

# FACULTY OF MEDICINE AND HEALTH SCIENCES MUHAMMADIYAH UNIVERSITY OF MAKASSAR

Wiky Wahyuni<sup>1</sup>, Wiwiek Dewiyanti Habar<sup>2</sup>, Rima January Putri Ridwan Gani<sup>3</sup>, Ahmad Nasir<sup>4</sup>  
<sup>1</sup>Student of Faculty of Medicine and Health Sciences Muhammadiyah University of Makassar, class of 2022/Email: [wikywahyuni1@med.unismuh.ac.id](mailto:wikywahyuni1@med.unismuh.ac.id), <sup>2</sup>Lecturer, Faculty of Medicine and Health Sciences, Muhammadiyah Universitas Makassar, <sup>3</sup>Lecturer, Department of Al-Islam and Kemuhammadiyah, Faculty of Medicine and Health Sciences, Muhammadiyah Universitas of Makassar.

## ”THE RELATIONSHIP BETWEEN FASTING BLOOD GLUCOSE LEVELS AND THE SEVERITY OF PRURITUS IN DIABETES MELLITUS AT H. ANDI SULTHAN DAENG RADJA BULUKUMBA GENERAL HOSPITAL”

### ABSTRACT

**Background:** Diabetes mellitus (DM) is a chronic metabolic disease with an increasing prevalence and the potential to cause various complications, including dermatological manifestations such as pruritus. Chronic hyperglycemia may lead to microcirculatory impairment, peripheral neuropathy, and disruption of the skin barrier function, all of which contribute to itching. Fasting blood glucose (FBG) level is an important indicator in assessing glycemic control in patients with DM.

**Objective:** This study aimed to determine the relationship between fasting blood glucose levels and the severity of pruritus in patients with diabetes mellitus at RSUD H. Andi Sulthan Daeng Radja Bulukumba. **Methods:** This study employed an observational analytic design with a cross-sectional approach. The study sample consisted of DM patients who met the inclusion criteria. Fasting blood glucose data were obtained from medical records, while pruritus severity was measured using the Visual Analog Scale (VAS). Data were analyzed using univariate and bivariate analyses to determine the relationship between the two variables, employing the Fisher’s Exact Test. **Results:** The results showed that most patients with fasting blood glucose levels  $\geq 126$  mg/dL experienced mild to moderate pruritus. Bivariate analysis demonstrated a statistically significant relationship between fasting blood glucose levels and the severity of pruritus in patients with diabetes mellitus. **Conclusion:** It can be concluded that higher fasting blood glucose levels are associated with greater pruritus severity in patients with DM. Optimal glycemic control is essential to reduce pruritus symptoms and prevent further dermatological complications.

**Keywords:** diabetes mellitus, fasting blood glucose, pruritus, hyperglycemia, skin complications