

## **ABSTRAK**

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Program Studi : Pendidikan Dokter

Judul : Pola Kepekaan Bakteri Gram Negatif dari Penderita Infeksi Saluran Kemih terhadap Fluorokuinolon di Laboratorium Mikrobiologi Klinik FKUI tahun 2001-2005

Infeksi saluran kemih (ISK) merupakan penyakit infeksi yang cukup sering terjadi di masyarakat. Dari berbagai penelitian di Indonesia dan di luar negeri, telah menunjukkan penurunan kepekaan bakteri penyebab ISK terhadap antibiotik golongan fluorokuinolon. Hal ini dikhawatirkan menjadi kendala dalam penanggulangan ISK di Indonesia. Penelitian ini bertujuan untuk mengetahui pola kepekaan bakteri Gram negatif yaitu *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* *Enterobacter aerogenes*, dan *Proteus mirabilis* dari penderita infeksi saluran kemih terhadap siprofloksasin, gatifloksasin, ofloksasin, dan moksifloksasin. Penelitian ini dilakukan dengan cara menganalisis data sekunder sebanyak 3268 isolat urin dengan kultur positif dari Laboratorium Mikrobiologi Klinik FKUI pada Januari 2001 sampai Desember 2005 dan telah dilakukan uji resistensi sesuai dengan NCCLS. Dari hasil analisis didapatkan angka kepekaan *Escherichia coli* terhadap siprofloksasin, ofloksasin, gatifloksasin dan moksifloksasin adalah 54.5%, 59.4%, 54.5%, dan 38.0%; kepekaan *Klebsiella pneumoniae* terhadap siprofloksasin, ofloksasin, gatifloksasin dan moksifloksasin adalah 46.0%, 54.2%, 48.1%, dan 34.9%; kepekaan *Pseudomonas aeruginosa* terhadap siprofloksasin, ofloksasin, gatifloksasin dan moksifloksasin adalah 43.9%, 43.9%, 44.9%, dan 38.1%; kepekaan *Enterobacter aerogenes* terhadap siprofloksasin, ofloksasin, dan gatifloksasin adalah 58.7%, 63.8%, dan 65.5%; kepekaan *Proteus mirabilis* terhadap siprofloksasin, ofloksasin, dan gatifloksasin adalah 80.5%, 83.9%, dan 70.0%.

Kata kunci: kepekaan, Gram negatif, infeksi saluran kemih, siprofloksasin, ofloksasin, gatifloksasin, moksifloksasin

## **ABSTRACT**

Name : Firdaus Nurdin  
Study Program : Physician Education  
Title : Sensitivity Pattern of Gram Negative Bacteria towards Fluoroquinolone on Urinary Tract Infection Patients in Microbiology Laboratory of FMUI Year 2001-2005

Urinary tract infection (UTI) is a common infectious disease in the community practice. Studies in Indonesia and overseas showed the decrease of sensitivity of bacteria causing UTI to fluoroquinolone. This problem is potentially leading to difficulty in the treatment of UTI in Indonesia. This study objective was to investigate the sensitivity pattern of Gram negative bacteria such as *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Enterobacter aerogenes*, and *Proteus mirabilis* taken from UTI patient to ciprofloxacin, gatifloxacin, ofloxacin, and moxifloxacin. This study was conducted by analyzing secondary data of 3268 isolated urine with positive culture from Clinical Microbiology Laboratory of FMUI since January 2001 to December 2005. Resistance test had been performed in guidance of NCCLS. Results of the analysis indicate that sensitivity patterns of *Escherichia coli* to ciprofloxacin, ofloxacin, gatifloxacin, moxifloxacin were 54.5%, 59.4%, 54.5%, and 38.0%, respectively; *Klebsiella pneumoniae* to ciprofloxacin, ofloxacin, gatifloxacin, and moxifloxacin were 46.0%, 54.2%, 48.1%, and 34.9%; *Pseudomonas aeruginosa* to ciprofloxacin, ofloxacin, gatifloxacin, and moxifloxacin were 43.9%, 43.9%, 44.9%, and 38.1%; *Enterobacter aerogenes* to ciprofloxacin, ofloxacin, and gatifloxacin were 58.7%, 63.8%, and 65.5%; *Proteus mirabilis* to ciprofloxacin, ofloxacin, and gatifloxacin were 80.5%, 83.9%, and 70.0%.

Keywords: sensitivity, Gram negative, urinary tract infection, ciprofloxacin, ofloxacin, gatifloxacin, moxifloxacin.