# Abdominal Obesity Among Malaysian Elderly: The Contributing Factors

#### Azli Baharudin

Institute for Public Health, National Institutes of Health

#### ABSTRACT

BACKGROUND: The increase in the prevalence of abdominal obesity (AO) among Malaysians contributes to the increased rate of diabetes, hypertension, high cholesterol, heart disease and certain types of cancer. METHODS: A total of 3,977 elderly aged 60 years and above participated in this study. This is a cross-sectional study with two stratified random sampling. Sociodemography was obtained through face-to-face interview and waist circumference was measured using SECA measuring tape. AO was classified using cut-off values of  $\geq$ 90cm for men and  $\geq$ 80cm for women based on the recommendation from World Health Organization. Complex sample descriptive and multiple logistic regression analysis were performed for statistical analysis. **RESULTS:** The findings showed that 67.3% of elderly have AO. The prevalence of AO was higher among elderly from urban areas (69.7%, 95%CI: 66.01, 93.01), females (78.4%, 95%CI: 75.01, 81.39), and those were married (68.7%, 95%CI: 64.42, 72.66). Besides, the prevalence of AO was higher among elderly who had tertiary education (73.6%, 95%CI: 66.14,79.86) and who were unemployed (70.9%, 95%CI: 63.84, 73.79)]. The complex sample logistic regression analysis shows that elderly from urban (aOR: 1.51, 95%CI: 1.21, 1.88), females (aOR: 2.72, 95%CI: 2.17, 3.40), who were unemployed (aOR: 1.21, 95%CI: 0.89, 1.40), with hypertension (aOR: 1.47, 95%CI: 1.22, 1.75), with hypercholesterol (aOR: 1.33, 95%CI: 1.09, 1.62) and with diabetic mellitus (aOR: 2.08, 95%CI: 1.62, 2.66) were significantly associated with AO. DISCUSSION/CONCLUSIONS: In conclusion, most of the socio-demographic factors and history of having noncommunicable diseases were the contributing factors to AO among Malaysian elderly. Implementing of obesity intervention among pre-elderly and elderly is vital to combat the epidemic of AO in Malaysia.

**KEYWORDS:** abdominal obesity, elderly, National Health & Morbidity Survey, Malaysia

## Achievements and Challenges of Verbal Autopsy in Penang After One Year of Implementation

### Mei Ching Lim (MD), Farzaana bt Adam (DrPH)

Non-Communicable Disease (NCD) Unit, Penang State Health Department

## ABSTRACT

**INTRODUCTION:** Precise data on cause of death is essential in development and evaluation of health policy. Verbal autopsy (VA) was introduced to reduce the indistinct mortality causes and to improve medically certified deaths. The objective of this study is to review the performance and challenges faced in Penang since the implementation of VA. METHODS: This cross-sectional study utilised Death Data outside Medical Facilities in Penang from August 2017 to July 2018. Face-to-face interviews were conducted by trained medical staffs to the next of kin of the deceased using Validated WHO VA Questionnaire (with sensitivity 50-75%). Completed questionnaires were reviewed by trained Doctors who assigned the most likely underlying cause of death. **RESULTS:** There were 4,178 cases allocated for VA in Penang. Successfully interviewed cases were 1,530 (36.63%) while 2,610 cases (62.47%) were unsuccessful due to various reasons namely wrong or incomplete address (11.51%), next of kin not traceable (43.71%) and 303 cases refused for interview (noted 4.0% was due to language barrier). Out of the 1,530 cases interviewed, 256 cases (16.7%) were related to cancer, with the main cancer involving the Trachea, Bronchus and Lungs (3.9%), followed by Cancer of the Colon, Rectum and Anus (3.5%) and Breast Cancer (2.1%). The other major causes of death were acute coronary syndrome (15.6%), cerebrovascular accidents (8.6%) and pneumonia (5.9%). CONCLUSION: Additional effective approach is essential to detect the next of kin so that more interviews can be conducted, and in-depth training is also needed especially to determine the underlying cause of death.

**KEYWORDS:** Verbal Autopsy, Challenges, Causes of death