CONCLUSION

Individuals with high PP were susceptible to deterioration of renal function. Albuminuria partially contributed to the pathophysiological mechanism. PP could potentially be incorporated in clinical practice as an inexpensive and convenient marker of renal decline in T2D.

KEY WORDS

pulse pressure, chronic kidney disease, type 2 diabetes

OP-12

VALIDATION OF THE MODIFIED KNEE-HEIGHT AND MID-ARM CIRCUMFERENCE METHOD IN ESTIMATING BODY WEIGHT AMONG ADULT FILIPINOS

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INTRODUCTION

Nutritional assessment, dietary prescription, and optimal dosing of medications are calculated based on body weight (BW), which is difficult to obtain in bed bound patients. Due to the unavailability of bed weighing scales, physician's estimation of BW or self-reported BW is being used which is inaccurate. Hence, this study aimed to validate the modified Knee Height (KH) and mid-arm circumference (MAC) method in estimating BW among adult Filipinos.

METHODOLOGY

This cross-sectional analytical study included 383 admitted patients. Anthropometric measurements were obtained. Accuracy of the modified KH-MAC method was determined using Bland-Altman analysis.

RESULTS

BW measurements were significantly higher using KH-MAC method compared to actual BW, by a mean of 8.94 (95% CI, 8.36–9.52) and 6.76 (95% CI, 6.22–7.31) kg as measured by 2 research associates. The least bias in BW estimates appeared to be with elderly, followed by middle and then young adults. A similar pattern is seen with body mass index (BMI) category, with bias increasing while going from the obese to underweight categories. % bias across malnutrition classifications are similar. A new equation was derived which has better weight estimates and biases were generally small (all within +/- 1.5%) across all categories.

CONCLUSION

The modified KH-MAC method overestimated actual BW. Factors having least bias in BW estimates are elderly and obese. A new equation was derived which has better accuracy and lesser biases were noted across all categories, however, this requires validation studies.

KEY WORDS

adult weight estimation, modified knee-height-mid arm circumference, Filipinos

OP-13

LEAN MASS, AGE AND SCLEROSTIN LEVELS INFLUENCE BONE HEALTH IN POSTMENOPAUSAL WOMEN WITH TYPE 2 DIABETES

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INTRODUCTION

Osteoporosis affects 1-in-3 women aged 50 years and above. However, studies reported that people with type 2 diabetes (T2D) have more incidences of fractures than non-T2Ds. Yet, few T2D women were osteoporotic. This study aims to describe the osteoporosis status and investigate sclerostin (a signaling protein exclusively from osteocytes that prevent bone formation), lean mass and other related factors to osteoporosis in postmenopausal Malaysian women with T2D.

METHODOLOGY

We recruited 71 postmenopausal women (age 59.7±4.2 year) and measured their bone mineral density (BMD, kg/cm^2), body fat (kg) and lean mass (LM, kg) using dual energy X-ray absorptiometry (DXA) and derived BMD T-scores. We obtained fasting blood measures of HbA1c (%), glucose (mmol/L) and sclerostin (pmol/L). Participants' calcium intake was also assessed using a validated food frequency questionnaire. We conducted correlation followed by multivariable regression analysis using SPSS version 24.