What are MPTs and why do we need them? What's available now and on the horizon

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Women's varying SRH needs over time

If sexually active:
- Delay in first birth
- Prevention of STI/RTIs & HIV

- Planning &
- Spacing Pregnancy
- Prevention of STI/RTIs & HIV

- Need Long term or Permanent method of contraception
- Prevention of STI/RTIs & HIV

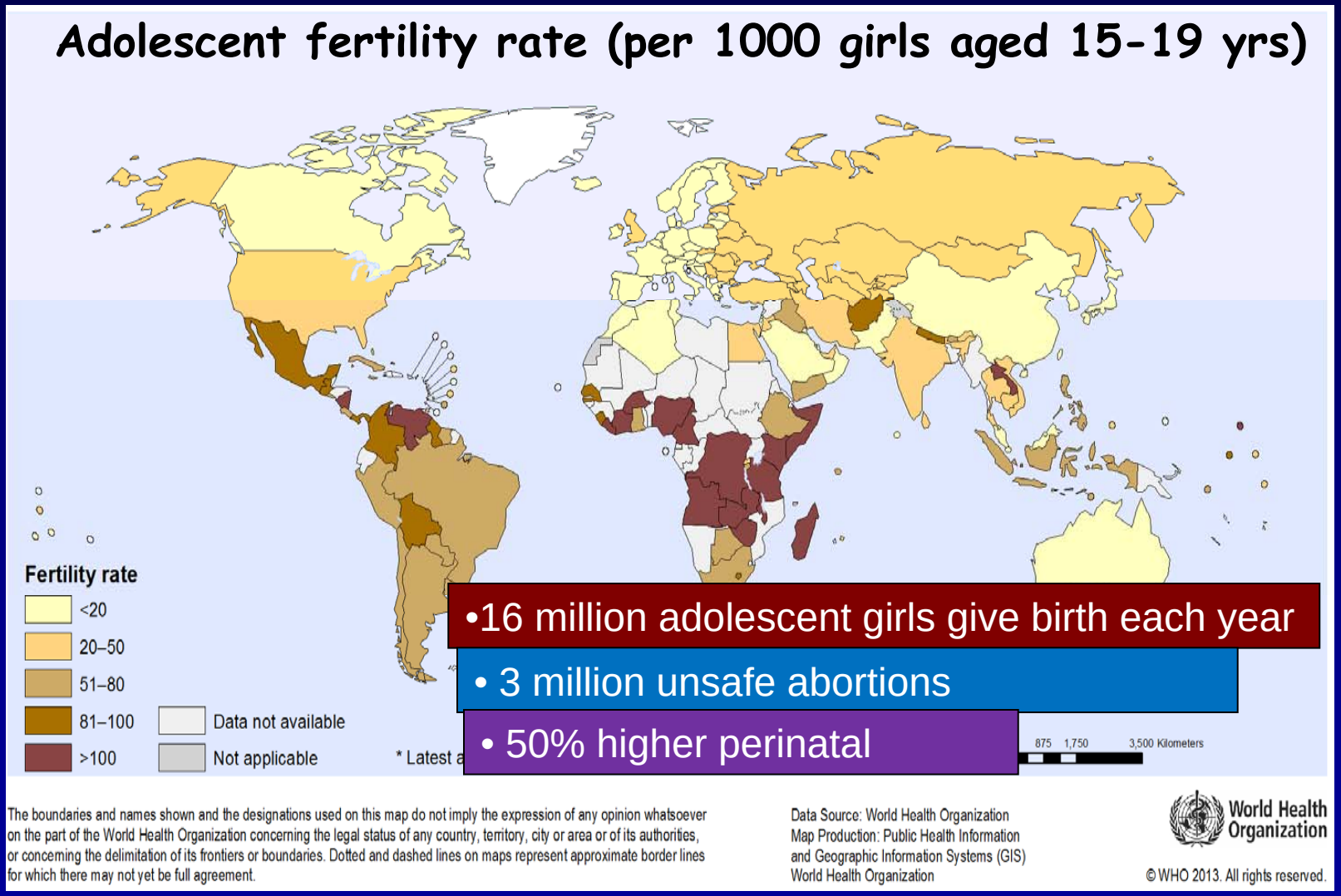
Greater choices would empower women to have more control over their health

Our Challenge as Researchers, Providers and Policy Makers…

How to address the primary sexual and reproductive health concerns of all women?

1. Healthy timing & spacing of intended pregnancies
2. Safe birth for mother and child
3. Protection against sexually transmitted infections (STIs), including HIV

Healthy timing and spacing of intended pregnancy



Rate of decline has slowed in the last decade

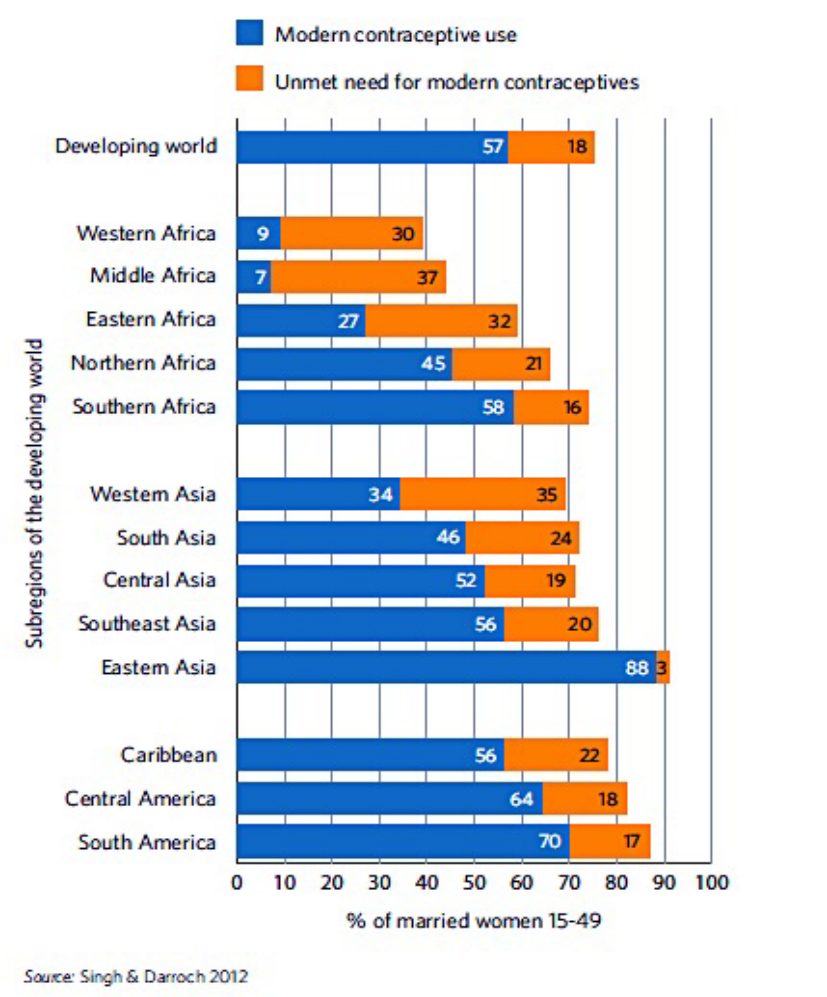
Healthy timing and spacing of intended pregnancy

- Unmet need for FP of 222 million women in developing countries translates annually to:
  - 63 million unintended pregnancies
  - 23 million abortions
  - 590,000 newborn de
  - 291,000 pregnan lated deaths

By choice, not by chance

- South est Asia has largest unme eed:
  - 88 million women
  - 41% of TOTAL unmet need

- Africa has made the least progress in family planning



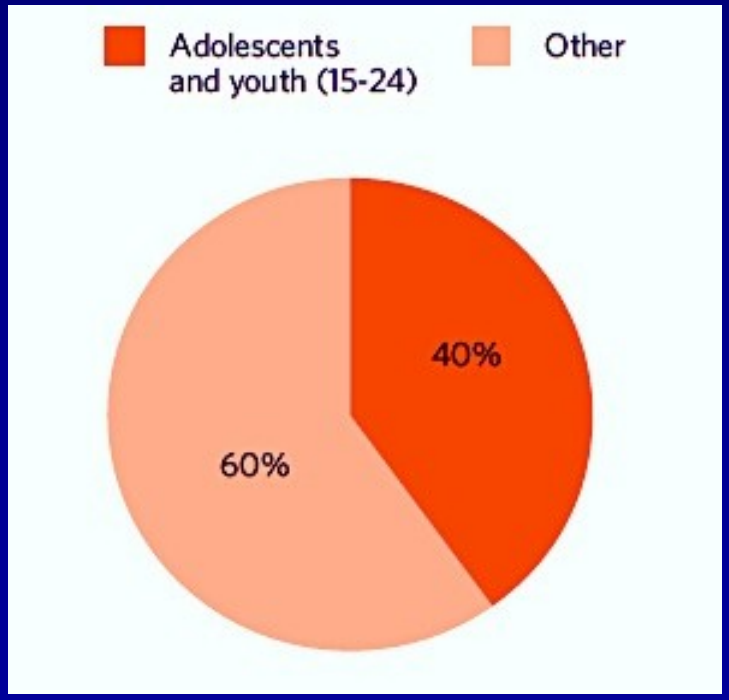
Large variation in Unmet need for and use of modern contraception (developing countries)

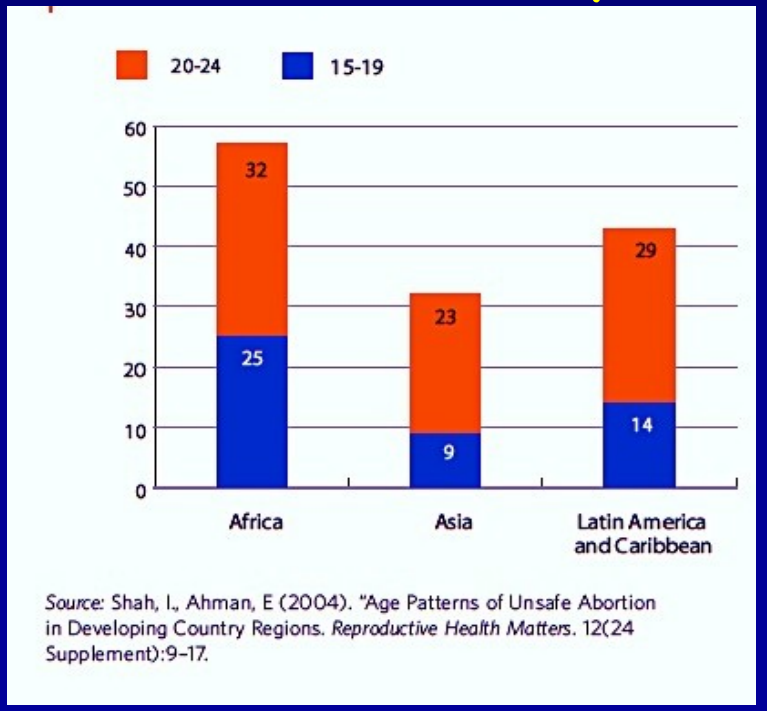
Unintended pregnancies and their outcomes

	Total No of pregnancies	% pregnancies unintended	Unintended pregnancy outcomes (as % of all		
	(millions)		Births	Abortions	Miscarriages
World	208.2	41	16	20	5
More developed region	22.8	47	15	25	6
Less developed region	185.4	40	16	19	5

Singh S et al 2010

Unsafe abortions among adolescents and youth





Source: Shah, I., Ahman, E (2004). "Age Patterns of Unsafe Abortion in Developing Country Regions. *Reproductive Health Matters*. 12(24 Supplement):9–17.

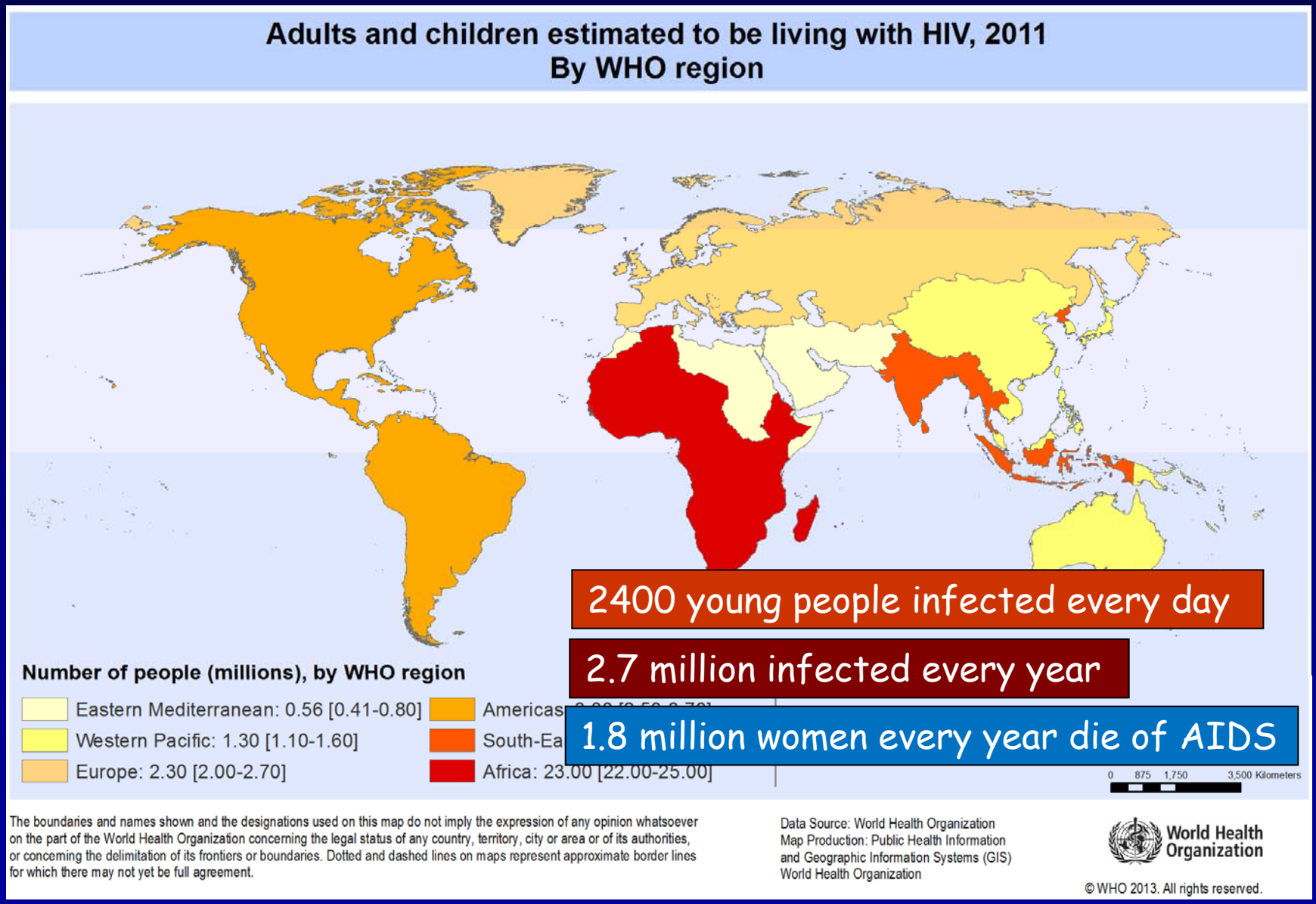
Safe birth for mother and child

Maternal Mortality ratio (per 100,000 live births), 2010

47% reduction in last 2 decades

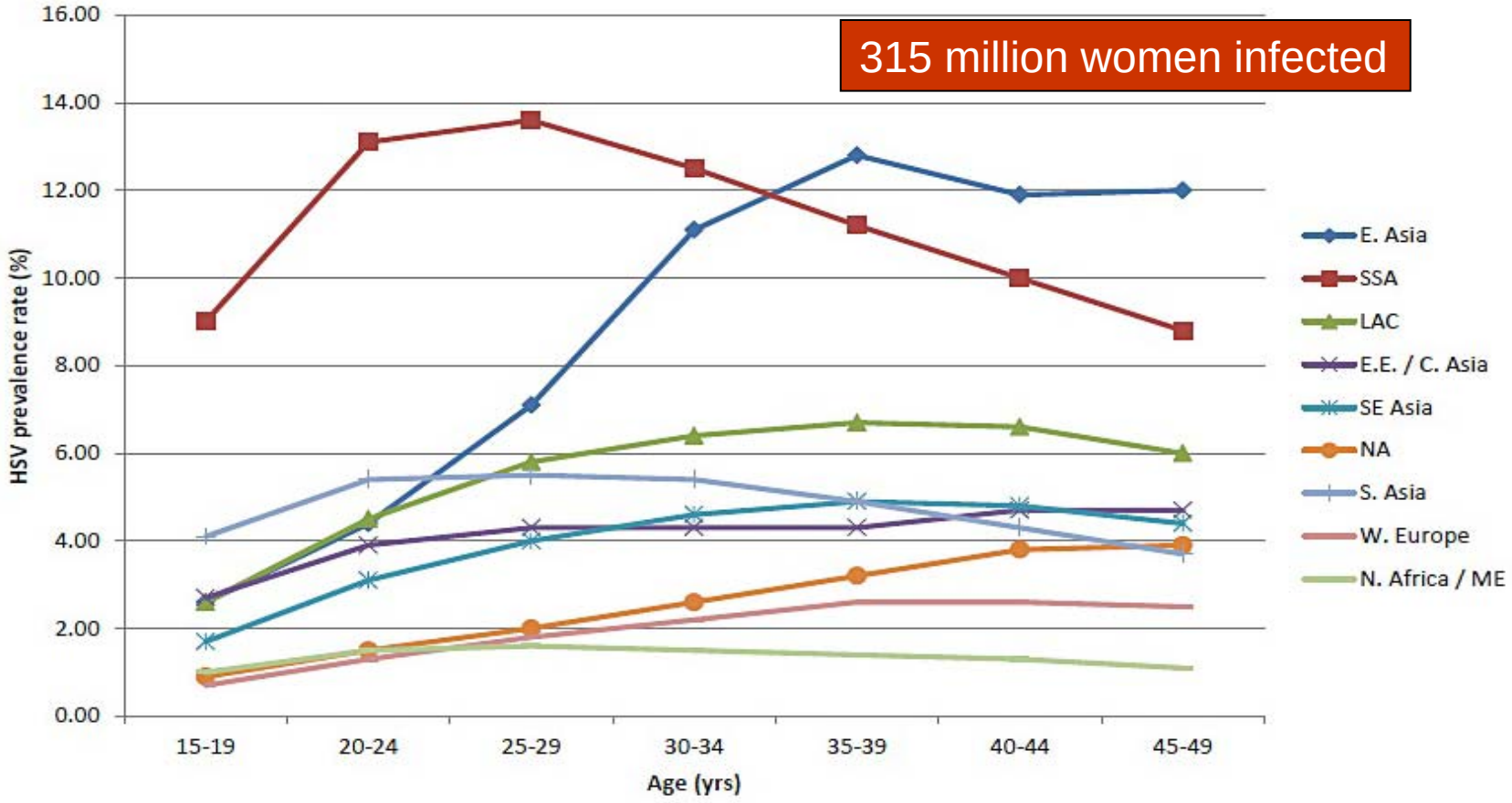
Preventing unintended pregnancies saves maternal lives

Protection against STIs, including HIV



Protection against STIs, including HIV

2003 regional estimates of HSV-2 prevalence in women, by age group



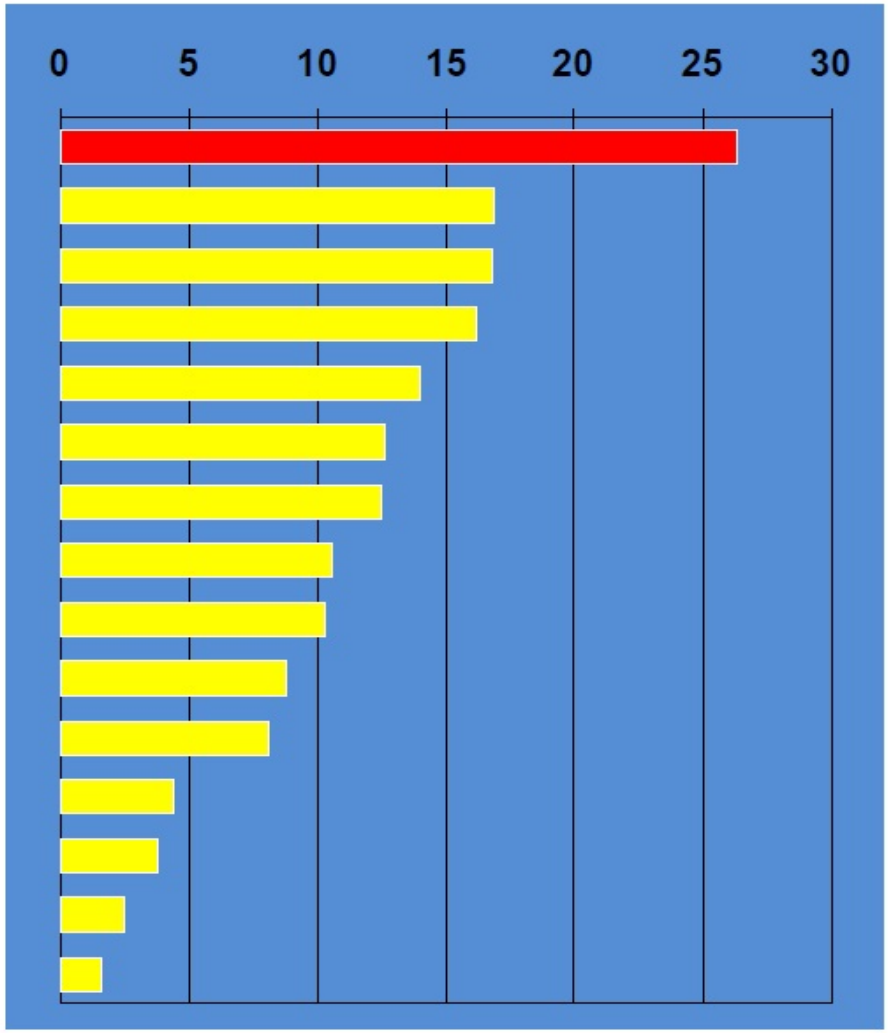
Adapted from: KJ Looker, GP Garnett and GP Schmid; *An estimate of the global prevalence and incidence of herpes simplex virus type 2 infection*; Bulletin of the World Health Organization, 2007, vol 86/10/07

Protection against STIs, including HIV

Age-standardised prevalence of cervical HPV DNA in sexually active women

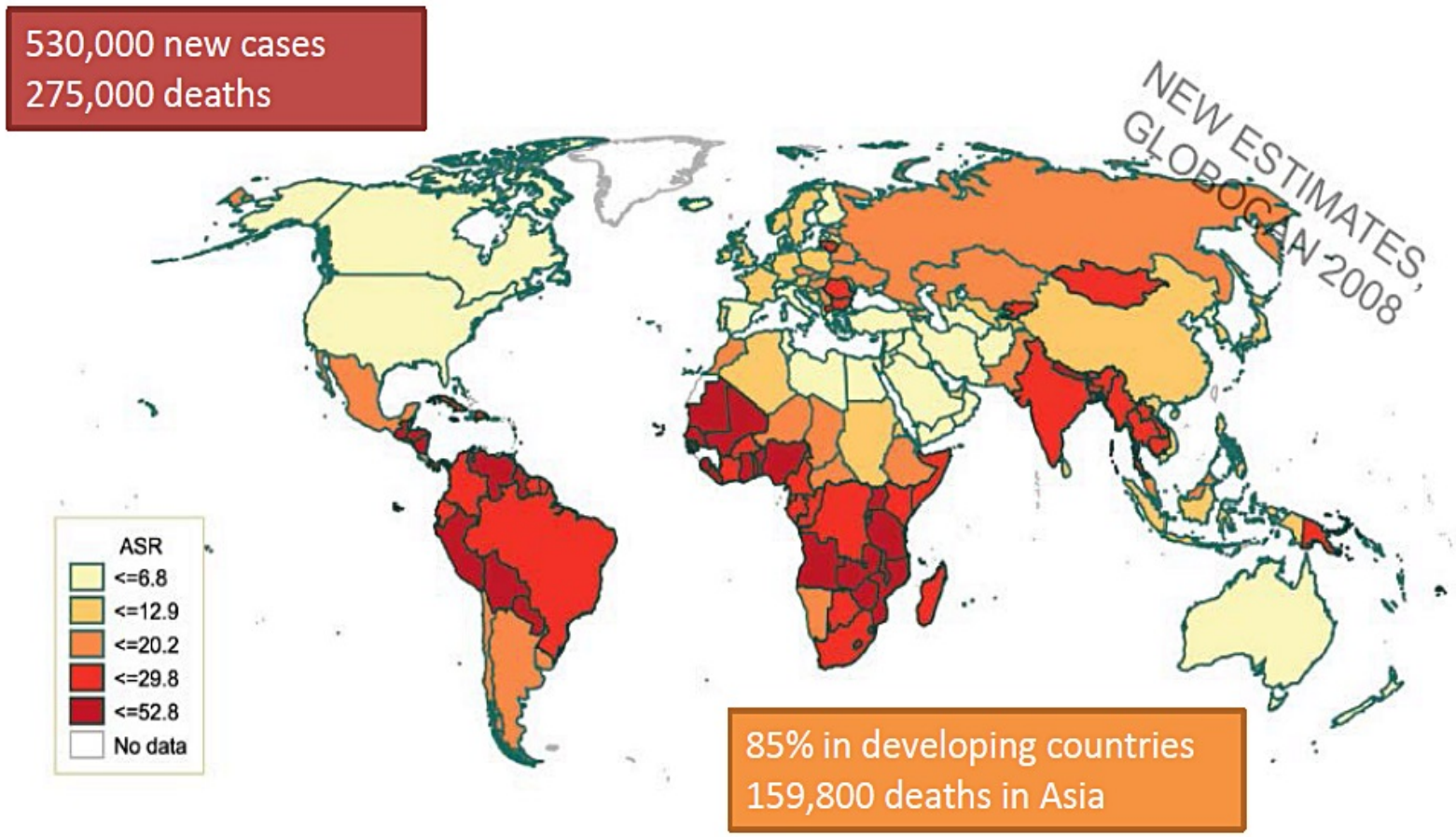
IARC Multi-centre HPV Prevalence Survey, 1995-2002

Nigeria	933
Argentina	908
India	1940
Colombia	1981
China, Yangcheng	671
Chile	971
Mexico	1340
Vietnam, Ho Chi Minh	918
Korea	870
Italy, Turin	1013
Thailand, Lampang	1024
Netherlands	3299
Thailand, Songkla	716
Spain	908
Vietnam, Hanoi	1007



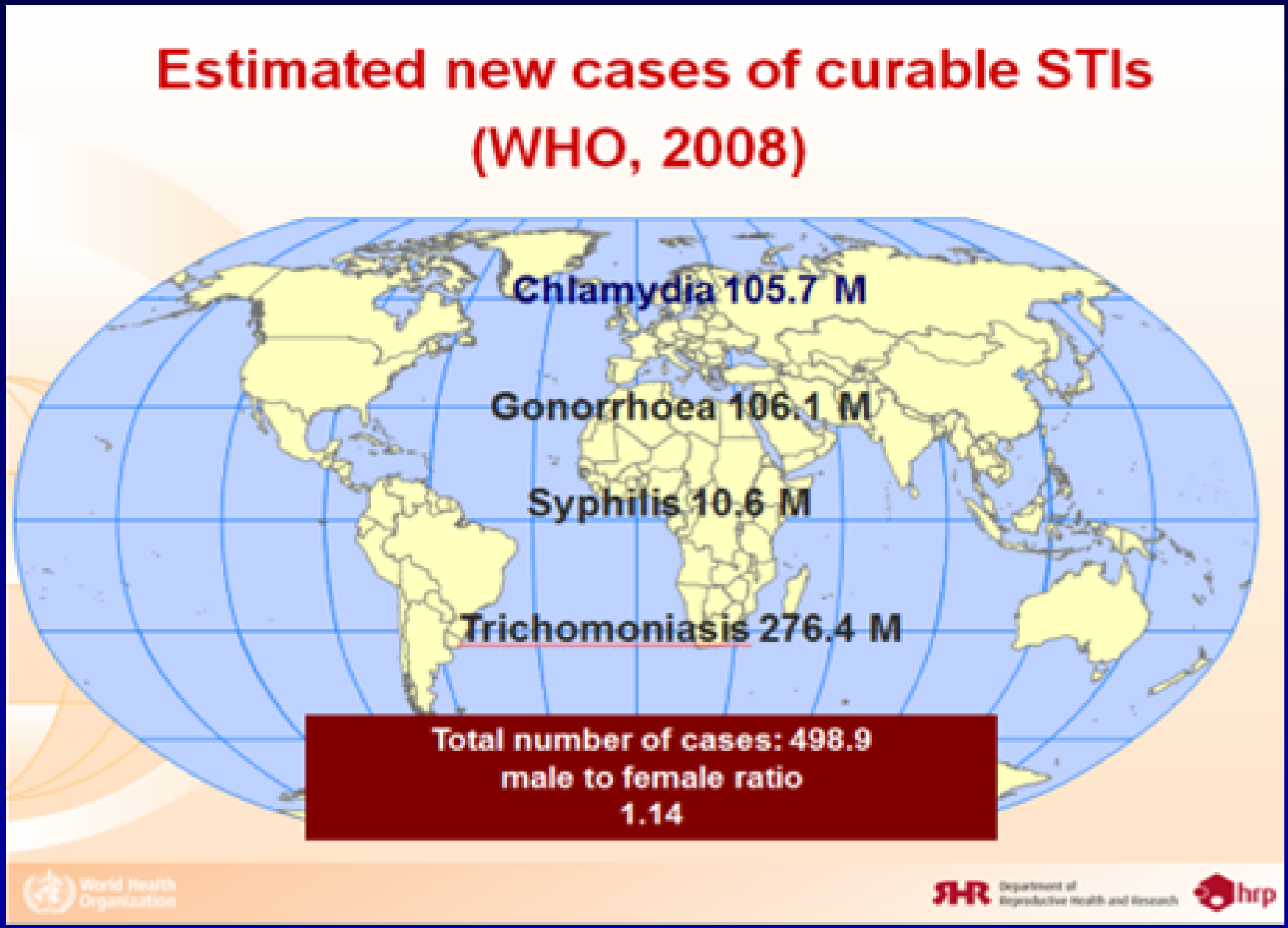
Protection against STIs, including HIV

World age-standardized incidence rates of cervical cancer

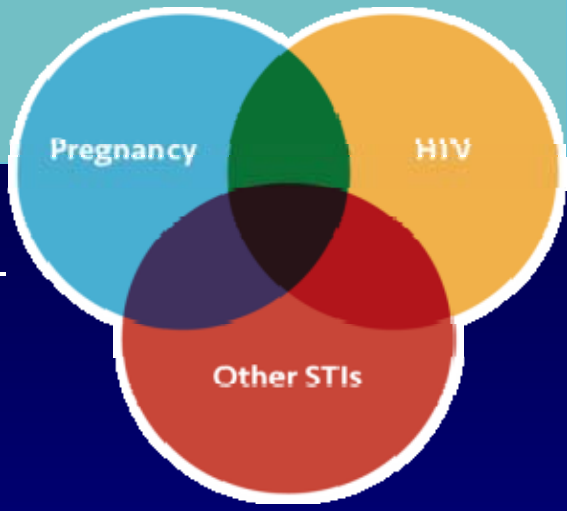


ASR, age-standardized incidence rate; Rates per 100,000 women per year.
Data sources: IARC, Globocan 2008.

Protection against STIs, including HIV



What are Multipurpose Prevention Technologies (MPTs)?



A single product, configured for at least two SRH prevention indications:

- ✓ **Contraception**
- ✓ **Protection against HIV & other STIs**
- ✓ **Other health benefits**

Alternative Configurations:
Drug+Drug
Drug+Device
Vaccines

***WHY* MPTs?**

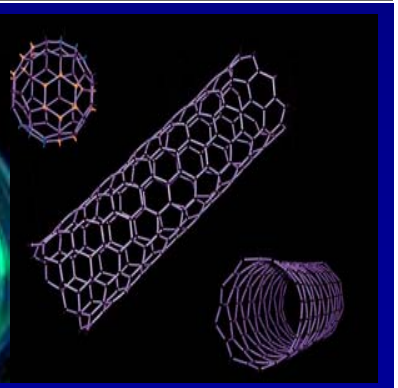
- ❑ Greater ***efficiency*** in terms of cost, access and delivery of SRH prevention products
- ❑ Capitalize on the demand in populations using one product type to achieve uptake and use of a second "product"

MPTs available now and on the Horizon

Female Condom

Male Condom

Drug combinations	Drug/device combinations	Multipurpose vaccines	Bacterial therapeutics	Nanoparticals



The future of MPTs…

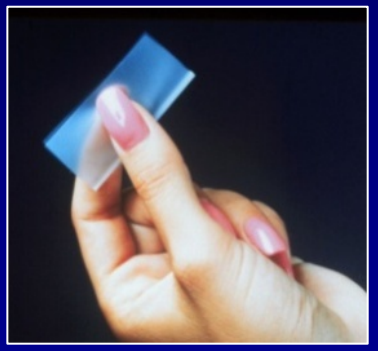
Currently available products- Female Condom

- Enhances women's ability to negotiate and ensure safer sex
- Low demand, high cost, strong provider bias
- "Learning curve" for acceptability and use; improves with time
- Male partner response range from enthusiastic to rejecting
- Consistent use is optimal, but difficult to achieve
- Interventions that will enhance FC use over the longer term
- Sexuality, communication & negotiation skills should be embedded in user education

Multipurpose Prevention Technologies

✓"On demand" products:

- Used around the time of intercourse
- Appropriate for women who have intermittent sex,
- or who would like more direct control over their own protection
- Barrier devices and active agents (Gels)



Multipurpose Prevention Technologies

- **Sustained release devices:**
  - User-initiated, but do not require daily action
  - Should increase adherence, and therefore overall effectiveness
  - Vaginal rings, injectables

To Conclude…

- MPTs could simultaneously prevent pregnancy, HIV, HSV-2, and HPV with a great potential for public health impact
- Increased integration of family planning and SRH services
- Expand the contraceptive method mix and uptake
- Socio-cultural beliefs and practices, gender dynamics, users and providers perspective and positioning of product would impact product acceptability
- Support of program and policy makers will depend upon effectiveness, safety and acceptability of products

THANK YOU

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