

DAY 1 – November 21, 2019 (Thursday)**OP-01****ANXIETY AND DEPRESSION AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS USING THE VALIDATED FILIPINO VERSION OF THE HOSPITAL ANXIETY AND DEPRESSION SCALE**

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INTRODUCTION

In 2017, over 3.7 million Filipinos have diabetes according to the International Diabetes Federation. Similarly, 3.29 million Filipinos are battling depression and 3.07 million are living with anxiety. Studies have concluded that anxiety and depression are burdensome comorbidities in people with T2DM. Clinicians should be aware that even subclinical symptoms of depression may negatively impact diabetes self-care behaviors. We therefore conducted this study to determine the prevalence of anxiety and depression in patients with diabetes.

METHODOLOGY

This was a cross-sectional single-center study using non-probability sampling conducted on September 2018 at the OPD. All patients diagnosed with T2DM, age 35 years and above, currently receiving glucose-lowering medications were included in the study. A self-administered questionnaire was used to obtain the sociodemographic and clinical characteristics of the participants. HADS-P was used to screen for anxiety and depression. The relationship between the clinical variables and anxiety and depression was assessed by performing chi-square and Fisher's Exact test.

RESULTS

A total of 63 patients were included in the analysis. Anxiety was seen in 26 (41%) patients and 10 (16%) patients were found to have symptoms of depression. Significant association was found between monthly income and anxiety ($p=0.040 < 0.05$). There was significant association between depression, civil status ($p=0.047 < 0.05$), and monthly income ($p=0.049 < 0.05$).

CONCLUSION

Mood disorders could be readily observed among patients with T2DM. Younger patients were more likely to suffer from depression. Other factors such as low income, poor moral and social support especially among married and widowed/er individuals are identified.

KEY WORDS

anxiety, depression, HADS-P

OP-02**NUTRIGENETIC MARKERS OF VITAMIN D DEFICIENCY: FINDING GENETIC MARKERS FROM THE 2013 PHILIPPINE NATIONAL NUTRITION SURVEY USING HIGH-THROUGHPUT NEXT GENERATION SEQUENCING**

<https://doi.org/10.15605/jafes.034.02.S2>

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INTRODUCTION

In the Philippines, based on the 2013 National Nutrition Survey, vitamin D deficiency was highest in Benguet at 60.3% and lowest in Cagayan, but still very high, at 19.5%. With vitamin D implicated in a wide range of multiple health outcomes, a fuller understanding of the determinants of vitamin D status is needed and must include consideration of inherited characteristics.

OBJECTIVE

The study determined the relationship of serum vitamin D levels and genetic variations in 502 lifestyle related genes among adult respondents, age 21 years old and above, from the 2013 Philippine National Nutrition Survey (NNS).

METHODOLOGY

The study followed a cross-sectional research design. A total of 1,160 adult respondents of the 2013 NNS and living in Metro Manila, Philippines were included in the study. Anthropometric, biochemical, clinical and dietary data were generated through validated questionnaires, physical examination and laboratory analyses. Total serum 25-hydroxyvitamin D (25OHD3) was determined using electro-chemiluminescence binding assay method. Genomic DNA was used for massively parallel sequencing of 502 lifestyle related genes.

RESULTS

Of the study participants, 56% were classified as having low serum 25OHD3 concentration (<75 nmol/mL). The data discovered at least six genetic variations show statistically significant differences in serum vitamin D concentration across genotypes. These genes were previously known to have contributed to the risk of developing Type 2 Diabetes Mellitus, Obesity, Iodine Deficiency and a neurodegenerative disorder.

CONCLUSION AND RECOMMENDATION

Large-scale analysis of genes associated with lifestyle disease and other determinants of overall health have shown great utility in the discovery of genes and polymorphisms that play a role in vitamin D nutrition. Post – hoc test may be performed to confirm where the differences occurred between groups. It is envisioned that understanding how genetic variations interact with environmental factors, especially nutrition may hold the key to better prevention and management of nutrition-related diseases and may be basis for future innovative genome-based functional food product development enriched with vitamin D.

KEY WORDS

nutrigenomics, vitamin D, next generation sequencing

OP-03

FACTORS ASSOCIATED WITH THE SEVERITY OF FINDINGS ON HEPATIC TRANSIENT ELASTOGRAPHY AMONG PERSONS WITH TYPE 2 DIABETES AND FATTY LIVER

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OBJECTIVE

This study aims to determine the relationship between the different factors associated with the severity of Fibroscan with CAP findings among patients with type 2 diabetes and fatty liver.

METHODOLOGY

This is a cross-sectional study. Seven hundred four Fibroscan with Controlled Attenuation Parameter (CAP) results were electronically retrieved from a diagnostic center. 285 charts of diabetic patients with fatty liver on ultrasound were reviewed. One hundred sixty-four patients with fatty liver on ultrasound and Fibroscan with CAP were included in the study. Several factors were analysed in relation to the severity of Fibroscan with CAP findings in the study group.

RESULTS

55.5% (91/164) had significant fibrosis and cirrhosis. Hepatic steatosis prevalence was 96% (158/164). Diabetes >5 years (OR 1.75), HbA1c ≥7% (OR 2.25) and high SGPT levels (OR 2.39) were associated with liver fibrosis and cirrhosis. BMI >25 kg/m² (OR 1.45), triglyceride levels >150 mg/dl (OR 1.31) and HbA1c ≥7% (OR 1.74) were associated with hepatic steatosis.

CONCLUSION

Factors associated with the severity of hepatic fibrosis, cirrhosis and steatosis included above normal BMI, disease duration of ≥ 5 years, poor glycemic control and elevated levels of ALT, and serum triglycerides.

KEY WORDS

type 2 Diabetes, NAFLD, transient elastography