Knowledge, attitude and practice regarding antimicrobials for acute respiratory infections among urban slum dwellers in Dhaka during COVID-19 pandemic

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Background: Inadequate awareness and knowledge on rational antimicrobial use significantly contributes to antimicrobial resistance in low-and middle-income countries (LMICs) including Bangladesh. This study aimed to assess the knowledge, attitude and practice related to care-seeking for acute respiratory infection (ARI) among adult patients in urban slums of Dhaka during COVID-19 pandemic. Methods: This cross-sectional study was conducted in urban slums of Dhaka from November 2021 to March 2022. We conducted 466 exit interviews among adult patients with ARI who sought care and/or bought medication from selected pharmacies. Data were analyzed using STATA (Version 21). Findings: More than half (55.8%) of the participants were male, their median age was 35 years and median income was US$ 193 per month. The majority (66.5%) had completed only primary education and 97% study participants lived within 3 km from the pharmacy where they sought care. In terms of knowledge and awareness related to antimicrobials, 45.5% of the study participants were familiar with the term “antimicrobial/antibiotic” but only 7.5% could name one or more antimicrobial. Thirty percent of patients knew about the importance of adhering to recommended antimicrobial dosage schedule but only 17.4% of study participants claimed that they “always” adhere to recommended dosage schedule. The majority (96%) of patients stated that pharmacy workers were the usual source of care-seeking and/or prescription for ARI. About 70% of the patients said that they “rarely/never” go for antimicrobial self-medication without prescription or advice from a formal or informal healthcare provider. About 40% of patients either don’t check or don’t know (45.3%) about the expiry date of the medicine they purchase. Forty-six percent of the patients claimed that they know the symptoms of COVID-19 while 67% don’t know the difference between symptoms of COVID-19 and common cold. Conclusion: The study highlights the lack of knowledge and awareness related to rational use of antimicrobials for ARI among urban poor in Dhaka. Our findings further reinforce the role of pharmacy medicine sellers as the first-point-of-care-seeking in urban slums. Communication strategies can potentially involve pharmacy medicine sellers for raising awareness and improving knowledge and practice around antimicrobial use among urban vulnerable population.