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### Introduction:

Anti-microbial resistance (AMR) is a major problem for healthcare, potentially causing 10 million deaths annually by 2050 if current trends continue.<sup>1</sup> MRSA has spread from hospitals to communities, increasing risks for everyone. Anti-microbial Clinical Audit (AMCA) is a core strategy in Anti-microbial Stewardship programs designed to control AMR by promoting proper antibiotic use.<sup>2</sup>

### Objective:

To identify elements that require intervention to enhance antimicrobial stewardship in health clinics within the Tumpat District.

### Results:

The majority of health clinic scored 80% or higher in good antibiotic prescribing practices. Sungai Pinang Health Clinic (73.3%) and Teluk Renjuna Health Clinic (78.5%) fell short of this target score. (see Figure 1) While most audit elements exceeded the 80% target, except for two crucial elements, viz. drug allergy statement (65.5%) and health education on compliance or side effects (69%). (see Figure 2)

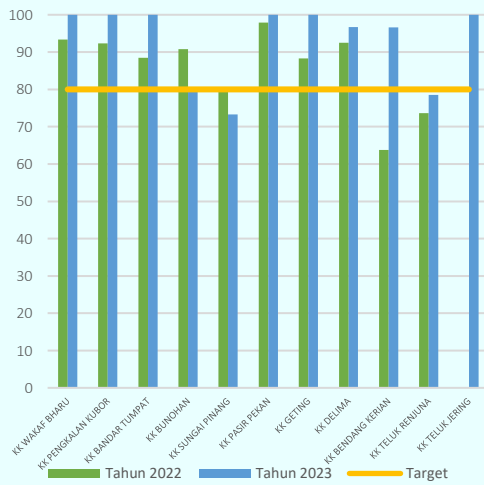


Figure 1: Achievements in Good Antibiotic Prescription Practices for 2022 and 2023

### Methods:

A cross-sectional retrospective record review of 30 randomly selected samples from 11 health clinics in Tumpat District, Kelantan, was conducted from May to June 2023. Data was analysed descriptively using an Excel-based AMCA form from the Ministry of Health Malaysia (MOH). The audit reviewed 20 best practice elements for antibiotic prescribing, aiming for a score of 80% or more, as per MOH standards. The drug allergy statements and patient education on compliance and side effects were monitored in Tumpat District.

### Discussion:

Between 2022 and 2023, there was a decline in the achievement score for good antibiotic prescribing practices at Bunohan Health Clinic (90.8% to 80.0%) and Sungai Pinang Health Clinic (79.4% to 73.3%). These results highlight the importance of targeted improvements to enhance the quality of clinical practices in antibiotic prescription among health clinics. Comparing our clinical audit with those from other districts in Kelantan, revealed that the same elements consistently received the lowest score.<sup>3</sup>

### Conclusion:

In conclusion, our audit has pinpointed two key elements for improvement in antimicrobial stewardship in Tumpat District: drug allergy documentation and health education on compliance and side effects. To address these issues, we have implemented a revised antibiotic checklist aimed at enhancing prescribing antibiotic practices and advancing overall stewardship efforts.

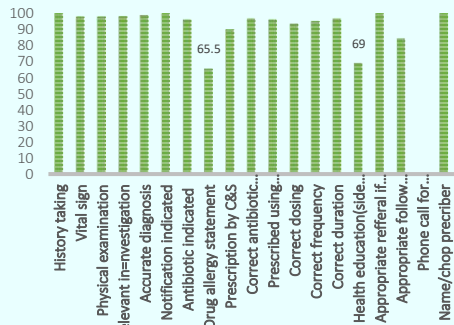


Figure 2: The Percentage According to Elements in AMCA 2023

### References:

1. Ministry of Health Malaysia. (2022). Malaysian second action plan on antimicrobial resistance (MyAP-AMR 2022-2026).
2. Ministry of Health Malaysia. (2022). Protocol on antimicrobial stewardship (AMS) programme in healthcare facilities (2nd ed.).
3. Jabatan Kesihatan Negeri Kelantan. (2024, March 18). Unpublished data on clinical audit of antimicrobial stewardship, 2023.

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