OA-D-07

COGNITIVE IMPAIRMENT AND MEDICATION NONADHERENCE IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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INTRODUCTION
Poor glycemic control in patients with type 2 Diabetes Mellitus results in a variety of complications including cognitive impairment. To implement self-management, intact cognitive function is necessary. In a variety of chronic diseases, cognitive impairment has been associated with medication nonadherence. Nonetheless, no studies have looked into the relationship between the two in patients with type 2 DM in Indonesia**.** This study aimed to determine the relationship of cognitive impairment with medication nonadherence in patients with type 2 DM.

METHODOLOGY
The design of this study was cross-sectional with 96 study subjects with type 2 DM older than 18 years old in the outpatient unit at Tebet District General Hospital. Demographic characteristics, clinical parameters, cognitive function assessment, and medication adherence use were fully documented. Cognitive function was assessed with the Indonesian version of the Montreal Cognitive Assessment (MoCA-Ina). Medication adherence was assessed using pill count.

RESULTS
There were 69.9% of the research subjects with cognitive impairment with education level as an associated factor (OR 5.223; 95% CI 1.99-12.22). Analysis of the occurrence of impairment of the function of memory domain 96.9%; executive 78%, visuospatial 78%; attention 30%; language 26%; and 4.2% orientation. Medication non-adherence was found in 26% of the study subjects. Bivariate analysis did not show an association between cognitive impairment and medication non-adherence. (OR 0.757 95% CI [0.280-2,051] p=0,58).

CONCLUSION
Cognitive impairment was found in 69,9% of patients with type 2 DM, and medication non-adherence was found in 26% of patients. Cognitive impairment was not associated with medication non-adherence in patients with type 2 DM.

KEY WORDS
Cognitive impairment, diabetes mellitus, medication nonadherence

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WEIGHT LOSS ASSOCIATED WITH SODIUM GLUCOSE COTRANSPORTER-2 INHIBITOR DURING RAMADAN: A SINGLE CENTRE EXPERIENCE

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INTRODUCTION
Muslims observed daytime fasting during Ramadan. During daylight, no food or water is allowed. Sodium glucose cotransporter-2(SGLT-2) inhibitor promotes renal caloric and water loss, and results in weight reduction. This study aimed to look at changes of weight and blood pressure among persons with diabetes newly started on SGLT-2 inhibitor.

METHODOLOGY
This was a prospective study done in April and May 2019 in Hospital Tengku Ampuan Afzan, Pahang, Malaysia. The study recruited Muslim subjects with established diabetes on treatment and are able to fast. They were given Empagliflozin® 25 mg daily 2 weeks run-in period and throughout Ramadan. Blood pressure is measured with Colin Press-Mate and weight measured with Gima body weight scale during recruitment and between 2nd to 4th weeks of Ramadan. Descriptive statistics and paired t-test were used for statistical analysis.

RESULTS
Thirty-four subjects were recruited, 2 refused to participate. Mean HbA1c was 10.08%. Mean weight before starting Ramadan was 78.36 kg and during Ramadan was 75.88 kg (mean delta weight -2.55 kg, 95% CI 1.74 – 3.21, p<0.001). Mean systolic BP reduced from 153.5 mmHg to 150.2 mmHg (p=0.615) and no changes for diastolic BP (82.7 vs 82.6 mmHg), p=0.971.

CONCLUSION
The positive effect of weight loss is observed in most subjects started with SGLT2 inhibitors prior to Ramadan. This effect is seen as early as 4 weeks. Though effect may be confounded by Ramadan fasting itself, average weight loss from EMPA-REG outcome trial was about 3 kg and peaked during first 12 weeks. SGLT2 inhibitors remains a choice of therapy for patients desiring weight reduction.

KEY WORDS
empagliflozin, fasting, weight loss