AMR Fact Sheet Health Professionals

What you need to know about Antimicrobial Resistance

Antimicrobial Resistance (AMR) occurs when organisms that cause disease are no longer susceptible/responsive to antimicrobial agents that previously were effective in combating them. AMR is a global problem with particularly dire consequences for Africa which is already grappling with high levels of infection in the face of limited resources.

Antimicrobial treatment is the major lifesaving intervention for infectious diseases but AMR is rapidly reducing the effectiveness of antimicrobials. As a result, many first line treatments for diseases such as malaria, Tuberculosis and opportunistic infections of AIDS are no longer effective and the cost of care with second line or newer agents is inevitably increased.

WHO's 2014 report on global surveillance of antimicrobial resistance reveals that antibiotic resistance is no longer a prediction for the future; it is happening right now across the world and it is putting at risk the ability to treat common infections in the community and hospitals. Without urgent, coordinated action, the world is heading towards a post-antibiotic era in which common infections and minor injuries, which have been treatable for decades, can once again kill.

Major factors contributing to AMR

Factors that contribute to the development of AMR are numerous but the majority revolve around prescribing, dispensing and other medicine use practices.

Prescribing

- Making the wrong diagnosis
- · Prescribing medicines which are not needed
- Over/under dosing

Dispensing

- Giving the wrong medicines
- Supplying poor quality medicines
- Poor storage and/or packaging of medicines

Medicine use

- Taking medicines which are not needed and self medication
- Failing to complete courses of treatment
- Taking irrational combinations of medicines
- Widespread inappropriate use of antimicrobial agents in agriculture, aquaculture and animal husbandry

All these choices are influenced by things which may or may not be within the control of the health worker or patient. They include among others; inadequate information, lack of funds to buy required medicines, unavailability of medicines, poor training and inappropriate norms and beliefs.



Consequences of AMR

Consequences of AMR are far reaching! One of the most evident is its financial impact which is illustrated in the table below. The table shows the costs of the first and second choice treatments. Second choice treatment is given when the first choice is not effective

Disease	Average cost of first line treatment	Average cost of second line treatment	Cost increase
Urinary Tract Infection (UTI)	0.44USD/patient/course	4.15USD/patient/course	9.4 times more
Malaria	0.62USD/patient/course	4.15USD/patient/course	6.7 times more

Other consequences of AMR

- Increased morbidity and mortality
- Longer periods of infections increase the risk of pathogens transmission to others
- Longer hospital admission increase the cost of care and risk of hospital acquired infections
- The value of life-saving medical technologies such as transplants is reduced
- Some infections become almost untreatable and no vaccines or new drugs are in development. For example, treatment failure of gonorrhoea due to resistance has been reported from 10 countries as at 2014

What can you do?

As health professionals we can implement a number of interventions to contain AMR.. You can do the following;:

- Control the spread of infection within the health facility which starts with adopting proper hand hygiene practices
- Make better use of available diagnostic tools
 e.g. otoscopes and laboratory facilities to reach
 a conclusive diagnosis in as many cases as
 possible,
- Adopt standard protocols for the management of common infections within the facility
- Conduct audits on prescribing and dispensing practices within the facility to measure compliance to the agreed standards
- Supply medicines bought from licensed outlets which can guarantee that the commodities they are selling are of good quality
- Provide full information to patients on how to take their medicines properly and on the dangers of AMR
- Avoid prescribing and dispensing of irrational combinations of antimicrobials and other medicines



Resistance increases the risk of death from infection. We need to act now.

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