Global Child Health Equity Focused Strategies
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- child survival and MDG targets
- chronic diseases and disability
- historical trends in child mortality
- slowing progress in child mortality: how Africa is faring worse
- millennium development goals
- over 7 million children die each year, 37% in the first month of life, a critical window for improving survival. 98% of these deaths occur in the developing word. And three quarters are preventable by access to simple health interventions. Over 50 fold increase risk of dying before age 5 in many regions of Africa
- leading causes of death
    - diarrheal disease
    - malnutrition (underlies about a third of deaths
    - respiratory disease
    - roughly half due to infectious disease
    - 36% neonatal deaths
- importance of addressing newborn period
- evidence based interventions to improve child survival
- deaths prevented if interventions were available
- 6 million of the 10 million deaths could be prevented – that was the goal, the countdown to 2015 project
- child mortality declined by average of 41%
- 10 million went to 6.9 million
- considering the quality of survival burden of childhood disease
- beyond survival – where you should be focusing your energy
- basic survival → beyond survival → thrival
- infectious disease/perinatal conditions/malnutrition(least developed nations) = basic survival
- life cycle perspective: intergenerational impact
- poor maternal health → low birth weight infant → infection/malnutrition → neurologic disability → obesity/diabetes → circle back to poor maternal health
- 62% → 82% of child death now in regions in Africa
- mortality rates for poorest children in a country are two to three times higher than wealthiest quintile and the disparity is increasing
- adopting an equity focus agenda
- think about social factors in health
- social determinant #1-100: poverty and child health
- poverty is most direct correlate
- social factors linked to access to resources, what are the mechanisms?
- Food insecurity/malnutrition
- Maternal health, education and gender equity

- Exposure to infectious disease
- Water and sanitation
- Environmental exposures
- Stress/social support networks
- Social determinants
- Conflicts/disaster
- Parental education/health
- Environment
- Public health and economic policies
- Cultural and race
- Governance
- Barriers to access to healthcare
- Three delay model
- Delay in decision to seek care in community
- Delay in reaching care
- Delay in receiving adequate care at health facility
- Delay 1: in the community
- Haitian in bateyes in the Dominican republic
- Sugar cane farms in DR
- Pervasive discrimination against Haitians
- Illegal status and "in transit" birth registration policy
- Unable to leave or to access to public health services
- 1990s infant mortality rate estimated to be 3-4x higher
- strategies to improve access to care in community
- mobile medical vans
- primary care, care of urgent illness, chronic disease care
- health education
- educational services
- legal services
- role of advocacy in reducing health inequities
- individual vs. community based vs. policy and politics
- delay 2: reaching care at health centers
- Tanzania
- Human resource shortage
- Morthers and infants require immediate and skilled care to avert poor health outcomes
- Primary level health workers lack skills and training is lenghthy and expensive
- High maternal and newborn mortality, especially in remote areas
- What would you do?
- Using technology to overcome lack of infrastructure mHealth (mobile phones) and Newborn health care
- Protocols for newborn care embedded in cell phone to provide decision support for nurses and health officers in health centers in Tanzania
- Cell phone leads health workers through critical assessments, decision points, and prompts immediate treatment

- Services as medical record, facilitates communication and referrals
- Significantly improved adherence to care standards
- More efficient – training time ½ days vs. 5 days, length of encounter
- Lack of human resource for health Rwanda
- Rwanda 633 physicians
- Not enough health workers
- Problem all throughout Africa
- Reasons for human resource shortage
- Mortality and migration due to civil strife
- Chronic brain drain
- Underfunded public sector, poor work conditions, low salaries, few opportunities for career paths
- Disruption of medical education system
- Aim: to build a high quality sustainable health system
- Collaboration between US academic medical centers and Ministry of Hleath in Rwanda
- Double the number of physicians – in year two now
- Unique features
- Large scale, coordinated approach to upgrade health professions
- Responsibility, control and accountability will rest with the Rwanda government
- Structural change; after 8 years, the Rwanda government will be positioned to sustain the HR gains on its otwn without foreign aid
- Delay 3
- DR newborn health
- Quality of care
- Nurses,doctors available,
- No geographic barriers
- >98% coverage of interventions
- discrepancy between access and outcomes
- poor quality and over medicalization of birth
- how do you identify and prioritize needs
- where and with whom will you work
- what capacities/skills can our group most effectively leverage
- maternal vs. newborn? Facility vs. community? Clinical vs. public health?
- Infante sano
- Targeted provincial hospitals with highest mortality
- Training physicians, nurses, health workers
- Improving quality of hospital systems
- Improving the hospital and clinical faciltity
- Data driven strategy to prioritize interventions: the babies matrix
- Counts of fetal death by time and place
- Identifies opportunity gap and targets best time and stie to intervene
- Improving maternal care: use of the partogram

LIZA HERZOG

- SIT Switzerland: global health and development policy

- Geneva = hub for international health
- Visit to UN, access to UN library
- Guest lectures
- Water safety and health
- Field work – realities, challenges of a microfinance organization
- Epidemiology
- International org for migration
- Intellectual property
- Food safety/security
- Mental health of victims of war
- Trip to morocco
    - Compare health systems
    - Morocco < Switzerland
    - Saw firsthand some of the issues with health care
    - Host family asked her for medicine
- Independent project
- Tentative model to prevent water born infectious disease assoc. with climate change and disaster: an application to cholera prevention
- Interviewed head of WHO's task force on global cholera control
- Climate change and disaster
- Geographical water patterns are changing
- Increase in frequency and severity of extreme weather events
- Cholera transmission and treatment
- Person consumes water or food contaminated with bacteria
- Fast acting
- Vaccine can be used prophylactically
- Oral rehydration therapy best way to treat it
- Two strains responsible for the epidemics
- Ecological niche
- Major cholera epidemics
- South America hadn't seen cholera in a century when the Peru epidemic took place
- V. cholerae changing ecological niche: south America
- 19 different countries reported cases
- Peru particularly affected
- El Nino
- Bangladesh
- Cholera is endemic
- Area with a lot of cyclones
- Continuous rise in prevalence over past three decades
- Prediction and prevention
- Integrate geographical info with medical care
- Remotely monitoring sea surface temp and plankton populations
- Target areas where cholera might strike
- Use in combo with meteorological data
- Send in emergency care in anticipation of cholera

- Infrastructure of country for prevention
- Water needs to be sanitized
- Education/efficient dissemination of early warning
- Vaccinations only make sense in endemic areas
- Water purification kits
- Treatment facilities and appropriate training of healthcare workers
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