2022 ISPAD “Allan Drash” Clinical Fellowship Report

Recipient: Marzhan Rakhimzhanova, MD, MSPH, Kazakhstan

Duration: 4 weeks (February 5th – March 1st)

Host center: Endocrinology Division, Boston Children’s Hospital, MA, USA

Fellowship supervisor: Prof. Katharine Garvey

**Introduction**

I am deeply honored to have been selected for the ISPAD "Allan Drash" Clinical Fellowship, which allowed me to train at one of the most renowned centers for pediatric endocrine and diabetes care: the Pediatric Endocrinology Division at Boston Children’s Hospital. This experience was transformative, significantly enhancing my clinical and educational skills, and will undoubtedly elevate the quality of care for children and families with diabetes.

**Acknowledgments**

First and foremost, I would like to express my heartfelt gratitude to ISPAD for this incredible opportunity, which provided me with a unique opportunity to advance my knowledge and skills in the care of children and adolescents with diabetes. My deepest thanks go to my supervisors, Dr. Katharine Garvey and Ari Wassner, whose guidance, kindness, and dedication made this experience truly exceptional.

I also extend my sincere appreciation to the entire team at the Endocrinology Division. Their collaborative spirit, expertise, and commitment to patient care created an environment that surpassed all my expectations.

**Objectives of the Fellowship**

The primary goals of my fellowship were:

* To deepen my clinical expertise in pediatric diabetes management, including technology and personalized care strategies.
* To explore innovative approaches to diabetes education and multidisciplinary team-based care.
* To gain insights into best practices for diabetes care delivery and apply these in Kazakhstan.

**Host Institution Overview**

During my fellowship, I was privileged to train at the Endocrinology Division at Boston Children’s Hospital, known for its excellence in pediatric endocrinology and diabetes care. The institution offered exposure to cutting-edge research and technology, such as continuous glucose monitoring systems, insulin pump therapy, and advanced patient education models.

**Activities and Experience**

* Participated in outpatient diabetes clinics and inpatient diabetes rounds, focusing on insulin pump initiation and optimization.
* Observed complex cases of diabetes and its complications under the guidance of expert mentors.
* Observed multidisciplinary team meetings involving dietitians, psychologists, social workers and diabetes educators and coordinators
* Attended fellows didactic series and case discussions
* Participated in-patient and outpatient family education sessions
* Additional experiences in endocrine subspecialty clinics
* Academic activities, endocrine clinical case conferences, post outpatient clinic conferences, pediatric grand rounds and other research conferences

**Achievements and Outcomes**

Improved my proficiency in using advanced diabetes management tools and techniques like hybrid closed-loop systems.

Developed patient-centric approaches to diabetes education, applicable to local settings.

Strengthened my ability to work in multidisciplinary teams for comprehensive care.

Identified strategies to integrate global best practices into the home institution with the available resources.

**Challenges and Lessons Learned**

The fellowship highlighted the disparities in healthcare resources and the need for tailored interventions in resource-limited settings like Kazakhstan. It emphasized the importance of patient-centered care and robust team collaboration for optimal outcomes.

**Future Directions**

The fellowship has inspired several initiatives I plan to implement:

* Establish a structured diabetes education program for children and families
* Advocate for the introduction of diabetes technologies, such as CGMs and insulin pumps, within our healthcare system
* Strengthen local research on diabetes epidemiology and innovative management approaches.

I extend my deepest gratitude to ISPAD, the host institution, and my mentors for their invaluable guidance and support. Special thanks to my colleagues and patients who inspire me to continue striving for excellence in pediatric endocrinology and diabetology.

Marzhan Rakhimzhnova MD, MSPH

CF University Medical Center Astana, Kazakhstan