

## **ABSTRACT**

ESA UNGGUL UNIVERSITY
FACULTY OF HEALTH
NUTRITION STUDIES PROGRAM
UNDERGRADUATE THESIS, FEBRUARY 2015

MERCY LAOWO

ASSOCIATION BETWEEN BODY MASS INDEX (BMI) AND PHYSICAL ACTIVITY WITH DIABETES MELLITUS IN WOMEN AGE  $\geq$  45 YEARS IN PROVINCE OF NORTH MALUKU, RIAU AND BANGKA BELITUNG (Analysis Riskesdas 2007)

xvi, VI BAB, 168 pages, 22 Table.

**Background:** Riskesdas 2007 shows that 1.1% of adult in Indonesia have diabetes mellitus. The highest prevalence by province is North Maluku 11.1%, Riau 10.4% and Bangka Belitung 8.6%. Some studies have found that BMI, physical activity, level of education, type of area and economic status associated with diabetes mellitus.

**Objective:** This study examined the association between BMI, and physical activity with diabetes mellitus in Province of North Maluku, Riau and Bangka Belitung

**Design:** This was a cross sectional study that using secondary data from Riskesdas 2007. The sample size consisted 4174 women aged  $\geq$  45 years. Data analysis was performed using chi-squre test and logistic regression.

**Result:** The proportion of elderly who had diabetes mellitus was 3,9%. Among diabetes mellitus, 69,9% respondent were aged 45-59 years, 5,3% respondent lived in urban areas, 5,3% respondent in level of higher education 4,2% respondent has high economic status, 5,3% respondent were obesity, 5,0% respondent did less physical activity. Multivariate analysis using logistic regression showed that BMI (p=0.006; OR adjusted 1.570; 95% CI: 1.138-2.165) and physical activity (p=0.032; OR adjusted 1.464; 95% CI: 1.033-2.076) had significant influence with diabetes mellitus. Whereas type of area, level of education and economic status has not significant correlation with diabetes mellitus.

**Conclusion**: This study suggests the intervention of diabetes mellitus focusing on food and lifestyle education.

**Keyword**: BMI, physical activity, level of education, type of area and economic

status, diabetes mellitus.

References: 118 (1998 – 2014)