Mahidol University
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Curtailing inappropriate vancomycin use in a setting with a low prevalence of Methicillin-resistant *Staphylococcus aureus* infection

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Vancomycin

- A drug of choice for treating MRSA infections

- The emergence of vancomycin-resistant organisms has been reported worldwide, including VISA, VRSA, VRE, which correlated with the increased use of vancomycin

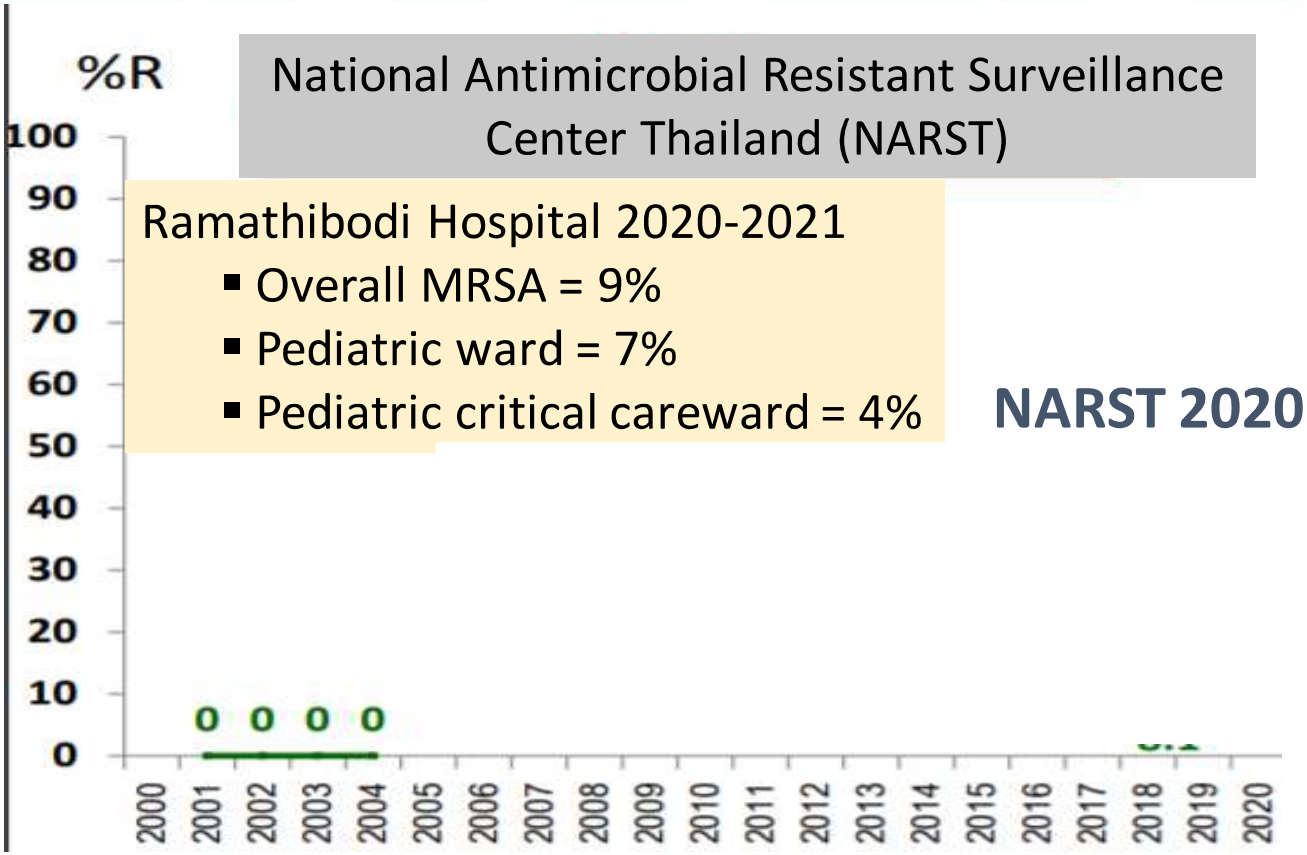
- Therefore, an optimal and appropriate use of vancomycin is required to dampen the emergence of vancomycin-resistant organisms

- BSAC recommendation suggested that vancomycin should be used as empirical treatment for MRSA infection in area with **MRSA prevalence > 10%**

VISA: vancomycin-intermediate *S. aureus*
VRSA: vancomycin-resistant *S. aureus*
VRE: vancomycin-resistant enterococci
BSAC: British Society for Antimicrobial Chemotherapy

Clin Microbiol Infect.2014;20:605-23
J Antimicrob Chemoth.2010;65:2658-65

MRSA in Thailand



National Antimicrobial Resistant Surveillance Center Thailand (NARST)

Ramathibodi Hospital 2020-2021

- Overall MRSA = 9%
- Pediatric ward = 7%
- Pediatric critical careward = 4%

NARST 2020: 8.4%

Clin Microbiol Infect.2014;20:605-23

Gap of knowledge

• Does the decreased MRSA prevalence in Thailand have an impact on the rate and the appropriateness of vancomycin prescription?

How to evaluate appropriateness?

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Drug Utilization Evaluation

• An ongoing, systematic, criteria-based program of medicine evaluations that will help ensure appropriate medicine use

• A quality method that is used worldwide, to improve quality and cost-effectiveness of medicine use, including antibiotics

Production of DUE

Reviewed international guidelines* for indication of vancomycin use

ID staff agreed with criteria

Established the criteria for vancomycin

Established Rama pediatric DUE for vancomycin use

*NCCN: National Comprehensive Cancer Network *HICPAC: Healthcare Infection Control Practices Advisory Committee
*BSAC: British Society for Antimicrobial Chemotherapy *IDSA: Infectious Diseases Society of America