

ABSTRACT

Indonesia is a country with the highest number of stroke in Southeast Asia. In recent cases, stroke in productive age are increasing because of unhealthy life styles. The knowledge about stroke's risk factors is needed to prevent stroke at productive age that causes decreasing quality of human resources. This research was aimed to analyze the difference of stroke's risk factors based on biological risk factors (hypertension, DM type 2, hypercholesterolemia, and coronary heart disease) and smoking behaviour at productive age.

This research used case control method with 33 persons sample of case group and 33 persons of control group in systematic sampling. Data was collected using medical records and interview from questionnaires. The examining variable included productive age, hypertension, DM type 2, hypercholesterolemia, coronary heart disease, and smoking behaviour. Then, data analyzed bivariate with logistic regression and multivariate with Odds Ratio (OR) 95%CI and Risk Difference (RD).

The results showed that at the productive age group, hypertension has 45 times higher risks than those without hypertension (OR=45 95%CI=8,75<OR<274,4, RD=0,73), DM type 2 has 5,71 times higher risks than those without DM type 2 (OR=5,71 95%CI=1,26<OR<29,39, RD=0,39), hypercholesterolemia has 18,6 times higher risks than those without hypercholesterolemia (OR=18,6 95%CI=3,41<OR<133,91, RD=0,57), coronary heart disease has 13,91 times higher risks than those without coronary heart disease (OR= 13,91 95% CI=1,61<OR<311,02, RD=0,49), smoking behaviour has 3,75 times higher risks than non smoker (OR=3,75 95%CI=1,09<OR<13,45, RD=0,31), and cigarette smoke exposure has 5,33 times higher risks than those without cigarette smoke exposure (OR=5,33 95%CI=1,65<OR<17,77, RD=0,4).

It can be concluded that at productive age group, hypertension, DM type 2, hypercholesterolemia, coronary heart disease, and smoking behaviour can increase the risk of stroke. It is advisable to educate about stroke and monitoring stroke prone person by regular check up to prevent stroke.

Key words : Stroke, risk factor