

27th International Conference on

Diabetes and Endocrinology

May 16-17, 2019 | Prague, Czech Republic

Optimizing treatment for diabetic patients with integrated approach of behavioral management, food science, artificial intelligence and pharmaceutical care

Ahmad Hussien Tareq

Nanyang Technological University, Singapore

Diabetes is a major, non-communicable disease with increasing prevalence at a global level. Optimized diabetic care comprises of various factors. It starts from right medications, frequent blood glucose monitoring, modification in diet, increasing physical exertion and behavioral intervention for patient compliance. Pharmaceutical care addresses the drug related issues and assist in sustaining desired blood glucose levels. However, lifestyle changes are the significant component of diabetes management. To adjust with these changes patient needs continuous education, motivation and monitoring. To track patient progress, pharmaceutical care and behavioral challenges, we are developing tool to manage clinical data, applying artificial intelligence and data analytics to acquire expedient actionable insights for the clinicians. Our focus is to resolve behavioral challenges of patients particularly with diet. With reference to South Asia, diet transition is significant part of disease management, and it poses high barrier for patient compliance. Most diabetics are accustomed to refined carbohydrate with high glycemic index (GI) food. They have difficulty following dietary recommendation for long term. The likely causes of

poor adherence are headaches, craving for carbohydrates, habituation for their preferred food choices like white rice, noodles and bread. We are developing a composite to incorporate it into raw food ingredients. Aim is to enable food production with lower GI. It will potentially help in addressing the challenges of nutritional adherence in diabetic patients. Although further research is needed to understand and explore this route, nevertheless it offers a promising route to replace high GI products with medium/low GI products.

Speaker Biography

Ahmad Hussien Tareq is pharmacist and scientist who did extensive work in peptide engineering, its application in infectious diseases drug development and nutrition sciences. After completing his PhD from NTU, Singapore, he has been extensively involved with the deep tech startup ecosystem of Singapore. Recently, he is building his own startup focused on developing optimized nutritional care and behavior compliance for diabetics. As a pharmacist, he worked with numerous diabetic patients, particularly in developing countries with aim of reversing type 2 diabetes. His work is focused on using integrated approach of behavior management, AI, sports science, big data, optimized nutritional & pharmaceutical care.

e: ahmadhus001@gmail.com

 Notes: