

Operations Research and Policy Change: Can we actually make a difference?

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Overview of Presentation

- ▶ Brief introduction to policy-related elements of research
- ▶ Examples of where research has failed and succeeded in impacting policy

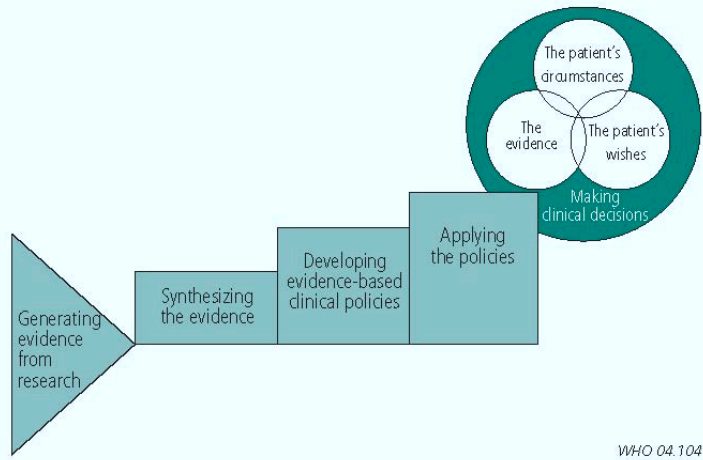


Why policy?

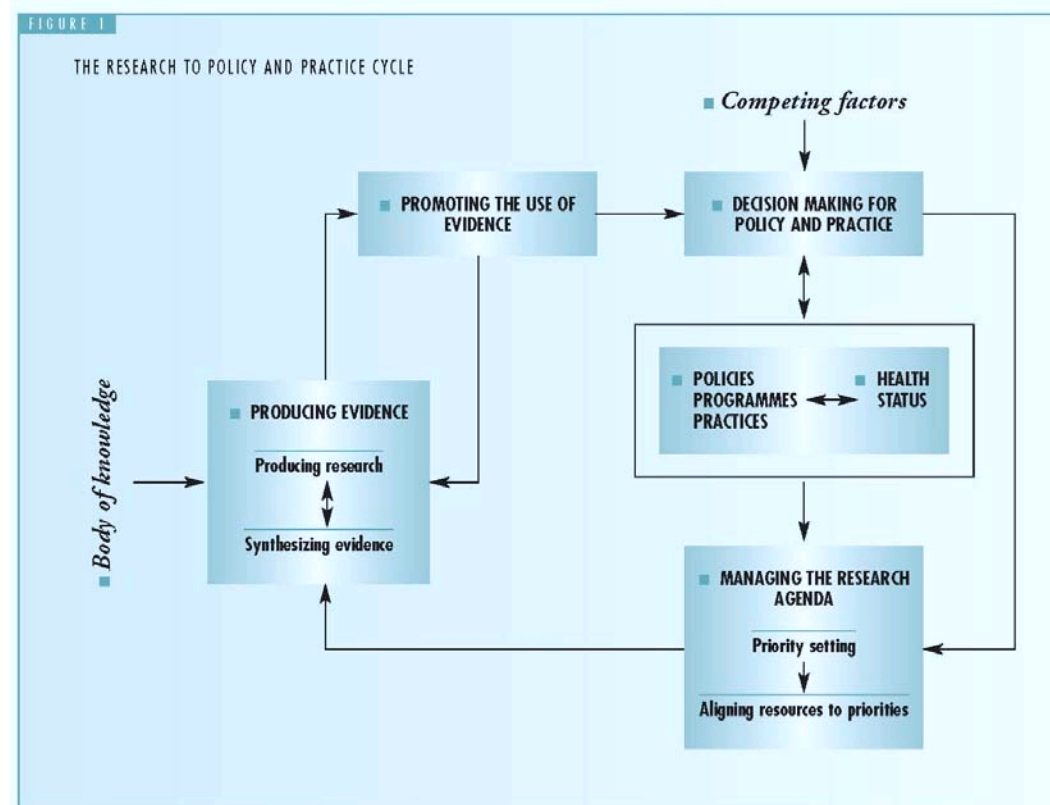
- ▶ **If I'm a researcher, why do I have to consider policy?**
 - ▶ Policies are a necessary step for health program implementation of proven interventions
- ▶ **Goal of research is not the results, but to lead to change**
 - ▶ Evidence base for decision making
 - ▶ Tool to improve operations



Ideal policy cycle



Haines A, Kuruville S, Borchet M. Bull WHO 2004;82:724-732



Alliance for Health Policy and Systems Research. Strengthening health systems: the role and promise of policy and systems research. Geneva, 2004



What do I need to consider?

- ▶ Is policy setting a linear, uni-directional process?
- ▶ In policy context, data don't stand alone



Research as a problem-solving tool that depends on the policy context



HARRY BELIEVED IN
HAVING THE RIGHT
TOOL FOR THE WRONG
JOB

- ▶ Is it the “right job”?
- ▶ Is it the right tool?
- ▶ Does everyone know how the tool works?
- ▶ Are there resources to run the tool?
- ▶ Does it make the job easier?



Research/Policy Linkage Examples

- ▶ **Traditional birth attendants (failure)**
 - ▶ Evaluation of established program

- ▶ **Syphilis screening in pregnancy (success)**
 - ▶ Constant operations research



Evaluation of Impact of Traditional Birth Attendants (TBAs) in Rural Mozambique (1)

- ▶ With donor support/pressure, the MOH implemented a TBA program to reduce maternal/neonatal mortality
- ▶ Over 8 years, a NGO trained >300 TBAs; support included supervision, equipment, refresher courses
- ▶ Post training surveys showed that TBAs had improved knowledge of obstetric emergencies and skills to manage them
- ▶ An evaluation was planned to assess whether the program had met its initial goals



Evaluation of Impact of Traditional Birth Attendants in Rural Mozambique (2)

▶ Design

- ▶ retrospective cohort study comparing maternal and newborn outcomes in 40 communities with trained TBAs and 40 with non-trained TBAs

▶ Women interviewed on

- ▶ Type of provider during last pregnancy/birth
- ▶ Outcome of pregnancy/childbirth for mother/child



Evaluation of Impact of Traditional Birth Attendants in Rural Mozambique (3)

▶ Results:

1. Access to a trained TBA

- 43% birthed at health facility; 33% birthed with trained TBA; 24% birthed with an untrained person

2. No access to trained TBA

- 58% birthed at health facility; 42% birthed with an untrained person

3. Access to a health facility with a midwife

- 77% birthed at a health facility; 22% birthed with an untrained person

▶ Mortality rates similar across type of birth attendance





Preference for future births

| Experience | Group 1 (trained TBA) | Group 2 (no trained TBA) | Group 3 (HF with midwife) | Total weighted average |
|---|--------------------------|--------------------------------|---------------------------------|------------------------------|
| % prefer health facility for next birth | 61% | 83% | 93% | 79% |

Policy eventually shifted over time away from the TBA and towards improving maternities

5 years after study...



TBA OR to Policy

- ▶ Right tool, right question, but wrong timing
 - ▶ TBA training initiated despite evidence on efficacy
 - ▶ Key decision-maker rejected it because of her investment in the program and donor support
 - ▶ Insufficient engagement of the right people from the outset
 - ▶ Findings not adopted or integrated until there was a change in staff at the MOH level
 - ▶ And global transition away from TBAs



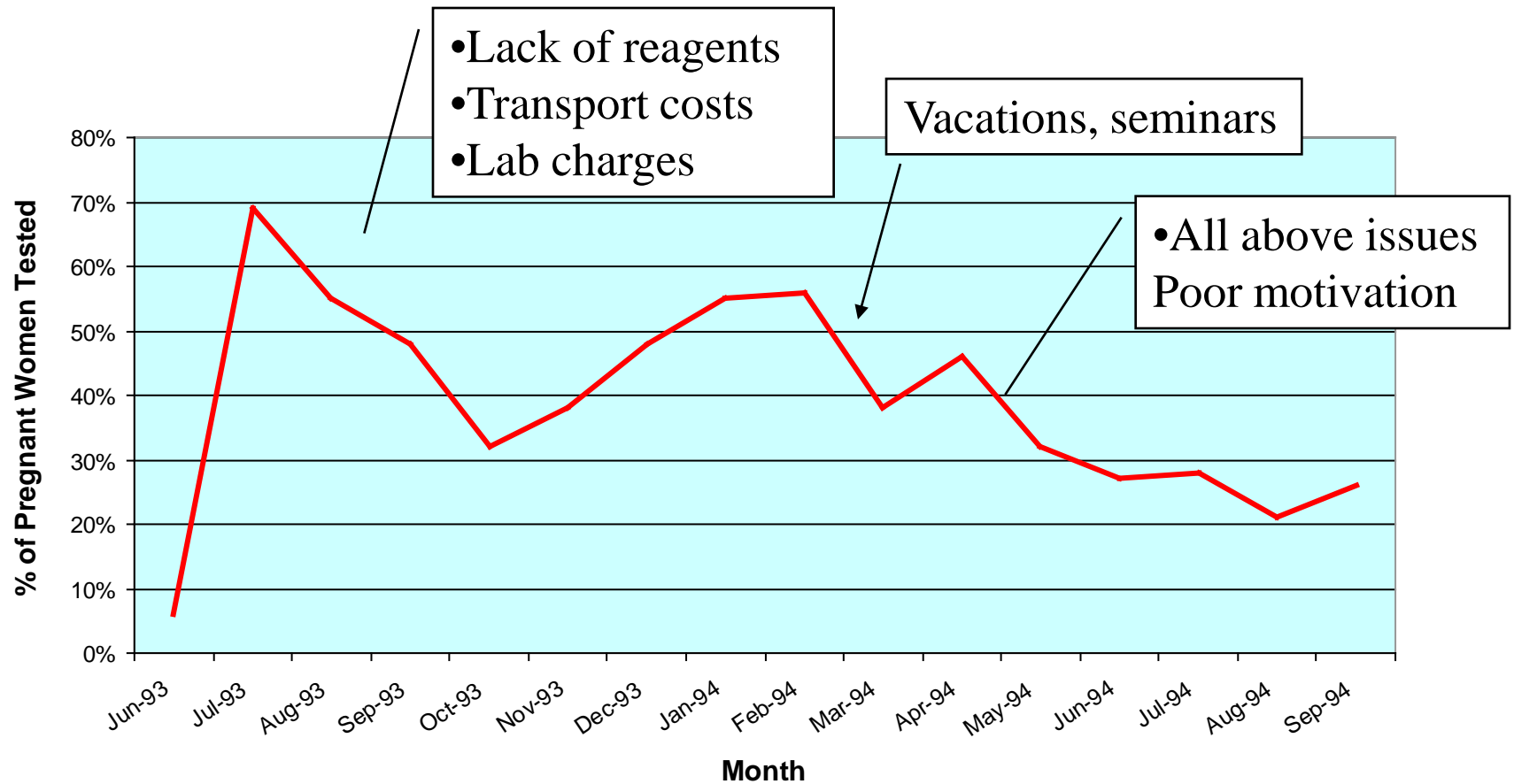
Syphilis Screening in Pregnancy (1)

- ▶ Unequivocal evidence on efficacy of intervention
- ▶ 1978: Universal antenatal syphilis screening made national policy in Mozambique; sporadic & uneven screening
- ▶ 1993: Prenatal Syphilis Screening Feasibility Study
 - ▶ 11 health facilities, training, development of a facility registry book, externally purchased RPR
 - ▶ Rapid increase in RPR screening (<5% to 70%)
 - ▶ Advocacy:
 - ▶ Presentations (provincial & national level conferences, Minister of Health, Council of National Directors)
 - ▶ Article and editorial in national medical/health journal
 - ▶ Multiple informal meetings with MOH, UN, Bilaterals



Pilot intervention, 1993-94

11 Health Posts - Manica Province, Mozambique



Syphilis Screening in Pregnancy (2)

- ▶ 1996: Syphilis screening made a key element in national 5-year plan
 - ▶ Provincial Medical Director in Manica province adopted program as a priority
 - ▶ Increased total screening rate of pregnant women to 50-60% in health facilities with laboratories (one province)

Syphilis Screening in Pregnancy (3)

- ▶ **1998: Syphilis screening extended to all districts in neighboring province**
 - ▶ Percentage of ANC attendees tested increased to 80% at the health facilities with laboratories
 - ▶ Over 7,000 RPR positive women identified that year (~70% treated)
- ▶ **1999: Sustained results with no donor input**



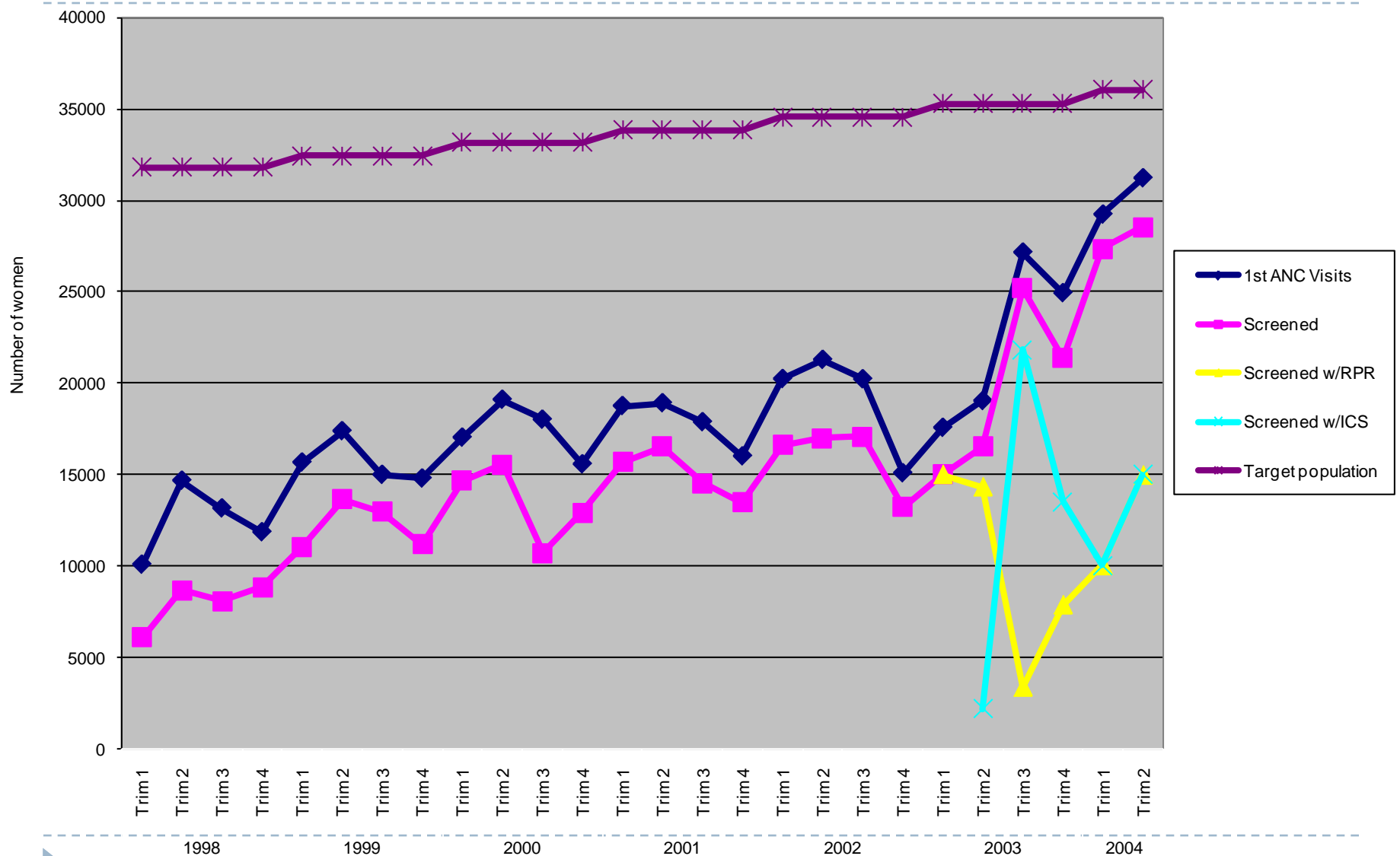


Syphilis Screening in Pregnancy (4)

- ▶ **2000: Free treatment for pregnant women as a national norm & MCH nurses empowered to treat RPR+**
 - ▶ Treatment rate increased to 90%
- ▶ **2003: Introduction of rapid treponemal Immunochromatographic strip (ICS) test pilot project (with MOH/Gates Foundation)**
 - ▶ Number of facilities screening increased from 45 to 132 (100% of those with ANC)
 - ▶ Percentage of ANC attendees tested increased to 93%
 - ▶ Over 80,000 women tested annually
 - ▶ Over 8,000 syphilis positive women identified per year (96% treated)

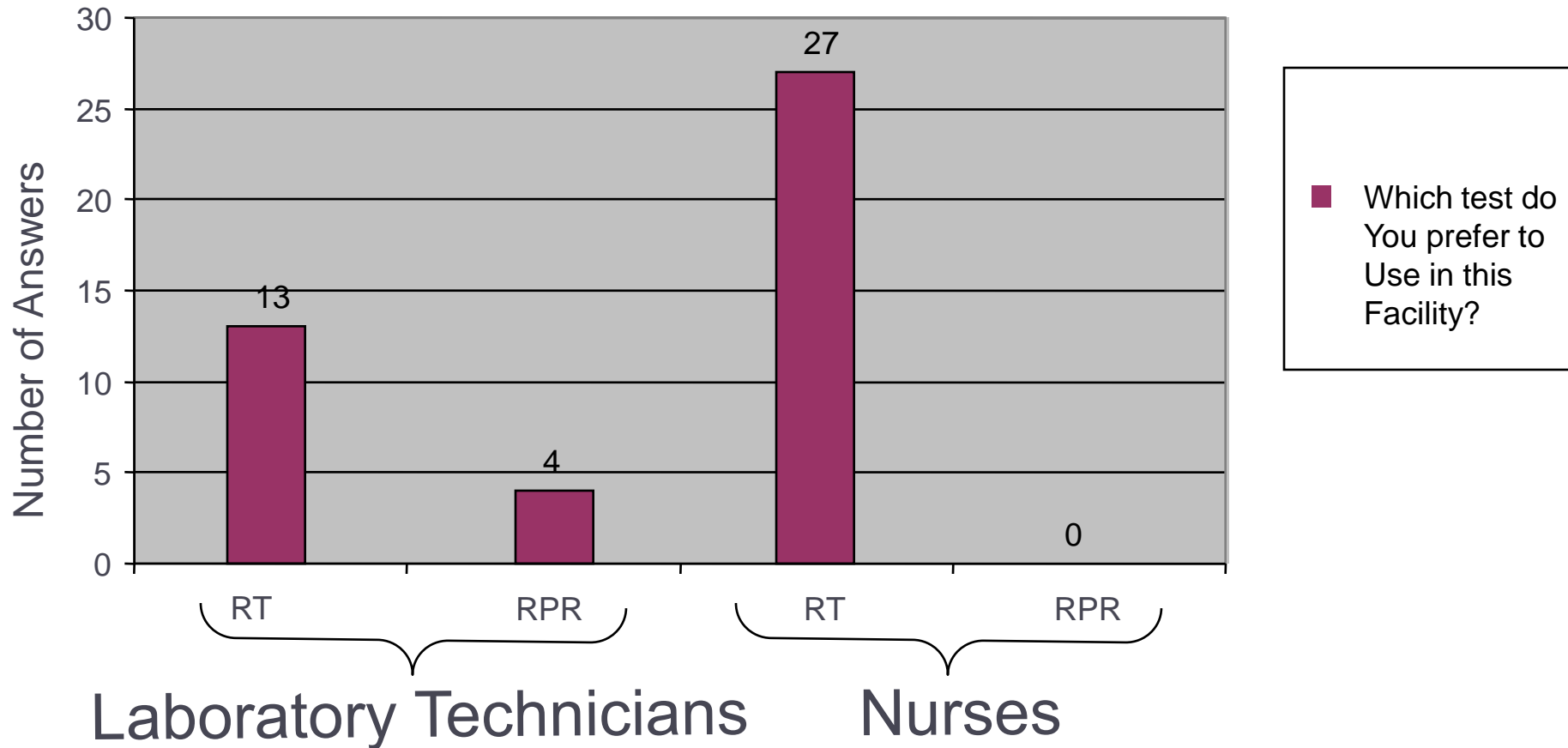


Syphilis Screening in Pregnancy Central Mozambique, 1998-2004



Syphilis Screening in Pregnancy (5)

Health Worker Satisfaction Survey



- **“Takes less time...” “...Can be used in health facilities without laboratories...” “...Is easy to read...” “...Doesn’t require much blood...” “...Reduces the waiting time of the mothers...”**



Syphilis Screening in Pregnancy (6)

Cost-effectiveness analysis of RPR/strip test (US\$)

| | Clinics with laboratories | Clinics without laboratories |
|---|---------------------------|------------------------------|
| RPR women screened | \$0.85 | |
| RPR positive women screened and treated | \$12.25 | |
| RPR active cases screened and treated | \$13.19 | |
| ICS women screened | \$0.98 | \$0.96 |
| ICS positive women screened and treated | \$13.45 | \$14.76 |
| ICS active cases screened and treated | \$13.90 | \$15.26 |

Syphilis Screening in Pregnancy(7)

- ▶ Rapid test has become national policy
 - ▶ For use in facilities without laboratories
 - ▶ Procured directly by the MOH



Syphilis Screening in Pregnancy (8)

Determinants of Success

- **Constant advocacy**
- **Close partnership with MOH**
- **10 years of frequent operations research to:**
 - Implement policy
 - re-shape policy
- **Right tool for the right job at the right time**
 - Problem was a priority of policymakers
 - Tests were available and cheap (RPR), or innovations were appropriate, responded to need, and made life easier (rapid test)



How does this apply to you?

- ▶ Your challenge is to figure out how to maneuver data most effectively in your system
 - ▶ Who to engage?
 - ▶ What dynamics are present?
 - ▶ What constraints to consider?



Who to engage?

- ▶ Who defines the problems & priorities?
- ▶ Whose policy is it?
- ▶ Role of researchers, clinicians, managers

- ▶ Usually differs by health system level, domestic vs. international

- ▶ Careful of frequent changes



Who to engage → Consider Level of Involvement

| | |
|-------------------------------|--|
| Ministry of Health | <ul style="list-style-type: none">◆ Who's in charge of the program?◆ What's the scope of change?◆ How centralized are decisions?◆ Other government involvement? |
| Local Health Authority | <ul style="list-style-type: none">◆ Role in defining policy?◆ Geo-political considerations? |
| Health Facility | <ul style="list-style-type: none">◆ Often the best ideas |
| Community | <ul style="list-style-type: none">◆ Who are true leaders? Political structures? Religious leaders? Consensus leaders?◆ Who are the beneficiaries? |



What dynamics are present?

- ▶ Place research evidence within complicated, locally dependent dynamics
 - ▶ Personal agendas?
 - ▶ Interests?
 - ▶ Personal & professional histories?
 - ▶ Researcher/policymaker networks?



What Constraints to Consider?

- ▶ Contextual factors define parameters
- ▶ “Political Will” (what is it?)
- ▶ Resource constraints
 - ▶ Where (who) do they come from and what’s the probability they will change?
 - ▶ Donor priorities
 - ▶ SAPs, wage bill caps
- ▶ Process constraints – budget & planning process, procurement systems



Balance the needs of multiple stakeholders!



Constraints → Consider Level of Involvement

| | |
|-------------------------------|---|
| Ministry of Health | <ul style="list-style-type: none">◆ National priorities◆ Equity between regions◆ Budget process◆ Procurement systems |
| Local Health Authority | <ul style="list-style-type: none">◆ Local priorities◆ Management burden◆ Procurement systems◆ Infrastructure requirements |
| Health Facility | <ul style="list-style-type: none">◆ Human resources◆ Supervision capacity◆ Working conditions & satisfaction◆ Material resources |
| Community | <ul style="list-style-type: none">◆ Awareness◆ Acceptability◆ Affordability & access |

You can do it!

