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ABSTRACT

Title of Abstract : Comparative Patterns of Non-Communicable Disease Risk Factors Across Age Groups in Samarinda, Indonesia

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Background : Non-communicable diseases (NCDs) have become a major public health concern, with risk factors increasingly observed among younger populations. Examining how these risks differ between age groups may provide insight into early prevention priorities.

Objective : To describe and compare behavioral and biological NCD risk factors among older adolescents (15–19 years), young adults (20–24 years), and adults (25–59 years) in Samarinda, Indonesia.

Research Methods/ Implementation Methods : A descriptive cross-sectional study was conducted among 242 respondents selected through household interviews in Samarinda. Data were collected using the WHO STEPwise approach to NCD risk factor surveillance (STEPS) questionnaire, covering behavioral factors (tobacco, alcohol, physical activity, diet) and biological factors (BMI, blood pressure, blood glucose, cholesterol). Data were analyzed descriptively using STATA 17.

Results : Variations were observed across age groups. Smoking was more frequent among young adults (22.2%) compared to adolescents (9.3%) and adults (17.7%). Alcohol use was generally low but relatively higher among adolescents (12.4%). Physical activity levels and sedentary time showed comparable patterns, with young adults reporting slightly more sedentary behavior (40%). Most respondents consumed fruits less than four days per week. The proportion of overweight and obesity was greater among adults (54.4%) than in young adults (24.4%) and adolescents (19.4%). Differences were also seen in clinical indicators, with adults showing a higher proportion of hypertension (44.1%) and high cholesterol (35.3%) compared to younger groups.

Conclusion/Lesson Learned : The study highlights varying patterns of NCD risk factors among age groups, with several behavioral risks already present during adolescence. These findings emphasize the importance of early preventive actions focused on healthy lifestyles, especially among youth, supported by community-based education and health monitoring initiatives.

Keyword : Non-communicable diseases; adolescents; young adults; risk factors; STEPS