

Antimicrobial Resistance Issue: A Matter of Practice and Capacity to Conduct an Audit

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The World Health Organization released the practical toolkit for antimicrobial stewardship in health-care facilities in low- and middle-income countries in 2019 due to increasing rates of antimicrobial resistance (AMR) causing the diminishing of treatment options and that the available antibiotics seem to no longer work. The introduction of this toolkit indicates the need to be more down-to-earth in combating the problems of antimicrobial resistance.

This situation happened because we have taken antibiotics for granted for too long with less awareness, which results in the potential loss of its use and benefits. On the other hand, even though medicine is available, a major issue on the limited access to antibiotics are still reported in many parts of the world.¹

Limato R, et al.² in 2022 reported in 'The Lancet', based on the real-world situation on the practice of antibiotics use and its potential intervention, it appears that context-specific intervention strategies are needed for the Indonesian setting. There are approximately 9000 current reports related to the context of AMR. The evidence for the need of prudent antibiotics use is clear, yet unfortunately the prescribing of antibiotics by physicians might not much improved for the past years. A study by Ginting et al.³, evaluated the diagnosis and strategy for antibiotics prescription in 2021 among severely ill patients with sepsis, showed that the practice of obtaining evidence for the pathogen as the cause of infection (e.g blood cultures or any

cultures) needed to be encouraged for Indonesian physicians. As it was shown in the paper, nearly 50% (n=525) of patients received antibiotics with unknown reasons.

The need of doing an audit is clear. Nelwan et al.⁴ in 2022 presented a study on the mechanism of implementing an audit by conducting an audit at the national referral hospital, Cipto Mangunkusumo Hospital; by comparing 'traditional' hospital clinical rounds using the Gyssens flowchart with reference to the Point Prevalence Survey (PPS). This report is relevant to the fact that, the clinical round might not be suitable due to the limited number of human resources including experts specializing in the field of Tropical infection and the availability of microbiology specialists. There is also a high number of patients with low number of opportunities to sit and discuss cases, and lack of regular audits to search for the root cause of a problem to provide grounds for improvement.

The problem of antimicrobial resistance extended to the community; the population that is difficult to evaluate. In a hospital setting, patients are expected to be monitored which allows data to be gained easily. One way to learn about this is by measuring the quantitative report of the Defined Daily Dose (DDD) as reported by Apriyanti et al.⁵ in Bengkulu, Indonesia. This group classified the prescribing of antibiotics in accordance to the WHO classification release in 2019 that describes the Access, Watch and Reserve (AWARE) criteria, which is also

adopted by The Ministry of Health Republic of Indonesia. Moreover, the commitment to combat resistance is also demonstrated by the Indonesian government through the establishment of the National Committee of Antibiotics mentioned in Permenkes no. 8 (2015) that is adopted in each hospital and the upscaling of the issues of Antimicrobial Resistance to become one of the national priorities and program.⁶

In this issue, Fadrian, et al.⁷ conducted a study to measure the quality of antibiotics use at the western part of Indonesia. In 2021, research was conducted at the Dr. M. Djamil Hospital, Padang in which, during the COVID-19 pandemic, the inappropriate antibiotics use in this hospital was reported high using Gyssens flowchart.

Every year between 18 to 24 November, we are celebrating the World AMR Awareness Week, with a strong hope to reduce the number of deaths which is at an estimate of 1.27 million people in 2019 who have been presumed to have died as a result to drug resistance.

The hope must be followed by a strong commitment and understanding of the risk of overprescribing antibiotics, and if we ignore this, there will be a chance of a 9 times increase in mortality rates which translates to up to an estimate of 10 million deaths per year after 2050.⁸

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