



## PP-D-39

### ASSOCIATION BETWEEN BODY COMPOSITION AND BODY INDEX MASS AMONG GERIATRIC PATIENTS WITH TYPE 2 DIABETES MELLITUS IN SUMBAWA BESAR DISTRICT

<https://doi.org/10.15605/jafes.037.AFES.79>

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#### OBJECTIVES

Body distribution has been a new paradigm and more accurately to assess than body mass index. The body composed four molecular components: water, fat, proteins, and mineral. Body composition consists of cell or mass, extracellular water, skeleton, and connective tissue. This may highlight calculated fat and body composition more reliable for capturing real composition, especially for geriatrics with T2DM. This study compares body composition and BMI status among geriatric patients with diabetes in Sumbawa Besar district.

#### METHODOLOGY

This is an analytical study with an observational design conducted in Sumbawa Besar district. The data was taken using the consecutive sampling method; 41 samples of elderly T2DM were collected from primary data according to inclusion and exclusion criteria—the analysis using univariate and bivariate analysis.

#### RESULTS

The median age in this study was 67.6 (60-18) years old; BMI 23.16 (14.4-33.9) kg/m<sup>2</sup>; visceral fat 9.43 (0.5-29) %; body waist 89.3 (80-110) cm. The mean several parameters between higher and normal BMI group was compared using an independent t-test. The mean of visceral body fat in the higher BMI group is significantly higher than the control group (p=0.000). Body waist circumference and fat percentage is not different between groups (p>0.05).

#### CONCLUSION

There is a relationship between high levels of visceral fat and BMI in the elderly with T2DM. However, there are disparities between several body composition and BMI status among geriatric patients with diabetic conditions.

## PP-D-40

### TYPE 2 DIABETES MELLITUS PATIENTS' COMPREHENSION OF HYPOGLYCEMIA: A LONG AND WINDING ROAD TO OPTIMAL CARE OF DIABETES

<https://doi.org/10.15605/jafes.037.AFES.80>

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#### OBJECTIVES

Recent study at our tertiary referral hospital showed that the rate of severe hypoglycemia among type 2 diabetes mellitus (T2DM) outpatients was 34%. Our study aims to examine patients' comprehension of hypoglycemia and its associated factors.

#### METHODOLOGY

This cross-sectional study used data from a study reporting rates of severe hypoglycemia conducted in our hospital. Patients' comprehension of hypoglycemia was defined as patients' ability to define cut-off value of hypoglycemia and mention at least 3 neuroglycopenic symptoms.

#### RESULTS

Out of 291 patients, 62.9% were women and the mean age was 59.9 (± 9.36) years. The median HbA1c was 7.5% (range: 5.1-14.3) and the median diabetes duration was 12 (range: 1-43) years. There were only 63 (21.7%) patients who had comprehension of signs and symptoms of hypoglycemia. Factors associated were poor comprehension of hypoglycemia were the following: 1. Age >60 years (OR 0.45; p=0.006; 95% CI 0.25, 0.80), 2. HbA1c ≤ 7.5% (OR 0.53; p=0.026; 95% CI 0.30, 0.93), 3. Education level ≤9 years (OR 0.39; p=0.013; 95% CI 0.18,0.84) and (4) Use of sulfonylurea only (OR 0.49; p=0.025; 95% CI 0.27,0.92).

#### CONCLUSION

The proportion of patients with comprehension of hypoglycemia was low. Older age, lower education level, poorer glycemic control, and use of sulfonylurea are associated factors of patients' comprehension of hypoglycemia. Our findings suggest the lack of effective diabetes education and further studies are needed to evaluate the need for a better diabetes education structure for our T2DM patients.