



Global Antibiotic Resistance Partnership



Day 1 summary: GARP-Kenya Inaugural Meeting



Global and local/regional problem (and solutions)

- Global: antibiotic supply, resistance in some cases has cross-border consequences (some clones spread widely), similar solutions in many places (Kenya solutions will probably apply elsewhere in Africa)
- Local/regional: e.g., data from Kilifi: rapid change in antibiotic resistance profile (even if not understood)—also the France, Netherlands, Belgium story

Baseline: significant missing information

- Patterns and levels of antibiotic use: why do people get/buy antibiotics?
- Unlike US (Europe, etc.), *underuse* is a significant problem, as evidenced by deaths from antibiotic-treatable diseases. Overuse, misuse, also problems.
- BUT where you look, you find very high levels of ab resistance (probably biased high)
- Vet use/residues: even less information than human use
- Government vet program initiatives, but understaffed and underresourced



Surveillance—not happening

- Need to define an appropriate, sustainable surveillance system (one of WHO aims)
- Sentinel sites?
- netSPEAR: high quality data on modest number of isolates to support *H. influenzae b* and *S. pneumoniae* vaccination, but can it continue?

Low profile of antibiotic resistance as a public health issue

- Burden of disease has not been quantified: WHO working on this with Imperial College; separate GARP effort (DALYs due to ab resistance) with IHME
- Economic costs, full consequences of antibiotic resistance: need this to appeal to policymakers and others
- Policymakers have concentrated on AIDS, TB, malaria

State of microbiology

- Top to bottom lack of supply and demand
- E.g., data from Western Kenya—doctors don't order cultures and antibiotic resistance profiles until late in course of disease
- No testing below district hospital level
- Inadequate/unpredictable/variable quality materials
- No national standards for reporting data
- Training
- Technology: ready to leapfrog? Current system is expertise-intensive
- RDTs?



Great scope for infection prevention

- Vaccines
- Infection control in hospitals (CDC-KEMRI initiative)
- Infection control in food raising operations
- (Water and sanitation)

Good news: a lot of room for improvement!

Need to prioritize problems/solutions, according to where biggest impact is likely to be, but many chunks are manageable research projects with policy perspective, and possible policy changes that will improve conditions.

