

INTISARI

Arsih, Siti Nur. 2019. Deteksi *Methicillin Resistant Staphylococcus aureus* (MRSA) Pada Pasien RSUD Dr. Moewardi Surakarta Menggunakan Metode Kultur Dan *Polymerase Chain Reaction* (PCR). Program Studi D-IV Analisis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.

Methicillin Resistant Staphylococcus aureus (MRSA) adalah jenis *Staphylococcus aureus* yang tahan terhadap antibiotik jenis beta-laktam, seperti metisilin, penisilin, ampisilin, dan amoksisilin. Persentase kejadian MRSA di Indonesia cukup tinggi yaitu sebanyak 23,5%. Deteksi MRSA dapat dilakukan menggunakan metode kultur dan *Polymerase Chain Reaction* (PCR). Penelitian ini bertujuan untuk mengetahui perbandingan kecepatan dan sensitivitas dari metode kultur dan PCR dalam mendeteksi *Methicillin Resistant Staphylococcus aureus* pada pasien RSUD Dr. Moewardi Surakarta.

Penelitian ini menggunakan rancangan penelitian eksperimental dengan pendekatan komparatif (perbandingan). Menggunakan 3 sampel isolat *Staphylococcus aureus* suspek MRSA pasien RSUD Dr. Moewardi Surakarta. Pendeteksian MRSA menggunakan uji difusi cakram antibiotik penisilin, ampisilin, amoksisilin dan vankomisin serta menggunakan *Polymerase Chain Reaction* (PCR).

Hasil penelitian ini didapatkan metode *Polymerase Chain Reaction* (PCR) lebih cepat dan sensitif untuk mendeteksi *Methicillin Resistant Staphylococcus aureus* pada pasien RSUD Dr. Moewardi Surakarta.

Kata kunci: antibiotik, kultur, MRSA, PCR

ABSTRACT

Arsih, Siti Nur. 2019. Detection of *Methicillin Resistant Staphylococcus Aureus* (MRSA) on the Patients of RSUD Dr. Moewardi Surakarta Using Culture Method and *Polymerase Chain Reaction* (PCR). D-IV Study Program Of Medical Laboratory Technology, Faculty of Health Science Setia Budi University.

Methicillin Resistant Staphylococcus aureus (MRSA) is type of *Staphylococcus aureus* resistant to beta-lactam antibiotics, such as meticillin, penicillin, amphylicillin, and amoxycillin. The percentage of MRSA occurrence in Indonesia is quite high namely 23.5%. MRSA detection can be done using culture method and *Polymerase Chain Reaction* (PCR). This research aims to find out the comparison of speed and sensitivity between the culture method and *Polymerase Chain Reaction* (PCR) in detecting *Methicillin Resistant Staphylococcus aureus* towards the patients of RSUD Dr. Moewardi Surakarta.

This research used experimental analytic research design along with comparative research design. This experiment observed 3 samples of bacterial isolates *Staphylococcus aureus* MRSA suspect patients of RSUD Dr. Moewardi Surakarta. The detection of MRSA was conducted using disk diffusion test of penicillin, amphylicillin, amoxycillin and vancomisin as well as using *Polymerase Chain Reaction* (PCR).

The results of the research indicate that *Polymerase Chain Reaction* (PCR) method was faster and more sensitive to detect *Methicillin Resistant Staphylococcus aureus* on the patients of RSUD Dr. Moewardi Surakarta.

Key words: antibiotics, culture, MRSA, PCR