Health facility electrification
in a global public health context

Michaela Pfeiffer
World Health Organization
Department of Public Health, Environmental
& Social Determinants of Health
Geneva
Overview

- Energy access situation in health facilities in low income settings
- Energy as a determinant of quality of care, using maternal and child health as a case example
- Synergies between different SDG goal areas and related opportunities
- Sample WHO activities focused on this issue

Photo credit: Eight19
Importance of energy to health services
(in particular access to electricity)

• Easier recruitment and training
• Better staff morale
• Continued medical education

• Improved cold chain
• Laboratory testing
• E-health

Medical Services

• Prolonged opening hours
• Wider range of services
• Better functionality of medical devices

Staff recruitment and retention

• Better communication
• Improved records management

Adminstration and logistics

• General hygiene improved
• Enhanced safety
• Staff and patient sense of security and safety

Disease prevention and treatment

Health and safety

Access to electricity a significant concern

Percentage of Healthcare Facilities with Electricity Access

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Data Sources: World Health Organization
Map Production: Interventions for Healthy Environments
World Health Organization

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75 countries together account for > 95% of maternal and child deaths worldwide
Causes of deaths in children under 5 years of age

(6.3 million child deaths every year/around 17,000 preventable deaths every day)

- Undernutrition (underlying cause) 45%
- Neonatal 44%
- Pneumonia 17%
- Diarrhoea 9%
- Other 20% (congenital abnormalities, causes originated during the perinatal period, cancer, pertussis, severe malnutrition, and other specified causes)
- Malaria 7%
- Injury 5%
- HIV/AIDS 2%
- Meningitis 2%

- Preterm complications 34%
  - Intrapartum events 24%
  - Sepsis and meningitis 12%
  - Pneumonia 10%
  - Congenital 8%
  - Other 6%

Every year there are an additional 2.6 million stillbirths/more than 7,200 stillbirths every day
SAVING MOTHERS’ LIVES

WHAT ARE PREGNANT WOMEN DYING FROM?

- **28%** Pre-existing medical conditions exacerbated by pregnancy (such as diabetes, malaria, HIV, obesity)
- **27%** Severe bleeding
- **14%** Pregnancy-induced high blood pressure
- **11%** Infections
- **3%** Blood clots
- **8%** Abortion complications
- **9%** Obstructed labour and other direct causes
Health facilities an essential setting for addressing preventable maternal and newborn mortality

- Improving quality of facility based care at time of birth a central strategy
- Electricity (and WASH) critical determinant of quality of care provided
Global Strategy for Women's, Children's and Adolescent's Health (2016-2030)
Promoting access to modern energy in district hospitals in Africa

Linkages with the SDGs

- Ending preventable maternal and newborn deaths (Targets 3.1 & 3.2)
- Access to modern energy and increasing share of renewables (Targets 7.1 & 7.2)
- Resilience and adaptive capacity to climate-related hazards (Target 13.1)

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Opportunity associated with sustainable energy solutions

- Off-grid Solutions
- Hybrid Solutions
- Grid Extension
- Energy Efficient Equipment
Opportunities to finance "green energy" infrastructure in health facilities
Global partnership opportunities

Working with UNF and UN Women (since 2013) on a “high-impact opportunity” that seeks to address energy service issues in health facilities in low income settings. Particular focus is given to essential maternal and child health services.
Examples of related activities supported by the WHO

- **Technical support to countries/health ministries**
  - Energy audits in district hospitals
  - Facilitating participation in relevant energy and climate fora

- **Building the evidence base**
  - Impact health facility electrification on services delivery outcomes
  - Setting a research agenda

- **Monitoring trends**
  - Tracking the energy situation in countries using existing national health survey instruments, e.g. WHO SARA

- **Developing standards**
  - Min energy requirements to ensure WHO recommended standards of quality of care