Imperial College London

Community Health Workers

Who are they? What do they do? Are they cost effective?

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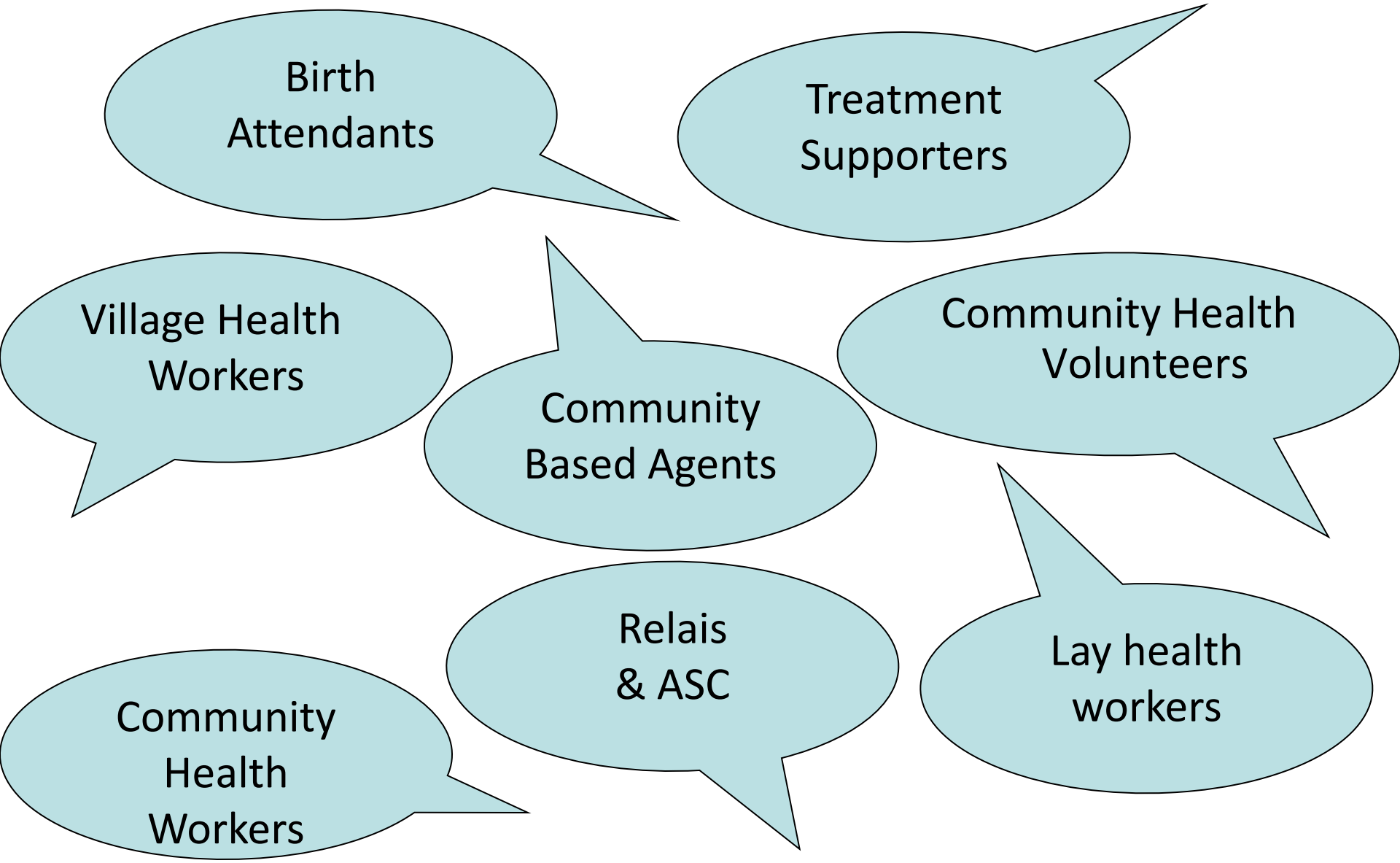
Who are Community Health Workers?



Any examples in the countries you live and work in?

Who are CHWs?

"Community health workers should be **members of the communities** where they work, should be **selected by the communities**, should be **answerable to the communities** for their activities, should be **supported by the health system** but not necessarily a part of its organization, and have **shorter training** than professional workers"

WHO (1989)

What is a lay health worker?

A ’lay health worker’ was defined as any health worker (**paid or unpaid**) carrying out **functions related to healthcare delivery**, **trained in some way** in the context of the intervention, and having **no formal professional or paraprofessional certificate or tertiary education degree**. There were no restrictions on care recipients.

Lewin S, et (*2010)*

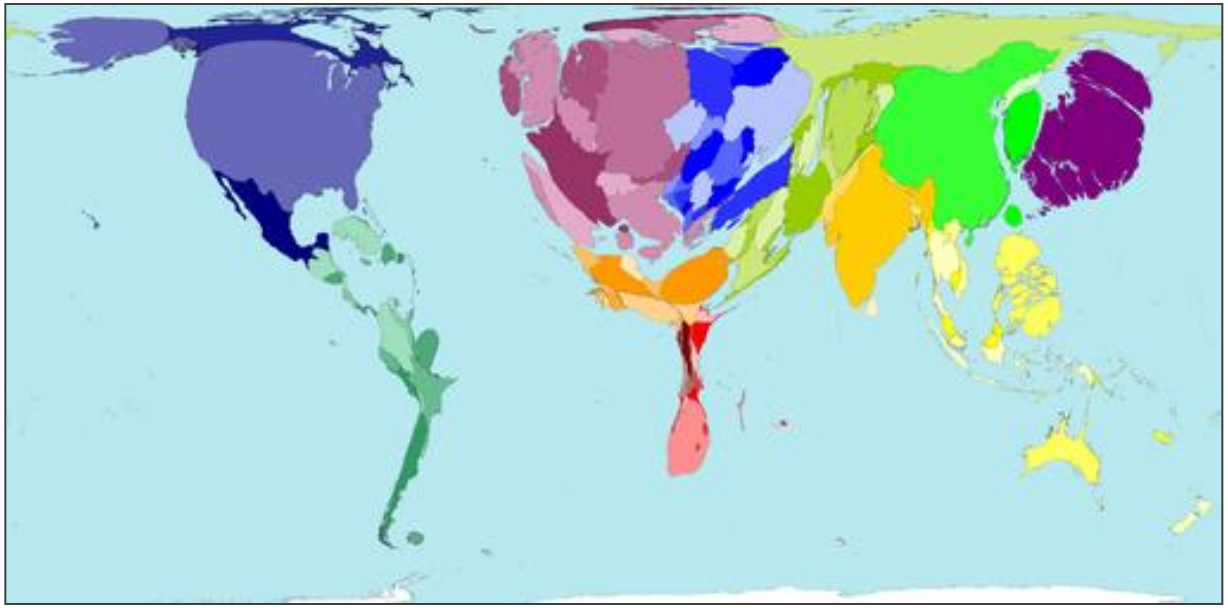
History

- 1970s and early 1980s - Alma Ata declaration
- However by the late 1980s, enthusiasm for community health workers had diminished
- 1990s saw renewed interest in community or LHW programmes in LMICs
- 2000's re-energised debates regarding their roles

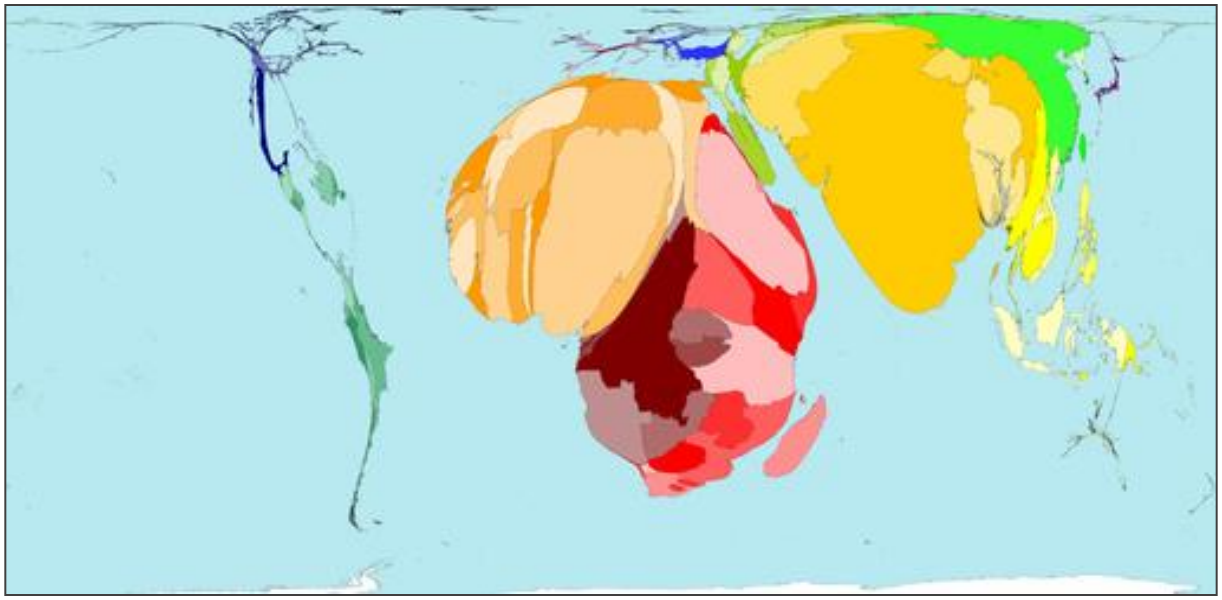
Why are we interested in them?

- 60% of deaths in children under age 5 years (currently >10 million per year) could be prevented by various existing interventions
- high cost of training doctors and nurses and the low use of services based in health facilities in many areas
- inadequate human resources

NURSES WORKING IN HEALTH SYSTEMS

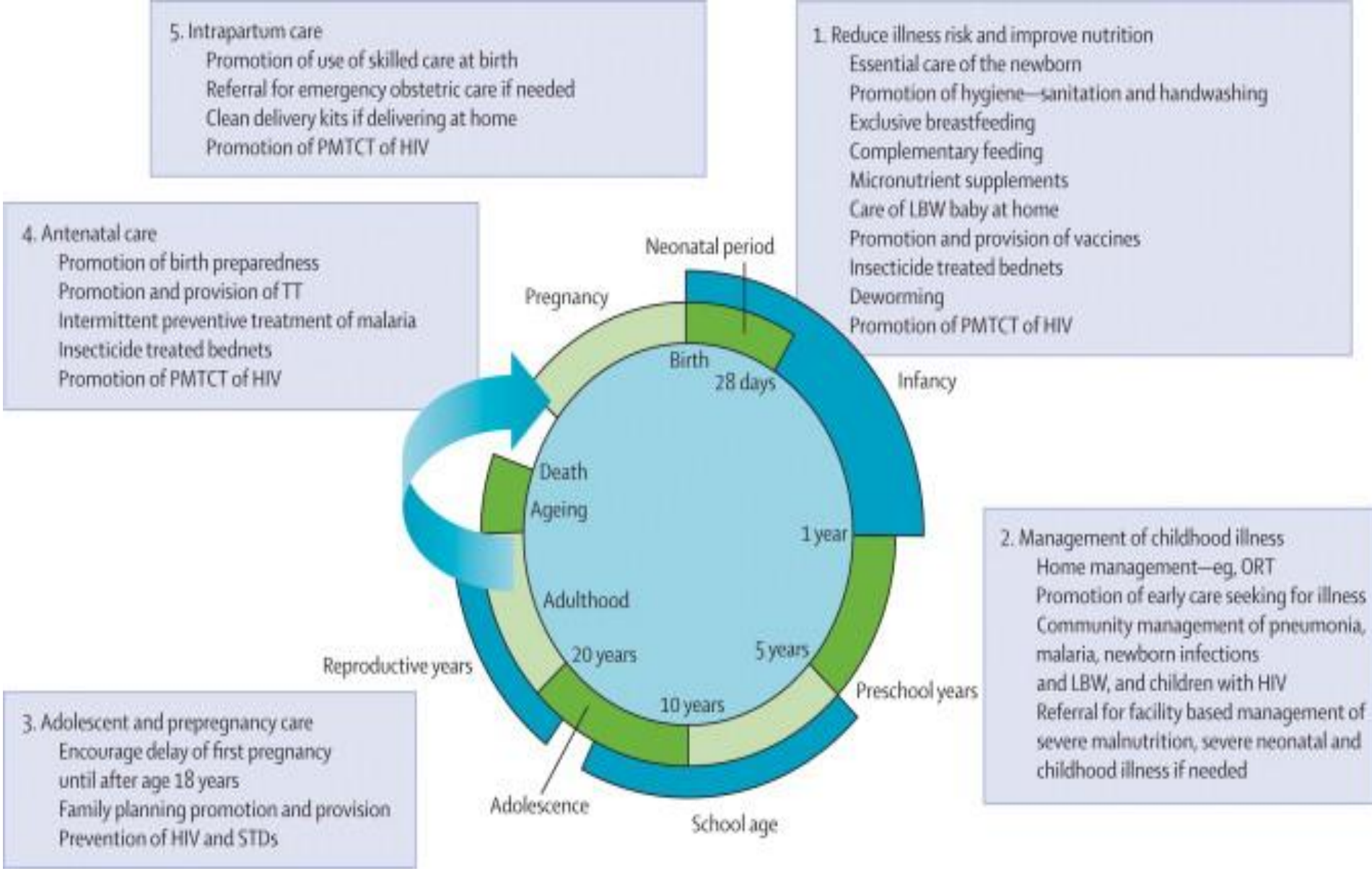


MORTALITY 1-4 YEAR OLDS



www.worldmapper.org

What do Community Health Workers do?



Taken from Haines et al Lancet 2007 Figure 1. Child health interventions throughout the life cycle which are feasible at the community level LBW=low birth weight. ORT=oral rehydration therapy. TT=tetanus toxoid. STD=sexually transmitted diseases. PMTCT=prevention of mother to child transmission

Ethiopia's Health Extension Program (HEP)

- (HEP) is an innovative community based programme started in 2003
- > 84 percent of Ethiopians live in rural areas
- Same principles as Primary Health Care, but focuses on the improvement of prevention skills and behaviours within the household
- Involves fewer facility-based services
- The Government of Ethiopia plans to train 30,000 HEWs by 2010

Ethiopia - HEP

- **Disease Prevention and Control.**
  - TB and HIV/AIDS and other STI prevention and control
  - Malaria prevention and control
  - First Aid and emergency measures
- **Family Health Service**
  - Maternal and child health
  - Family planning
  - Immunization
  - Adolescent reproductive health
  - Nutrition

Photo from Argaw 2007

- **Hygiene and Environmental Sanitation**
  - Excreta disposal
  - Solid and liquid waste disposal
  - Water supply and safety measures
  - Food hygiene and safety measures
  - Healthy home environment
  - Control of insects and rodents
  - Personal hygiene
- **Health Education and Communication as a cross cutting approach**

Why become a CHW?

Extrinsic motivation which comes from outside individuals and is triggered by external rewards or incentives

....and....

Intrinsic motivation which comes from inside an individual; and is generated by the inner satisfaction associated with the accomplishment of particular actions

Motivations

	Incentives	Disincentives
Monetary factors that motivate **individual** CHWs	Satisfactory remuneration/ Material Incentives/ financial incentives Possibility of future paid employment	Inconsistent remuneration Change in tangible incentives Inequitable distribution of incentives among different types of community workers

Strachan et al (In press), Lehmann U, Sanders D (2007)

Motivations

	Incentives	Disincentives
Nonmonetary factors that motivate **individual** CHWs	Community recognition and respect of CHW work Acquisition of valued skills Personal growth and development Accomplishment Peer support CHW association Identification (badge, shirt) and job aids Status within community Preferential treatment Flexible and minimal hours Clear role	Person not from community Inadequate refresher training Inadequate supervision Excessive demands/ time constraints Lack of respect from health facility staff

Bhattacharyya et al. (2001) & Lehmann U, Sanders D. cont

Motivations

	Incentives	Disincentives
Community-level factors that motivate individual CHWs	Community involvement in CHW Selection Community organizations that support CHW work Community involvement in CHW Training Community information systems	Inappropriate selection of CHWs Lack of community involvement in CHW selection, training and support

Lehmann U, Sanders D. cont

Motivations

	Incentives	Disincentives
Factors that motivate **communities to support** and **sustain** CHWs	Witnessing visible changes Contribution to community Empowerment CHW associations Successful referrals to health facilities	Unclear role and expectations (preventive versus curative care) Inappropriate CHW behaviour Needs of the community not taken into account

Bhattacharyya et al. (2001) & Lehmann U, Sanders D. cont

CHW Gambia and Senegal

CHW Diaries

No d'identification:

Calendrier des Activités de Relais & ASC

Mois _____Année _____

Noter toutes les activités que vous faites en tant que relais communautaires. Il pourrait y avoir des jours ou vous avez d'autres occupations, mais ce qui nous intéresse précisément se sont vos activités de relais. Noter également l'argent ou les « cadeaux » que vous recevez en guise de rémunération.

MOIS	ACTIVITE	TEMPS		MONTANT DE LA REMUNERATION*	AUTRES FORMES DE MOTIVATION	PROVENANCE DE L'ACTIVITE
		DEBUT	FIN			
1						
2						
3						
4						
5						
6						
7						

* Cette colonne renvoie à tout argent que vous recevez pour votre travail. Cet argent pourrait être donné pour l'exécution d'une activité. Il peut s'agir d'une rémunération hebdomadaire, mensuelle, ou annuelle, répondre au cas ou l'argent vous a été remis.

Autres commentaires:

Relais and ASC Pictorial Diary Keeper Details 2010-2011 - Study Senegal

- **IDENTIFICATION**
  - **How long in post? Member a 'network'**
- **SOCIO-DEMOGRAPHIC DETAILS**
  - married, regular cash income, assets, schooling
- **WORKLOAD INFORMATION**
  - Training , Supervision, Supplies, How did you become a Relais or ACS, member in other organizations, motivation
- **RELATIONSHIP WITH HEALTH SERVICE PROVIDERS OUTSIDE THE HEALTH POSTS**

CHW Mali and Burkina Faso

Qualitative Research on the Perceptions of CHW Programmes in Peri-Urban and Rural Mali

1) Organisation and Management
2) Implementation and Delivery
3) Interface with Community and Health Services

Theme Identified	Frequency (Number of times Referenced)
Services provided	146
Relationship with Community and HCP	65
Delivery Constraints	69
Selection Process	51
Remuneration and Incentives	51
Recognition of CHW	29
Prioritisation and Time Management	25
Capacity Development and Training	24
Credibility/Acceptance	23
Intensity of Interaction	18
Attributes of CHWs	15
Gender disparities	7
Education/Literacy	7
Duration of Service	5
Monitoring and Evaluation	4

Sidibe (2011)

Are Community Health Cost Effective?

Why should we care if they are CE?

- Cost-effectiveness analysis (CEA) is a form of economic evaluation that involves the estimation of cost alongside a measure of outcome (typically health gain)

- Estimates of cost-effectiveness for a particular health intervention, say in terms of cost per life saved, when compared with that of another, indicate where funds could be allocated to maximize health gain

The effect of lay health workers on mother and child health and infectious diseases

What the research says:

The use of lay health workers, compared to usual healthcare services:

- **probably** leads to an increase in the number of women who start to breastfeed their child; who breastfeed their child at all; and who feed their child with breastmilk only;
- **probably** leads to an increase in the number of children who have their immunization schedule up to date;
- **may** lead to slightly fewer children who suffer from fever, diarrhoea and pneumonia;
- **may** lead to fewer deaths among children under five;
- **may** increase the number of parents who seek help for their sick child.

The use of lay health workers, compared to people helping themselves or going to a clinic:

- **probably** leads to an increase in the number of people with tuberculosis who are cured;
- **probably** makes little or no difference in the number of people who complete preventive treatment for tuberculosis.

Lewin S. et al (2010)

Measuring Cost - Effectiveness

- The value of CHWs is influenced heavily by institutional factors such as altruism, volunteerism, community norms, reciprocity and duty and these tend not to be reflected well in estimates of cost-effectiveness.

Costs and cost-effectiveness of vaccination programme interventions involving LHWs

Results

- 2616 records identified, only 3 studies fully met the inclusion criteria, while an additional 11 were retained as they included some cost data.
- Methodologically, the studies were strong but did not adequately address affordability and sustainability and were also highly heterogeneous in terms of settings and LHW outcomes
- Studies focused largely on health outcomes
- There were insufficient data to allow any conclusions to be drawn regarding the cost-effectiveness of LHW interventions to promote vaccination uptake.

Corluka et al (2009)

Seasonal Malaria Chemoprevention (SMC)

- SMC previously known as Intermittent Preventive Treatment of Malaria in children (IPTc).

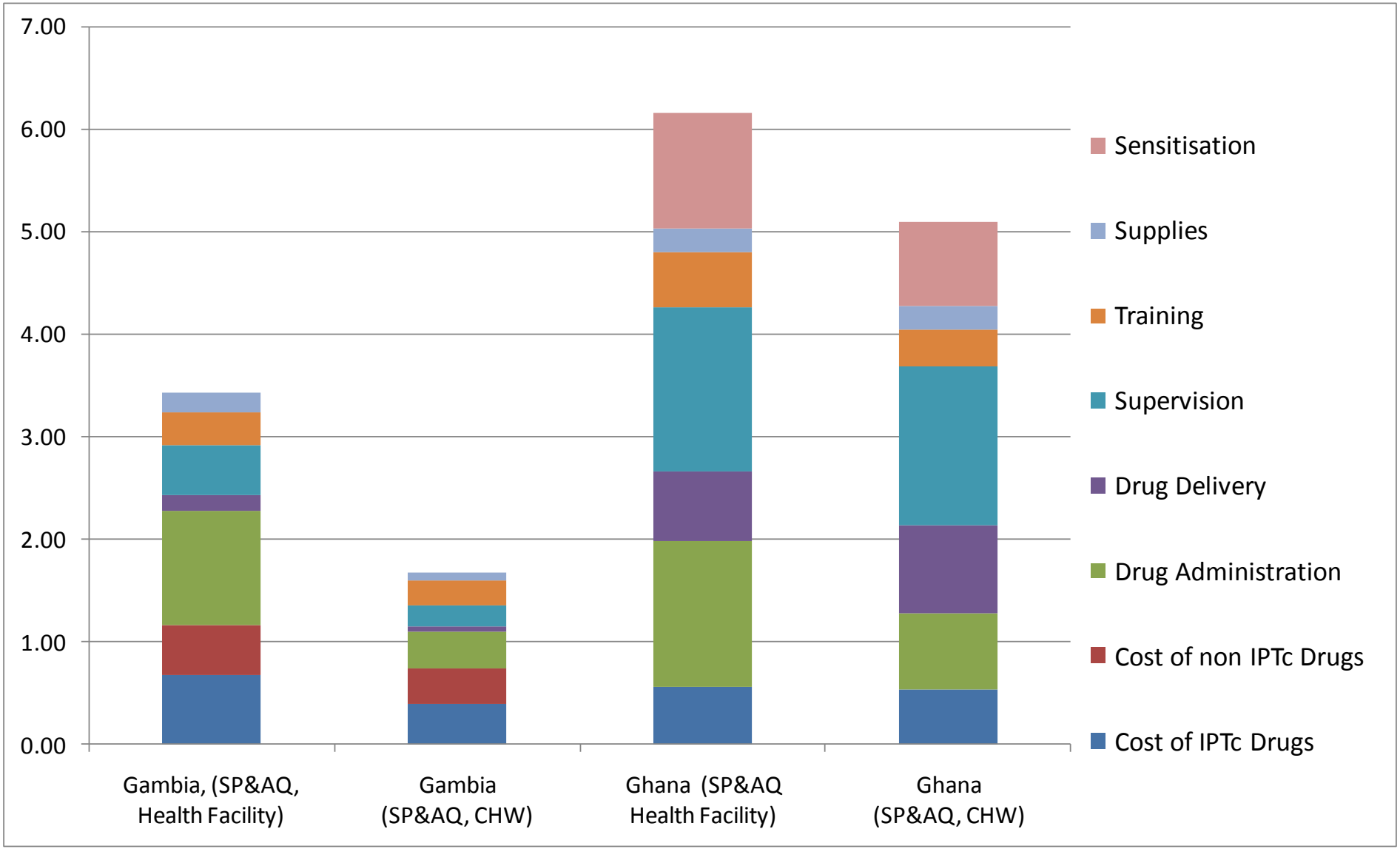
- Administration of an antimalarial drug or drug combination in a full therapeutic course to children under the age of five or ten years, on a limited number of occasions during the period of highest risk of infection.

- Studies undertaken in several countries in West Africa, have shown that SMC is a highly effective intervention in areas where the transmission of malaria is markedly seasonal, reducing the incidence of severe and uncomplicated malaria by up to 80%.

Wilson et al (2011)

Economic Cost of Delivering SMC Per Child

(USD 2008)



SMC - Seasonal Malaria Chemoprevention

Conteh et al (2010) & Patouillard (2011)

Main drivers of CE

COSTS

- The level of district management 'buy in time' particularly the opportunity cost of their involvement in training - economic costs
- Level of community sensitisation
- Level of supervision
- Method of delivering the drugs to CHW

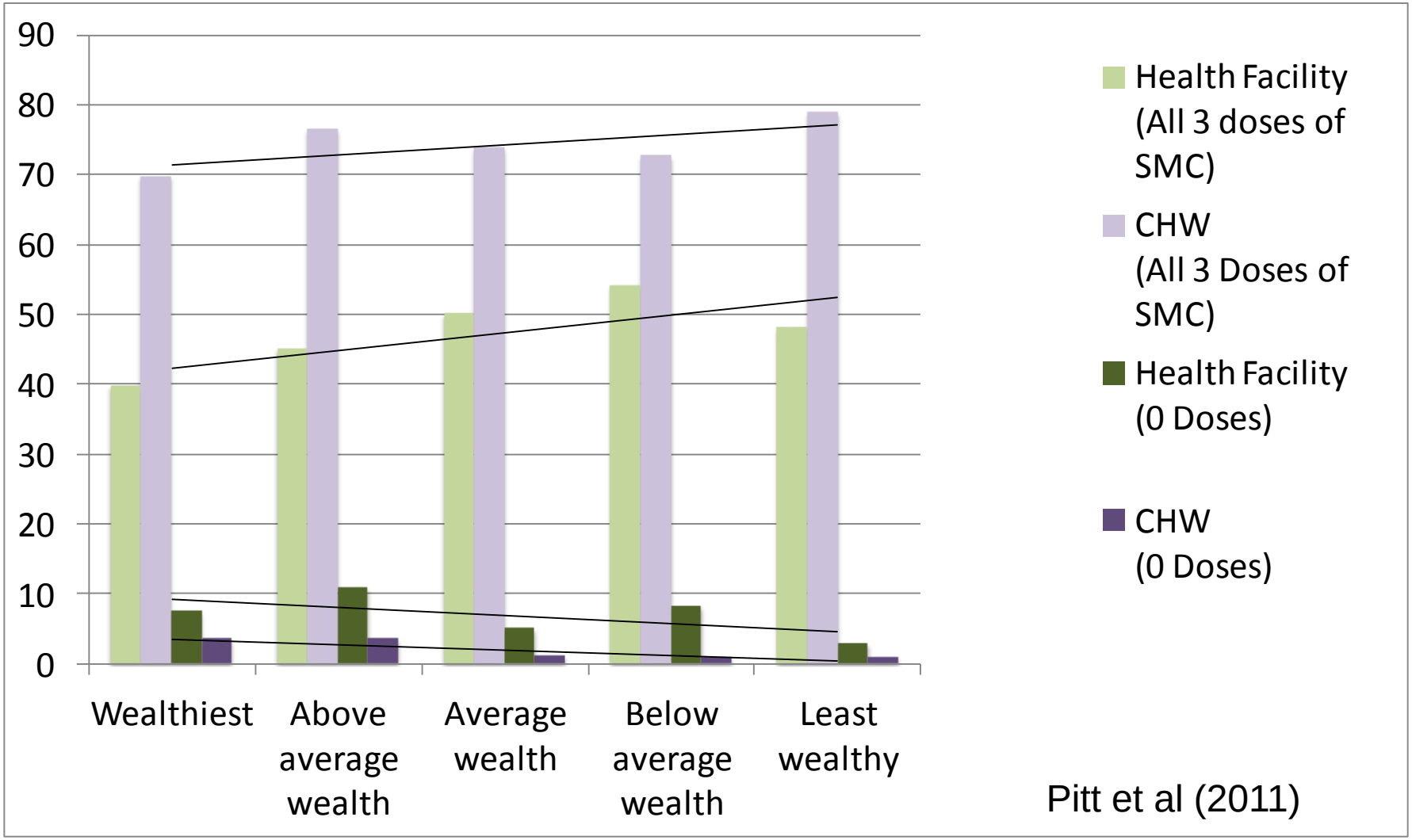
- Scale & Integration with existing delivery systems - Economies of Scale and Scope
- Existing CHW 'market'

EFFECTS

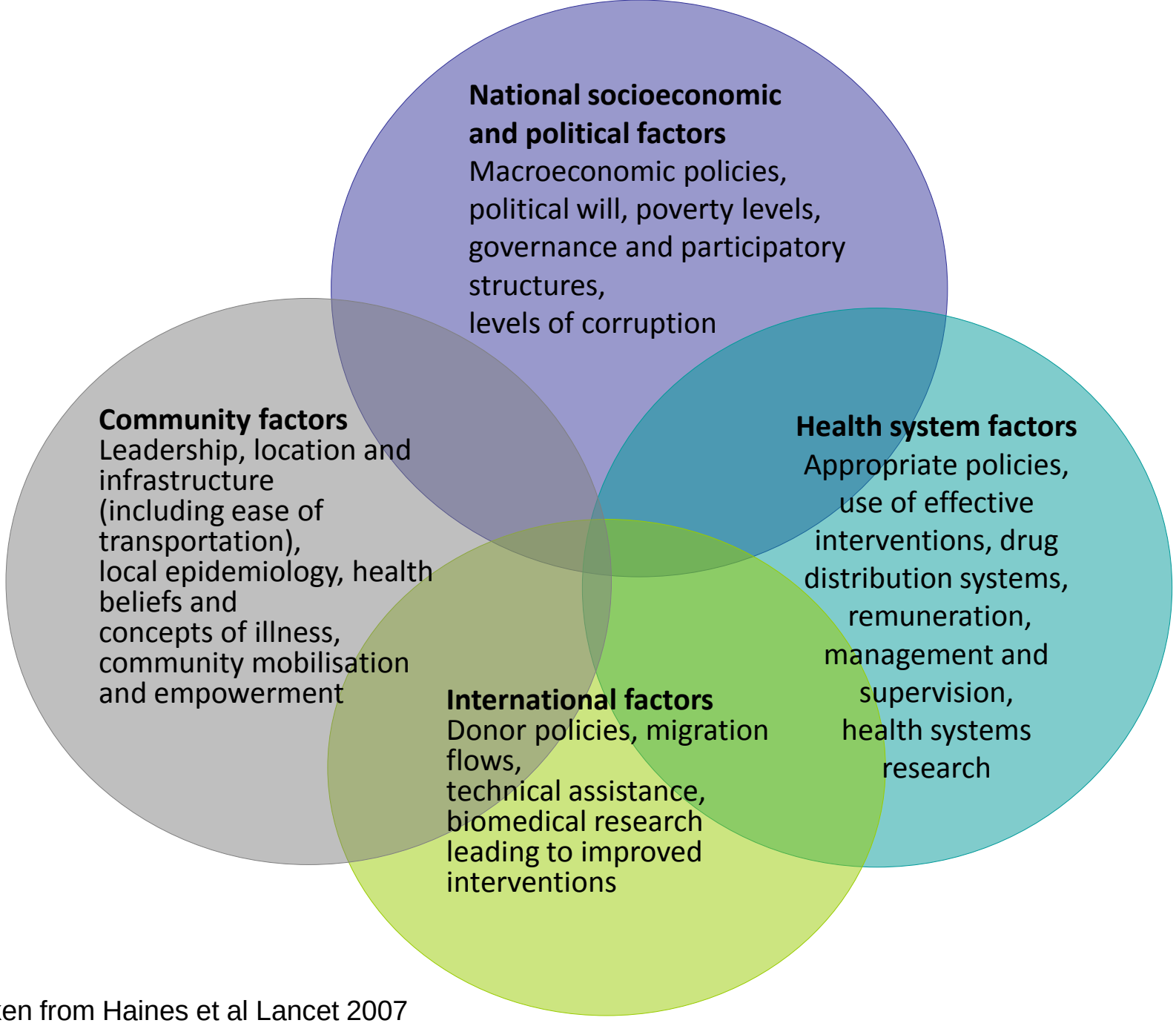
- Averting severe cases (anaemia & malaria)
- Understanding impact on deaths averted

Pitt et al (2011)

Gambia SMC
Coverage – Equity Implications



Pitt et al (2011)



Taken from Haines et al Lancet 2007

Figure 2: Examples of factors that influence the impact and sustainability of community health programmes

Conclusion

- Renewed Focus on CHW
- Growing recognition for the need for a financial reward, still no concensus
- Generalised versus target role still debated
- An answer in part to increasing coverage and addressing human resource crisis?
- More information needed on their CE
- More information needed on how to motivate and sustain CHW networks

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