ABSTRACT

Diabetic foot, one of the chronic complications caused by Diabetes Mellitus that is the most common, is the occurrence of pathological changes in the lower limbs. In this case, the innervation disorder (neuropathy), the structural changes, the bulge of skin (callus), changes in skin and nails, foot ulcers, infections and vascular disorders happen. Diabetic foot ulcers until now are a major health problem throughout the world, including Indonesia. The objective of this study was to analyze the factors that influence the incidence of diabetic foot ulcers. This type of research was observational-analytic study with case control design. Research was conducted at Dr. Chasan Boesoirie Hospital and Ternate Diabetes Center. The sample were patients with diabetic ulcers, and diabetes mellitus patients without ulcer numbered 35 people as case group and 35 people with diabetes who do not experience foot ulcers as a control group. The samples were done by using consecutive sampling technique. Data analysis was carried out simultaneously with logistic regression. The results showed that long-suffering DM ≥ 10 years OR = 5,06; 95% CI (1,79 < OR <14,31), hypertension (potential) OR = 0,11; 95% CI (0,01 < OR <1,10) and non-routine foot care OR = 127,87; 95% CI (21,85 < OR <748,30) affect the incidence of diabetic foot ulcers. The conclusion from this study that the long ≥ 10 years suffering from diabetes, hypertension and foot care routine jointly affected the incidence of diabetic foot ulcers. It is recommended that health agencies, hospitals and diabetes centers increase awareness in combating the incidence of diabetic foot ulcers, improve information, education and communication about the risk factors for ulcers of diabetic in DM patients to paramedics, health workers, and community and local campaigns for controlling risk factors of non-communicable disease through printed and electronic media. Campaign should be conducted in the media such as local radio and local printed media.

**Keywords**: Determinants, diabetes mellitus, diabetic foot ulcers, case control