Prescription ethics: A primary care perspective

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ABSTRACT

Summary: Antimicrobial resistance rate has increased by two folds in the last 20 years and has killed approximately 700,000 people per year globally. The number is estimated to escalate to 10 million deaths annually by 2050 whereas the financial burden could cost up to US\$100 trillion (RM416.65 trillion). This situation highlights the urgency of an action plan to combat the issue comprehensively. As an emerging global health threat with major economic impact, it requires a comprehensive strategy at various aspects, including primary care. The emergence of antibiotic resistance in bacteria is directly linked to selective pressure exerted by the overuse of antibiotics. Indiscriminate antibiotic prescribing is defined both by excessive prescribing and by prescribing an inappropriate antibiotic. Although there has been a focus on antibiotic stewardship in the hospital setting, outpatient prescribing accounts for the majority of antibiotic consumption and is an important factor in the emergence of resistance in both the community and hospitals. Thus, preventing unnecessary antibiotic use in the primary care setting is essential for overall stewardship efforts. Over prescription of antibiotics is a continuing problem in primary care. To combat these, there is a need to use antibiotic appropriately and wisely, based on evidence-based guidelines, avoiding unnecessary and sub therapeutic antibiotic usage, besides educating patients regarding antibiotics. Algorithms and quidelines on managing common outpatient conditions eg acute rhinosinusitis, acute tonsillo-pharyngitis, acute otitis media, pneumonia/acute bronchitis, urinary tract infection, skin and soft tissue infection and acute gastroenteritis are available. These algorithms will assist primary care providers to decide whether antibiotics are needed or not, what antibiotics to use, the correct dose and duration of antibiotics and when to escalate antibiotics in cases not responding to current treatment. The choices of antibiotics are based on current national antibiotic guidelines. By implementing clinical pathways for common outpatient infections on antibiotics prescribing, declining prescriptions for non-pneumonia acute respiratory infections and the use of broad spectrum antibiotics over the first year was found in one study. Strategies on dealing with possible patient driven demands are also crucial to synergize these approaches for antibiotic stewardship.