



Global Antibiotic Resistance Partnership

Objective

Develop actionable national strategies to address the challenge of antibiotic resistance in four low- and middle-income countries

- Kenya
- India
- South Africa
- Vietnam

Specific Aims

- Develop the evidence base for policy action on antibiotic resistance
- Identify policy opportunities where research dissemination, advocacy, and information can have the greatest impact in slowing the development and spread of resistance.

Steps

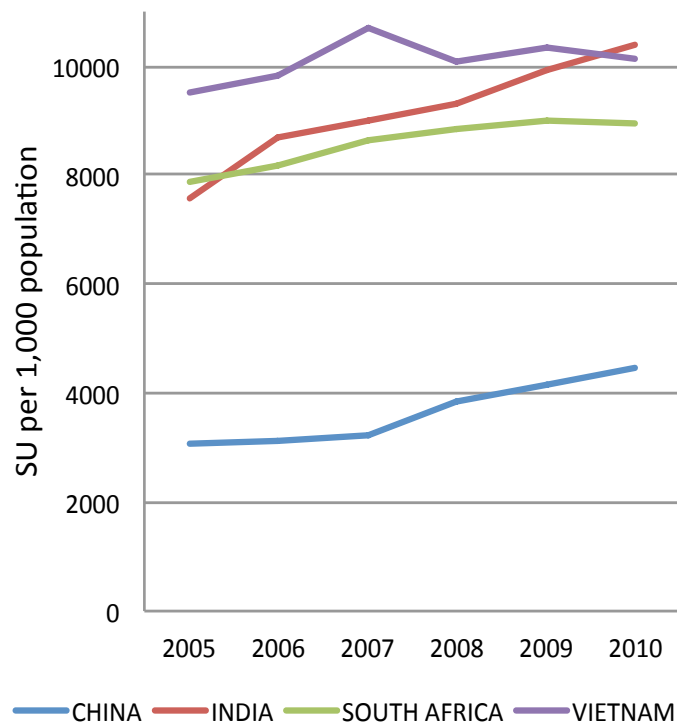
- Create country profiles of baseline resistance, antibiotic use and burden of resistance
- Assess the health and economic consequences of antibiotic resistance
- Develop mathematical models of specific approaches to delay emergence of antibiotic resistance
- Constitute GARP National Working Groups

The need for GARP

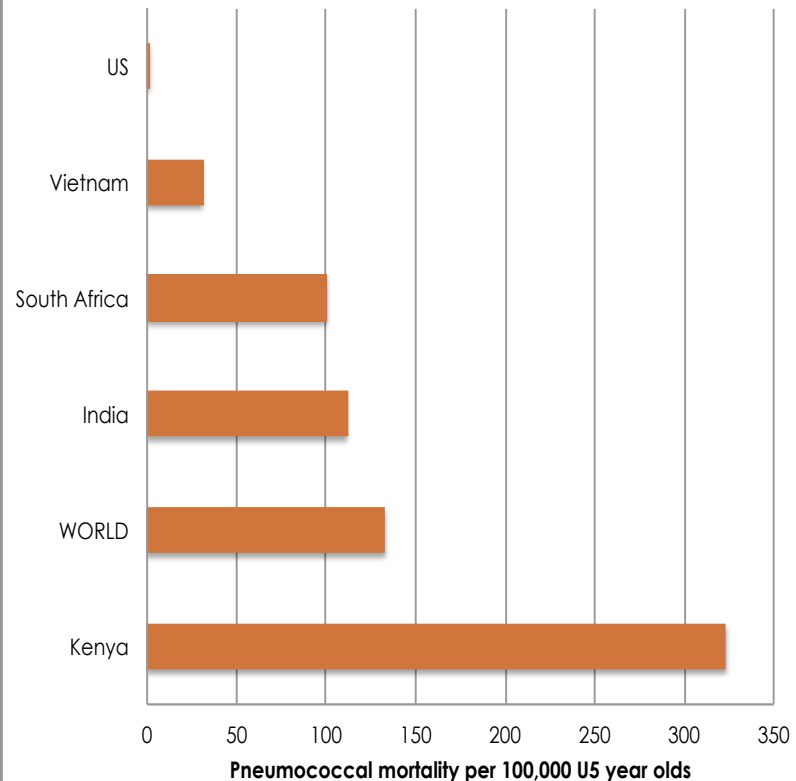
- Two fold problem in low- and middle-income countries: lack of access AND over use
- Much higher infectious disease burden

Over use AND Lack of access are a problem in LMCs

ANTIBIOTIC CONSUMPTION IN INDIA, CHINA, SOUTH AFRICA AND VIETNAM
ALL CLASSES COMBINED, 2005-2010



Pneumococcal mortality rate of under five year olds of GARP countries, US and the world (2000)



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Source: World Health Organization, 2000

The need for GARP

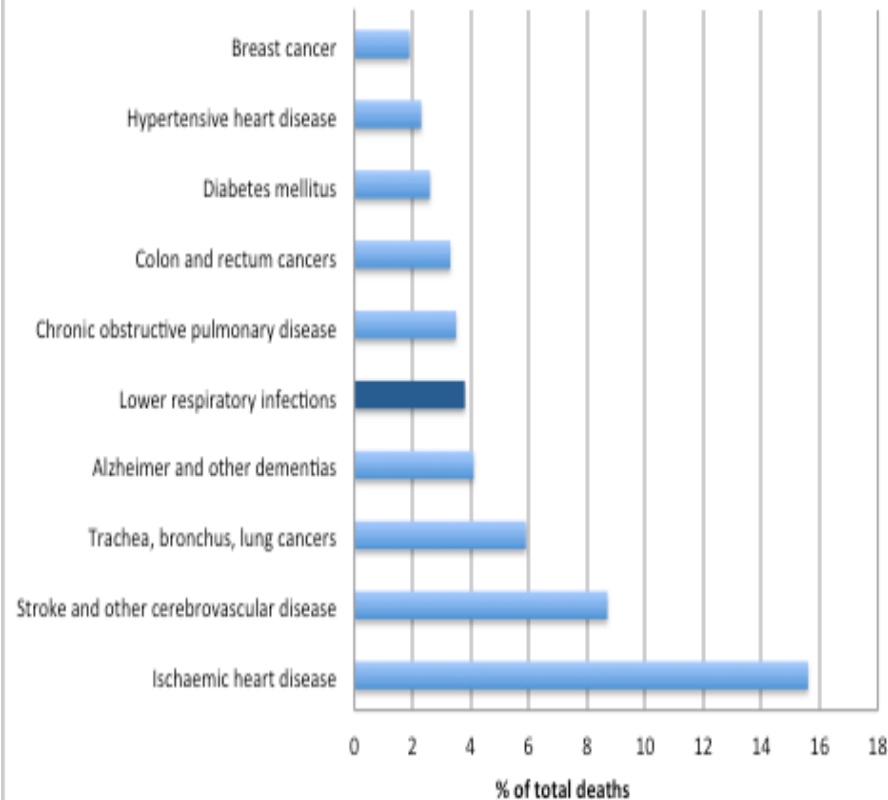
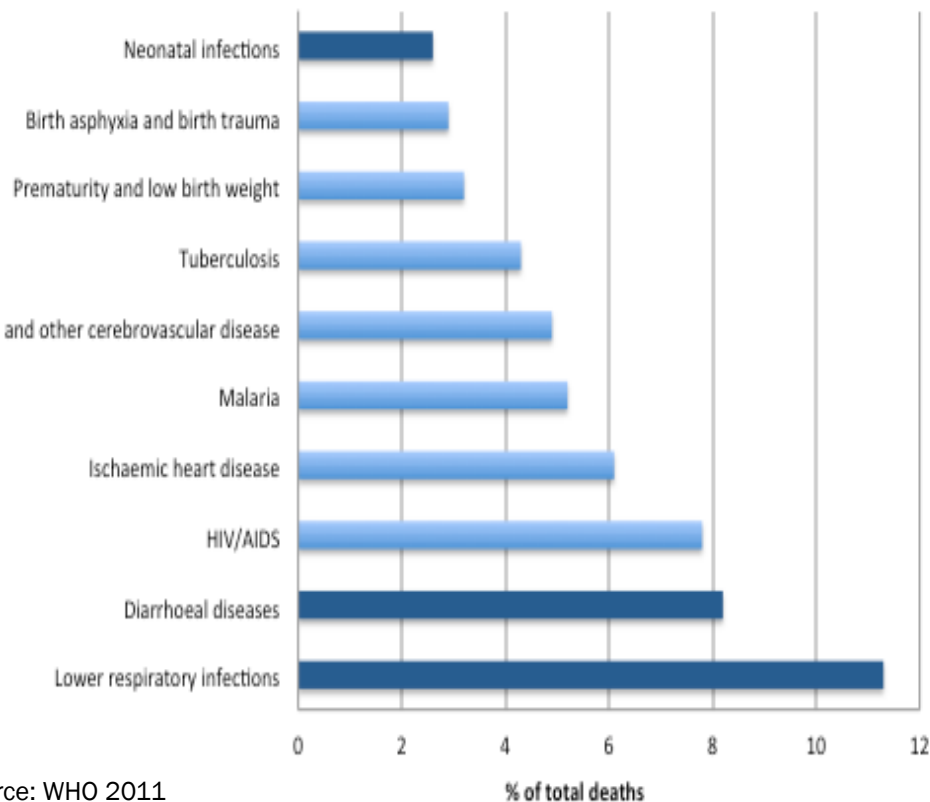
- Two fold problem in low- and middle-income countries: lack of access AND over use
- Much higher infectious disease burden

LMCs have a much higher bacterial disease burden...

Low income countries

Top ten leading causes of deaths in 2008

High-income countries

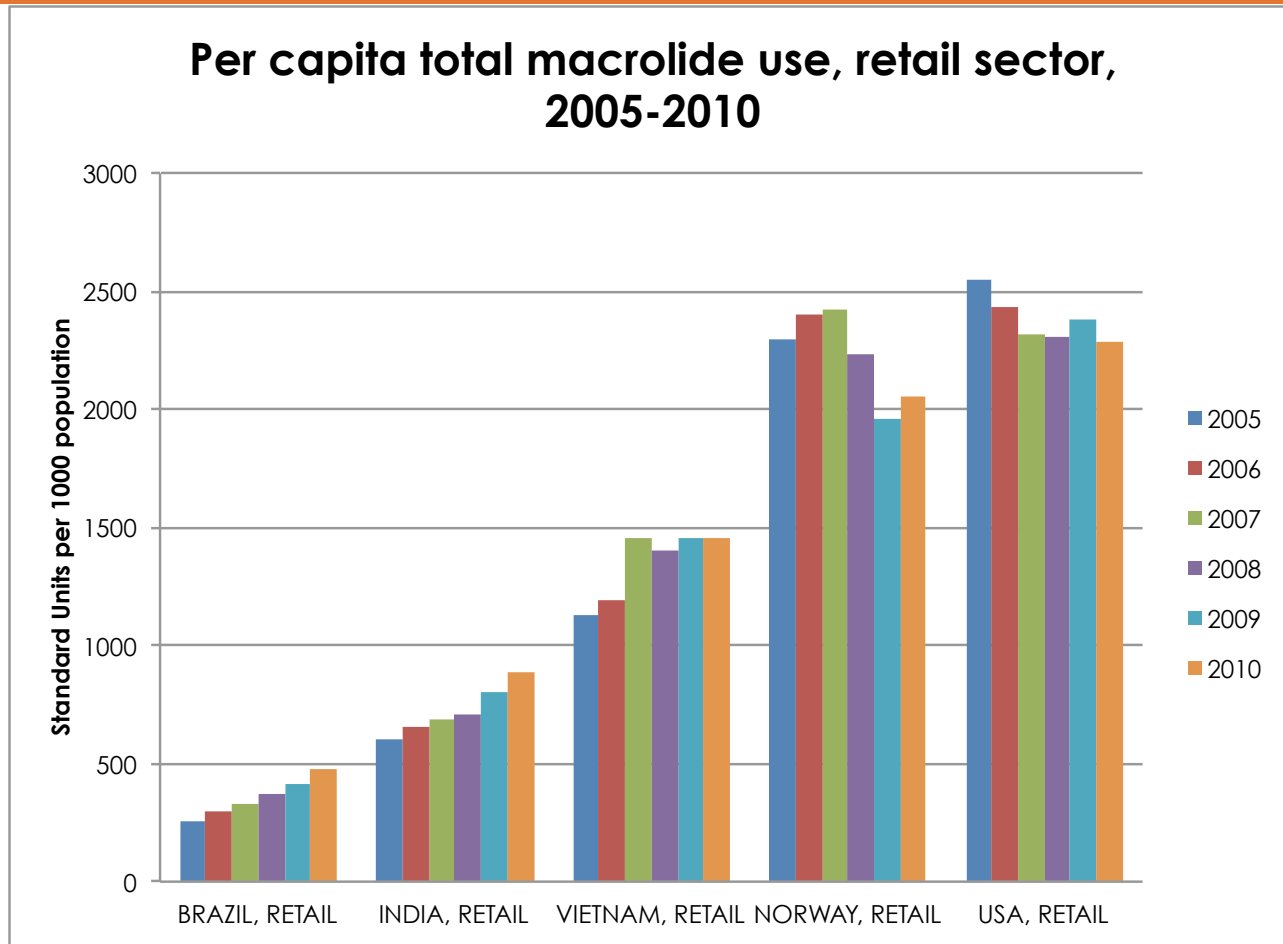


Source: WHO 2011

The need for GARP

- Two fold problem in low- and middle-income countries: lack of access AND over use
- Much higher infectious disease burden
- Rising incomes are leading to increased antibiotic consumption

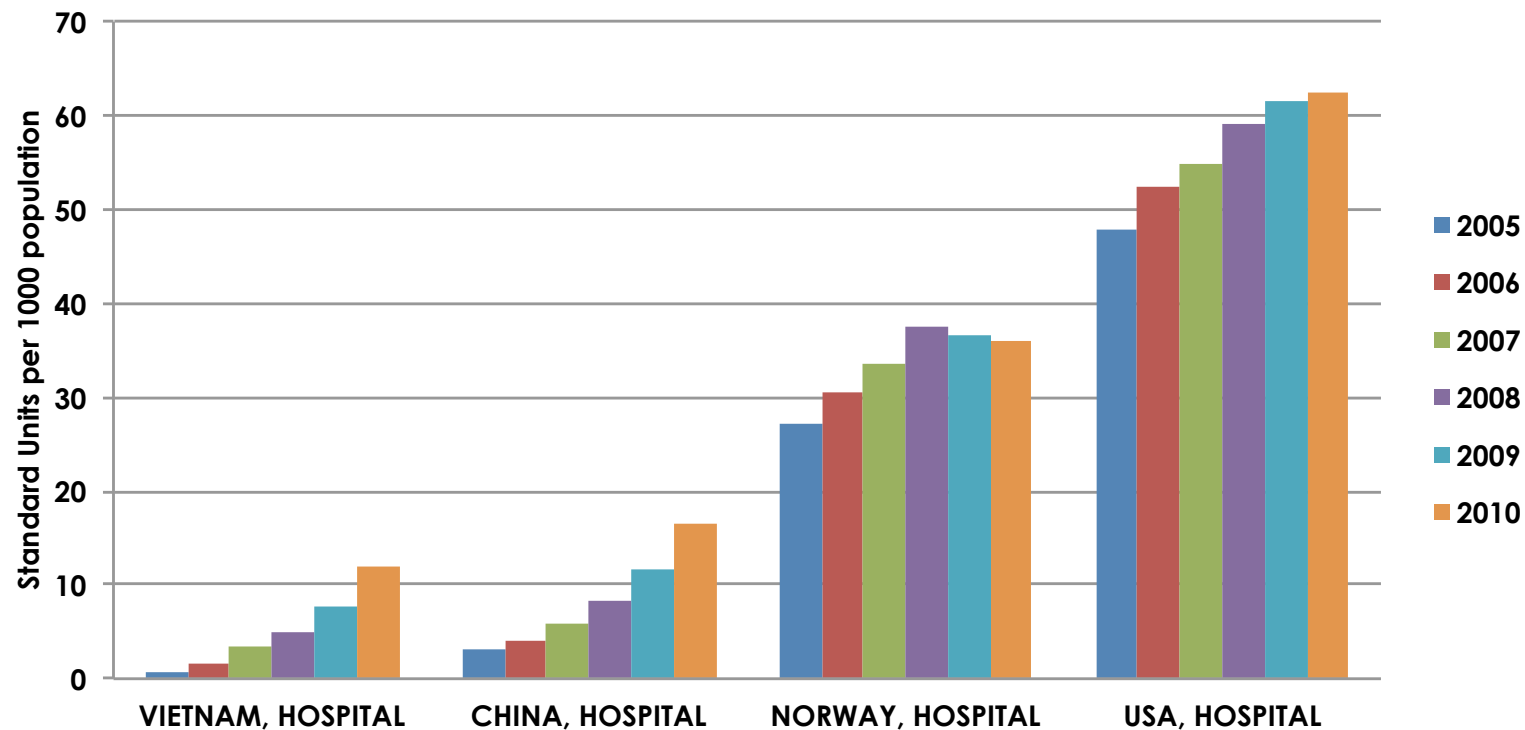
Antibiotic use is rising in the retail sector, mostly without prescriptions...



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Hospital antibiotic use is rising along with increasing hospital infections

Per capita total carbapenem use, hospital sector, 2005-2010



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The need for GARP

- Two fold problem in low- and middle-income countries: lack of access AND over use
- Much higher infectious disease burden
- Significant financial burden on poor families involved in the substitution to non-first line drugs
- Unique relationship between food animals and people

What we found

- Resistance worsening in all four countries
- Growing recognition of challenges of resistance
- Low priority given to surveillance for resistance
- Lack of attention to health system factors that drive antibiotic overuse
- Poor linkages between animal and human health sectors in addressing antibiotic use

GARP Situation Analyses



SITUATION ANALYSIS AND RECOMMENDATIONS

Antibiotic Use and Resistance in Kenya



The GARP-Kenya Working Group
Dr. Samuel Kariuki, Chairman
August 2011

Kenya



SITUATION ANALYSIS

Antibiotic Use and Resistance in India



Global Antibiotic Resistance Partnership-India National Working Group
Dr. N. K. Ganguly, Chairman
March 2011

India



South
Africa

South African Medical Journal



August 2011, Vol. 101, No. 8

Global Antibiotic Resistance Partnership
SITUATION ANALYSIS:
Antibiotic use and resistance in South Africa

CDDEP THE CENTER FOR
Disease Dynamics,
Economics & Policy



SITUATION ANALYSIS

Antibiotic Use and Resistance in Vietnam

The GARP-Vietnam National Working Group
Dr. Nguyễn Văn Kinh, Chairman

October 2010

CDDEP THE CENTER FOR
Disease Dynamics,
Economics & Policy

Vietnam

GARP Phase 2

- Policy action in four Phase 1 countries
- Expansion to at least four more countries
- Deploy PneuMOD to address policy questions in intervention effect size
- Improved communication of resistance data
 - ResistanceMap
 - Resistance Index