

Current status of diagnostic stewardship in the field of clinical microbiology in Korea

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Antimicrobial resistance is a global health threat in many countries regardless of the status of development. According to systemic analysis performed by Antimicrobial Resistance Collaborators, there were an estimated 4.95 million (3.62–6.57) deaths associated with bacterial AMR in 2019. This burden will increase over time, and 10 million people are expected to die from antibiotic resistance in 2050. To overcome this serious health threat, many policies should be done including antimicrobial stewardship program (ASP). ASP can help to optimize the use of antibiotics and minimize the harms by misuse of antibiotics. ASP should be made to cover the hospital in a narrow scope and the country in a broad scope. In order to introduce the ASP, eight core political components may be required according to CDC including hospital leadership commitment, accountability, pharmacy expertise, action, tracking, reporting and education. However, another requirement should be adopted to maximize the efficiency of ASP, the diagnostic stewardship. The meaning of diagnostic stewardship is improving diagnostics and diagnosis as part of patient care. Proper diagnosis result in right treatment, and so diagnostic stewardship is related to antibiotic stewardship. In South Korea, many laboratory physicians are trying to make diagnostic stewardship program, but it's still in the early stages. In this lecture, I would like to introduce the current status of diagnostic stewardship in the field of clinical microbiology in Korea.