

School Health and Nutrition



Imperial College
London

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Jane Lillywhite



Presentation Outline

- **Who** we are
- **Why School Health & Nutrition?**
- **What** are School Health & Nutrition Programmes?
- **Where:** Global Reach
- **How**

PCD's goal – Better education through better health



To improve the **educational achievement** of children, especially girls, through **national programmes** that enhance the **health, nutrition and psychosocial** status of children in low and middle income countries.

PCD's Objectives

1. *Evidence*

To strengthen the evidence base: Promoting good practice of cross-sectoral SHN programmes.

2. **Capacity**

To strengthen the capacity of the education sectors in low and middle income countries: Developing policies and plans for cross-sectoral programmes in SHN, early child development, HIV education and support for orphans and vulnerable children.

3. **Knowledge**

To improve, collect, share and disseminate knowledge: On cross-sectoral SHN programmes.

4. **Partnerships**

To strengthen global, regional, national and local partnerships: Facilitating consensus and supporting effective programme coordination and implementation.

Education for All

at the EFA meeting in Addis Ababa in February 2010, the participants urged, “*Education For All Partners [should] intensify efforts to support initiatives targeted at the most marginalized, such as cash transfers, school health and school feeding, scholarships and gender-specific interventions.*”

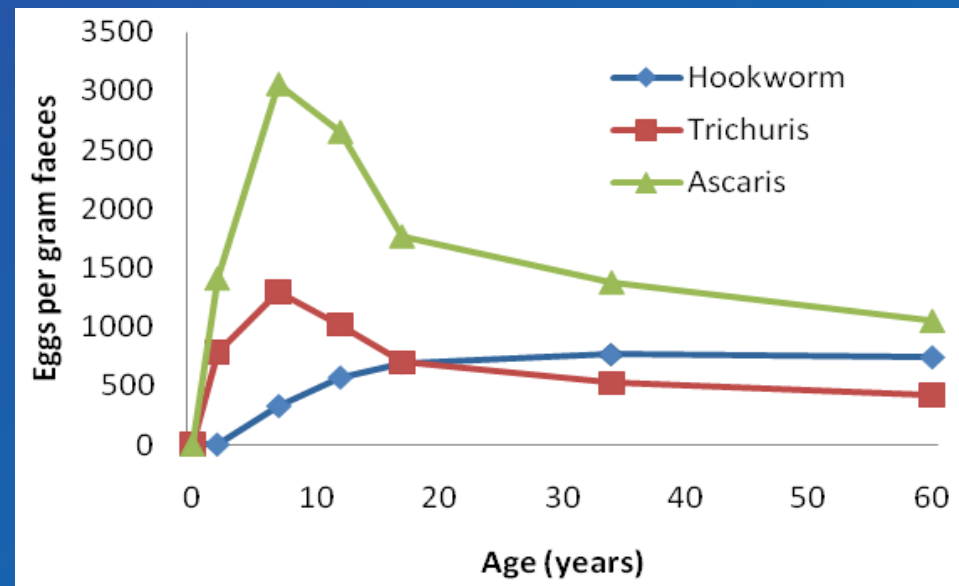
- Evidence shows that simple, school-based health and nutrition interventions can have significant impact on health, **nutrition**, education and long-term development.
- In terms of access to education, such interventions have been shown to increase attendance by 25%.
- In terms of quality, such interventions improve the ability of the child to absorb the education on offer.



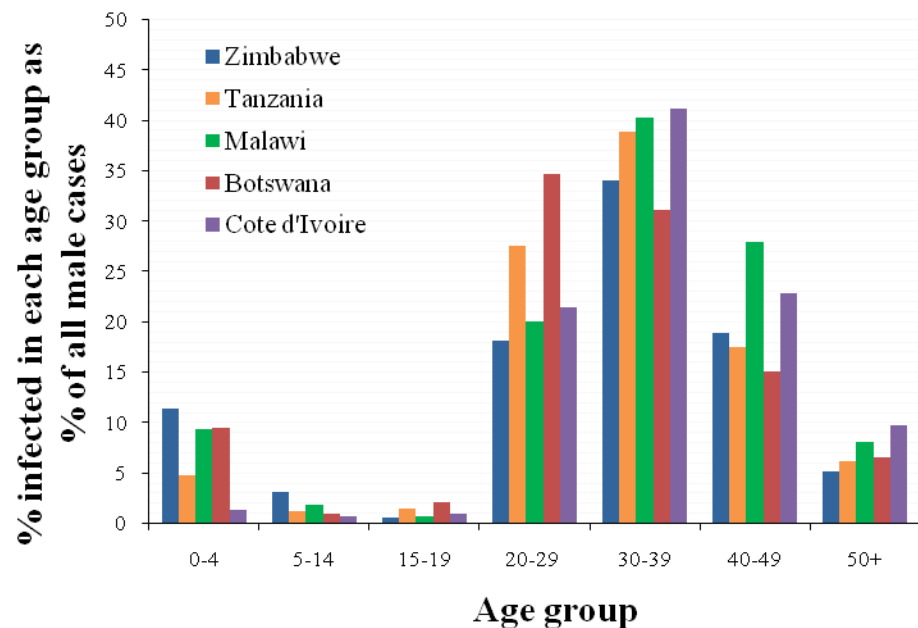
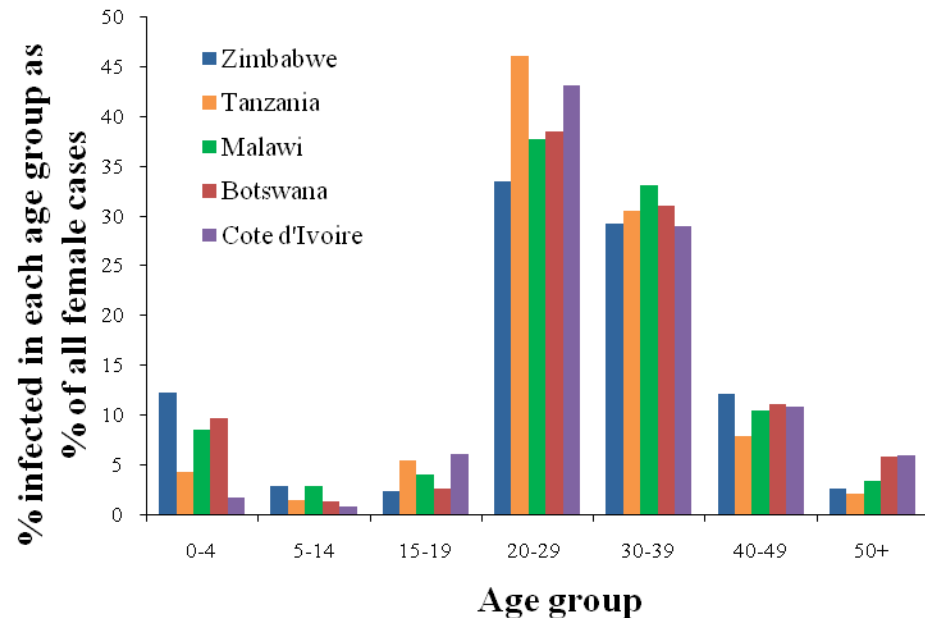
Highly prevalent conditions affect school-age children's health and education

	Prevalence	Total cases (millions)	IQ points lost per child	Lost years of schooling (millions)
Worms	30%	169	3.75	201
Stunting	52%	292	3	284
Anemia	53%	298	6	524

Over 400 million school-age children are infected with worms worldwide.

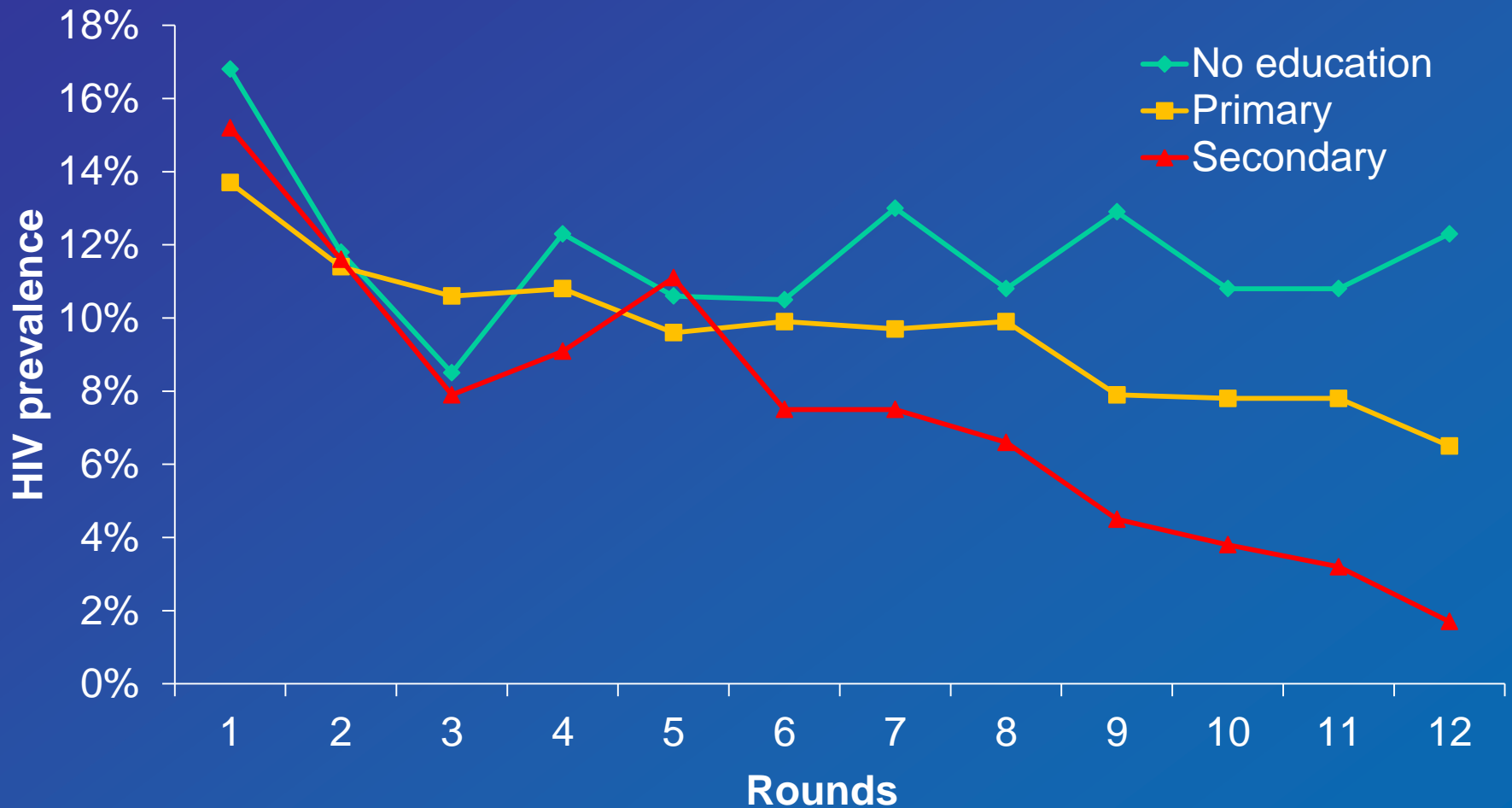


Why are schoolchildren sometimes called a “window of hope” to prevent HIV?

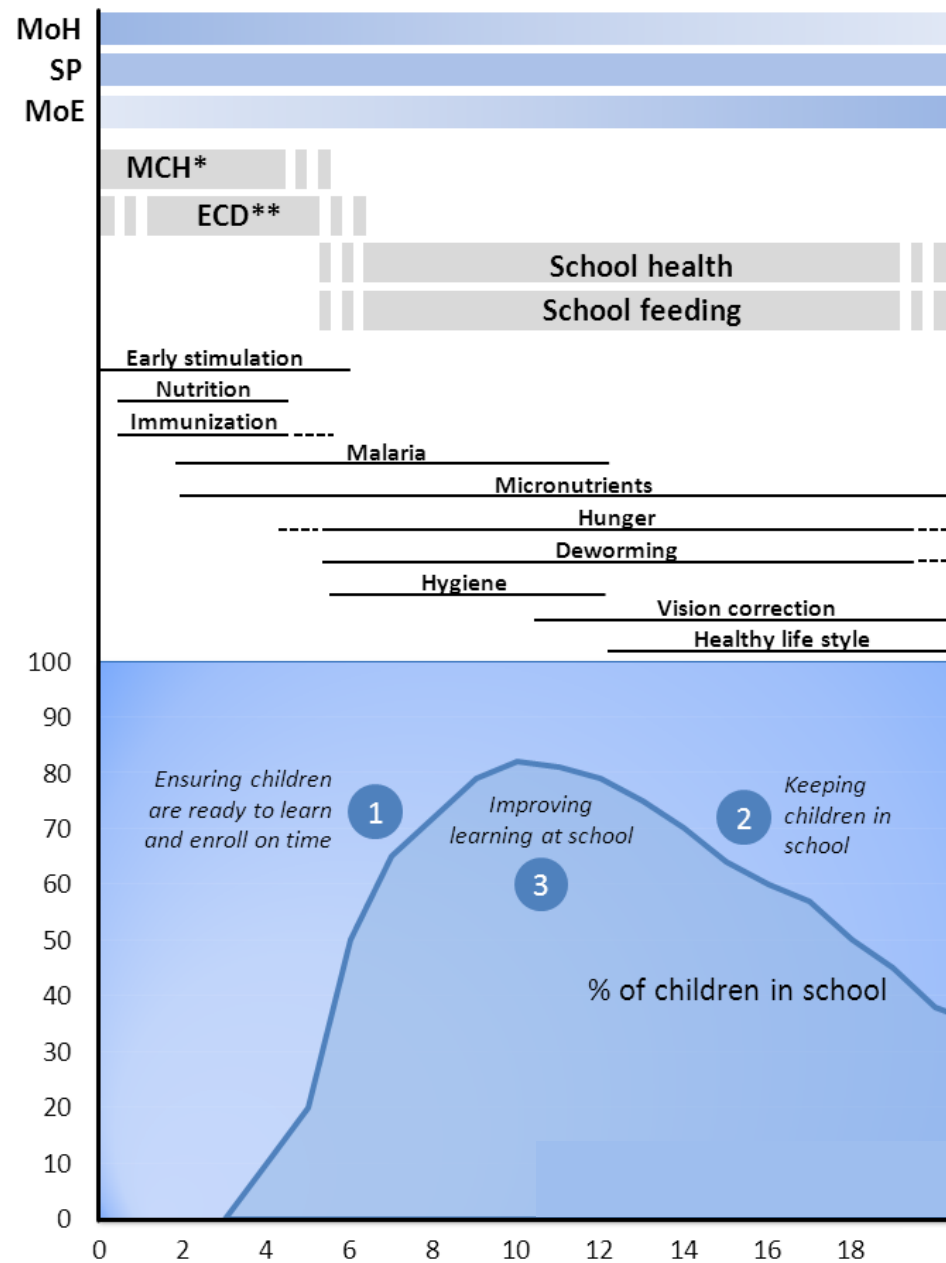


Education a “social vaccine”?

HIV prevalence by education category, Rural Uganda, 1990-2001.
Individuals aged 18-29.



How ECD and school health can help change the current education profile in low-income countries: Three key areas for improvement

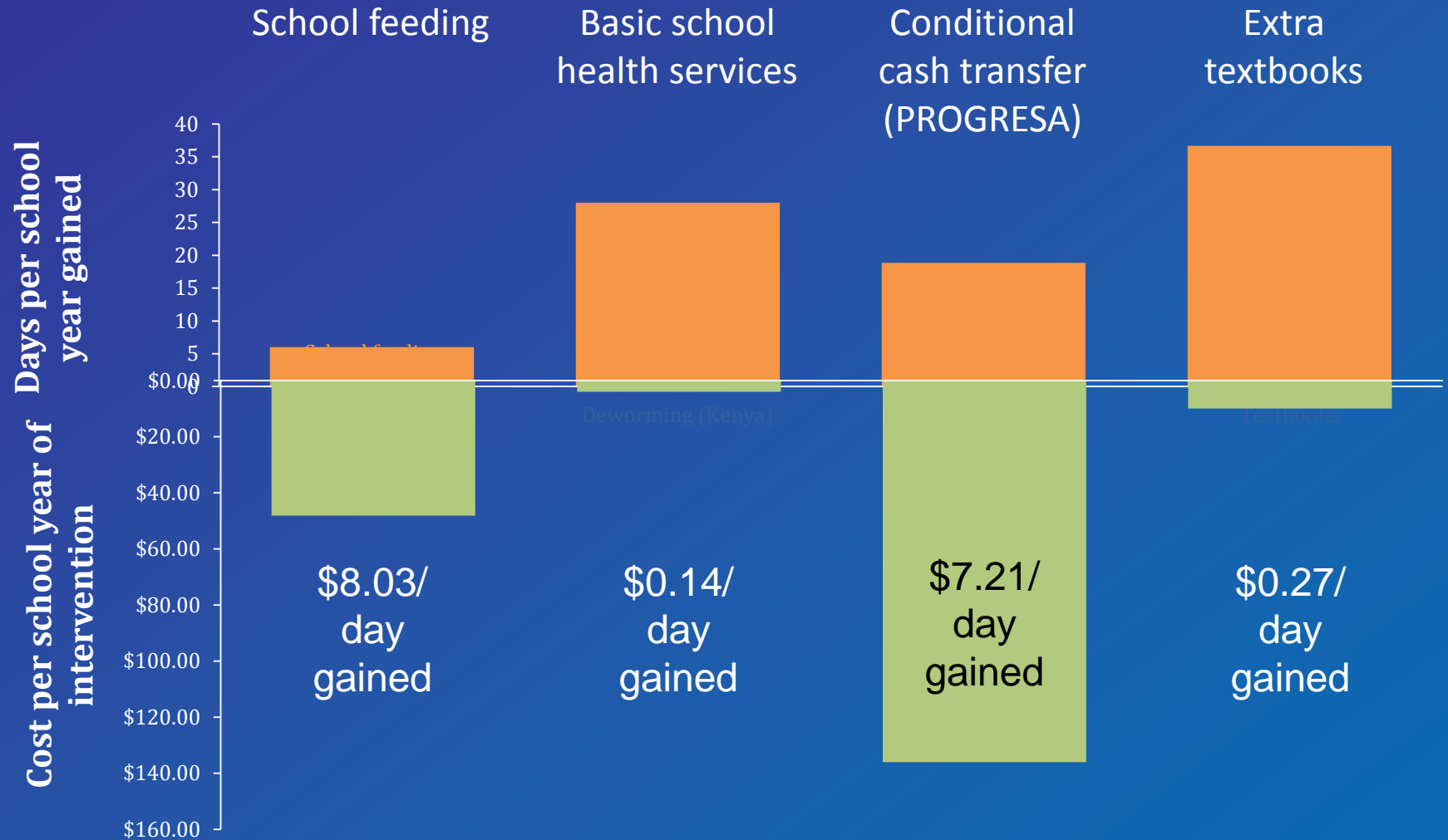


*includes early nutrition

**includes early stimulation

Source: Bundy 2010

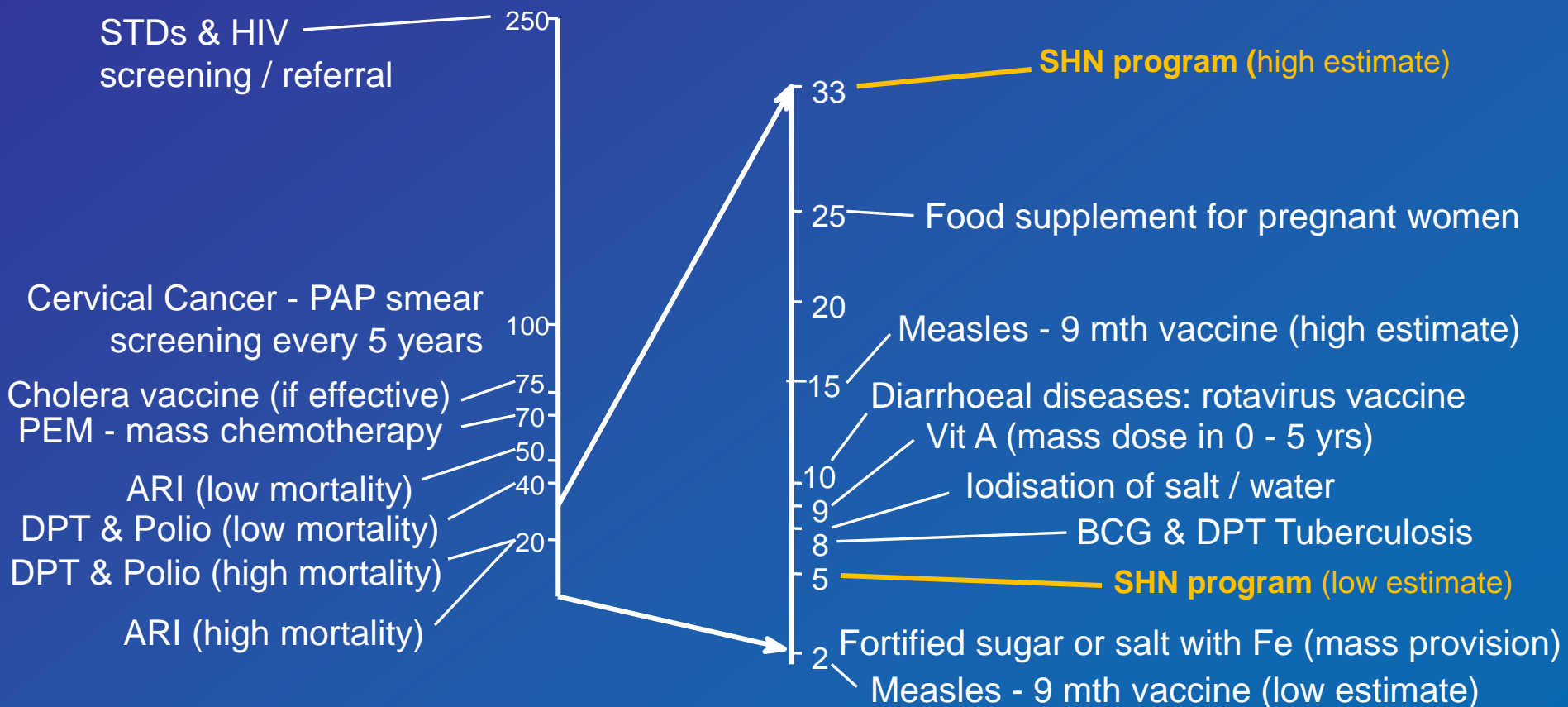
Cost and effectiveness versus other measures to improve attendance



Source: Jukes *et al.* (2008)



Cost in US\$ per DALY (Disability Adjusted Life Year)



SHN Success Stories

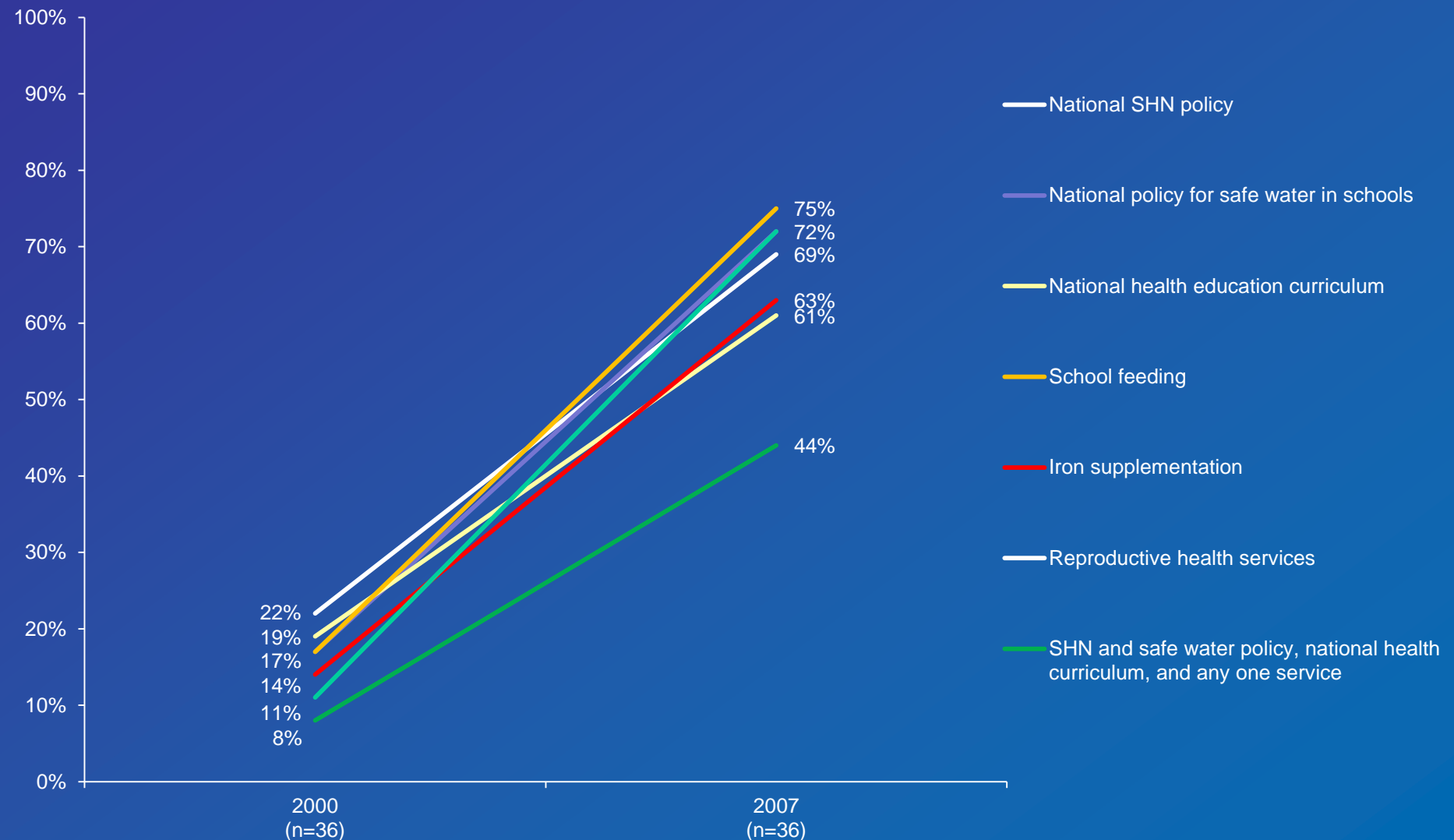
Education Sector's Response to HIV and AIDS

- National MoE HIV Focal Points
- Regional Network of HIV&AIDS Ministry of Education Focal Persons (EAC, ECOWAS, ECCAS, EduCan)
- National policies and strategies

School Based SHN Services

- School based deworming
- Delivery of health services for malaria through schools
- Home Grown School Feeding

Countries in Africa and Asia that are implementing SHN programs



***Taking school health
programmes to scale.***

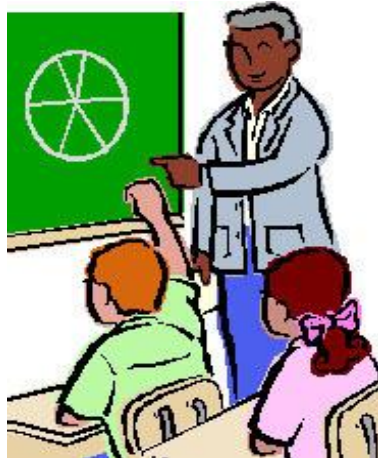
How the education sector can provide an entry point

Using the school infrastructure to...

**Deliver health &
nutrition
services**



**Deliver health
education**



**Promote a safe
school
environment**



Delivery costs for deworming

Strategy	Drug for deworming	Country	Delivery cost per treatment (US\$)
Mobile health team	Albendazole	Montserrat	0.51
	Levimasole	Nigeria	0.32
	Praziquantel	Tanzania	0.21
School-based	Albendazole	Ghana	0.04
		Tanzania	0.03

Bihar has successfully implemented the largest school-based mass deworming programme globally

- Cost-effectively treated over 17 million school-age children (Rs. 25 or USD 0.56 per child per year)
- State-wide coverage across all 38 districts
- Coverage of children through network of over 67,000 government schools
- First-ever programme implemented in just 3 months from February – April 2011
- Achieved through the active partnership of two government departments
 - Department of Health & Family Welfare (DoH&FW)
 - Department of Human Resource Development Education (DoHRD)
 - Supported by the Partnership for Child Development (PCD) and Deworm the World (DtW)

Total number of School-age Children in Bihar (Source: BEPC; 2010-11)	20,800,000 (20.8 million)
Total School-age Children Dewormed (Source: District-level data , 2011)	17,044,840 (17.04 million)

What Bill Gates Jnr had to say
about de-worming and schools at
the meeting on Neglected
Tropical Diseases in London on
Monday Jan 30th 2012

Verbatim transcript, Monday 30th January 11.30am....Bill Gates Jnr

"... the parasite load that the young kids [have] of these worms...means that they are malnourished in a way so that their brain never fully develops... and so for the rest of their lives they are permanently impacted by this" "These health interventions have a huge impact on allowing school children to be able to achieve. There was a really good study on hookworm in which they compared incentives for kids to go to school....huge investment in the schools [compared with] ...hookworm treatment. Getting rid of hookworm had the biggest impact on allowing those students to learn. All these things really have a multiplying effect on each other....improving agriculture so that kids have enough to eat....avoiding diseases... and [providing quality] education....these are the magic three which lead a country to meet the MDGs."

A Global Atlas of Helminth Infections

Mapping this wormy world



A new open-access, global information resource for public health professionals and managers of deworming programmes.

www.thiswormyworld.org

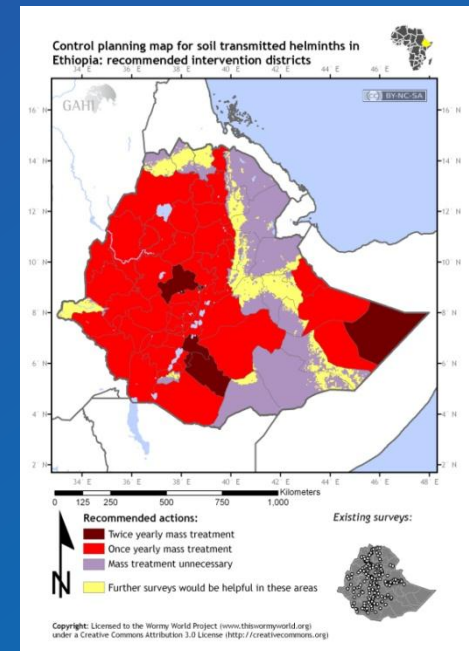
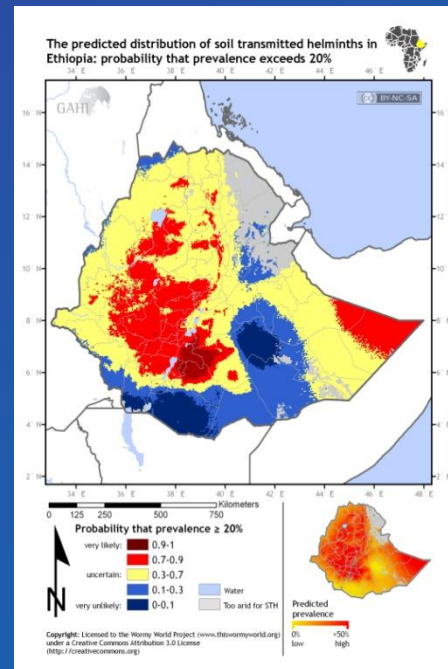
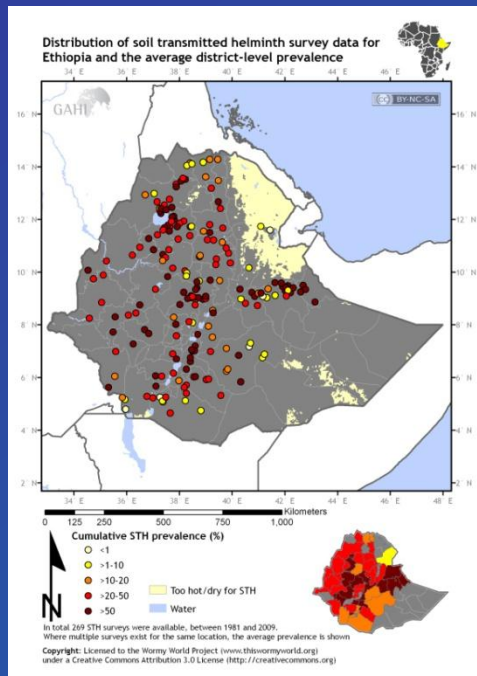
- 1) Provide an information resource to governments, planners and development partners to guide control efforts
- 2) Highlight areas where further survey information is required.

DtW-PCD-GAHI overlap: an obvious information resource when offering technical assistance re the sampling and targeting of deworming

The Maps

Three types of map are presented per country:

- 1) a **survey data map** showing the prevalence of worm infection based on survey data
- 2) a **predictive risk map** showing the probability that infection prevalence warrants mass treatment according to recommended WHO thresholds
- 3) a **control planning map** showing which districts require mass treatment or where further surveys are probably needed



Why Develop A Global Atlas?

Geographical targeting is required to ensure that programmes are implemented appropriately, focusing resources on areas of greatest need.

The maps can be used to:

- define the numbers at risk of infection with each STH and schistosome species
- determine areas requiring mass treatment and provide estimates of target populations
- forecast drug needs and costs for albendazole and praziquantel
- facilitate efficient allocation of scarce control resources

