**High prevalence of antibiotic self-medication for children under 5 and contributing factors in a suburban district of Hanoi, Vietnam**

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**Background and aims.** Antimicrobial resistance (AMR) is a critical global health issue, driven mostly by irrational use of antibiotics (1). This study aimed to investigate the prevalence and factors influencing the self-administration of antibiotics to children under 5 years old in a suburban district of Hanoi, Vietnam.

**Methods.** A cross-sectional study design was employed, combining both qualitative and quantitative methods. The quantitative component involved surveying 519 caregivers of children under 5 years old across 19 public kindergartens in Dan Phuong district. Data was collected using structured questionnaires. Additionally, in-depth interviews were conducted with a subset of 8 caregivers to gain deeper insights into their decision-making processes regarding antibiotic use for their children. Exploratory Factor Analysis (EFA) and multivariate logistic regression were performed to identify factors associated with the arbitrary use of antibiotics in children.

**Results.** The study found that 26.9% of caregivers reported self-medicating their children with antibiotics. Factors significantly influencing self-medication practices included personal experience and advice from others, beliefs and concerns, and issues related to healthcare access. The qualitative analysis revealed that caregivers often relied on past experiences, advice from family or friends, and perceived convenience when deciding to self-medicate their children.

**Conclusion.** Self-medication with antibiotics for young children is prevalent in the study district, driven by a combination of factors, including personal experience, advice from others, concerns about healthcare access, and attitudes about medication. There is a need for targeted interventions to improve caregiver knowledge about antibiotics, promote appropriate healthcare-seeking behaviors, and enforce regulations regarding antibiotic sales. These include health education programs, community-based interventions, strengthening the role of healthcare providers, and implementing stricter regulations on antibiotic sales.

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**References:**

(1) Antimicrobial Resistance Collaborators (2022), The Lancet.12;399(10325):629-655.