

Editorial

Antimicrobial resistance: a potential threat to attaining sustainable development goals

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Antimicrobial resistance (AMR) is a phenomenon when microorganisms such as bacteria, fungi, viruses and parasites change when they are exposed to antimicrobial drugs including antibiotics, antifungals, antivirals, antimalarials and antihelmintics (WHO 2016). Although microbes have been evolving the ways to resist antibiotics since their introduction before 80 years and has become a global emergency (Chajer et al. 2014; Toner et al. 2014).

Obviously, in the absence of effective antimicrobials for prevention and treatment of infections, medical procedures and major surgery becomes high risk (WHO 2016). More interestingly, AMR if continued unabated not only could erode gains of Millennium Development Goals but also a potential threat to achieving the United Nation's Sustainable Development Goals (SDGs). Due to the threat of AMR to humanity, the World Health Assembly (May 2015) endorsed a global action plan to tackle AMR (WHO 2016).

Similarly, the Federal Ministry of Health of Ethiopia has approved its five-year Health Sector Transformation Plan in which AMR was accommodated as a priority area (HSTP 2015). This plan considered to contain escalation of multi-drug resistant tuberculosis during the plan period. In February 2014, the US government and international organizations jointly launched a 5-year Global Health Security Agenda (GHSA) to increase efforts globally to prevent, detect, and respond to infectious disease outbreaks.

Overall, the political commitment rendered at local and global levels is motivating the researchers to engage more in generating evidence on AMR in various clinical settings (Dessie et al. 2016; Gezmu et al. 2016; Amsalu et al. 2017; Moges et al. 2014). The regulatory agency (FMHACA) in 2009 conducted a national survey to establish the magnitude of resistance to most of the commonly used drugs (FMHACA 2009). Kemal et al. (2015) also

reported that high proportion of *Salmonella* isolates developed resistance to the commonly prescribed antimicrobials and this may be a considerable risk in the treatment of clinical cases.

Furthermore, the National Task Force for AMR prevention and control has been established with members from (FMHACA, *National Animal Health Diagnostic and Investigation Center* (NAHDIC) and Centers for Disease Control and Prevention (CDC-Atlanta) among others with the Ethiopian Public Health Institute (EPHI) as secretary to the task force. It therefore appears prudent to base the collaboration on the WHO's five AMR key elements such as improving awareness and understanding of antimicrobial resistance; strengthening knowledge through surveillance and research; reducing the incidence of infection; optimizing the use of antimicrobial agents; and increasing investment in new medicines, diagnostics, vaccines and other tools (WHO 2016).

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