

MEI 2024 / BIL. 11 / 2024

EON

Epitome of Nature

KESIHATAN DAN KESEJAHTERAAN



MAJALAH PP BIOLOGI
UITMCNS

ISSN 2773-5869



INSULIN INTEGRATION – INSULIN MANAGEMENT UPDATE

Fatimah Zaherah Mohamed Shah
Endocrine Unit, Faculty of Medicine, Universiti Teknologi MARA

fatimah521@uitm.edu.my

EDITOR: DR. NOR'AISHAH ABU SHAH

The incidence of Type 2 Diabetes Mellitus (DM) in Malaysia is increasing, with an estimation of 3.9 million adults diagnosed according to the recent Malaysian National Health and Morbidity Survey (NHMS) in 2019. In fact, Malaysia has the highest rate of diabetes in Western Pacific region and one of the highest in the world, with a prevalence of diabetes increasing from 11.2% in 2011 to 18.3% in 2019, translating into a 68.3% increase. Diabetes is expected to affect 7 million Malaysian adults aged 18 and older by 2025, posing a major public health risk with a diabetes prevalence of 31.3%. The increasing trend is a result of a variety of causes, including population expansion, population ageing, urbanization, and rising rates of obesity and physical inactivity.

This increasing prevalence of diabetes is associated with high treatment burden and increase in insulin use, which is reflected in the last National Diabetes Registry Report. This report has stated that the rate of insulin use in Malaysia has increased consistently, with 23.1% of patients treated with insulin in 2013 compared to 30.3% in 2019. This is perhaps not very surprising as the 'Asian

diabetes phenotype' model underlines the need for insulin in Asian people with diabetes at earlier stages of diabetes due to high rate of visceral adiposity and lower pancreatic beta cell mass.

The magnitude of the burden of diabetes in this country emphasizes the necessity for better management of this condition and the associated complications, especially the need for it to be addressed at the various levels of healthcare providers. Hence, a workshop was designed focusing on updating and educating diabetic educators, dietitians, pharmacists and junior medical officers on insulin use.

Diabetes is expected to affect 7 million Malaysian adults aged 18 and older by 2025, posing a major public health risk with a diabetes prevalence of 31.3%.



Image 1: Speakers and workshop participants (Source: Author's own collection)

This workshop, organized by Endocrine team UiTM, was held at Hospital Al-Sultan Abdullah UiTM Puncak Alam, in conjunction with World Diabetes Day and was well attended by over 80 participants consisting of health-care practitioners from the nearby health clinics and hospitals.

The event started with 2 consecutive lectures delivered by the resident endocrinologists, the first was an overview of insulin use and indications, as well as on types of insulin and its administration, whereas the second was on blood sugar monitoring with targets for control, followed by a question and answer session. This was then followed by a presentation by the dietitian on diabetic diet, glycaemic excursions with certain foods and some basic principles of carbohydrate counting, paired with quizzes. The diabetic educator was next with an informative talk on addressing barriers and complications on insulin therapy.

The next event was a breakout session with a case-based discussion workshop, with the cases ranging from storage and transport of insulin, approach and management of hypoglycaemia to titration of insulin to lifestyle and during fasting. The attendees also had a chance to discuss any challenging cases with the doctors or diabetic educators at the booth.

The special feature of this workshop started in the afternoon session, which was a course on 'Approach to Diabetic Foot'. This course was a collaboration between the UiTM endocrine unit and rehabilitation unit and consisted of introductory lectures and hands-on experience. In the break-out session, the participants were divided into groups, with one group educated on assessing peripheral neuropathy, another group on vascular compromise assessment using ABI (ankle

-brachial systolic index) measurement, and another group receiving information on orthosis.

References:



Image 2: Case- based discussion (Source: Author's own collection)



Image 3: Diabetic foot care demonstration (Source: Author's own collection)