

**Perancangan dan Pembuatan Sistem Deteksi Dini Penyakit Diabetes Melitus di Puskesmas Sumpersari Jember Berbasis Website.** (*Design and Creation of an Early Detection System for Diabetes Melitus at the Sumpersari Jember Community Health Center Based on a Website*). Mudafiq Riyan Pratama, S.Kom., M.Kom (Chief Counselor)

**Frista Meinida Listyawati**  
*Health Information Management Study Program*  
*Departement of Health*

### **ABSTRACT**

*Diabetes Mellitus is a disease with the number of sufferers continuing to increase every year. The increase in the number of Diabetes Mellitus sufferers at the Sumpersari Jember Community Health Center is due to the fact that the screening corner has not been running well and the public is less aware of the early symptoms of Diabetes Mellitus so it cannot be detected early. The aim of this research is to design and create a website-based early detection system for Diabetes Mellitus at the Sumpersari Jember Community Health Center. An early detection system can help officers in early detection of diabetes and monitoring of Diabetes Mellitus sufferers. The result of this research is a website-based early detection system for Diabetes Mellitus at the Sumpersari Jember Community Health Center using the waterfall system development method and Forward Chaining and Certainty Factor expert system methods. Data collection in this research used observation, documentation, interviews and brainstorming to obtain data and information related to early detection systems. The early detection system has 4 access rights, namely doctors, police officers, SIK officers and the public. Doctors as admins have access rights to all menus in the early detection system. SIK officers have access rights to the history menu. The public has access rights to the early detection and history menu. Police officers have access rights to master data, early detection, history, reports and settings.*

**Keywords:** *early detection system, diabetes mellitus, waterfall method, Forward Chaining, Certainty Factor*