Abstract:

The threat to human health posed by antimicrobial resistance of bacteria is a worldwide and ever growing problem related to the use of antibiotics as is demonstrated by numerous examples of which some are discussed in this review. Resistant bacteria emerge by the selective pressure of antibiotics. Information about antibiotic use in developing countries is limited. We found quantitative data about 15 low-income and developing countries, and data about the appropriateness of antibiotic use of 3 countries. Important determinants of antibiotic use playing a role in prescribers, dispensers and customers are lack of knowledge of antibiotics, economic incentives, and marketing influences. A prerequisite for an adequate fight against ever increasing rates of resistance is information about the quantity and quality of antibiotic use. Methods to measure quantity and quality are discussed. The prudent use of antibiotics should be promoted. WHO has set a number of targets to improve antibiotic use, among which are changing behaviour of prescribers by introduction of guidelines and education about preferred antimicrobial therapy.