Generating evidence of the effectiveness and scalability of Community Health Clubs on health and behavioral outcomes: Evaluation of CBHEPP in Rwanda

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Background: Rwanda

- 44% of children under the age of five are moderately or severely stunted.
- 25% of the population use unimproved latrines.
- Only 10% of households have hand-washing facilities, and only one in five of such households use water and soap for handwashing.
- Nearly a quarter of households use unprotected springs as the main source of drinking water.

Background: CHCs

- Community health clubs (CHCs) provide a vehicle to inform and incentivize households to change their behavior in relation to a range of health outcomes.
- The information component arises from courses covering a wide range of health, hygiene and sanitary subjects and facilitated by a community health worker.
- The incentives for sustainable behavior change follow from the social sanctions and rewards that club members can impose/bestow on members.

CBEHPP in Rwanda

- Community Based Environmental Health Promotion Programme (CBHEPP) in Rwanda is the first programme internationally to take the Community Hygiene Club approach to scale nation-wide.
- President Paul Kagame and his cabinet have directed that all 15,000 villages across Rwanda should have an operational CHC that will address all preventable diseases through hygiene behaviour change.

Study Design

- Three-year study
  - Cluster randomised trial (years 1-2)
  - Evaluation of sustained impact evaluation (year 3)
- For CRT, 150 villages randomized to one of three study arms:
  - standard approach
  - minimum approach
  - control group

Standard Approach

- Implement all 20 sessions as per the training manual.
- Community health workers to receive careful training in the delivery of the CHC instruction.
- High quality instructional materials (in color)
- Members will each have a membership card.
- Home competitions and a graduation ceremony will be held.
- Monitoring of the clubs will be conducted by community health workers using mobile phones.

Minimum Approach

- 8 sessions covering all the WASH topics.
- Facilitated by CHWs receiving minimal training
- Use black/white photocopies of instructional materials.
- Members will not be issued with membership cards and will not have a graduation ceremony or home garden competitions.
- Minimal monitoring of this arm will be carried out by environmental health officers.

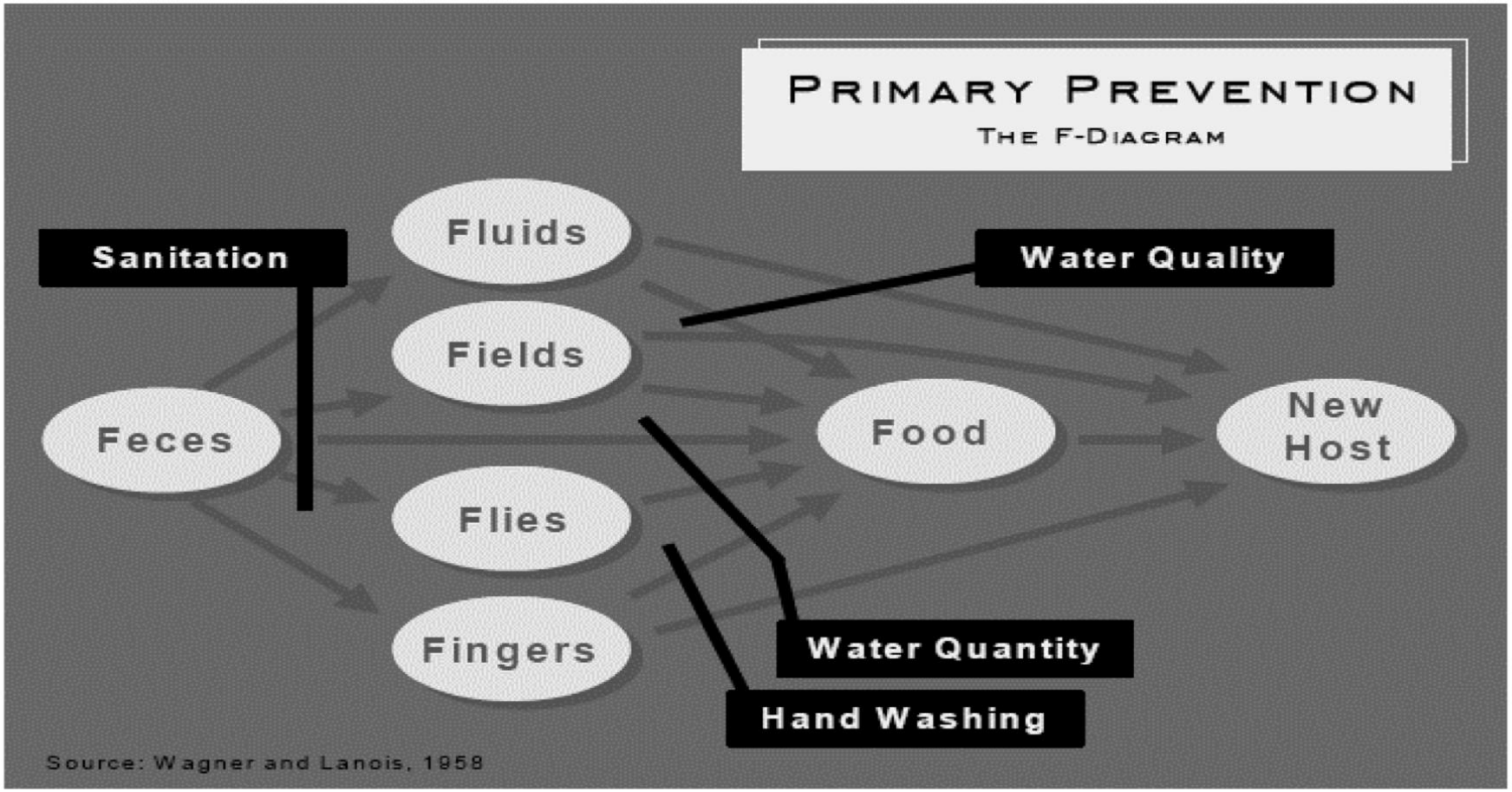
Study Site: Rusizi

- Chosen in consultation with the environmental department in the ministry of health and implementing partners.
- Largely rural district with a high incidence of under-5 diarrhea and considerable worm burden
  - Nearly 2500 documented cases of diarrhea and about 3500 cases of intestinal parasites per 100,000 inhabitants.
  - More than 1350 reported cases per 100,000 inhabitants.

Study Objectives: Health Outcomes

- Longitudinal prevalence of diarrhea among children under 5 (primary outcome) and all ages,
- Prevalence of malaria
- Child anthropometrics
- Self-reported health status by household members.
- Clinic attendance for diarrhoea and lower respiratory tract infection and malaria.

Study Objectives: Impact on Environmental Exposure



- Water quality, hand contamination, presence of human faeces

Study Outcomes: Knowledge and Practice

- Knowledge and Practice of target behaviors
  - sleeping under a mosquito net
  - child health management
  - effective drinking water treatment and safe storage and dispensing
  - improved nutritional practices
  - the construction and use of hygiene and sanitary behavior supporting infrastructure such as improved latrines
  - hand washing stations with soap

Study Outcomes: Community functioning:

- As CHC intervention relies on and potentially builds social capital, we will:
  - Collect information on the extent of trust, other regarding behavior and cooperation at the community level.
  - Examine the patterns of diffusion of adopted hygiene and sanitary behavior between members and non-members and across communities with different levels of social capital.

Identify Drivers of Success: Quantitative Methods

- Social functioning of the community
- Quality of the community health workers
- Quality of, and extent to which the political leadership is involved in the clubs
- Composition of the club/community along gender, age and income dimensions

Identify Drivers of Success: Qualitative Methods

- Experimental games that measure directly a series of social preferences
  - measuring proxies for the willingness of individuals to adopt negative-externality avoiding behaviors
  - measuring trust within the community
  - measuring the degree of contribution to community public good.

Study Schedule

- Preparation and Planning (Months 1-3)
- Baseline (Months 4 and 5)
- Randomization and Implementation (Months 6-12)
- Surveillance and Sampling (Months 13-24)
- Sustainability (Months 25-36)

Participants

- Implementers
  - Rwanda Ministry of Health
  - Africa Ahead
- Investigators
  - Georgetown University
  - Innovations for Poverty Action
  - School of Public Health at the National University of Rwanda (NURSPH)
  - London School of Hygiene & Tropical Medicine
- Funding
  - Bill and Melinda Gates Foundation