Host center: Oslo University Hospital, Pediatrics Diabetes Deparetment- Ullevål – Oslo/Norway

Host supervisor: Dr. Lars Krogvold, pediatrician, pediatric endocrinologist and head of the diabetes team.

Training time: April – May 2023

Introduction of myself:

I am Prusha Shwan Mohammed Salih, a medical doctor at the Diabetes and Endocrinology Center of Sulaimani from Kurdistan region of Iraq. I also hold a master degree in Nutrition from Karolinska institute in Sweden through a scholarship for future global leaders.

I feel immensely honored to have been awarded the Allan Drash's Clinical Fellowship by ISPAD, which I believe I am the first recipient for it in Iraq.

Choosing Oslo University Hospital as my 1st choice training host center in my application proved to be an excellent decision, as I was fortunate enough to be accepted. Additionally, this was my first time to visit Oslo and very first time to have this intense practical training in diabetes outside my country. The experience proved to be an incredibly rewarding and enjoyable journey in every possible aspect.

Introduction of the host center:

Oslo Ullevål University Hospital (Norwegian: Ullevål universitetssykehus) in Oslo, Norway is the largest of the four main campuses of Oslo University Hospital. It was opened in 1887, it has many departments, among them is pediatrics hospital and its departments that includes patient treatment, research, teaching and administration activities.

My Journey with Allan Drash's Clinical Fellowship:

My training supervisor was Dr. Lars Krogvold, he is brilliant person, a very smart doctor and a very loyal and dedicated pediatrician to his patients and job. He was very welcoming with his team at the Oslo University Hospital to us. I was accompanied by the other awardee Dr. Emine Ayca, who is a smart pediatrician from Turkey. When we arrived, everything was arranged regarding our training and timetable for our stay by Dr. Lars.

With a team consisting of skilled pediatricians, diabetes nurses, dieticians, psychotherapists, and other healthcare professionals, they collaborated to ensure our training was productive and fulfilling.

The training schedule were of variety of sessions as diabetes clinics, endocrine clinics, morning tours, afternoon tours, meetings, obesity clinics, seminars and also lunch time together most of the times. Beyond knowledge exchange, we were given the opportunity to share our cultures, personal ideas, hobbies, and enjoy fun interactions with the entire team.

The newest experiences which expanded my diabetes knowledge was the Continuous Glucose Monitor CGM and sensors and on the top was the insulin pump for delivering insulin. In my country, The CGMs can been seen from time to time with patients which brought them from abroad and it is user-friendly, while the insulin pump can rarely be seen because it is expensive to be purchased and there are very few doctors in the country that can deal with it as no one has enough or any experience in using it. I consider myself exceptionally fortunate to have had

the opportunity to learn and practice with the insulin pump in a live clinical setting at Oslo University Hospital during this fellowship.

<u>Outpatient clinics:</u> they were two shifts morning and after lunch shift. In which there were many pediatrics diabetes and endocrinology condition received. They usually had about 5 to 10 patients per day, sometime more accordingly.

What amazed me was the considerable amount of time the pediatricians dedicated to each patient, often spending 45 to 60 minutes or even more in consultations. During these appointments, they took the time to thoroughly discuss every aspect of the patients' diabetes and the challenges they faced. Furthermore, they even explored the possibility of mental health issues or stress affecting the patients and referred them to psychologists when needed.

Also during the outpatient clinic, the pediatricians were looking thoroughly into the children's CGM charts and recordings and also to the insulin doses that has been taken through insulin electronic pens or insulin pumps. It was a remarkable experience to learn about the developed countries' protocols in diabetes management on practical basis

Morning/ afternoon tour: Experiencing the diabetes management approach in Norway was a novel experience for me, as it differed from the practices in my home country. In Norway, children newly diagnosed with type 1 diabetes are admitted to the hospital for a few days with a special teaching schedule, a unique practice not commonly followed by my country.

During their stay, the admitted children undergo an extensive teaching and learning program tailored to their diabetes needs. The sessions cover various essential aspects, including understanding diabetes and hypoglycemia, its causes, potential consequences, and the necessary actions to manage it effectively. They also receive comprehensive guidance on how to use insulin pens or pumps, glucometers, and continuous glucose monitoring CGM devices. Moreover, the sessions also address the psychological aspects affecting both the child and their parents, providing crucial support and coping strategies.

This comprehensive schedule is delivered by a multidisciplinary team consisting of pediatricians, diabetes nurses, psychotherapists, dieticians/nutritionists, and other related staff members. Special instructing brochures are provided to supplement the learning process. It seemed to me a bit tiring and demanding for the health staffs and doctors but will have very positive long-term outcome for the patients, their families and also the health system on a long-term.

<u>Meetings</u>: The meetings were conducted on a regular basis, for instance at least two gatherings per week at the department. The first meeting was bringing together the entire endocrine team, while the second meeting focused solely on the diabetes team. During these sessions, doctors, nurses, and other staff members engaged in meaningful discussions regarding significant cases from the previous week. This collaborative atmosphere encouraged the exchange of ideas, where even we had the opportunity to contribute our own knowledge. These meetings were of great importance to us, serving as a comprehensive review of the week's cases, to take notes and to address any inquiries we had.

Additionally, there were seminars organized on vital topics in the field, presenting the latest research findings and guidelines. These seminars provided us with up-to-date insights and a deeper understanding of the diabetes, enhancing our overall learning experience during the fellowship.

Due to my profound curiosity in every aspect of diabetes, I asked Dr. Lars to introduce me to other sectors in the hospital which are interconnected to diabetes. This included visiting the obesity centers where I had the opportunity to interact with dedicated dieticians who work with children with obesity, as well as compassionate psychotherapists who specialize in supporting children with abnormal eating behaviors, I also met with obesity management physicians. Luckily, I had the chance to attend the forementioned clinics of course after taking permissions from the department and the patients. (To mention too, everyone in Oslo is welcoming)

In addition to the wealth of knowledge I gained in diabetes management, my time in Norway allowed me to explore various aspects of the Norwegian healthcare system. I observed how they efficiently receive and manage patients, and I learned how to implement their exemplary medical practices in our own system back home.

Beyond the professional growth, my journey was enriched by the warmth and company of the friends I made both within the hospitals and outside. These connections created a sense of belonging and added a special dimension to my experience.

Moreover, I was fortunate enough to participate in the celebration of the National Norwegian Day, an extraordinary event in itself. Being a part of such a fantastic celebration further immersed me in the culture and traditions of Norway, creating lasting memories.

A significant part of this enriching experience was learning exceptional medical communication skills from the remarkable team at the diabetes department of Oslo University Hospital. Their expertise and professionalism are truly commendable. Most importantly, I was very amazed by Dr. Lars Krogvold for his dedication to his profession. Under his guidance, I not only learned most updated knowledge about diabetes, I also acquired valuable insights into medical ethics and I also witnessed his exceptional care for pediatric patients, especially those with diabetes. He embodies the ideal qualities of a pediatrician.

Thus, I express my heartfelt gratitude to ISPAD for the incredible fellowship and the invaluable opportunity it has offered to us from developing countries. Throughout this journey, I have gained extensive knowledge in various aspects, including diabetes, endocrine disorders, obesity, eating disorders, as well as collaborating within a multidisciplinary team and utilizing cutting-edge management technology and tools.

I thank everyone I met at Oslo University Hospital that I couldn't mention all their names here. I carry with me a wealth of knowledge and skills that will undoubtedly shape my future in diabetes and other related aspects in the medical field. I trust that this report has allowed me to paint a vivid picture of my experiences during the ISPAD fellowship. I look forward to the possibility of reliving these cherished moments once more someday.

Prusha Shwan M Salih

MD / MSc - Kurdistan of Iraq