

PRACTICES OF ANTIBIOTIC CONSUMPTION IN ACUTE RESPIRATORY INFECTIONS AT THE PRIMARY HEALTH CARE LEVEL IN THE REPUBLIC OF MOLDOVA

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Introduction. Antibiotics (AB) rank among the most frequently prescribed drugs globally, and their usage continues to rise. Excessive use is recognized as a major contributor to the development of antibiotic resistance. Primary Healthcare (PHC) practitioners are responsible for over 80% of all antibiotic prescriptions, primarily for respiratory tract infections. Inappropriate antibiotic prescriptions by healthcare practitioners stem from various factors, including diagnostic uncertainty due to the absence of rapid diagnostic tests, influenced prescribing knowledge and behaviors, and practice settings.

Aim. The undertaken study aimed to assess the consumption of antibiotics for acute respiratory infections at the level of Primary Health Care Units in the Republic of Moldova.

Material and methods. A total of 12,948 records of patients with respiratory infections (RI) were analyzed, as consulted by 429 family physicians (FP) in both rural and urban areas of the Republic of Moldova (RM) between November and March 2015-2016. Each participating physician documented data on patients with acute respiratory infections (ARI) over a consecutive 2-week period, with a minimum of 30 patients each. The participants utilized the "Happy Audit 2" questionnaire, as proposed by the Baltic Antibiotic Resistance Network (BARN).

Results. The prescription rate of antibiotics by family physicians (FP) for respiratory infections in the Republic of Moldova was found to be high, at 53.4%. The combination of Amoxicillin with β -lactamase was prescribed in 33.1% of cases, followed by Cephalosporins at 21.3%, Amoxicillin at 18.8%, and Macrolides at 16.0%. Elevated prescription rates were particularly noted for acute tonsillitis (93.6%), acute bronchitis (89.1%), acute otitis media (85.6%), and acute sinusitis (78.2%). Antibiotic prescribing in urban areas accounted for 49.5% (± 0.01), while in rural areas, it was 58.2% (± 0.01). Across geographical regions of the Republic of Moldova, antibiotic prescription rates were registered as follows: 61.3% (± 0.02) in the North, 56.1% (± 0.02) in the Center, and 52.5% (± 0.03) in the South. Self-medication with antibiotics before consulting a family physician was noted in 2.7% of respondents. The average self-medication rate for the studied sample was 2.1% (± 0.6), which included rates for urban areas (2.5% \pm 2.1) and rural areas (1.67% \pm 0.8).

Conclusions. The antibiotic prescription rate for Acute Respiratory Infections (ARI) in the Republic of Moldova is notably high at 53.4%, and this prevalence is more pronounced in rural areas. The antibiotic consumption practices for ARI in the country closely mirror those observed in Southeastern European nations. The extensive use of second-line antibiotics such as Amoxicillin clavulanate and Cephalosporins by Primary Healthcare (PHC) practitioners for ARI treatment contradicts both national and international recommendations. Self-medication with antibiotics is more commonly practiced among the urban population in the Republic of Moldova compared to rural areas. It is imperative to implement robust educational measures to curb irrational antibiotic consumption and promote responsible antibiotic use.