabetes care. Observing an exemplary diabetes management center like CHOP has provided a wealth of insights, helping us refine and further develop our diabetes follow-up program.

Activities

A) Diabetes Outpatient Clinic

The diabetes outpatient clinic at CHOP exemplifies a high standard of multidisciplinary care. During my observation, I had the privilege of shadowing a wide range of professionals, including physicians, nurses, diabetes educators, dietitians, social workers, and psychologists. This underscored the integral role of each team member in managing T1D.

One particularly impressive aspect was the structure of the appointments: each visit was scheduled for 45 minutes—significantly more time than is typically allocated in our own clinic. This allowed for more comprehensive interactions, with most patients meeting at least two team members during their quarterly visits. In our clinic, patients typically see every member of the diabetes team at each visit, a practice we follow to compensate for shorter visit times, ensuring that comprehensive care is still delivered.

My experience with diabetes technology was extensive. I gained firsthand insight into continuous glucose monitoring (CGM) and automated insulin delivery systems. I learned about the nuances of each device, including their benefits, limitations, and the guidance required to help patients select the devices that align with their glycemic control needs, lifestyle, and level of involvement in their care. Observing discussions with families about CGM and pump data provided valuable insights into supporting behavioral changes to optimize glycemic control.

The weekly diabetes team meetings were another impressive aspect. Team members collaborate to discuss patient management, fostering a holistic and patient-centered approach to care.

B) Diabetes Inpatient Program

The inpatient diabetes program at CHOP provided an interesting contrast to the practices in our clinic. During my final week, I participated in inpatient rounds in the pediatric endocrinology and diabetes ward, as well as in educational sessions for newly diagnosed T1D patients. At CHOP, patients are typically discharged within 1-2 days, which contrasts with the 7-10 day hospitalizations we follow in our practice.

This divergence illuminated an important aspect: cultural differences that shape diabetes care approaches. In our clinic, the extended hospitalization period ensures that patients and their families feel secure and adequately educated before discharge. While this approach is lengthier, it aligns with our emphasis on thorough education and patient confidence. CHOP's model, in contrast, focuses on early discharge without compromising the quality of care. This experience helped me appreciate how different cultural values influence patient care and the structure of diabetes management programs.

C) Celiac Clinic

During my observation at CHOP, I had the opportunity to attend the celiac clinic, which provided valuable insights into managing patients with both celiac disease and T1D. The clinic emphasized a strong team-based approach, ensuring high-quality care, similar to our practice. A key component of the clinic's success was the comprehensive nutrition education provided to patients and their families, which included practical sessions on reading food labels for gluten content. This approach mirrors the one we take in our clinic, focusing on empowering patients with knowledge about their dietary needs.

One element that particularly stood out to me was the weekly family and team education meetings held at CHOP. These sessions not only keep the education and management of celiac disease up-to-date but also create a supportive community where families can meet, socialize, and share their experiences. I found this practice to be excellent and believe it could be implemented in our clinic to foster a stronger sense of community and support among families.

D) Cystic Fibrosis Clinic

At CHOP's cystic fibrosis clinic, I observed a highly effective model of care characterized by strong teamwork, thorough education, and close patient follow-up. During each visit, patients meet with every member of the care team, ensuring comprehensive management. This approach is quite similar to the model we use in our diabetes care, where each patient sees the entire team at each visit.

In contrast, in our own cystic fibrosis clinic, patients do not always meet with every team member. Specifically, not all patients are consistently referred to the dietitian, which can result in gaps in nutrition education. This observation has highlighted an area for improvement in our clinic, as comprehensive dietary guidance is crucial for optimizing care.

E) Eating Disorder Clinic

At CHOP's Eating Disorder Clinic, I observed an integrated and multidisciplinary approach to managing complex cases of eating disorders in children and adolescents. The team, which included physicians, psychologists, dietitians, and social workers, worked closely together to provide holistic care tailored to each patient's needs. Each team member played a critical role in addressing the medical, psychological, and nutritional aspects of eating disorders.

What impressed me most was the personalized nutrition education and counseling provided by the dietitians. They carefully tailored meal plans and strategies to restore healthy eating behaviors while addressing the psychological barriers patients faced. Additionally, the close follow-up with patients and families ensured that progress was continuously monitored, with adjustments made as needed.

This patient-centered, multidisciplinary approach resonated with me, as it aligns with the care principles we strive to implement in our own clinic. The seamless coordination and constant communication between all team members were particularly noteworthy and could enhance our own practice in managing eating disorders.

F) Educational Sessions

CHOP places a great emphasis on continual professional education. I attended case presentations, research discussions, and journal clubs, typically organized once or twice a week. These sessions not only reinforced my existing knowledge but also introduced me to cutting-edge research in diabetes care. The collaborative and intellectually stimulating environment fostered by these educational activities was particularly inspiring and aligned with CHOP's culture of lifelong learning.

G) Other Activities

My time at CHOP was enriched by experiences beyond the clinical setting. Dr. Brynn Marks, my mentor, not only supported my professional growth but also ensured that I experienced the vibrant culture of the city. I was fortunate to attend concerts, visit world-renowned museums, and even watch live NBA and baseball games. These extracurricular activities created lasting memories and made my time at CHOP an unforgettable blend of professional and personal development.

Acknowledgments

In the spring of 2024, I had the privilege of spending six weeks at the Children's Hospital of Philadelphia (CHOP). This experience deepened my knowledge and approach to pediatric nutrition, particularly in diabetes care, and reignited my professional passion, inspiring me to take new steps in my work. I am incredibly grateful to ISPAD for this amazing opportunity and to the wonderful team at CHOP for their unwavering support and kindness throughout my time there.

I would especially like to express my heartfelt gratitude to my mentor, Dr. Brynn Marks. It was an incredible privilege to be her observer. Her outstanding guidance, kindness, and exceptional hospitality made this experience truly special. I have no doubt that I will carry her support with me for a lifetime.

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