

OCCURRENCE OF ANTIBIOTIC RESISTANCE IN GRAM NEGATIVE BACTERIA ISOLATED FROM PATIENTS AT THE PRIMARY HEALTHCARE CENTER IN SURABAYA

Dian Natasya Raharjo

Departement of Clinical and Community Pharmacy, Faculty of Pharmacy, University
of Surabaya, Indonesia
email: natasya@staff.ubaya.ac.id

Mariana Wahyudi

Faculty of Technobiology, University of Surabaya, Indonesia

Arum Mubaraqah Haji Abdullah

Departement of Clinical and Community Pharmacy, Faculty of Pharmacy, University
of Surabaya, Indonesia

Hestyanti Irawan

Departement of Clinical and Community Pharmacy, Faculty of Pharmacy, University
of Surabaya, Indonesia

Anastasia Kresensia Taa

Departement of Clinical and Community Pharmacy, Faculty of Pharmacy, University
of Surabaya, Indonesia

Amallia Putri Arianti

Departement of Clinical and Community Pharmacy, Faculty of Pharmacy, University
of Surabaya, Indonesia

Abstract

The objective of this study was to evaluate the occurrence of antibiotic resistance in gram negative bacteria in the Primary Healthcare Center in Surabaya. This study was a preliminary study, conducted in four Primary Healthcare Center in Surabaya during April until June 2017. Thirteen pathogens of gram negative bacteria were isolated from 49 specimens during the research period. Those isolates were 6 *Klebsiella pneumoniae*, 2 *Klebsiella ozaenae*, 2 *Pseudomonas* sp., 1 *Salmonella paratyphi A*, 1 *Acinetobacter* sp. and 1 *Escherichia coli*. The susceptibility test showed that all isolates were resistant to ampicillin, meanwhile all of *Klebsiella pneumoniae* and *Klebsiella ozaenae* isolates still sensitive towards amoxicillin-

clavulanat, trimethoprim-sulfamethoxazol, ciprofloxacin, and tetracycline. Furthermore, The *Pseudomonas* sp. and *Acinetobacter* sp. isolates not only resistant towards ampicillin, they also resistant to amoxicillin-clavulanat and trimethoprim-sulfamethoxazol, the *Escherichia coli* isolate also resistant to trimethoprim-sulfamethoxazol and tetracycline, and the *Salmonella paratyphi A* isolate also resistant towards ampicillin and ciprofloxacin. Based on this study, it can be concluded that all of gram negative bacteria isolated during the research period were resistant to ampicillin and there were some incidence of amoxicillin-clavulanat, trimetophrim-sulfomethoxazol, tetracycline, and ciprofloxacin resistance in gram negative bacteria isolated from patients at the four primary healthcare center in Surabaya.

Keywords : antibiotic, resistance, gram negative, healthcare center



UBAYA
UNIVERSITAS SURABAYA



COLLEGE OF
PHARMACY

PROGRAM BOOK



International Conferences on Medication Safety 2018

Wyndham Hotel Surabaya

23-25th August, 2018

Co-Host:



university of
 groningen



UNIVERSITI
KIBANGSAAN
MALAYSIA
National University
of Malaysia



DEAKIN
UNIVERSITY

USE
HEALTH

Finally, I wish all participants a scientifically rewarding conference in Surabaya

Chairperson

Dr. Agnes Nuniek Winantari, MSi., Apt.

**PROGRAMME INTERNATIONAL CONFERENCE ON
MEDICATION SAFETY**

**Pre Conference Workshop
Thursday, 23 August 2018**

TIME	TOPIC	SPEAKER
13.00-14.00	Preconference Registration	
14.00-17.00	Evidence Base Medicine	Micromedex

Friday, 24 August 2018

TIME	TOPIC	SPEAKER	MODERATOR
07.30 - 08.00	Registration		
08.00 - 09.30	Opening Ceremony		
	Welcoming speech	MC	
	Opening Traditional Dance	UKM Dance	
	Report from Head of Committee	Dr. Agnes Nuniek W., M.Si., Apt (Faculty of Pharmacy- University of Surabaya)	
	Welcoming Speech	Dean (Dr.Christina Avanti, Msi., Apt) (Faculty of Pharmacy- University of Surabaya)	
	Welcoming Speech	Rector (Prof. Ir. Joniarto Parung, MMBAT, Ph.D.)	

Saturday, 25 August 2018

TIME	TOPIC	SPEAKER	MODERATOR
08.30 - 09.15	Implementation of Pharmacogenetics in Clinical Practice	Prof.Dr. B. (Bob) Willfert (University of Groningen)	Ike Dhiah R.,S.Farm.,M.Farm-Klin.,Apt
09.15 - 10.00	Shared Decision Making on Antibiotic Therapy Among Adolescence	Mohd Makmor-Bakry, Assoc.Prof.Dr (Universiti Kebangsaan Malaysia)	Fauna Herawati, S.Si.,M.Farm-Klin., Apt
10.00 - 10.15	Coffee Break		
10.15 - 11.00	Medication Safety in Australia: Where are we now?	Renly Lim, M.Pharm., PhD. (School of Pharmacy and Medical Sciences, University of South Australia)	Lidya Karina, S.Farm.,M.Farm-Klin., Apt
11.00 - 11.45	Evidence Base Practice to Control Medication Error	Dr. Drs. Antonius Adji Prayitno Setiadi, M.S., Apt. (Director of Center for Medicines Information and Pharmaceutical Care University of Surabaya)	Dr. Yosi Irawati Wibowo, M.Pharm., Apt
11.45 - 13.00	Lunch		
13.00 - 13.45	Preventing Medication Error in Critically Ill Patients	Dra.L. Endang Budiarti, M.Pharm., Apt (Bethesda Hospital)	Dian Natasya, S.Farm.,M.Farm., Apt

13.45 - 14.00	Coffee Break		
14.00 - 16.00	Oral Presentation		
14.00 - 14.15	OP07_ABS004: Types of Drug Related Problems Observed and Reported by Clinical Pharmacists in An Intensive Care Unit	Benny Wijaya Sunggono (Mochtar Riady Comprehensive Cancer Center, Siloam Hospital)	
14.15 - 14.30	OP08_ABS006: Unit Daily Dose (UDD) System in Hospital : A Brief Review to Increase Medication Safety	Hanny Cahyadi (National Hospital Surabaya and Faculty of Pharmacy, University of Surabaya)	
14.45 - 15.00	OP10_ABS010: Occurrence Of Antibiotic Resistance In Gram Negative Bacteria Isolated From Patients At The Primary Healthcare Center In Surabaya	Dian Natasya (Departement of Clinical and Community Pharmacy, Faculty of Pharmacy, University of Surabaya)	
15.00 - 15.15	OP11_ABS011: The Potential Of Pacitan Orange (<i>Citrus Sinensis</i>) Peel Extract As A Stimulus Of Regeneration Cells In <i>Rattus Norvegicus</i> Burns	Rinza Rahmawati Samsudin (Universitas Muhammadiyah Surabaya)	
15.15 - 15.30	OP12_ABS012: Analysis Of Cyp2c19*3 Polymorphisms And Platelet Aggregation Using Light Transmission Aggregometry In Coronary Heart Disease Patients	Ike Dhiah R. (Departement of Clinical and Community Pharmacy, Faculty of Pharmacy, University of Surabaya)	