

WORKPLACE HEALTH SCREENING OUTCOMES: A COMPARATIVE STUDY OF METABOLIC SYNDROME CRITERIA AMONG DISTRICT HEALTH OFFICE STAFF

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ABSTRACT

INTRODUCTION: Metabolic Syndrome (MetS) is a cluster of metabolic disorders characterized by central obesity, hypertension, dyslipidemia, and impaired glucose tolerance. OBJECTIVE: This study aims to compare the proportion of MetS among District Health Office (DHO) staff using IDF criteria and JIS Harmonised definitions and to determine the predisposing factors associated with MetS using these two criteria. METHODOLOGY: This retrospective descriptive study was conducted by analysing the secondary data obtained from KOSPEN WOW registry book using SPSS version 26 software. Health screening was done from 21 Mei to 31 Mei 2023 involving 128 DHO staff from administration and inspectorate unit. Simple and multiple logistic regression were conducted to determine the predisposing factors of metabolic syndrome using IDF criteria and JIS Harmonised definition. RESULTS: The mean age of staff was 40.5 years old, predominantly male (60.9%) and from inspectorate unit (63.3%). Seven males (9%) had waist circumferences of more than 90 cm while 29 female (58%) had waist circumference of more than 80 cm. 57.8% of staff had BMI more than 25.0 and above. 14.1% of staff were found to have fasting blood sugar (FBS) equal or more than 5.6 mmol/L, 20.3% had HDL below 1.03 mmol/L and 33.6% had increased triglyceride above 1.7 mmol/L. Whilst IDF criteria only identified 4 staff (3.1%) with MetS, the JIS Harmonised definition identified more (22, 17.2%). Multiple logistic regression reveals that waist circumference (AdjOR: 1.415, 95% CI: 1.077, 1.858) as the only predictor for diagnosing metabolic syndrome using IDF criteria. Whereas, the JIS Harmonised definition suggested that waist circumference, age of staff, triglycerides and HDL levels were significant predictors for MetS among DHO staff. CONCLUSION: JIS Harmonised definitions identified more proportion of MetS and its contributing factors among staff rather than IDF criteria.

Keywords: Metabolic Syndrome, waist circumference, central obesity, dyslipidaemia
