## Combaterea rezistenței antimicrobiene prin prisma abordării *O singură sănătate*

## ASSESSING THE ADVANCES AND OBSTACLES IN COMBATING ANTIMICROBIAL RESISTANCE IN KOSOVA

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**Keywords:** Kosova, antimicrobial resistance, achievements, challenges.

**Introduction**. Antimicrobial resistance (AMR) is a major global public health challenge, and its burden is particularly high in the developing world. As a country working towards a sustainable healthcare system, Kosova recognizes the pressing need to tackle AMR and preserve the effectiveness of antimicrobial agents. AMR presents a significant challenge to Kosova's healthcare system, with resistance rates surpassing EU standards by 2-5 times. Aim. This study aims to highlight the achievements and challenges associated with AMR in Kosova. Material and methods. This study employs a mixed-method approach, combining a review of documentary sources with qualitative analysis of institutional efforts and data related to AMR in Kosova. Results. The Ministry of Health has approved two national action plans for AMR with significant investments in the laboratory infrastructure and has also incorporated the WHO's AWaRe (Access, Watch, and Reserve) approach into the New Essential Medicine List. The Faculty of Medicine has included AMR as a new elective course at the undergraduate level, and the educational program "E-bug" has been introduced for schoolchildren. In 2023, the MoH added a specific provision (Article 22) in the proposed Law on Prevention and Control of Infectious Diseases, concentrating on patient safety, antimicrobial resistance, and healthcare-associated infections. The wholesale data of antibiotic use in Kosova has shown a decrease from 26.3 Defined Daily Doses (DDD) in 2011 to 20.1 DDD in 2018. A survey conducted in six Kosovan municipalities in 2023, involved 600 and showed that 31.3% of patients were prescribed antibiotics, mainly for respiratory diseases (31% of cases). Around 37.2% of prescriptions were other beta-lactam antibacterials ([01D), with the most common being ceftriaxone (24%). The primary route of antibiotic delivery was oral (59%), with antibiotics with International Nonproprietary Names (INN) comprising 51% of prescriptions. Main challenges are "over-the-counter" sale of antimicrobials from pharmacies, pressure from pharmaceutical industry to prescribe particular antibiotics, lack of officially approved antibiotic guidelines in hospitals, limited access to point-of-care diagnostics in primary care, shortcomings in the documentation process and underutilization of medical microbiologic diagnostics. The systematic monitoring of antibiotic consumption has not yet been implemented into the veterinary sector. The COVID-19 pandemic has further exacerbated antibiotic misuse, particularly in the primary healthcare system. **Conclusions.** To enhance the response to antimicrobial resistance in Kosova, it's recommended to enforce stricter regulations on antibiotic sales, reduce pharmaceutical industry influence on prescriptions, and develop and implement official antibiotic guidelines. Additionally, improving access to diagnostics in primary care, refining documentation practices, extending systematic monitoring to the veterinary sector, and reinforcing educational efforts are also crucial. Ultimately, a multi-sectoral approach is essential, along with fostering research and planning strategies to mitigate the impact of future pandemics on antibiotic misuse.