Health Systems Strengthening in Malawi

Paul Kawale BSc MPH





Usher Institute Population Health Sciences & Informatics www.ed.ac.uk/usher @EdinUniUsher

Structure

- Health systems strengthening efforts
- → Socio-economic context
- → Health systems strengthening policies, strategies & interventions
- → Strengthening health information system
- Results of health systems strengthening efforts: 2016 vs 2011
- → Socio-economic changes
- → Changes in maternal and child health, HIV, malaria
- → Effects on management of human and financial resources for health
- → Role of health information systems





www.ed.ac.uk/usher

@EdinUniUsher

Health systems strengthening efforts

- Socio-economic context
- Village Health Committees
- total fertility rate at 5.7, contraceptive prevalence rate at 35% (2010)
- 52% women, 44% of child-bearing age (2008)
- → 73% of household heads had no education, 65% adult literacy rate, dependency ratio 1.20 (2011)
- 21% electricity access (3% for cooking), 79% water access (19% piped) (2011)
- 36% mobile phone occupation (2012), 46.3% TV access, 23.4% computer access (2014)
- Agriculture: 35% GDP, 93% exports, 80% employment
- Public services financing: 60% taxes, 40% donors, loans

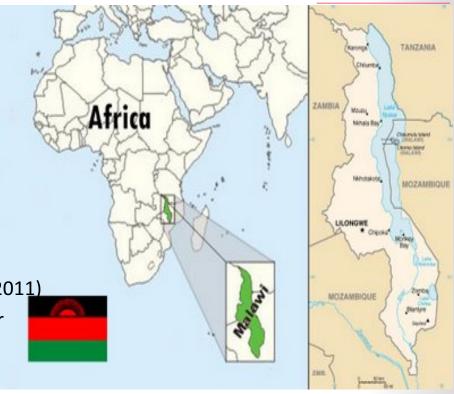


Figure 5 Map of Malawi, Africa

Source: Ashley Stafford (https://monpcaffair.wordpress.com/malawi/)







Health systems strengthening efforts

Health systems strengthening policies & strategies

2004

Annual Programme of Work & SWAp reviews

2011

- 1. Malawi Growth and Dev Strategy II (2011-2016)
- 2. Health Sector Strategic Plan (2011 – 2016)
- Public health
- Resources for health
- Quality of health

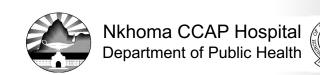
1994

Constitution: "to provide adequate health care, commensurate with the health needs of Malawian society and international standards of health care."

1999

MoH vision for 2020 – Essential Health Package (<u>EHP</u>) & Sector Wide Approach (<u>SWAp</u>)







Health systems strengthening efforts

Health systems strengthening interventions

Maternal mortality measurement & prevention

• Involving communities in identifying & discussing maternal deaths (Bayley et al. 2015)

Improving neonatal outcomes

• Quality improvement (Fottrell et al 2015)

Child health

• mobile phones to promote home based child care (Fotso et al. 2015)

• care groups (Perry et al. 2014)

alth

• integration of child health into HIV and maternal care services (Gunda et al. 2017)

• Provider-initiated opt out testing at antenatal clinics (Ahmed et al. 2016)

• Increased attention to MSM (Graham & Harper 2017)

• Self-testing (Choko et al. 2014)

HIV testing

HIV treatment adherence

• Pill count strategy (McKinney et al. 2016)

Malaria prevention

• Insecticide treated bed nets (Lindblade et al. 2015)

• Indoor residual spraying (Chanda et al. 2015)

Human & financial resource management

 training & deployment of medical assistants (Muula 2009) & HSAs (Perry et al. 2016)

• Supervision (Bradley et al. 2013)

• Service level agreements (Manthalu et al. 2016)









Health systems strengthening efforts

- Strengthening health information system
- 2013: Malawi Health Information Systems Strategic Plan
- → 2014: (i) National Health Information System Policy, (ii) eHealth Strategy

eHealth interventions









mHealth interventions



Chipatala cha pa Foni Health Center by Phone







Leveraging Mobile Technology to Strengthen Health Services for Women and Children in Rural and





















Socio-economic changes

➤ Women with no schooling: 13.9% vs 15.2%

➤ Female literacy levels: 72.1% vs 67.6%

Indicator	2016 (%)	2011 (%)
Access to clean water	87.2 (8.3 piped)	79.7 (6.6 piped)
Access to improved sanitation	51.6	8.2
Access to electricity	10.8 (2.1 for cooking)	8.7 (1.7 for cooking)
Mobile phone ownership	53.7	39.0
Wealth inequality (from Gini coefficient)	39.0	41.8





- Changes in maternal and child health
- → Maternal mortality ratio: 439 vs 675 deaths/ 100,000 live births
- → Pregnancy outcomes (2016): 91.3% live births, 0.6% abortion
- ➤ Neonatal death ratio: 35 vs 40 deaths/ 1,000 pregnancies
- ➤ Neonatal death ration (2016): 40 (urban) and 82 (educated)
- ➤ Postnatal care: 42.4% vs 43.0%
- → Under-5 mortality: 63 vs 112 deaths per 1,000 live births

"These men don't face any problems, they may just be sorrowful on that particular day on which they have lost their wives, but just after a few weeks they leave home and start looking around to remarry. Once they are married you will see they reduce the amount of care they provide, and even when you decide to follow him [a man who has recently lost his wife] you will discover that there is another lady who possibly will not take care of these children or might illtreat them." – (Bazile et al. 2015)



Changes in HIV

→ Prevalence: 8.8% vs 10.6%

→ Prevalence among MSM: 12.5% - 18.2%, over 99% previously undiagnosed







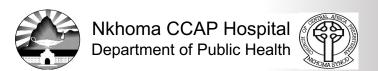




- Changes in malaria
- → Mosquito net (ITN) usage: 33.9% vs 29.0%
- → Indoor residual spraying coverage: 4.9% vs 2.2%









- Effects on management of human and financial resources for health
- → medical assistants for basic clinical care (Muula 2009)
- → Training & deployment of HSAs improve access to preventive & curative services (Perry et al. 2016)
- ➤ Supervision seen as for inspection & control, not quality improvement (Bradley et al. 2013)
- → Supervision improved health worker job satisfaction and retention (McAuliffe et al. 2013)
- → SLA: 15% increase in ANC visits & 11% increase in facility deliveries (Manthalu et al. 2016)





- Role of health information systems
- ➤ Service delivery & resource management pillars of health systems (Aqil et al. 2009)
- Limited rigorous research on implementation and outcomes (<u>social</u>, <u>organisational</u>, technological) of eHealth systems in Malawi
- How do complex sociotechnical facilitators, barriers and consequences of implementation & adoption of eHealth systems come to bear?
- 2. How do eHealth systems affect the quality and use of data for clinical & managerial

decision making?

3. How do eHealth systems affect management of health finances?





