

The Utility approach, Ethiopia

Safe water with a utility led distribution of household water filters

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The
SMART
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Oklahoma 2019



Ethiopia

107 mln people. 89% unsafe water

- Powercuts, need to store water
- Old piped systems
- 57 % of improved sources unsafe
- 80 % water in jerrycans unsafe,
unsafe,



Solution? Treatment

- **Point- of- Entry**
Water kiosk, Chlorine dispenser,..
- **Point- of- Use**
Boiling, Chlorine, Water filters



Which is more effective in reducing diarrhea?

Chlorine ?



Filters ?



Chlorine 25%

Filters 50 - 61%

Cochrane 2015. Wolf, Bartram, Clasen 2018



Filters used more consistent

Chlorine does not eliminate *Cryptosporidium*, 2nd cause of child mortality. GEMS study 2013

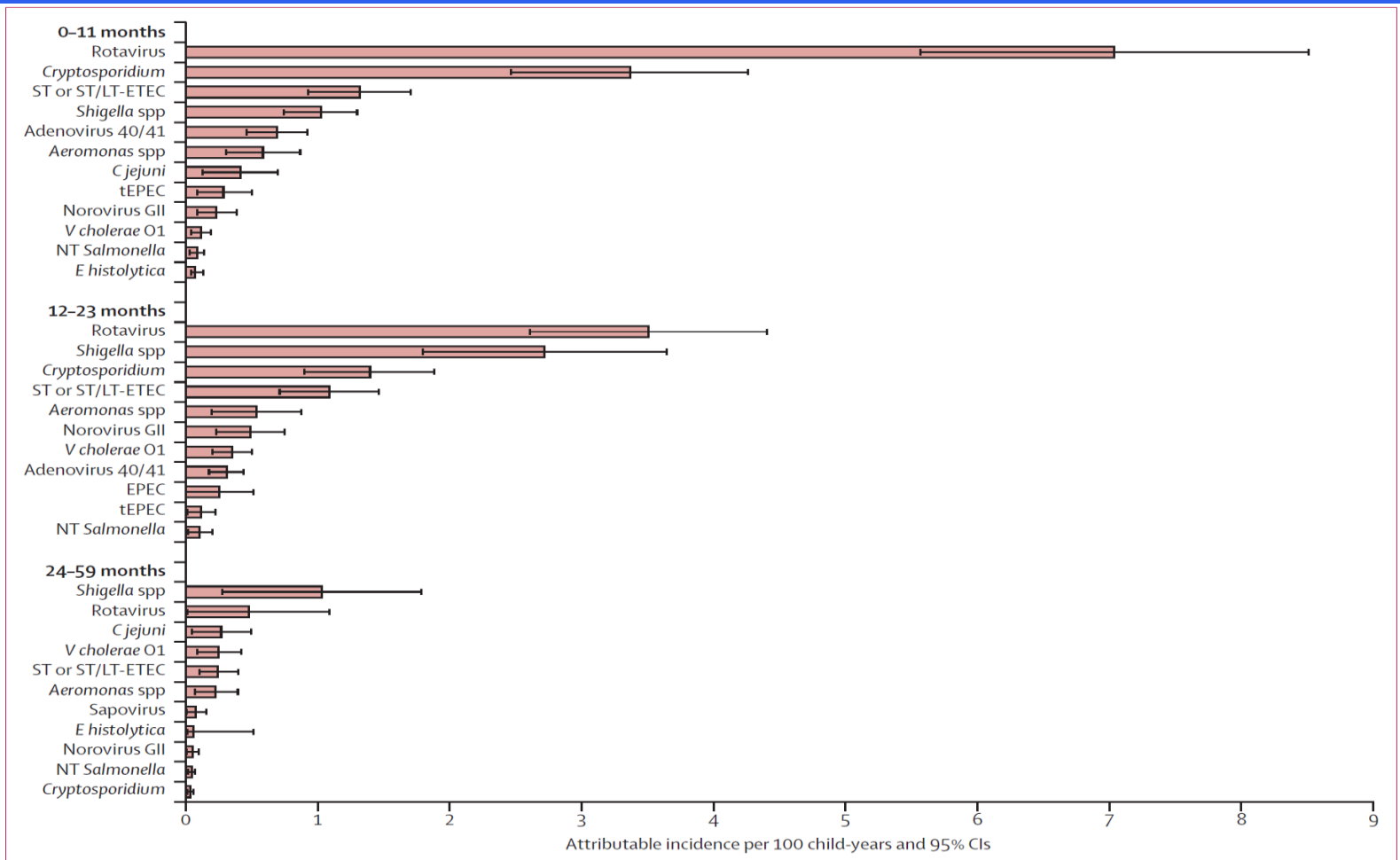
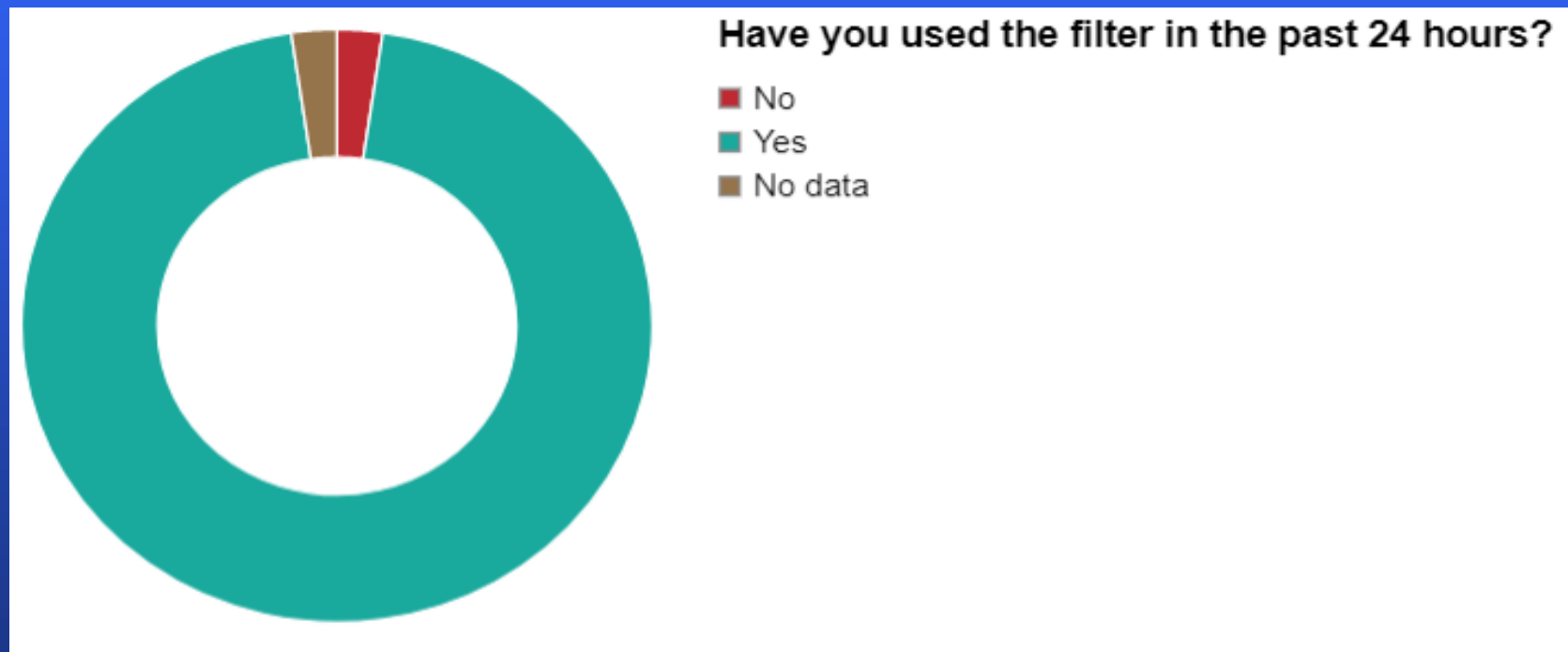


Figure 4: Attributable incidence of pathogen-specific moderate-to-severe diarrhoea per 100 child-years by age stratum, all sites combined

Are filters used consistently?

41 out of 43 respondents used the filter in the past 24 hours



Finote Selam pilot HWTS through Utilities (Nov '16-Dec '18)
Source: Merton, Thijs, April 2018, MSc Research

Conclusions

- Of all treatment options new water filters seem most effective;

- Remove bacteria, protozoa, (virus)
- Used all the time (adherence)
- New Table top models are userfriendly attractive and.... affordable

Proposition

For a 1 time grant of \$ 2 / person, all can have safe drinking water by 2030

\$ 2 /person used for

- Awareness

Country wide, long term awareness campaigns. Benefits treating water at the house hold level. Role Government ,NGOs

- Supply chains

Commercial supply chains of Effective, Attractive, Affordable filters
Role of private sector, support Government

- Payment system

For those who can not pay a filter in 1 time. Micro/ group credits, mobile payment,
Task private sector, support Government, NGOs

- Support the poorest

Condition do not distort market!!!. Eg. if an NGO give filters to pregnant women, give a voucher so she can get a filter in the shop

Funds needed to reach SDG6

\$ 114 Bln / year over 10 years

World Bank Stockholm, 2019

Safe drinking water is possible for

\$ 0.5 Bln / year over 10 years

2.5 Bln people x \$ 2/person : 10 yrs

\$ 2/p. for PP Partnership

- Public.

Government, Awareness. Invest \$0.1- 0.5/p

- Private.

Filter producers, retailers. Invest \$1-3/p

Families who buy filters invest \$3-6/p

Example use \$2 / person

35% awareness, 15% supply chain, 50% support poorest

Breakthrough in Ethiopia

First country in Africa where utilities “admit” they can not deliver safe water 24 /7.

As service some start selling filters



Lessons

- Make HWT attractive

Chlorine, boiling is not attractive

- Supply chain of affordable HWT options

- Health is not a motivator

Motivators to invest in a water filter are;

Aspiration, Peer pressure, Trust, Money saving

Why can it work in Ethiopia?

Policy to scale HWTS

Cooperation Gouvernement,
NGOs, private sector

Local production
reduce cost of filters

15000 utilities





Safe water for all? Ethiopia can