

Reducing irrational antibiotic use for coughs at Mulenga Hills Health Post of Kasama District, Northern, Zambia

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CITATION: Chishimba Lungu et al. Reducing irrational antibiotic use for coughs at Mulenga Hills Health Post of Kasama District, Northern, Zambia. *Journal of Interventional Epidemiology and Public Health*. 2025; 8 (Conf Proc 4): 20.

DOI: <https://doi.org/10.37432/JIEPH-CONFPRO4-00020>

LINK: <https://afenet-journal.org/reducing-irrational-antibiotic-use-for-coughs-at-mulenga-hills-health-post-of-kasama-district-northern/>

RECEIVED: 03/06/24 **ACCEPTED:** 11/08/24 **PUBLISHED:** 16/07/25

KEYWORDS: Antibiotics, Quality Improvement, Quality Assurance, Kasama Zambia

This is part of the proceedings of the Zambia Field Epidemiology Training Program Alumni Conference, September 11 – 13, 2024

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Introduction

Mulenga Hills Health Post (MHHP) in Kasama District, Zambia, identified a 70% rate of irrational antibiotic prescribing for cough management in Q4 2023, based on an analysis of 80 client records. Only 30% of these cases met the clinical criteria for antibiotic use, prompting the initiation of a Quality Improvement and Quality Assurance (QIQA) project to promote rational antibiotic use and mitigate antimicrobial resistance. The goal of the QIQA project was to reduce the rate of irrational antibiotic prescribing from 70% to below 30% by Q4 2024.

Methods

A Root Cause Analysis using a “But Why” Tree Diagram identified key issues: absence of prescribing criteria, limited clinical meetings, lack of awareness of alternative remedies, absence of standard guidelines, and unavailability of alternative cough mixtures. These were prioritized using a Prioritization Matrix. Starting January 2024, several interventions were implemented: a 5-point checklist for prescribing, monthly clinical meetings, daily patient education on alternative treatments, distribution of Standard Treatment Guidelines, and regular orders for alternative cough mixtures.

Results

Baseline data from Q4 2023 showed a 70% irrational antibiotic prescribing rate. After implementing interventions, a monthly review of 20 random client records from January to August 2024 showed a significant reduction in irrational prescriptions to 5% by August 2024.

Conclusion

MHHP successfully reduced irrational antibiotic prescribing for cough to 5% by utilizing a 5-point checklist and other targeted interventions. The QIQA project’s continued implementation will help sustain these improvements and embed quality practices in routine care.