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Needed and Measured
Water and Health Intervention
Despite exceptions, the chart shows declining or slow progress in four countries reviewed in the HRRC study: Tanzania, Botswana, South Africa, and Malawi.
Trend: The most marked slowing down of rates and the smallest reductions in mortality worldwide, the African region shows as compared with other regions of the situation in Africa is strikingly different. Globally from 146 per 1,000 in 1970 to 79 per 1,000 in 2003 (WHO 2005), the central trend: Although mortality rates under mortality declining slowly
(WHO 2005)

Rate are from the African region and increase in under-five mortality. Most of these countries showing.

2005.

Mortality rate is widening (WHO 2005). The gap between developed and under-five mortality.

More on under 5 mortality.
Region.

Can be achieved in the African
by 2015, from the base year 1990—
der-five mortality by two-thirds
development goals—to reduce
millennium

Goal four of the Millennium

Disease Interventions
due to diarrhea is crucial.
interventions to control cases and

Careful planning and evaluation of
Mortality rate by two-thirds

MDG Goal 4: Reduce under-5
dead

Infant mortality
in decline in
four countries
progress in
uneven
shows
HSRC study

Source: World Development Indicators

Malawi
Tanzania
Botswana
South Africa
Determinants of Health

- Improved hygiene.
- Safe drinking water, and improved sanitation.
- Critical "external" factors are sanitation.
- A major study of these "external" factors.
- Indeed, health impact assessment involve health care sector.
- Influenced by the policies outside the
- Health and its determinants are strongly

Determinants of Health
Diarrheal diseases and to thereby reduce diarrheal mortality. Existing interventions to prevent or treat achieved with the implementation of know large reductions in child mortality could be

- Interventions.

Diarrhea is prevalent and treatable worldwide. Occur in the African region of all diarrhea deaths in children under five pattern most important: Almost 40 percent

Background on Southern Africa
External factor 1: Sanitation

Very slow progress in implementing improved sanitation facilities

Source: World Development Indicators
External Factor 2: Water

Source: World Development Indicators

Facilities

Improved

Progress in

More

Improved water source (% of population with access)

Malawi

Tanzania

Botswana

South Africa
Among under-5s:

Particularly if undertaken by caregiver
diarrhea;
even mud (dramatically reduces
washing hands with soap (or ash or
poses methodological challenges:
measured;
The crucial variable which is not well

External Factor 3: Hygiene
A factor that may contribute to this situation is the human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic in the region, but an underlying weakness of the implementation capacity of the health system is also likely to blame (Walker, Schwartländer, and Bryce 2002).
to always wash hands after visiting toilets.

respond to the following statements: "It is not necessary

Or posing question differently (negatively): Please

"rather than "Do you treat your drinking water?"
normative factor e.g. "Do you feel it is necessary to treat

Possible solutions: Improving questions to reduce

often at variance to practice;

treating water invoke "correction answers

Direct questions e.g. hand-washing

health and hygiene practices;

Extraordinary challenge in developing questionnaires in

Questioning questionnaires
is very time demanding and small scale.

Final alternative on site observation which

washing facilities are available.

questions to establish proxies e.g. "if hand-

Or combinations of observation and

wash your hands"

e.g. "Please could you show me how you

scheduled in interviews linked to questions

Alternatives could include observation

Multi-method approach
Can better analyses resolve the issues?

Limitations on questionnaire responses

Questionnaires and Surveys

Issues in methodology

The MCC intervention

Background on Lesotho

Application To Lesotho
Background on Lesotho
MCC Intervention

- Reduce Poverty Thru Growth
- Investments in Dam Infrastructure
- Renovating AIDS Clinics
- Improving Urban/Pari-Urban Water
- Adding VIP Latrines to Villages
- Providing Clean Reliable Water
• Eventually Every Clinic/Village treated
• Because of Scarcity of Resources
• Ethical Random Selection of Treatment
• Randomization Whenever Possible
• Counterfactual Inference Structure
• Guided By Program Success Indicators
• Sound Data Collection

Evaluation Methodology
• Fingers Crossed and Prayers Said
• Training and Pre-testing Being Done Now
  - Module Questionnaire Development for Water
  - Just Gone through Rigorous
  - Two Modules Health and Water
  - Continuous Multi-Purpose Survey
  - Invested in the Bureau of Statistics

Household Survey Component
Baseline or "Continuous-Line"
Sample Size and Timing
Supply
Cannot know the Engineering of Water
Knowledge Limitations
Self-Perception can be a Barrier
All parties are learning
Mostly Covered Already

Household Survey Limitations
Refine Questions and Data Collection

Begin Analytics Early and Practice

Monitor and Clean Data as Collected

Identity Treatment Turning Points

Invest in Metadata Computer Systems

Deepen Interpretation

Tracking of Nonexperimental Indicators

Combined Analysis
• Achieve what is possible
• Reshape Sponsors' Limitations
• Close monitoring of results to adapt
• As Good Data Collection as Possible
• Good Evaluation Theory Obviously!

Lower, but Met, Expectations!
great conference
presence and wishing you a
Thanking you all for your
Olulile
Kweny, nibe nosuku
Ngokunigiphaka indlebe
Ngiyabonga kakulu

Many, Many Thanks