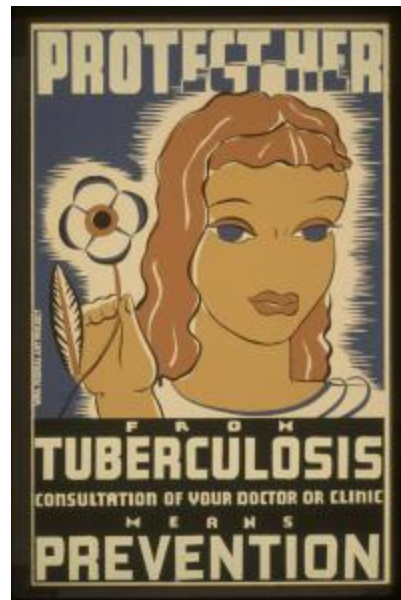




Integrating TB Case Finding Into Maternal Health Services

Stacie C. Stender
26 October 2011



Jhpiego: Innovating to Save Lives

Jhpiego prevents the needless deaths of women and their families

U.S. Headquarters

- Founded 1973
- Affiliate of Johns Hopkins University
- Experience in 154 countries, currently working in 58
- 900 employees worldwide
- Technical expertise in family planning, maternal and newborn health, infection control, innovations, and infectious diseases (HIV/AIDS, TB, malaria in pregnancy, cervical cancer)

Jhpiego's Approach

- Jhpiego save lives by:
 - Building local human resource capacity
 - Working in partnerships with government, nongovernmental organizations, universities, professional associations and communities
 - Strengthening health care systems
 - Developing evidence-based innovations & sharing best practices





USAID | TB CARE II

Partnership for Accelerating TB Implementation





USAID
FROM THE AMERICAN PEOPLE



The Maternal and Child Health Integrated Program

- USAID Bureau for Global Health's flagship maternal, newborn and child health program
- Working in over 30 countries worldwide
- MCHIP supports programming and opportunities for integration in MNCH, immunization, FP, infectious diseases, wat/san, urban health, HSS

The Statistics. Every year . . .

150,000,000	women become pregnant
75,000,000	unwanted pregnancies
20,000,000	unsafe abortions
10,000,000	maternal morbidities
358,000	maternal deaths
7,500,000	stillbirths and newborn deaths

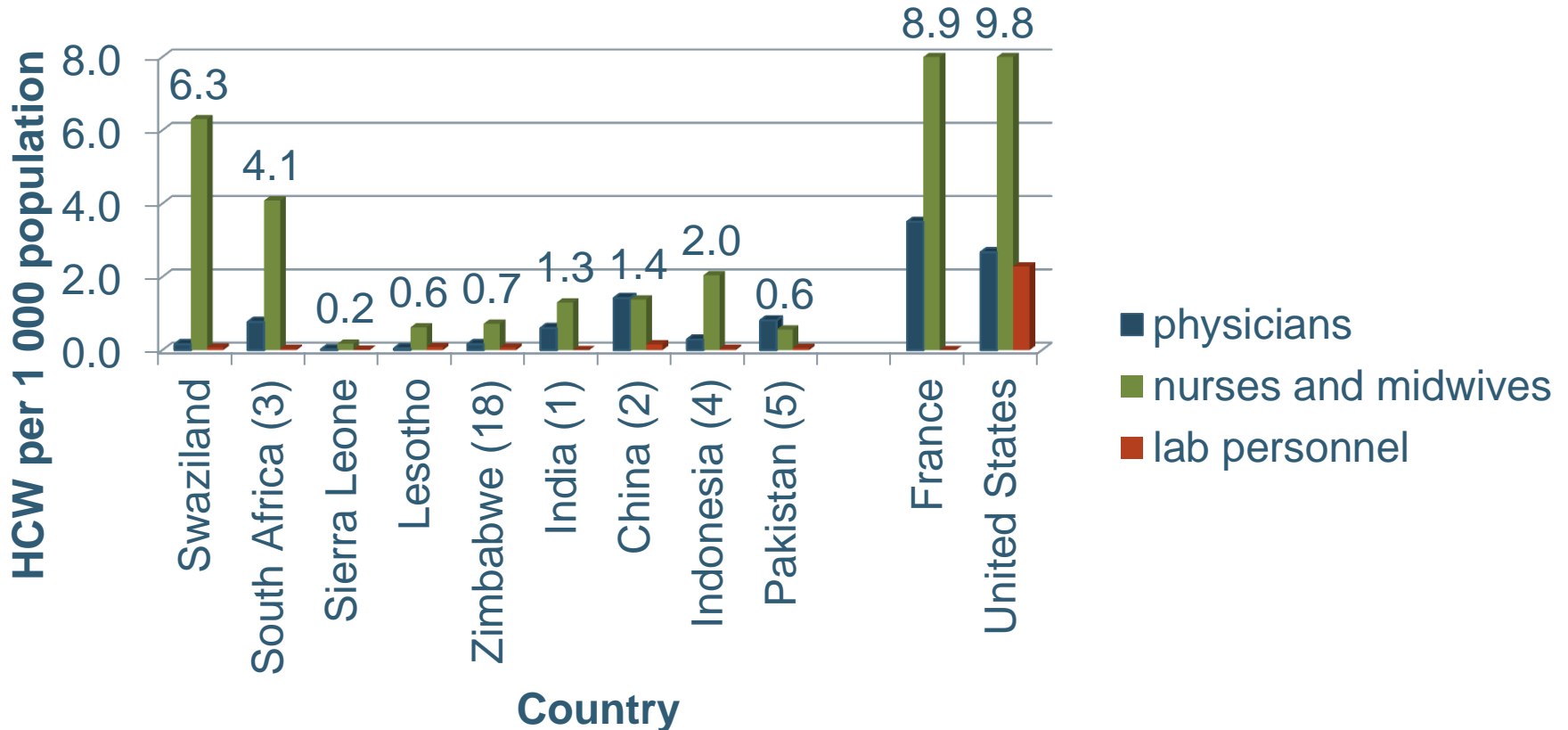
Special theme – Health workforce retention in remote and rural areas

Wanted: 2.4 million nurses, and that's just in India

In most countries of the world there is a shortage of nurses but nowhere is it so acute as in the developing world. With International Nursing Day on 12 May 2010, Kathryn Senior investigates.

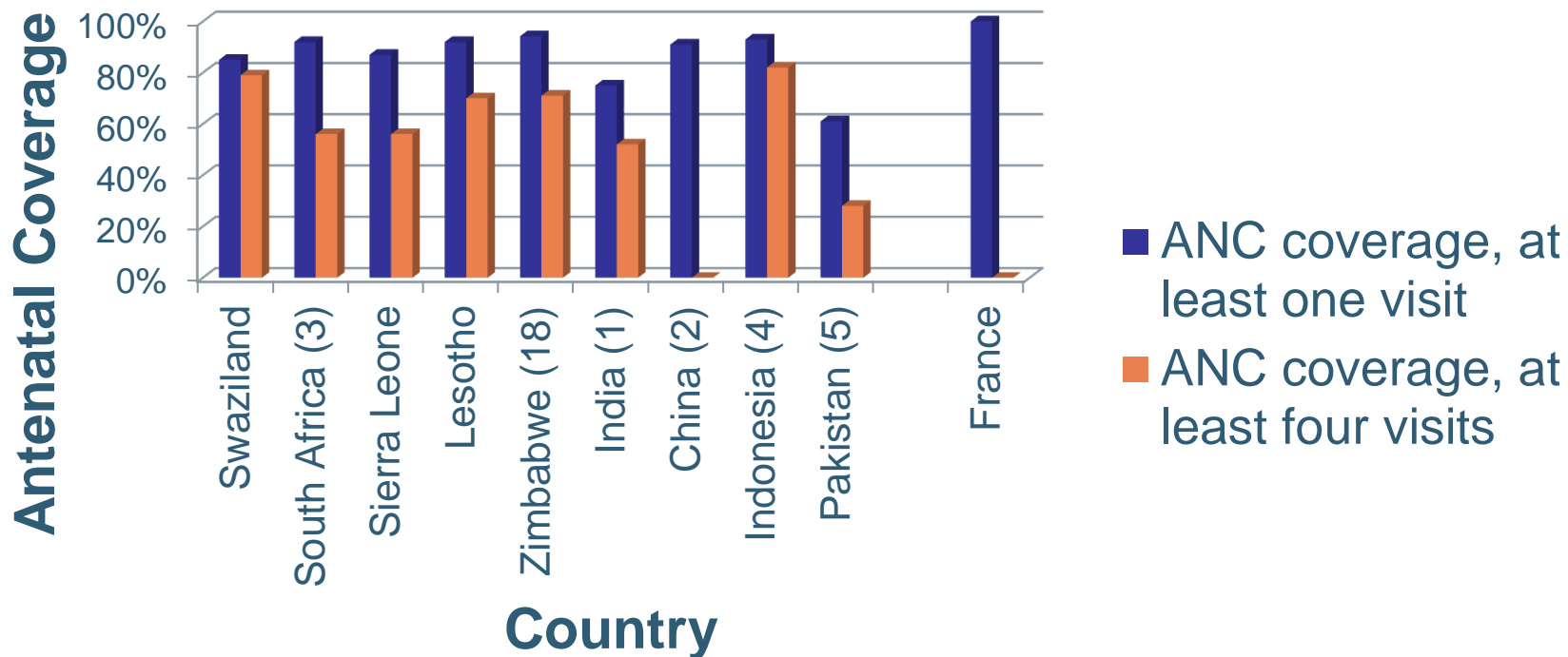
Who Provides Healthcare Services?

HCW density in the 5 countries with highest TB incidence / burden

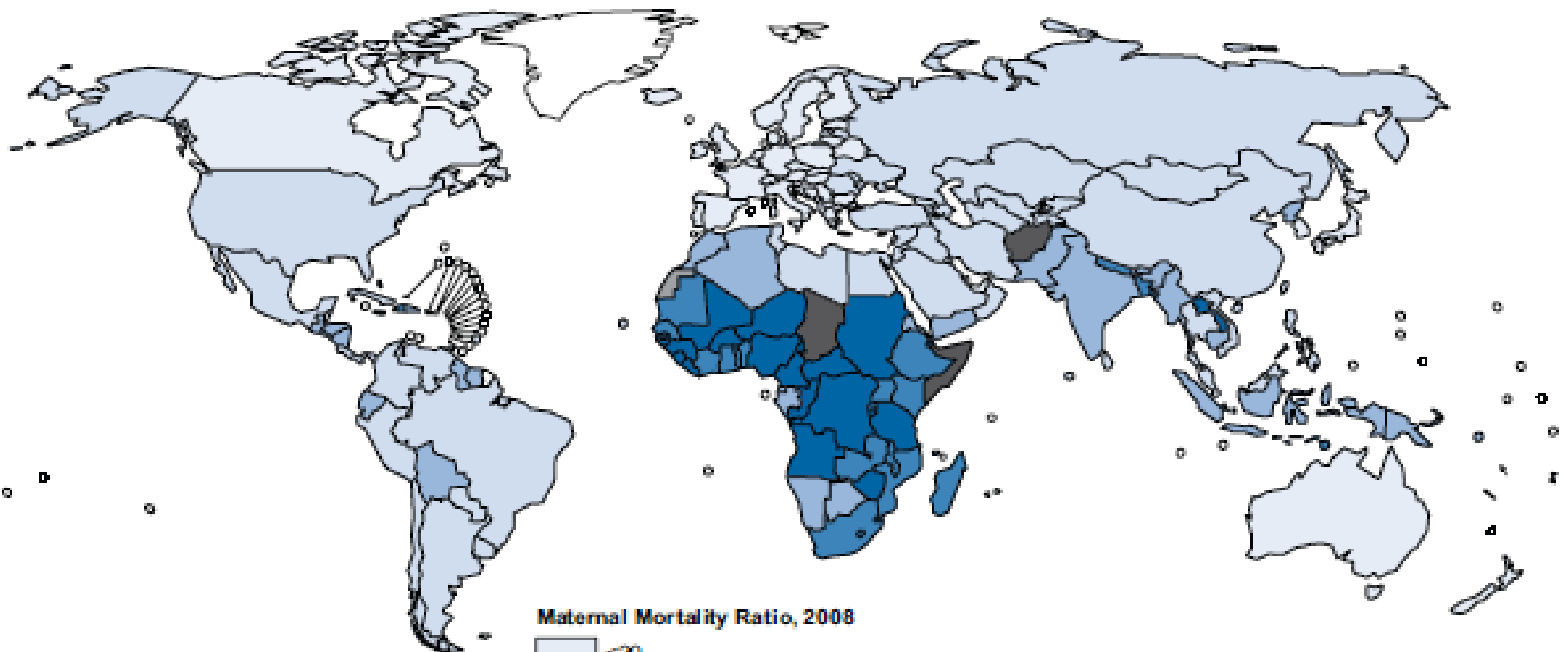


Opportunities...

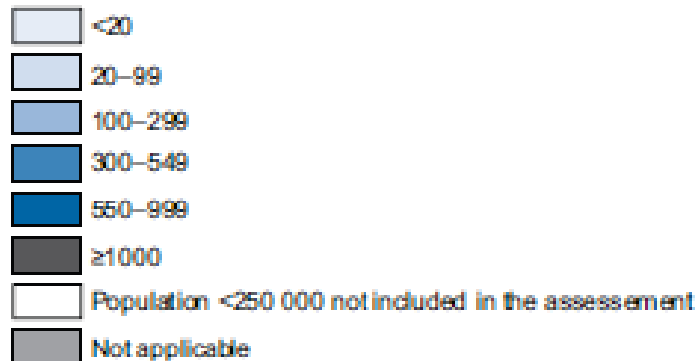
ANC coverage in the 5 countries with highest TB incidence / burden



Maternal Mortality Ratio, 2008 (deaths per 100 000 live births)



Maternal Mortality Ratio, 2008



WHO. Trends in Maternal Mortality: 1990 to 2008. WHO 2010

Maternal Death (definition)

- The death of a woman while pregnant or within 42 days of termination of pregnancy
 - regardless of the site or duration of the pregnancy
 - from any cause related to or aggravated by the pregnancy, but not by accidental or incidental causes.
- **Direct:** obstetrical complications of pregnancy, labor or the postpartum period
- **Indirect:** previously existing diseases, or diseases arising during the pregnancy which are aggravated by the physiologic effects of pregnancy

Maternal Deaths

- 99% occur in developing countries
- >50% occur in Africa
- 80% due to:
 - Severe bleeding
 - Infections
 - Eclampsia
 - Obstructed labor
 - Unsafe abortion

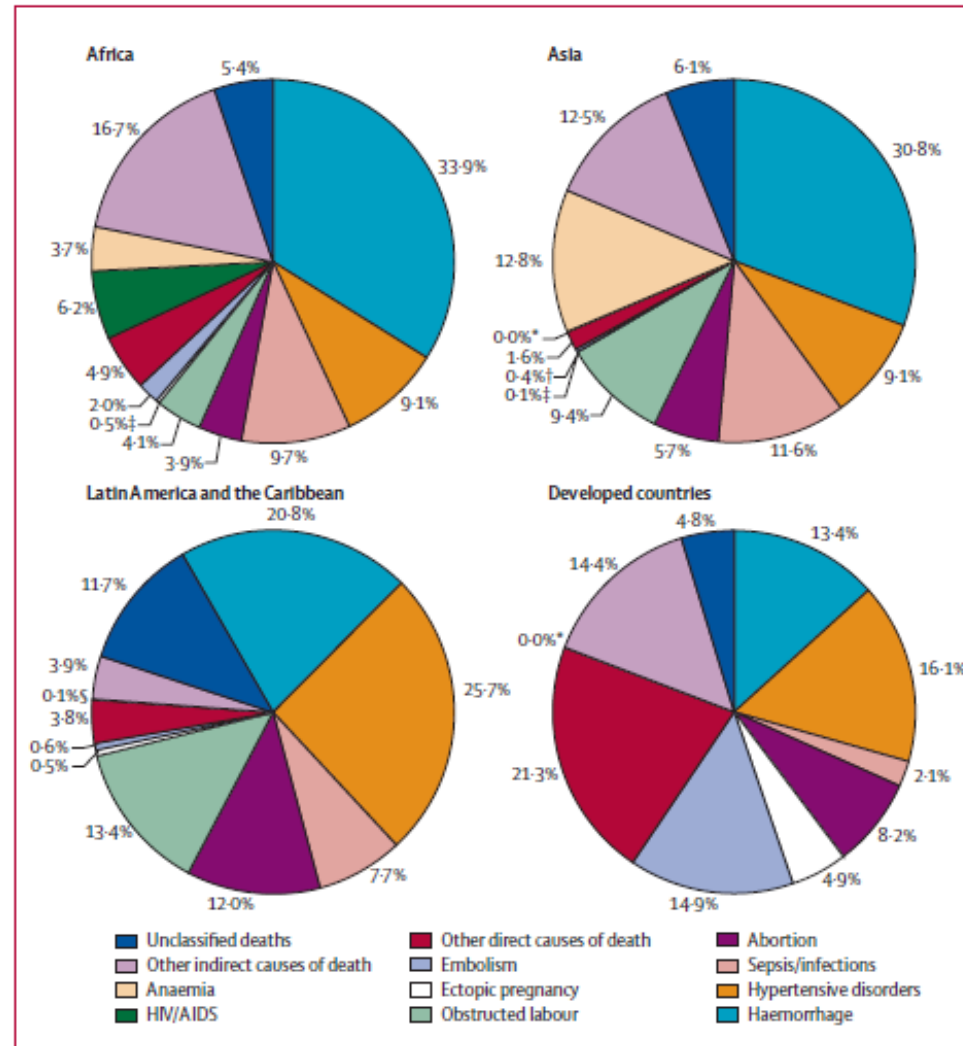


Figure 3: Geographical variation in distribution of causes of maternal deaths

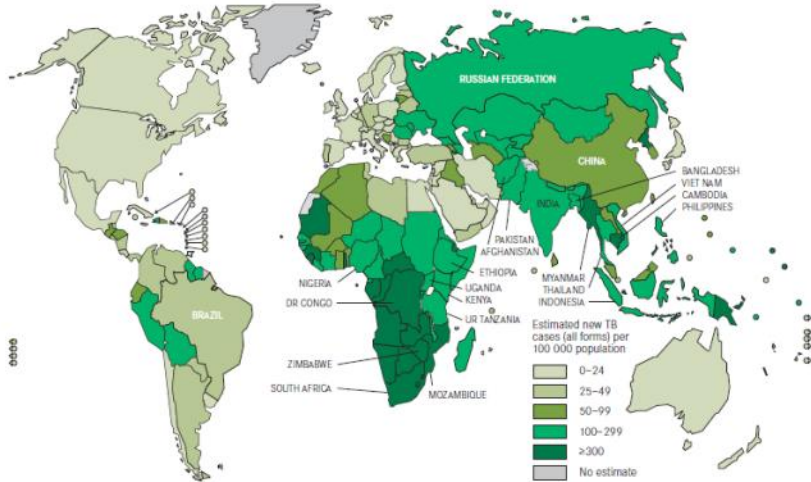
*Represents HIV/AIDS. †Represents embolism. ‡Represents ectopic pregnancy. §Represents anaemia.

Overlapping Epidemiology

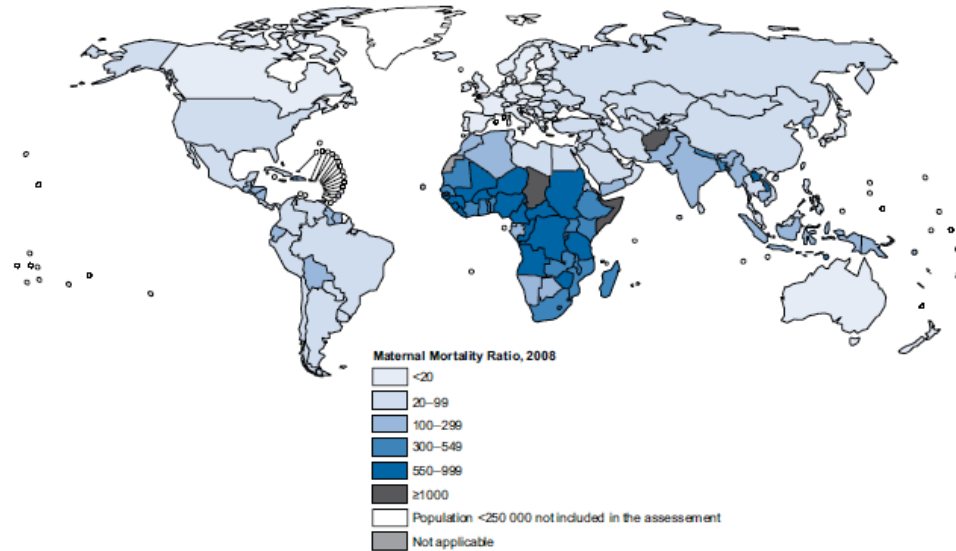
TB Incidence

FIGURE 2.3

Estimated TB incidence rates, 2010



Maternal Mortality Ratio



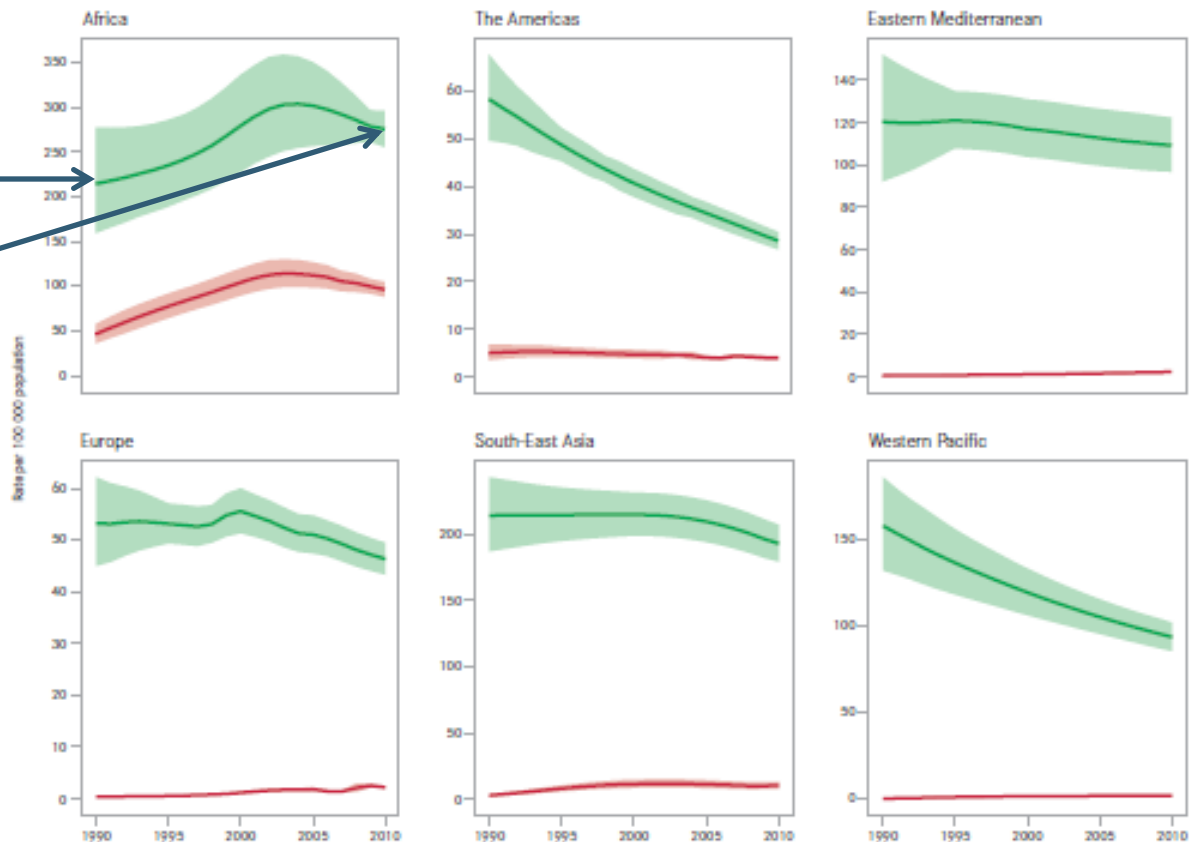
TB Cases Fall for First Time

By THE ASSOCIATED PRESS

The World Health Organization says the number of people with tuberculosis has been falling. A report issued on Tuesday estimated that 8.8 million people became ill last year, down from a peak of about 9 million in 2005.

Estimated TB incidence rates by WHO region, 1990–2010. Regional trends in estimated TB incidence rates (green) and estimated incidence rates of HIV-positive TB (red). Shaded areas represent uncertainty bands.

1990
in Africa?
2010



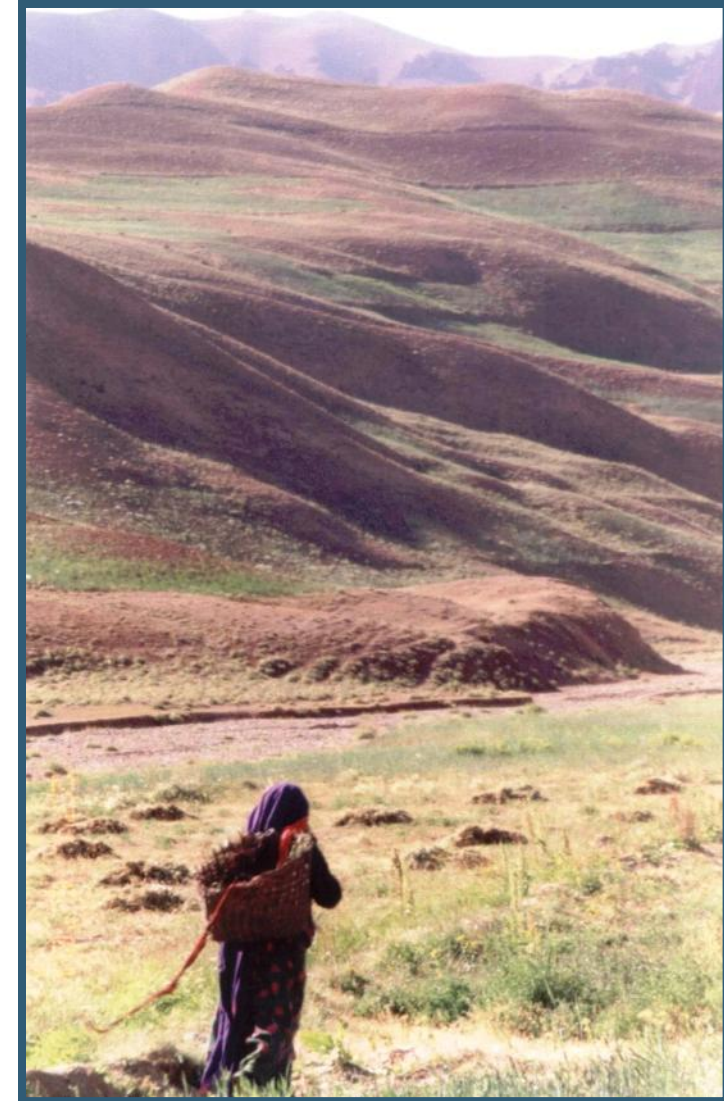
The *Three Delays Model* of Maternal Mortality... Applies to TB Mortality

Delay in

- 1) decision to seek care
- 2) reaching care
- 3) receiving care



Thaddeus S, Maine D. Too far to walk: maternal mortality in context. *Soc Sci Med* 1994;38:1091-1110.



Too far to walk: TB & HIV mortality in context

Factors Affecting Utilization and Outcome

Socioeconomic / Cultural Factors

Accessibility of Facilities

Actual Quality of Care

Poorly staffed facilities

- Staff numbers
- Competency of personnel

Poorly Equipped Facilities

- Unavailability of blood
- Unavailability of drugs
- Unavailability of other equipment
- Hard currency problems

Inadequate management

•**Incorrect diagnosis and action**

Phases of Delay

Phase I: Deciding to Seek Care

Phase II: Identifying and Reaching Medical Facility

Phase III: Receiving Adequate and Appropriate Treatment

Index of suspicion among healthcare workers
(*midwives*)

Taken from Thaddeus S, Maine D. Too far to walk: maternal mortality in context. Soc Sci Med 1994;38:1091-1110.

Framework for Engagement

- Advocacy
- Policy
- Education and training
- Facility-based implementation



Advocacy in Other Circles



Global Maternal Mortality Fact Sheet

"Women are not dying because of diseases we cannot treat... They are dying because societies have yet to make the decision that their lives are worth saving."

– Mahmoud Fathalla

MATERNAL MORTALITY

- **Nearly every minute a woman dies in pregnancy or childbirth.** In 2005, an estimated 536,000 women died due to complications developed during pregnancy and childbirthⁱ and 10 million more suffered debilitating illnesses and lifelong disabilities.ⁱⁱ Seventy-five percent of maternal deaths occur during childbirth and the post-partum period.ⁱⁱⁱ The vast majority of maternal deaths are avoidable when women have access to vital health care before, during and after childbirth.^{iv}
- **Pregnancy and childbirth are the leading causes of death and disability for women in developing countries.**^v Complications during pregnancy and childbirth include uncontrolled bleeding, obstructed labor, infection and high blood pressure.^{vi} Societal factors include gender discrimination and social, cultural, legal, economic and logistical barriers that deny women lifesaving health care.
- **Skilled health workers at delivery are key to improving outcomes.** Risks of mortality for women and their babies are highest at the time of birth.^{vii} Sixty-two percent of births in the developing world are attended by skilled health workers – including midwives as well as doctors and nurses with midwifery skills – up from less than half in 1990.^{viii} Coverage, however, remains low in Southern Asia (40 percent) and sub-Saharan Africa (47 percent) – the two regions with the greatest number of maternal deaths.^{ix}
- **Maternal deaths are the greatest health inequity of the 21st century.**^x Ninety-nine percent of maternal deaths occur in developing countries. In sub-Saharan Africa, the chances of dying in pregnancy or childbirth can be as high as 1 in 7, compared with just 1 in 8,000 in western Europe.^{xi} ^{xii} Worldwide, women giving birth in urban areas are twice as likely to be attended by skilled health workers as those in rural areas.^{xiii} Similarly, 84 percent of women who have completed secondary or higher education are attended by skilled workers during childbirth.^{xiv}
- **Despite progress in regions where maternal health has been prioritized, only 23 countries are on target to meet United Nations Millennium Development Goal 5 – to reduce maternal mortality by 75 percent and to achieve universal access to reproductive health services by 2015.**^{xv} At the global level, maternal mortality decreased by less than 1.5 percent annually since 1990 – far below the 5.5 percent annual improvement needed to reach the target.^{xvi} ^{xvii}

“Pregnancy and childbirth are the leading causes of death and disability for women in developing countries.”

Advocacy

- The *Unusual Suspects* at the table
- International Confederation of Midwives Congress, June 2011



Midwife-driven Interventions

to prevent, diagnose, care, treat and support women and **children** infected and affected by TB & HIV

	TB	HIV
Prevention	Respiratory infection prevention and control TB preventive therapy (IPT) in HIV	Primary HIV prevention: condoms, early infant male circumcision Reproductive choices for women living with HIV
	BCG for newborn TB preventive therapy for TB contacts < 5 years old	Prevention of infant HIV acquisition during pregnancy & childbirth: ARVs for mother Prevention of infant HIV acquisition during breast feeding: NVP for exposed infant
Diagnosis	TB screening Prompt laboratory diagnosis (sputum smear) Other investigations	Provider Initiated Testing and Counselling (PITC) WHO Clinical Staging CD4 Count Other laboratory investigations to initiate treatment
	Recognizing common signs & symptoms in children	PITC of infant at 6 weeks & again after cessation of breastfeeding

Midwife-driven Interventions

to prevent, diagnose, care, treat and support women and **children** infected and affected by TB & HIV

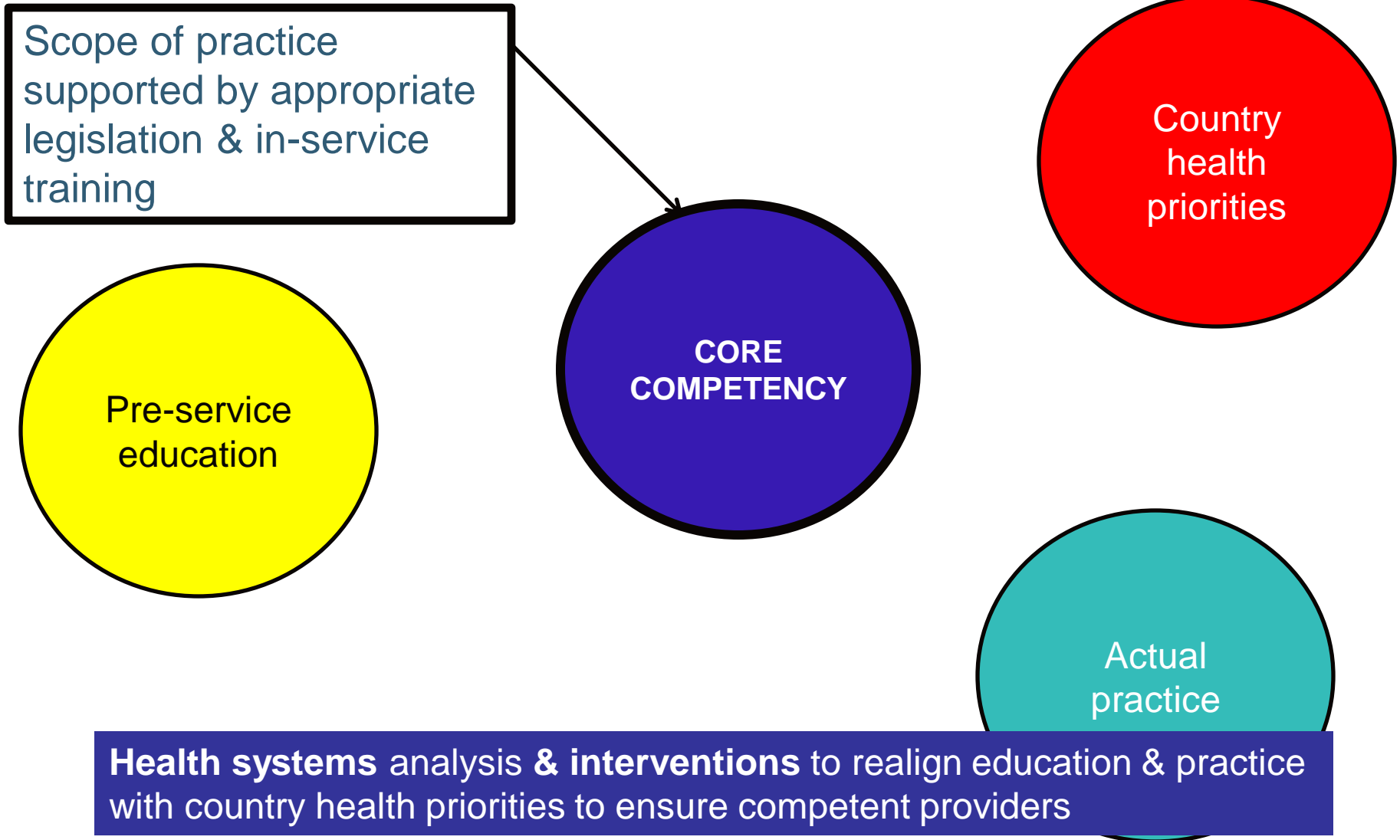
	TB	HIV
Care, Treatment & Support	Prompt initiation of TB treatment Management of side effects & drug interactions Adherence support Supervision of community workers	Cotrimoxazole preventive therapy (CPT) Antiretroviral therapy (ART) for women who need it for their own health Cervical cancer screening Adherence support Supervision of community workers
	TB contact screening and investigation	Exclusive breastfeeding support CPT for exposed infants ART for infants diagnosed with HIV

Policy

- Integration must be cultivated in international forums
 - WHO meeting seeking operational policy guidance for NGO/CSO engagement in community-based TB activities
- TB symptom screening can be successfully integrated into Focused Antenatal Care (FANC) and Postnatal Care (PNC) platforms



TB & HIV competencies & pre-service education: the reality in much of Sub-Saharan Africa



Education

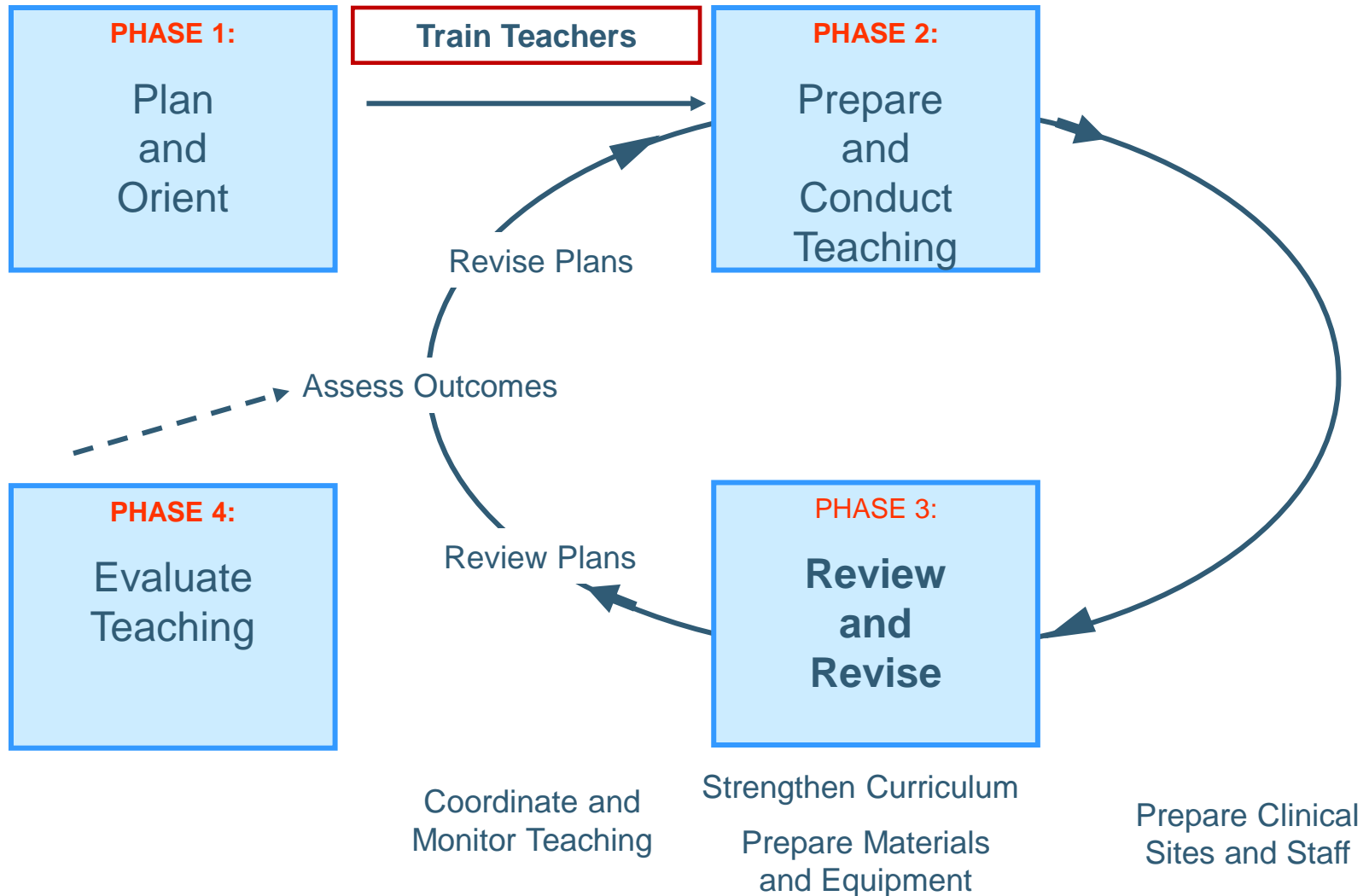
What is the 'gold standard' of TB diagnosis?

- a) Culture
- b) Microscopic examination for AFB
- c) Chest xray
- d) Tuberculin skin test (TST)

asked of 20 Educators and Preceptors in southern Africa...

one person answered A

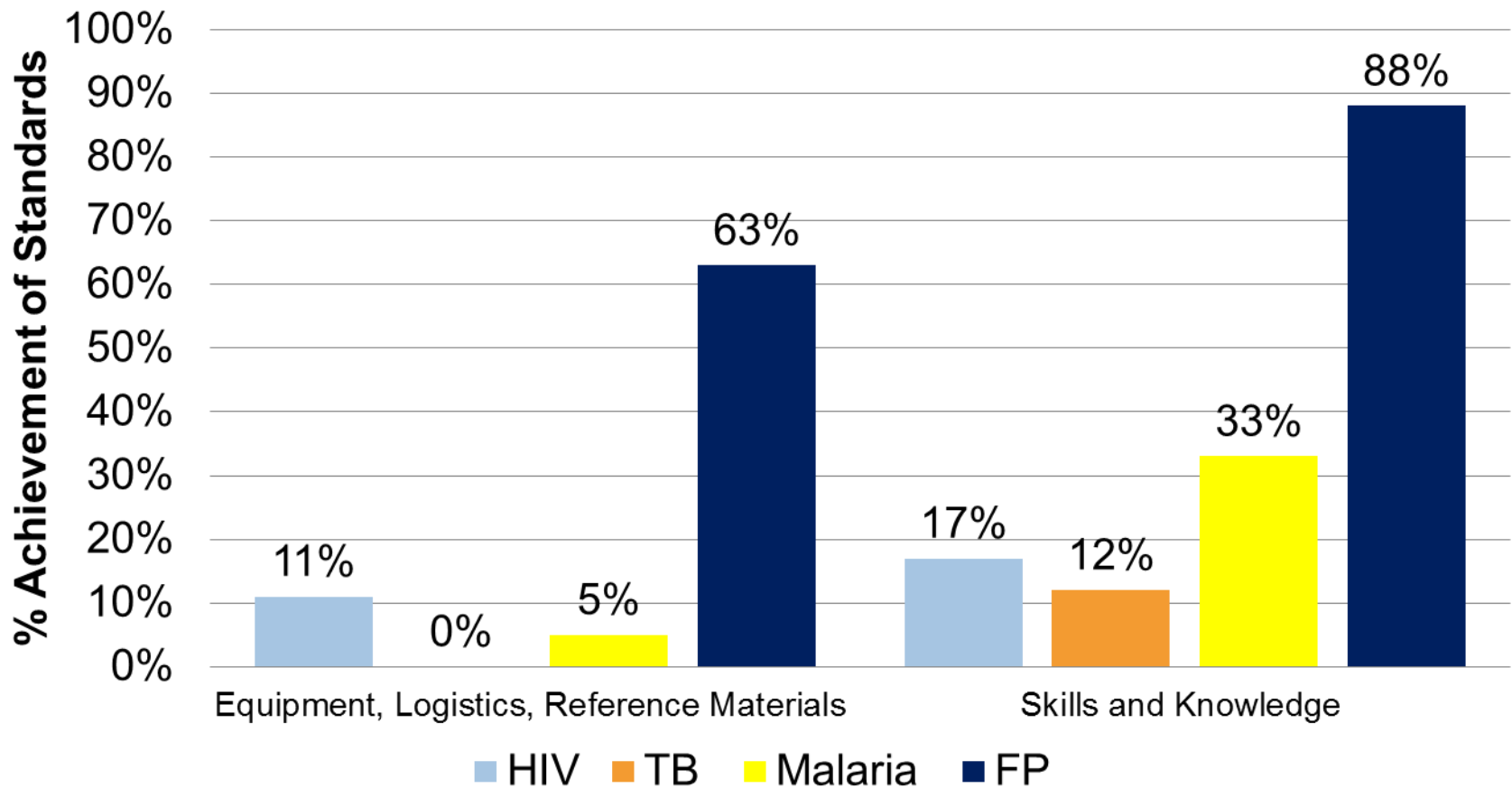
Pre-Service Education Interventions



Pre-service Preparation Analysis: Methodology

- Human resources, infrastructure, equipment and materials of education institutions
- *Faculty* & student competence of specified technical content
- **Technical content mapping**
- Teaching and assessment methodology
- Focus group discussions (faculty and students)

Summary Assessment Results *in west Africa ...*

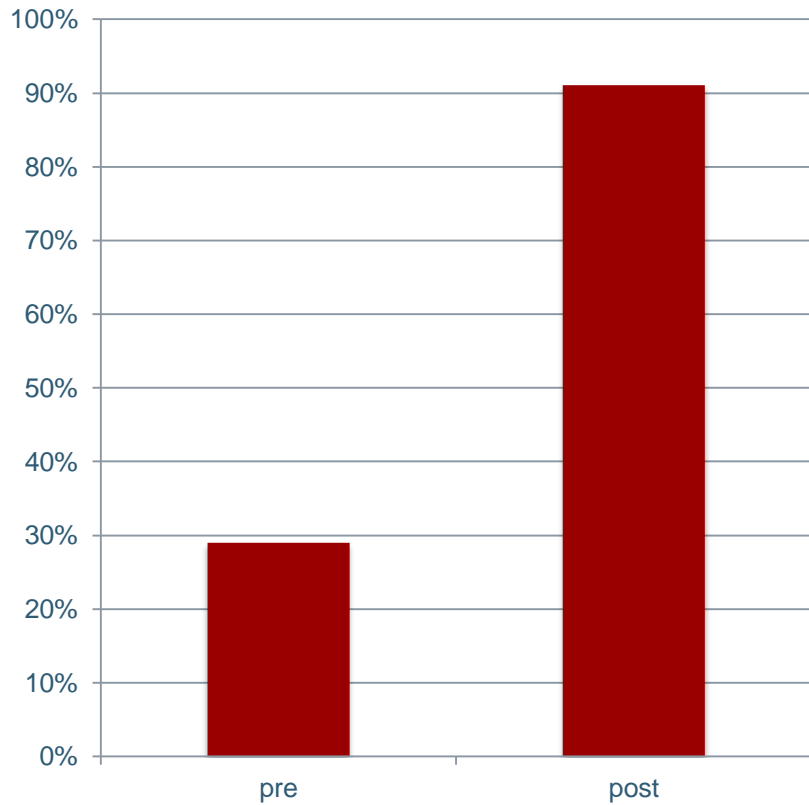


Sample Strategy

- First focus on technical knowledge and skills update for educators *and preceptors*
- Ensure that all schools receive required teaching and resource materials
- Follow up training on teaching skills with knowledge and skills revision

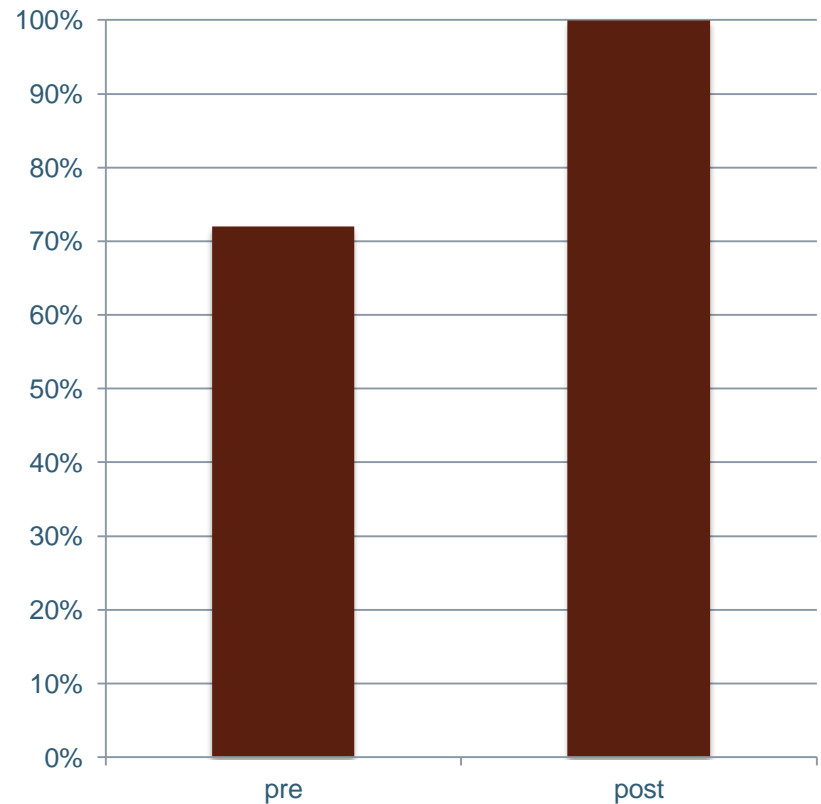
Technical Update: *Sample Questions*

Which is a normal CD4 count?:



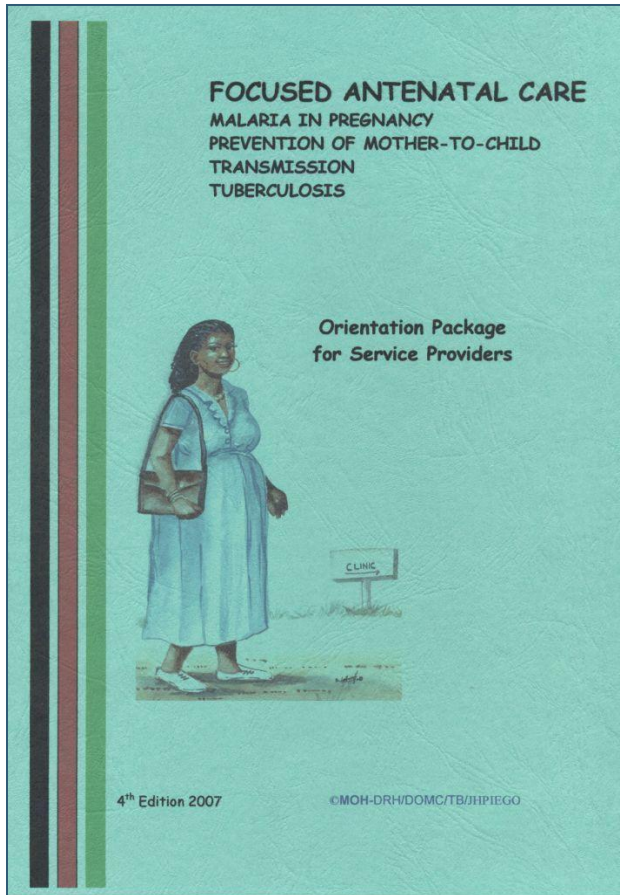
HIV

First line drugs used in the treatment of TB include:



TB

In-service Training: FANC in Kenya



This orientation package focuses on the content of quality:

- Focused Antenatal Care
- Intermittent Preventive Treatment
- Malaria Case Management
- PMTCT
- *TB screening in pregnancy*
- *TB case management and referral*
- *Enhancing linkages within the existing structures in provision of comprehensive FANC*
- *Community role in promotion of care seeking behavior.*

FANC in Kenya

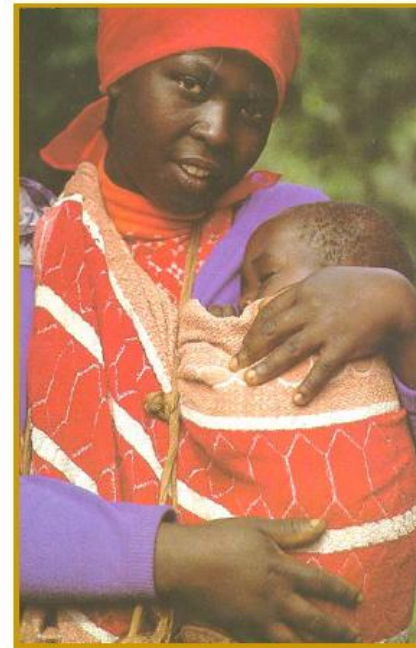
Objective one: Early detection and treatment of Problems

- Service providers should identify existing medical, surgical or obstetric conditions during pregnancy. Such as:
 - Severe anaemia (Hb <7gm/dl)
 - Vaginal bleeding
 - Pre-eclampsia (increased BP, severe oedema)
 - STI's, HIV/AIDS, TB and Malaria
 - Chronic diseases (diabetes, heart or kidney problems)
 - Decreased/absent foetal movement;
 - foetal malpresentation after 36 weeks

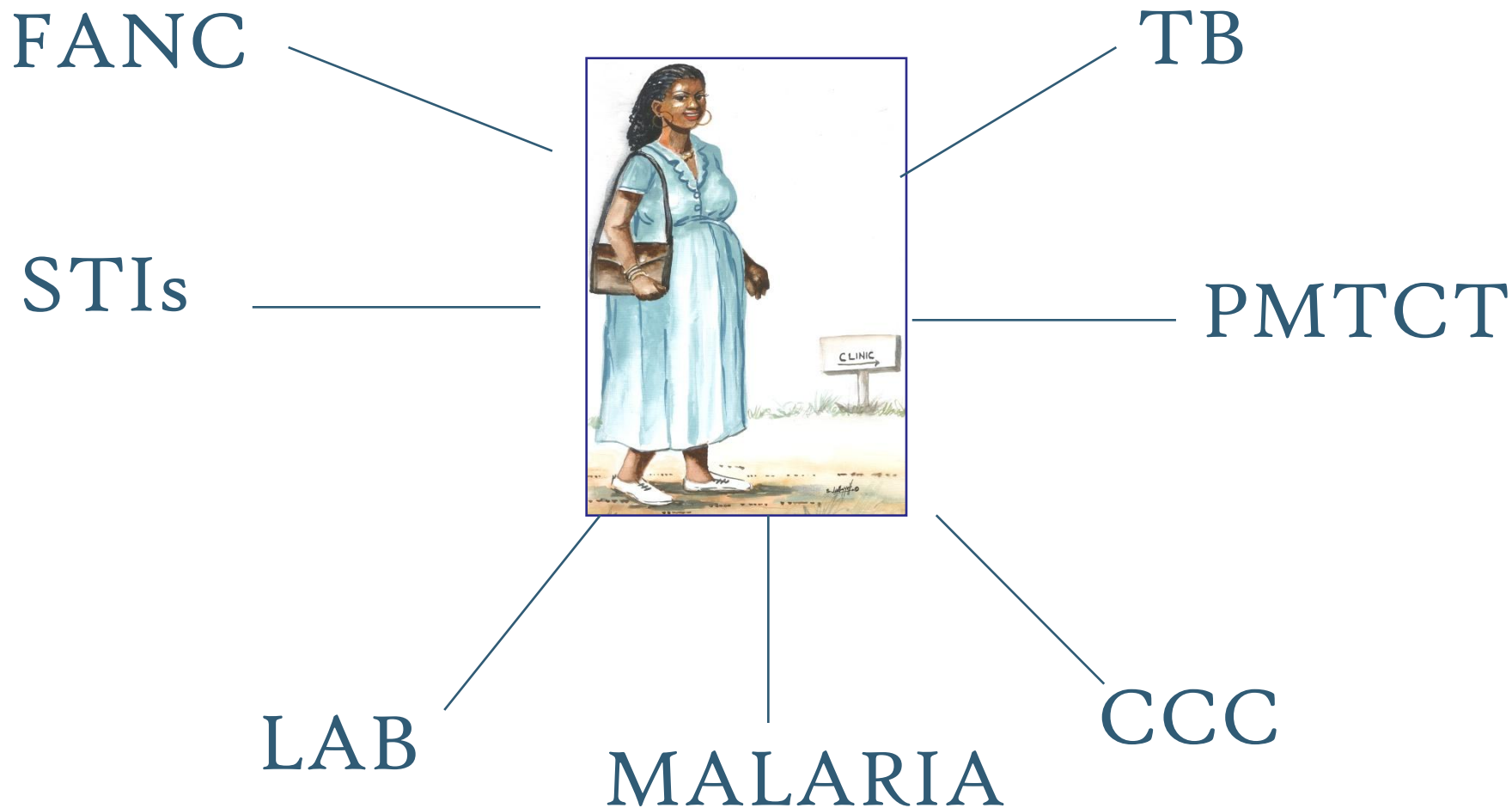
and PNC



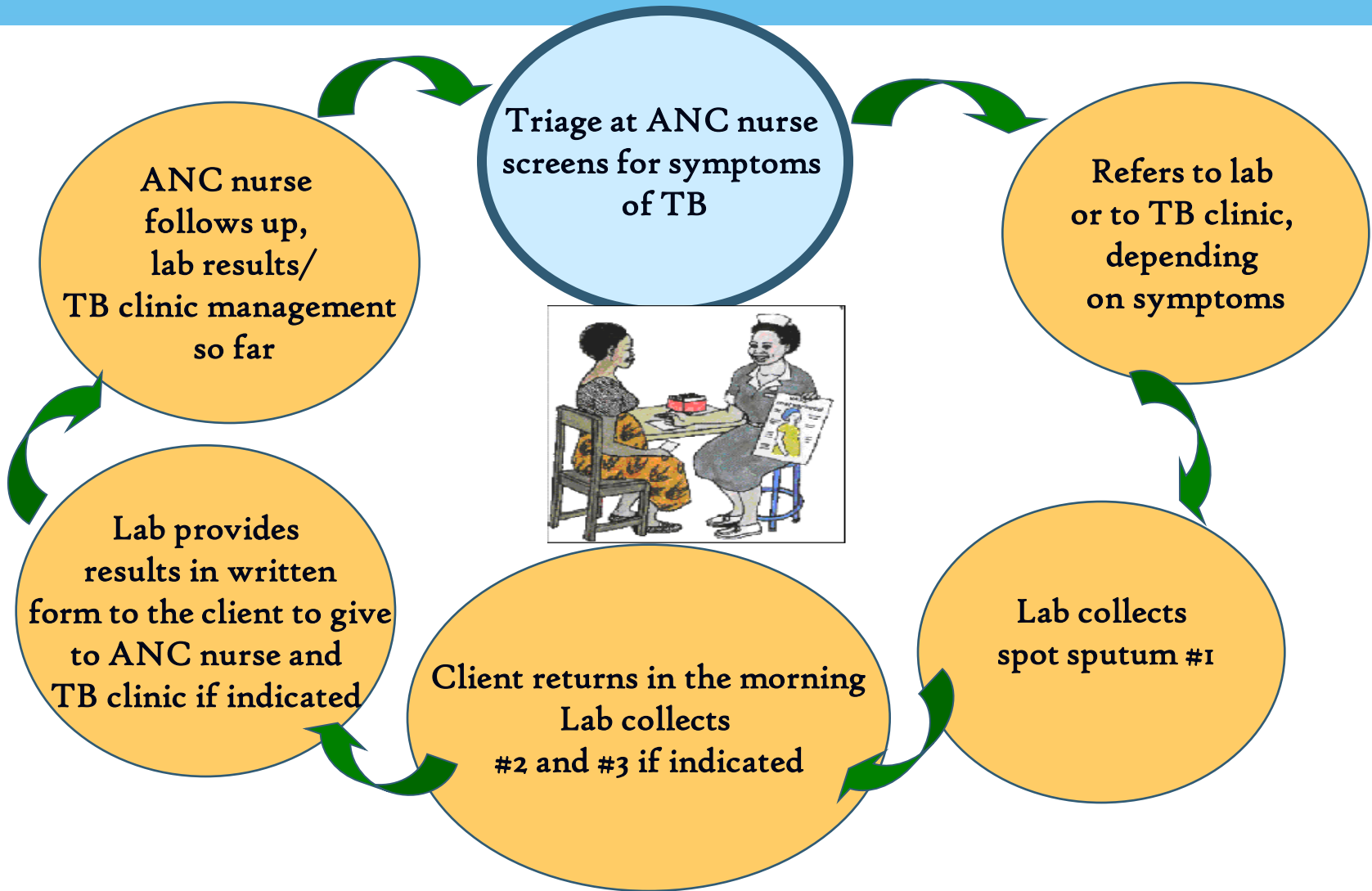
Integrating
Tuberculosis screening
in postnatal period



Facility-level Implementation: Integrated FANC Services



TB in Pregnancy Management Cycle



Specific Challenges of TB Case Finding in MCH

Kenya

- no routine collection of data in the monthly summary sheets
- TB data summary sheet does not specifically capture referrals from ANC

South Africa

- Provider bias of screening women perceived to have a higher risk of TB*
- Poor clinical staff moral and motivation*
- High rates of extrapulmonary TB - harder to screen and diagnose

*Gounder et al. JAIDS 2011; 57: e77-384

FOCUSED ANTENATAL CARE

G	Greet her in a friendly manner
A	Ask if she has made an individual birth plan
T	Tell her about danger signs (see back)
H	Help her make an individual birth plan
E	Explain about malaria, intermittent preventive treatment, insecticide-treated bed nets, tuberculosis (TB) and safer sex
R	Remind her about danger signs, individual birth plan and 4 ANC visit schedule (< 16 weeks; 16–28; 28–32; 32–40)

REMEMBER TO ASK ABOUT HER INDIVIDUAL BIRTH PLAN

- Does your client know when her baby is due?
- Has she identified a skilled birth attendant?
- Has she identified a health facility for delivery/emergency?
- Can she list danger signs in pregnancy and delivery?
- Has she identified a decision-maker in case of emergency?
- Does she know how to get money in case of emergency?
- Does she have a transport plan in case of emergency?
- Does she have a birth partner for the birth?
- Has she collected the basic supplies for the birth?
- Has she identified a blood donor?

BEFORE THE WOMAN LEAVES YOUR CLINIC, STOP AND ASK HER IF SHE:

- Has a supply of iron and folate tablets
- Has taken her SP and has had her tetanus toxoid injection
- Knows her appointment for the next ANC visit and second dose of SP
- Has a birth plan
- Knows to return for postpartum care within 3 days of birth
- Has a method of postpartum family planning in mind
- Knows the signs and symptoms of TB and has been screened if indicated
- Knows her HIV status

You have now prepared your client!

Tools

to assist with integration

FOCUSED ANTENATAL CARE

Tools

G	Gr
A	As
T	Tel
H	He
E	Ex be
R	Re 4 A

FAMILY PLANNING

- Healthy spacing: couples should wait two years after delivery before they become pregnant for the healthiest outcome
- Fertility can return before menses; most methods of family planning are safe while breastfeeding
- Use of family planning permits the mother to breastfeed her baby for a full two years
- Lactational Amenorrhoea Method (LAM)
 - Exclusive breastfeeding
 - Amenorrhoea
 - Infant <6 months
- Postpartum IUCD: safe, effective and can receive just after birth

HISTORY

- Personal information
- Obstetric information
- Medical/surgical history
- Family and social history

IF HIV POSITIVE

- Refer to local HIV/PMTCT management guidelines

TUBERCULOSIS

Symptoms

- Cough, weight loss, night sweats, fevers

Listen to breath sounds

HIV/AIDS Specific

- Check for oral candidiasis, PPE, seborrheic dermatitis, zoster

DANGER SIGNS

In Pregnancy

- Vaginal bleeding
- Convulsions
- Severe headaches with blurred vision
- Fever and too weak to get out of bed
- Severe abdominal pain
- Fast or difficult breathing

In Labour

Same as the signs in pregnancy plus:

- Labour pains for > 12 hours
- Waters break and not in labour after six hours
- Heavy bleeding after delivery (pad/cloth soaked in less than five minutes)
- Placenta not expelled one hour after birth

- RE**
- Does y is due
 - Has sl attent
 - Has sl for de
 - Can sl pregn
 - Has sl in cas

- Has a tablet
- Has ta tetani
- Know: ANC v
- Has a

G	Gr
A	As
T	Tel
H	He
E	Ex
R	Re

- RE**
- Does is due
 - Has sl attent
 - Has sl for de
 - Can sl pregn
 - Has sl in cas

- Has a tablet
- Has ta tetan
- Know: ANC v
- Has a

FAMIL

- Heal wait befo the h
- Ferti men fami brea
- Use the baby
- Lact (LAM
- E
- A
- I
- Post and

DANGE

- In Pregn**
- Vagi
 - Com
 - Seve visio
 - Feve of be
 - Seve
 - Fast

FOCUSED ANTENATAL CARE PLUS (FANC+)

Additional Considerations for Comprehensive Integrated Care of Women Living with HIV

Establish immune status: CD4 count and WHO clinical staging (see back)

Assess and manage opportunistic infections: TB is the most common.

Think pulmonary and extrapulmonary TB in women living with HIV.

- Fever
- Weight loss
- Drenching night sweats
- Cough of any duration
- Known TB contact

If symptoms of TB present, ensure mom has sputum collected today for laboratory evaluation and she understands she should receive her results within 48 hours.

Prompt diagnosis and treatment is essential for the health of mother and baby.

If no symptoms of TB are present, initiate Isoniazid Preventive Therapy at 5mg/kg up to 300mg for a period of at least 6 months

Send mother home with Cotrimoxazole Preventive Therapy (CPT), 960mg daily if CD4 < 350 cells per mm3 or WHO clinical stage 2, 3 or 4. NB: don't give SP for malaria if mom is taking CPT. Be sure to schedule her to come back for CD4 results.

Review CD4 results with mom and take action! At minimum mom needs AZT.

WHO	CD4 ≤ 350 cells per mm3 OR WHO clinical stage 3 or 4	CD4 > 350 cells per mm3 AND WHO clinical stage 1 or 2
WHAT	AZT (or TDF) + 3TC (or FTC) + NVP (or EFV) for life (throughout pregnancy and postpartum)	AZT during pregnancy sdNVP+AZT+3TC during labor and delivery AZT + 3TC for 7 days postpartum
WHEN	As soon as feasible	From 14 weeks
WHY	For her own health and to prevent HIV transmission to the baby	To prevent HIV transmission to the baby
WHERE	Where ARVs are available, preferably offered as an integrated service	

INFANT INTERVENTIONS

Breastfed baby	NVP daily (or AZT BD) from birth until 6 weeks of age	NVP daily from birth until 1 week after end of breastfeeding
Formula-fed baby		NVP daily (or sdNVP + AZT BD) from birth until 6 weeks of age



FOCUSED ANTENATAL CARE PLUS (FANC+)

Additional (

Establish

Assess all infections

Think pulmonary TB in women

- Fever
- Weight
- Drench sweats

If no symptoms to 300mg

Send mother < 350 cells/mm³ if mother is taking

Review CD4

WHO

WHAT

WHEN

WHY

WHERE

INFANT IN

Breastfed baby

Formula-fed baby

FAMILY

- Heal wait before the first
- Fertility men fami brea
- Use the baby
- Lact (LAM
- E
- A
- I
- Post and

DANGER

- In Pregn
- Vagi
- Com
- Seve visio
- Feve of be
- Seve
- Fast

WHO Clinical Staging	
Stage 1	<ul style="list-style-type: none"> • Asymptomatic • Persistent generalized lymphadenopathy (PGL)
Stage 2	<ul style="list-style-type: none"> • Weight loss < 10 % of body weight • Minor skin disease: seborrheic dermatitis, fungal nail infections, recurrent oral ulcerations • Herpes zoster, within the last 5 years • Recurrent upper respiratory tract infections: i.e., bacterial sinusitis
Stage 3	<ul style="list-style-type: none"> • Weight loss > 10 % of body weight • Unexplained chronic diarrhea > 1 month • Unexplained prolonged fever > 1 month • Oral candidiasis (thrush) • Oral hairy leukoplakia • Pulmonary tuberculosis • Severe bacterial infections: i.e., pneumonia • Unexplained anemia • Unexplained neutropenia • Unexplained thrombocytopenia
Stage 4	<ul style="list-style-type: none"> • HIV wasting syndrome • Pneumocystis jirovecii pneumonia • Toxoplasmosis of the brain • Cryptosporidiosis with diarrhea > 1 month • Cryptococcosis, extrapulmonary: cryptococcal meningitis • Cytomegalovirus (CMV) disease of an organ other than liver, spleen or lymph nodes • Herpes simplex virus (HSV) infection, mucocutaneous > 1 month, or visceral any duration • Progressive multifocal leukoencephalopathy (PML) • Invasive cervical cancer • HIV associated nephropathy or cardiomyopathy • Any disseminated endemic mycosis (i.e. histoplasmosis, coccidioidomycosis) • Candidiasis of the esophagus, trachea, bronchi or lungs • Atypical mycobacteriosis, disseminated • Non-typhoid Salmonella septicemia • Extrapulmonary tuberculosis • Lymphoma • Kaposi's sarcoma • HIV encephalopathy

TB CARE II, is funded by United States Agency for International Development (USAID) under Cooperative Agreement Number AID-OAA-A-10-00021. The project team includes prime recipient, University Research Co., LLC (URC), and sub-recipient organizations Jhpiego, Partners in Health,

G Gr
A As
T Tel
H He
E Ex
be
R Re
4 A

RE
• Does
is due
• Has sl
attenc
• Has sl
for de
• Can sl
pregn
• Has sl
in cas

• Has a
tablet
• Has ta
tetani
• Know:
ANC v
• Has a

G Gr
A As
T Tel
H He
E Ex
R Re

RE
is due
Has sl
attenc
Has sl
for de
Can sl
pregn
Has sl
in cas

Has a
tablet
Has ta
tetan
Know:
ANC v
Has a

FAMIL

- Heal wait befo the f
- Ferti men fami brea
- Use the baby
- Lact (LAM)
- E
- A
- I
- Post and

DANGE

- In Pregn
- Vagi
 - Com
 - Seve visio
 - Feve of be
 - Seve
 - Fast

FOCUSD ANTENATAL CARE PLUS (FANC+)

Additional (

Establish

Assess all infections

Think pulv TB in wom

- Fever
- Weight
- Drench sweats

If no symp to 300mg

Send mot < 350 cel mom is ta

Review Cl

WHO

WHAT

WHEN

WHY

WHERE

INFANT IN

Breastfed baby

Formula-fed baby

Formula-fed baby

Formula-fed baby

Formula-fed baby



WHO Clinical Staging

Stage 1	<ul style="list-style-type: none"> • Asymptomatic • P
Stage 2	<ul style="list-style-type: none"> • W • M di re
Stage 3	<ul style="list-style-type: none"> • W • U 1 • U H- • E- Explain about Malaria, IPT, treated nets and TB • O R- • O ANC visit schedule (< 16 weeks; 16 - 28; 28 - 32; 32-40)
Stage 4	<ul style="list-style-type: none"> • H • P • T • C 1 • C • C • C • C • H • H • P • le



FOCUSD ANTENATAL CARE

- 1ST VISIT**
- Advise on individual birth plan
 - Take history
 - Do physical exam
 - Look for anaemia
 - Screen for syphilis
 - Give tetanus toxoid, iron and folate
 - Give SP if more than 16 weeks
 - Tell her about danger signs
 - Counsel for HIV
 - Screen for TB

- 2ND VISIT**
- Check on individual birth plan
 - Give 1st SP, iron and folate
 - Listen for foetal heart sound
 - Counsel and Educate

- 3RD VISIT**
- Check on individual birth plan
 - Give 2nd SP, iron and folate
 - Give tetanus toxoid (if 4 weeks from 1st dose)
 - Listen to foetal heart sound
 - Counsel and Educate

- 4TH VISIT**
- Update on individual birth plan
 - Look for anaemia
 - Check foetal presentation
 - Do vaginal exam
 - Give iron and folate
 - Counsel and Educate

Remember to ask about her Individual Birth Plan (IBP)

- Does your client know when her baby is due?
 - Has she identified a skilled birth attendant?
 - Has she identified a health facility for delivery/emergency?
 - Can she list danger signals in pregnancy and delivery?
 - Has she identified a decision-maker in case of emergency?
 - Does she know how to get money in case of emergency?
 - Does she have a transport plan in case of emergency?
 - Does she have a birth partner for the birth?
 - Has she collected the basic supplies for the birth?
- Yes!**



TB CARE II, is fu CooperativeAgre University Resear

Tape Measure for Measuring Fundal Height

6 | 7 | 8 | 9 | 10 | 11 | 12 | 13
 + health history (vaginal bleeding, difficulty breathing, abdominal palpation, fetal movement & HR) + counsel on

22 | 23 | 24 | 25 |
 cough, weight loss, night sweats

At each visit give iron and folate + health history (vaginal bleeding, difficulty breathing, abdominal palpation, fetal movement & HR) + counsel on birth plan, nutrition, family planning, infant feeding

1st visit: HIV & syphilis testing + TB screening (test sputum if symptomatic) + give tetanus toxoid	2nd visit: check urine for protein + give 1st dose of SP (isoniazid)	3rd visit: check urine + give 2nd dose of SP + 2nd tetanus toxoid	4th visit: check urine for protein + repeat HIV test if negative
---	--	---	--

USAID | TB CARE II

For women living with HIV, at 1st visit do WHO clinical staging and CD4 count. At every visit check for signs & symptoms of anaemia (fatigue, shortness of breath, pallor, etc.) + TB (cough, weight loss or poor weight gain, night sweats, fever, vital signs, physical assessment) + other opportunistic infections + side effects of current medications. Initiate isoniazid Preventive Therapy if no TB symptoms. **NOTE: If mom is taking CPT, do not give SP**

CD4 ≤ 350 OR WHO stage 3 or 4: give CPT (cotrimoxazole, 960 mg daily) + HAART: AZT 2x/day (or TDF daily) + 3TC 2x/day (or FTC daily) + NVP 1x/day x 14 days then 2x/day OR EFV daily as soon as possible after ruling out infections, including TB	In labour and postpartum
CD4 > 350 AND WHO stage 1 or 2: give CPT if stage 2 + all receive ARV prophylaxis: AZT 2x/day + single dose NVP + AZT + 3TC at onset of labour	MOTHER: continue HAART; BABY: NVP daily or AZT 2x/day until 6 weeks
	MOTHER: AZT + 3TC 2x/day x 7 days; BABY: NVP daily until 1 wk after breastfeeding

21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50

TB (cough, weight loss or poor weight gain, night sweats, fever) + give SP

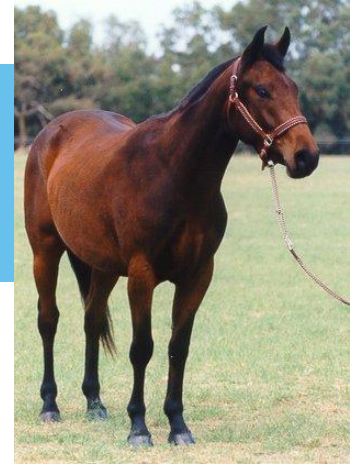
/day OR EFV daily as soon as possible after ruling out infections

Recommendations

- Campaigns on 8 March, 5 May – not just 24 March and 1 December
- Invite the *unusual* suspects to forums where policy decisions are made – TB case finding does not start with NTPs
- Ensure educators and preceptors have adequate knowledge, attitude and skills in technical content – include them in technical updates
- Foster linkages between educational institutions and facilities



Recommendations



- Create culture of thinking in clinical care rather than vertical integration of disease detection
- Patient-centred care: the fewer the referrals the more likely prompt diagnosis and treatment a possibility
- Maintain cognizance of HRH crisis and that providers predominantly don't think *or work* vertically
- PPV / NPV balance when determining how to screen
 - Taking HIV prevalence into consideration
 - PMTCT vs FANC vs PNC vs EPI platforms

Merci



[sstender@jhpiego.net](mailto:ssstender@jhpiego.net)