

MEDICAL RECORDS DATA SECURITY APPLICATION USING THE RSA ALGORITHM

CASE STUDY: MERAH PUTIH CLINIC NGAWI

MUHAMMAD GHAZALI RESTU ADJI

Informatics Study Program, Faculty of Science & Technology

University of Technology Yogyakarta

Jl. Ringroad Utara Jombor Sleman Yogyakarta

E-mail : adjiraviko@gmail.com

ABSTRACT

Patient data security is very important for doctors and patients. Abuse from irresponsible parties to change or steal patient data can be avoided by requiring a mechanism to secure data in the medical record system using encryption techniques in the database. In this research, the RSA cryptographic algorithm method was used to secure patient medical record data which contains notes and documents regarding patient identity, disease diagnosis, treatment, procedures and other services. RSA is an asymmetric cryptographic algorithm that uses a pair of keys, namely a public key and a private key. The security of the RSA algorithm lies in the difficulty of factoring prime numbers. The results of this research are a website-based medical record system that can help the Red and White Clinic to improve the security of patient medical record data.

Keywords: *Cryptography, Medical Records, RSA Algorithm, Data Security, Clinic.*