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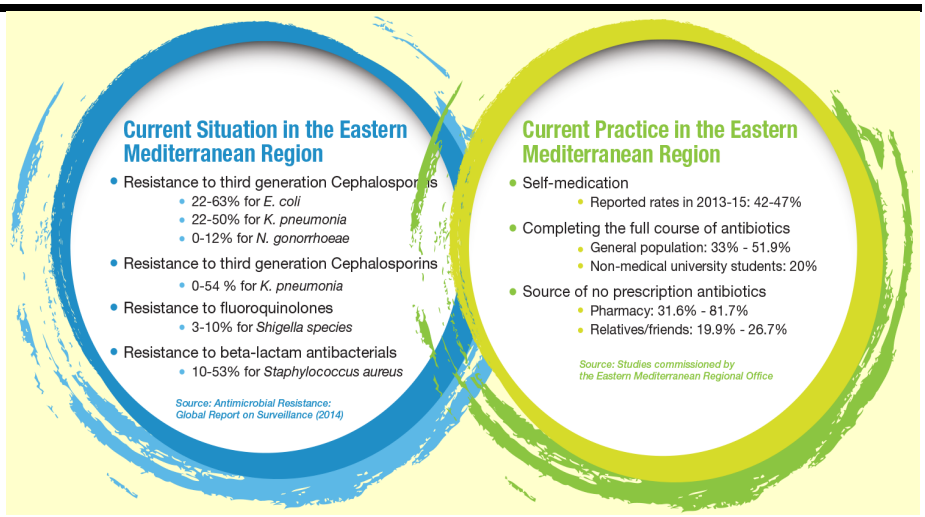
Current major event

Antimicrobial Resistance: A growing threat in the EMR

Antimicrobial resistance (AMR) is emerging as a major global health security concern. Despite the availability of non representative and comparable data across countries in the Eastern Mediterranean Region (EMR) of WHO, findings of a number of studies commissioned recently show a grave picture of the AMR situation in the Region.



Editorial note

Estimates on the magnitude and health and socio-economic burden of the problem associated with AMR in the Region are hampered by the limited availability of reliable data. However, academic studies from some countries in the Region show that the antimicrobial resistance pattern is critical and geographically extensive, with methicillin resistance rates in *Staphylococcus aureus* exceeding 50% in several countries and resistance to third generation cephalosporins in *Escherichia coli* exceeding 60% in some, among others *(Please see above).*

The resistance information from specific programs (such as tuberculosis (TB), HIV and malaria) are more advanced. Approximately 24,000 new cases of multidrug resistant tuberculosis occur each year in the Region. There are alarming signs of increased transmitted HIV drug resistance. Falciparum malaria parasites resistant to last resort drug-artemisinins, are emerging resulting in higher morbidity and mortality. Resistance to earlier generation antimalarial medicines, such as chloroquine and sulfadoxine-pyrimethamine, is also widespread in most malaria-endemic countries in the Region. Increasing levels of AMR prevalence is endangering the prevention and treatment of infections ranging from the common up to life-threatening ones, which disproportionately affect the poor. This in turn imposes significant burden on health systems and beyond.

The fast growing AMR is undermining the achievements of public health and medicine by taking back to the pre-antibiotic era where there was no cure for community acquired infections. It is a multifaceted problem and requires an urgent action today. Appropriate actions to combat the threat of AMR will rely on three strategic pillars: i) Raising awareness and stakeholder engagement, ii) national capacity building, and iii) innovation, research and development in new tools and knowledge. There is a sense of urgency now to accelerate efforts (please see the box) to combat the threats of AMR in the Region.

Important actions to curb the threats of AMR

- Raise awareness amongst public and health professionals
- Establish national multi-sectorial coordination mechanisms
- Set up national AMR surveillance system through early implementation of the Global Anti-microbial Surveillance System (GLASS)
- Improve antibiotic stewardship for rational use of antibiotics
- Enhance infection control programme specially in healthcare settings

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; cholera in Somalia;

Current public health events of international concern
[cumulative N° of cases (deaths), **CFR %**]

Avian Influenza : 2006-2016	
Egypt (A/H5N1)	[350 (117), 33.4%]
Egypt (A/H9N2)	[3 (0)]
MERS-CoV: 2012-2016	
Saudi Arabia	[1414 (601), 42.5%]
Bahrain	[1 (1), 100%]
Cholera : 2016	
Somalia	[8838 (433), , 4.9%
Yellow fever: 2015-2016	
Angola	[3137 (345), 10.9%
DRC	[1644 (71). 4.3%
Lassa fever : 2015-2016	
Nigeria	[273(149), 54.5%)
Benin	[54(28),51.8%
Avian Influenza A (H7N9) : 2013-2016	
China	[770 (306),39.7%]
Avian Influenza A (H5N6) : 2016	
China	[4 (0)]
Wild poliovirus: 2014-2016	
Pakistan	[371(0)]
Afghanistan	[54(0)]
Zika Virus Infection: 2007-2016	
58 countries and territories have reported transmission so far	