



NEGLECTED TROPICAL DISEASE
NGO NETWORK

A global forum for nongovernmental organizations
working together on NTDs

Welcome to the NNN Conference 2020

Accelerating to 2030:
Building Resilient NTD
Programmes in a
Changing World

With thanks to our
sponsors



Virtual Event

8th – 10th September 2020

Billy Weeks (2016, Chikwawa, Malawi)

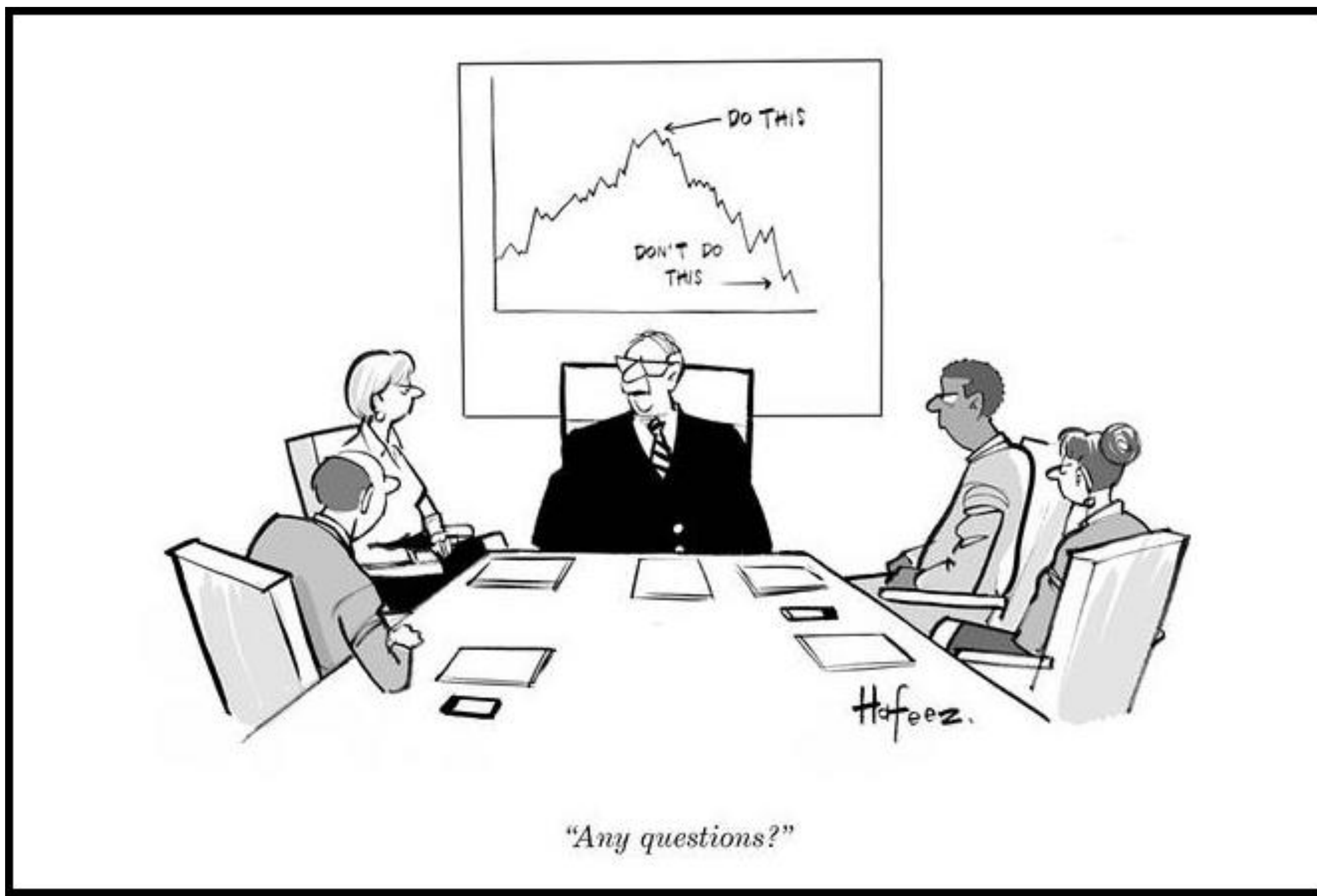


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From Evidence to Practice and Back Again: transforming WASH and NTDs programming





Where are you joining us from today?

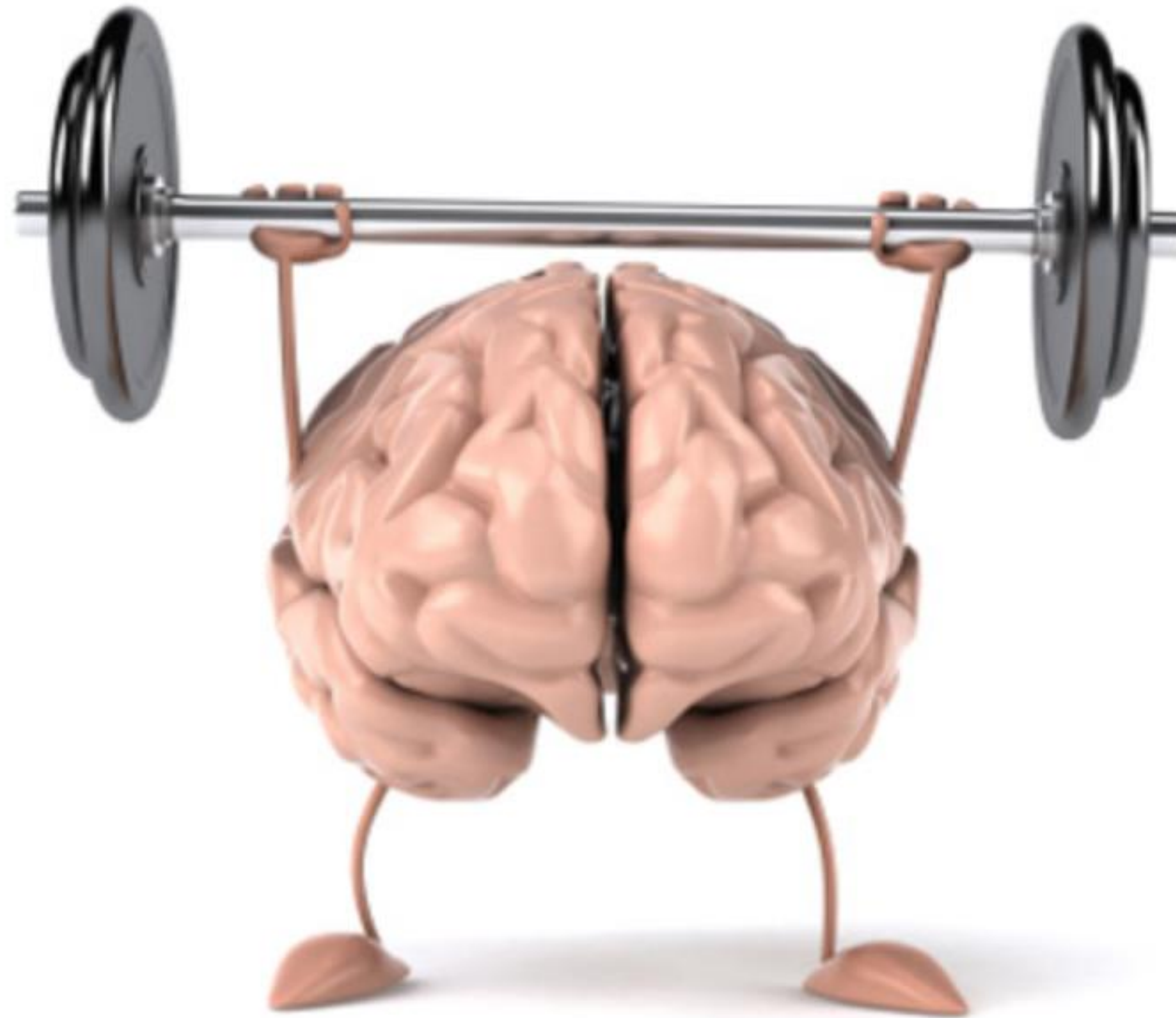
Purpose

Explore:

- the strengths and limitations of available evidence, and use of evidence, on WASH programming for NTDs;
- strategies for enhancing access to and use of available evidence to strengthen WASH programmes, including the role of the NNN;
- strategies for generating and sharing high quality ideas, approaches and evidence across the WASH and NTD communities.



Let's get warmed up first!



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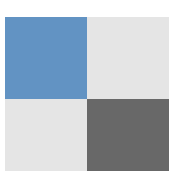


True or False?

26% of schools in sub-Saharan Africa had a basic hygiene service in 2019



Image: JMP, 2020



TRUE or FALSE: 26% of schools in Sub-Saharan Africa had a basic hygiene service in 2019.

TRUE

FALSE



True or False?

Universal access to toilets will eliminate soil-transmitted helminths

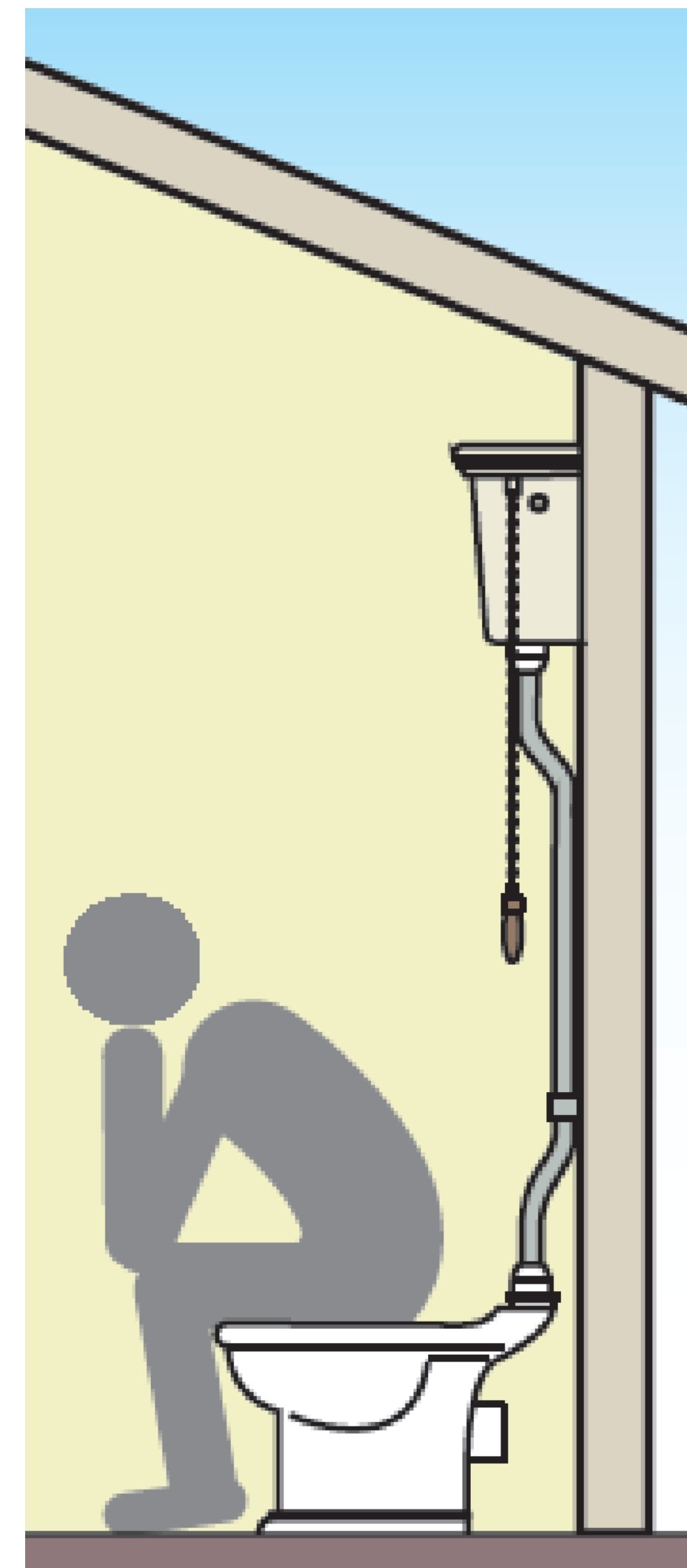
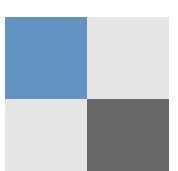


Image: WHO, 2018





**TRUE or FALSE: Universal access to toilets
will eliminate STH**

TRUE

FALSE

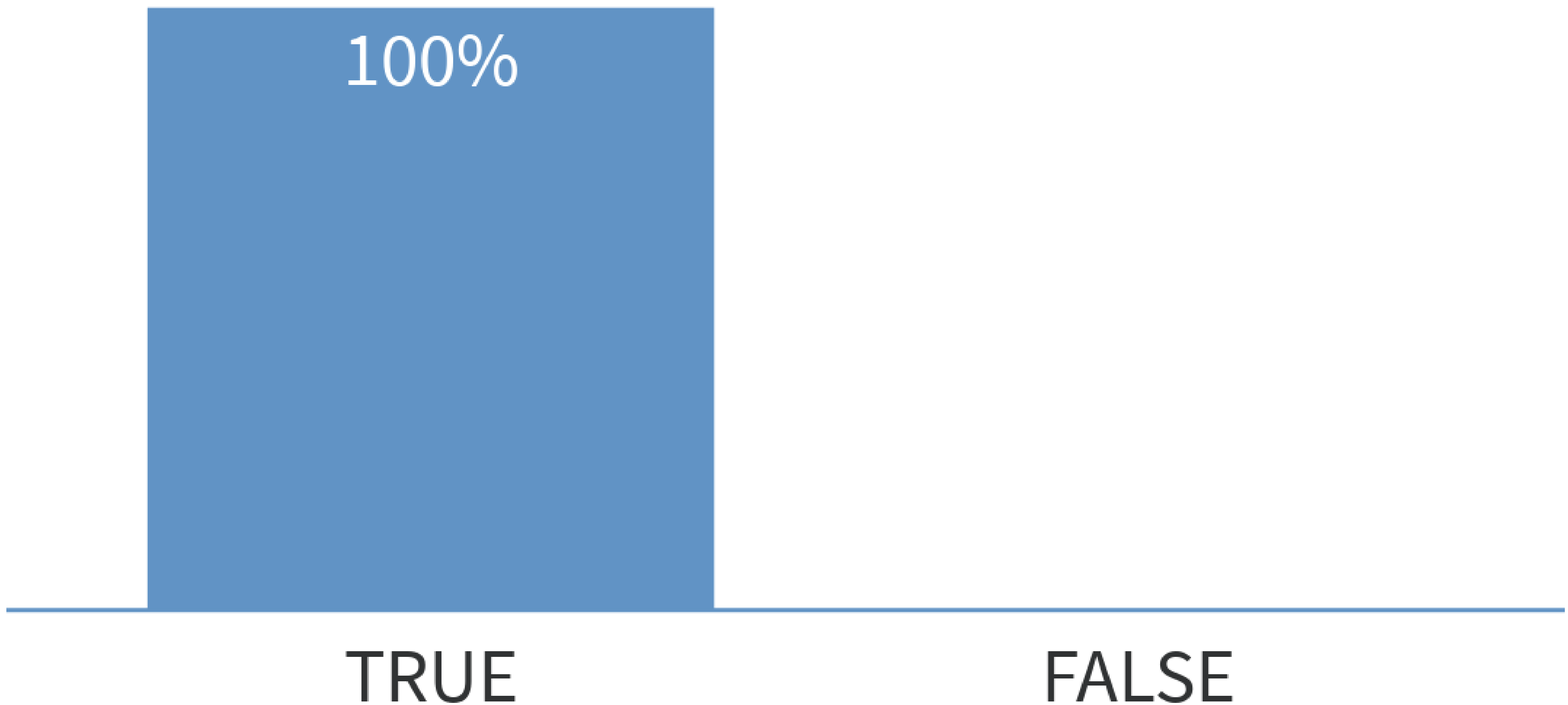


True or False?

According to the BEST Framework, all of the 20 NTDs are WASH related



TRUE or FALSE: According to the BEST Framework, all of the 20 NTDs are WASH related



True or False?

The NTD sector does not have a role to play in WASH resource allocation





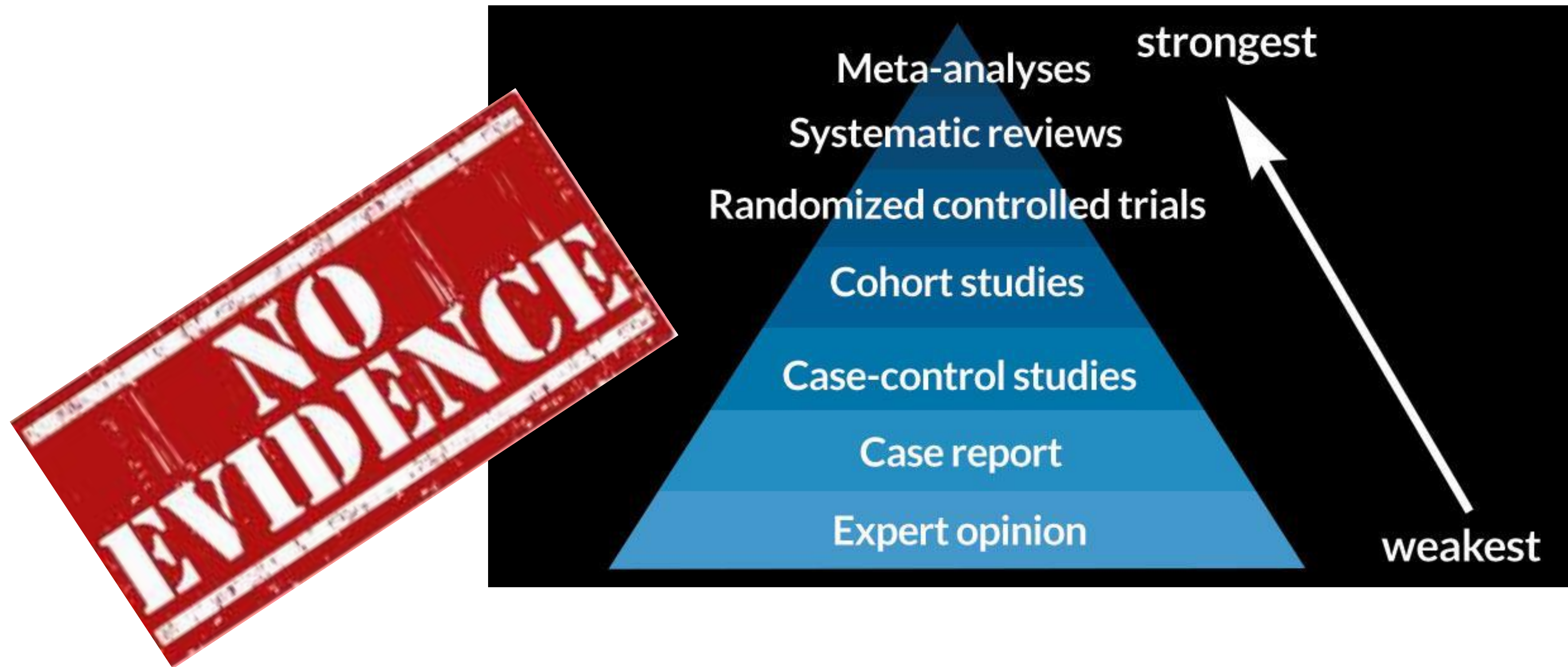
**TRUE or FALSE: The NTD sector does not
have a role to play in WASH resource
allocation**

TRUE

FALSE

True or False?

There is no clear evidence that improvement in WASH reduces NTDs





**TRUE or FALSE: There is no clear evidence
that improvement in WASH reduces NTDs**

TRUE

FALSE



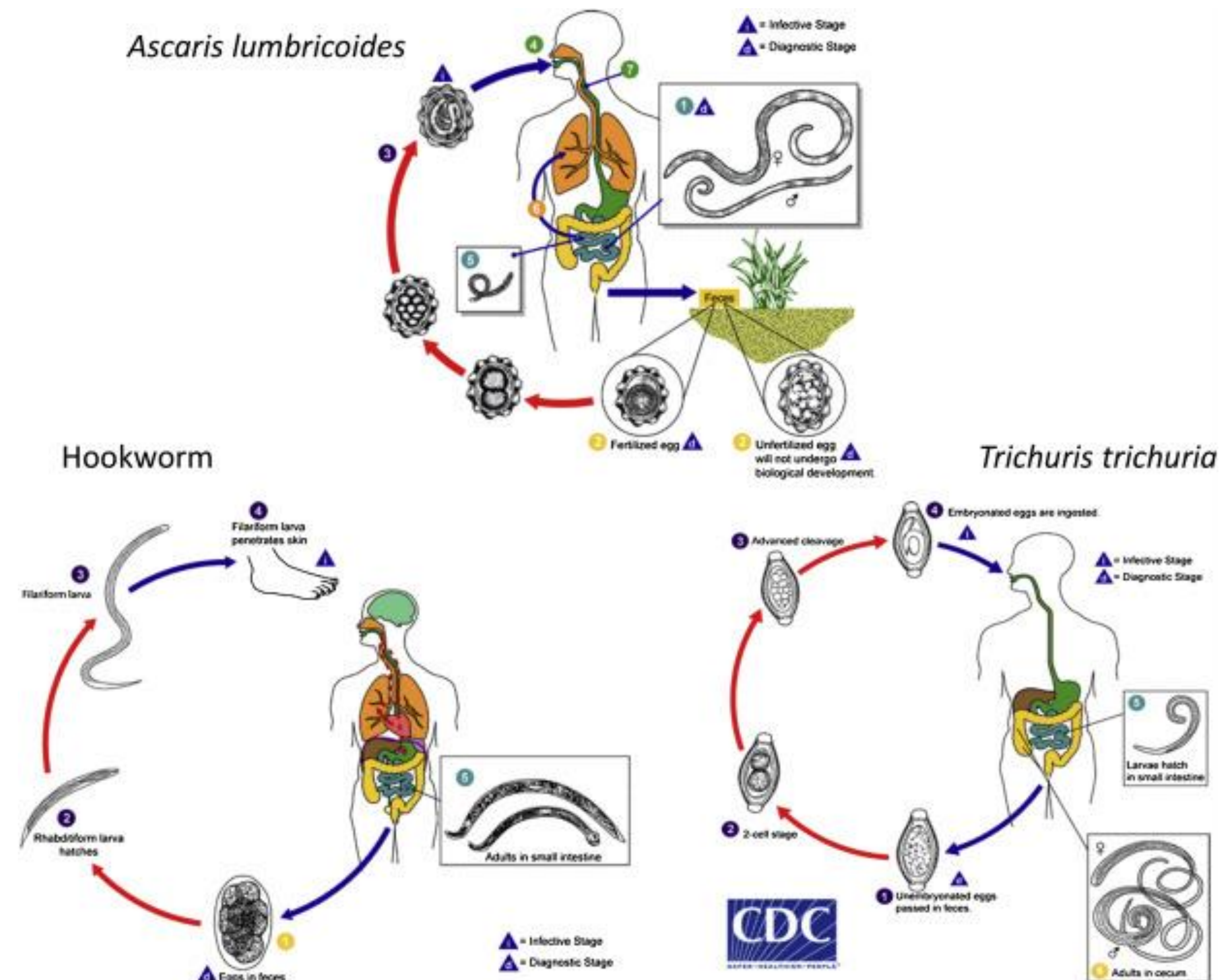
Where's the evidence?



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1. Knowledge of disease transmission and historical evidence



Human Intestinal Parasite Burden and Poor Sanitation in Rural Alabama (Megan et al. 2017)

Hookworm, a disease of extreme poverty, is thriving in the US south. Why?

Exclusive: in America, the world's richest country, hookworm, a parasitic disease found in areas of extreme poverty, is rampant, the first study of its kind in modern times shows

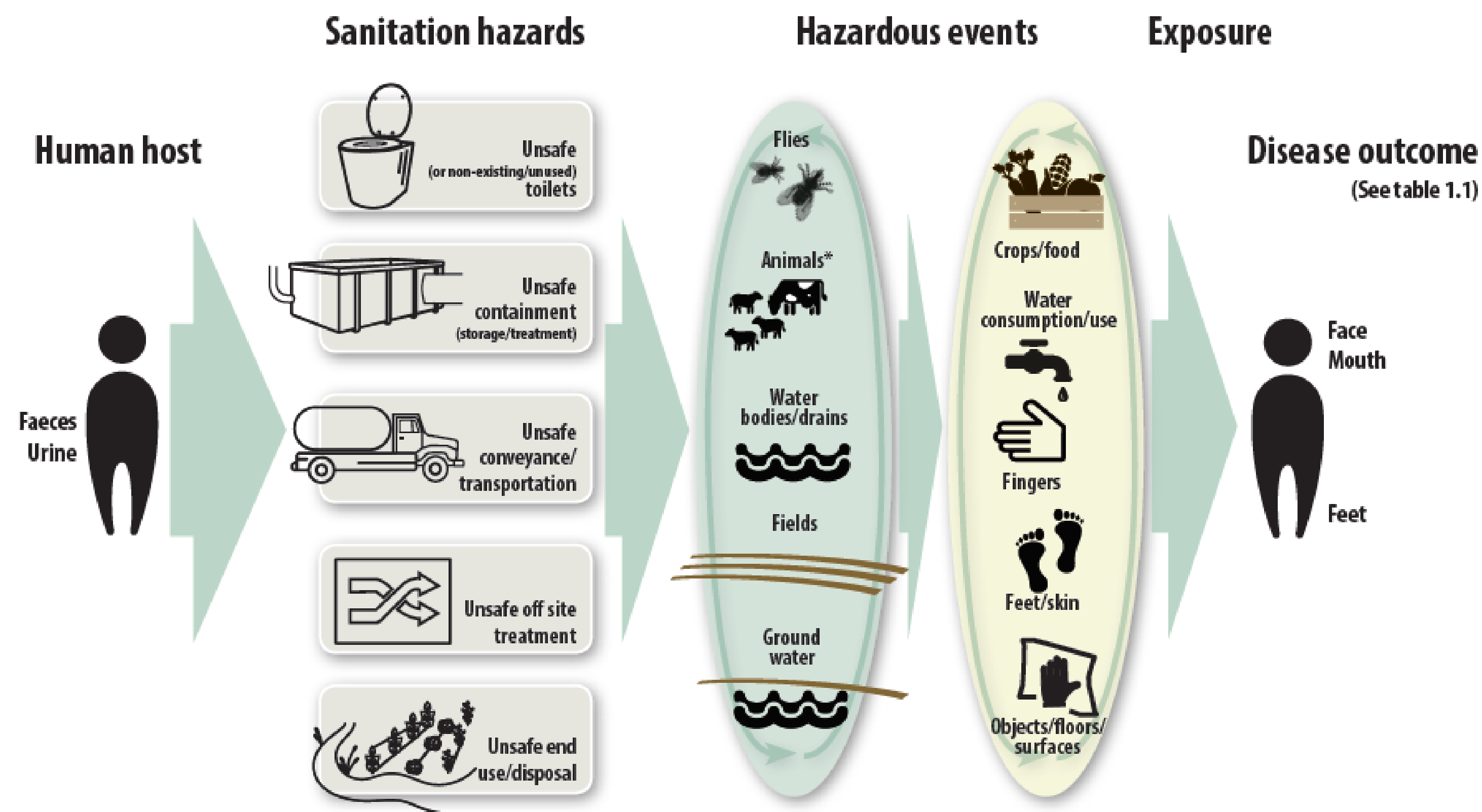


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2. WASH are complex interventions

Figure 1.1 Transmission of excreta-related pathogens



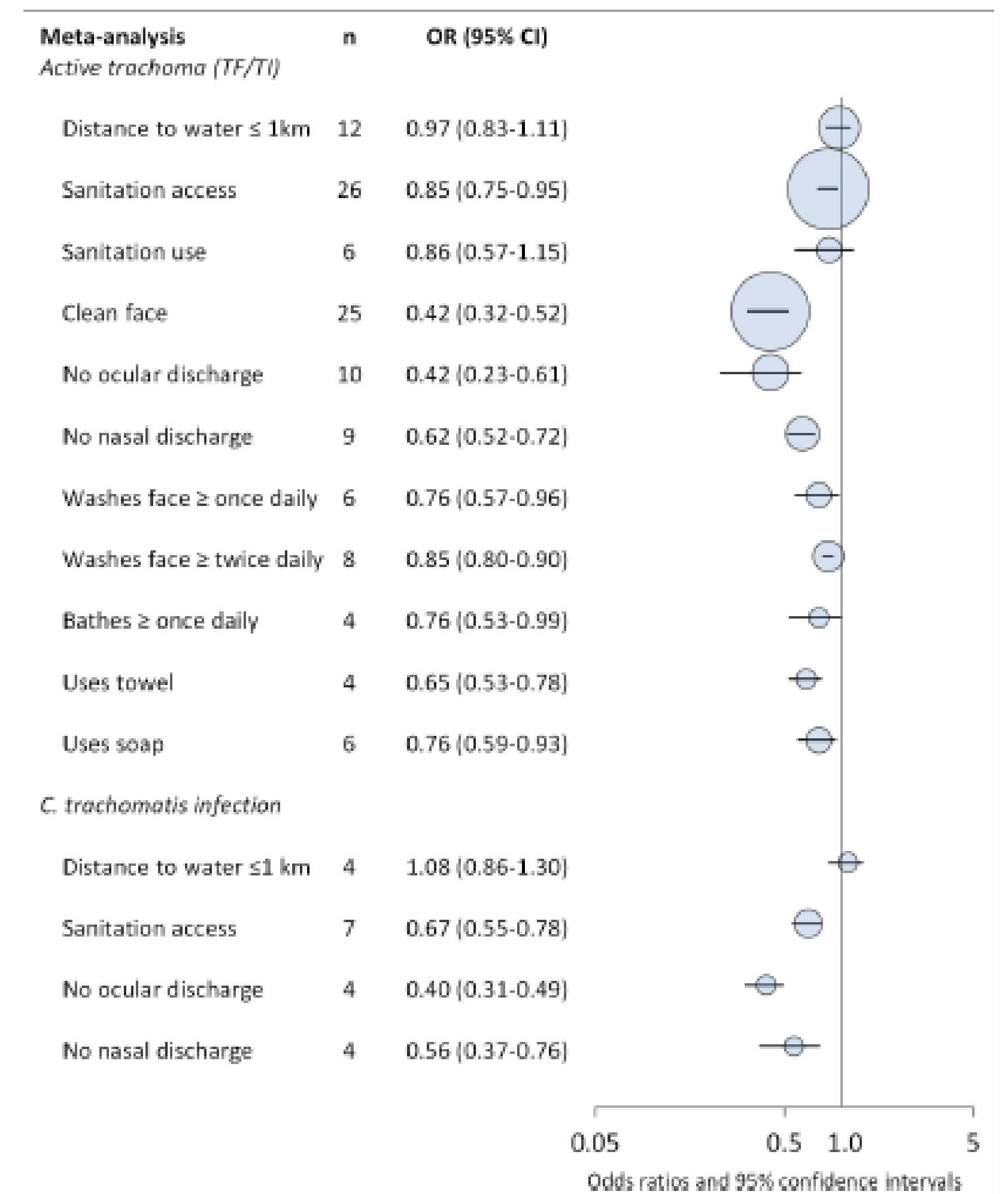
- Multiple transmission routes
- Highly contextual
- Technology and behaviours

Source: WHO Guidelines on Sanitation and Health 2018

3. Evidence from observational studies shows protective effect

- Systematic reviews and meta-analyses
 - Trachoma Stocks et al. 2014
 - Schistosomiasis Grimes et al. 2014
 - STH infections Strunz et al. 2014
 - Updates (sanitation) Freeman et al. 2017
- Low quality studies
 - Observational
 -

WASH and Trachoma (Stocks et al. 2014)



4. Evidence from RCTs show mixed results

- Gold standard in epidemiology
- Little or no impact:
 - Inadequate intervention
 - Poor delivery
 - Time to change behaviours
 - Need correct, consistent, sustained use
 - Requires high community coverage

REVIEW

Open Access



The role of water, sanitation and hygiene interventions in reducing soil-transmitted helminths: interpreting the evidence and identifying next steps

Susana Vaz Nery^{1*}, Amy J. Pickering², Ebba Abate³, Abraham Asmare⁴, Laura Barrett⁵, Jade Benjamin-Chung⁶, Donald A. P. Bundy⁷, Thomas Clasen^{7,8}, Archie C. A. Clements⁹, John M. Colford Jr.⁶, Ayse Ercumen^{6,10}, Siobhan Crowley⁵, Oliver Cumming⁷, Matthew C. Freeman⁸, Rashidul Haque¹¹, Birhan Mengistu¹², William E. Oswald⁷, Rachel L. Pullan⁷, Rita G. Oliveira⁵, Katey Einterz Owen¹³, Judd L. Walson¹⁴, Ashrafedin Youya¹⁵ and Simon J. Brooker^{13,14}

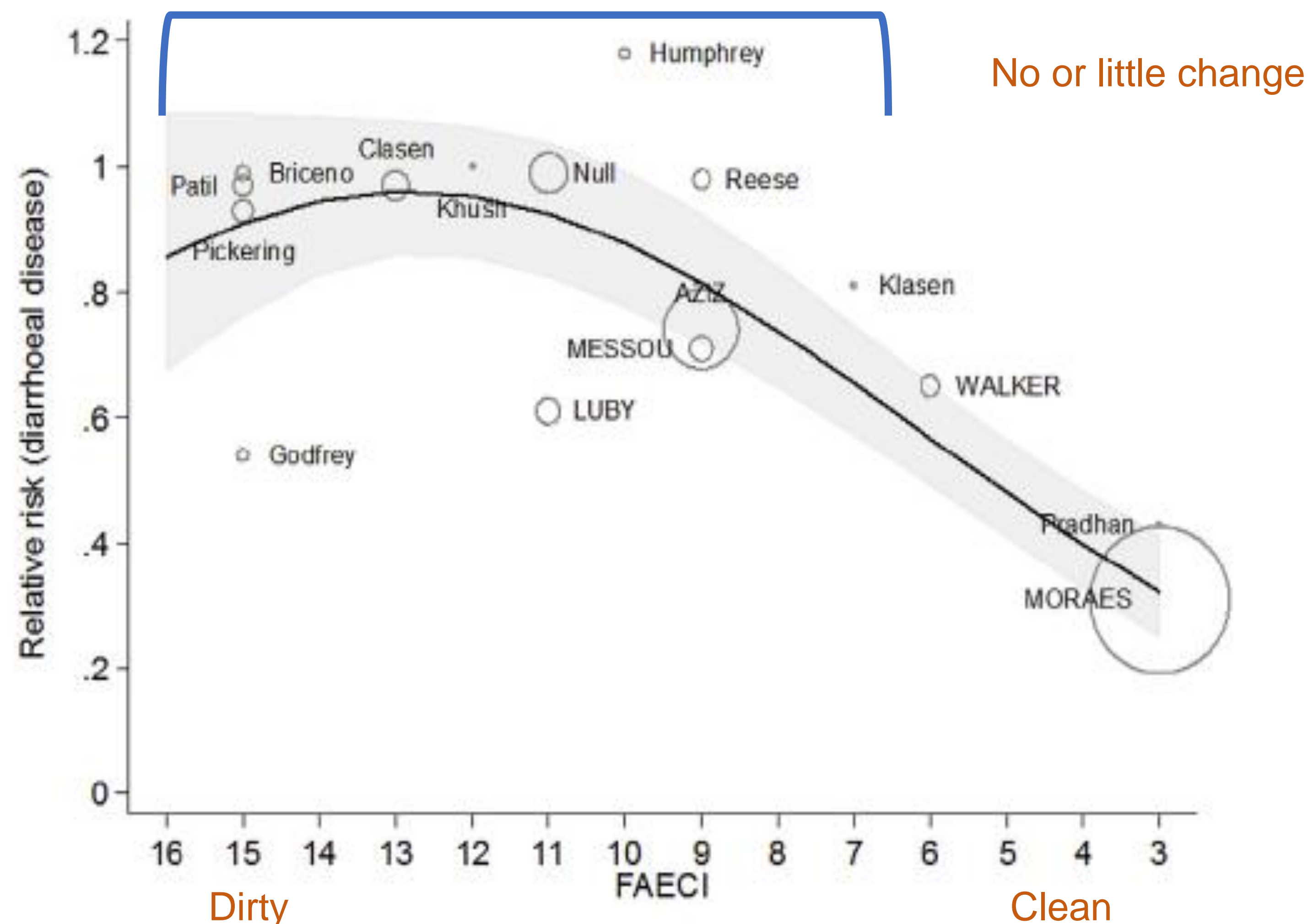
Source: Vaz Nery et al. 2019



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5. High level of community coverage and use needed



A Faecal Contamination Index for interpreting heterogeneous diarrhoea impacts of water, sanitation and hygiene interventions and overall, regional and country estimates of community sanitation coverage with a focus on low- and middle-income countries

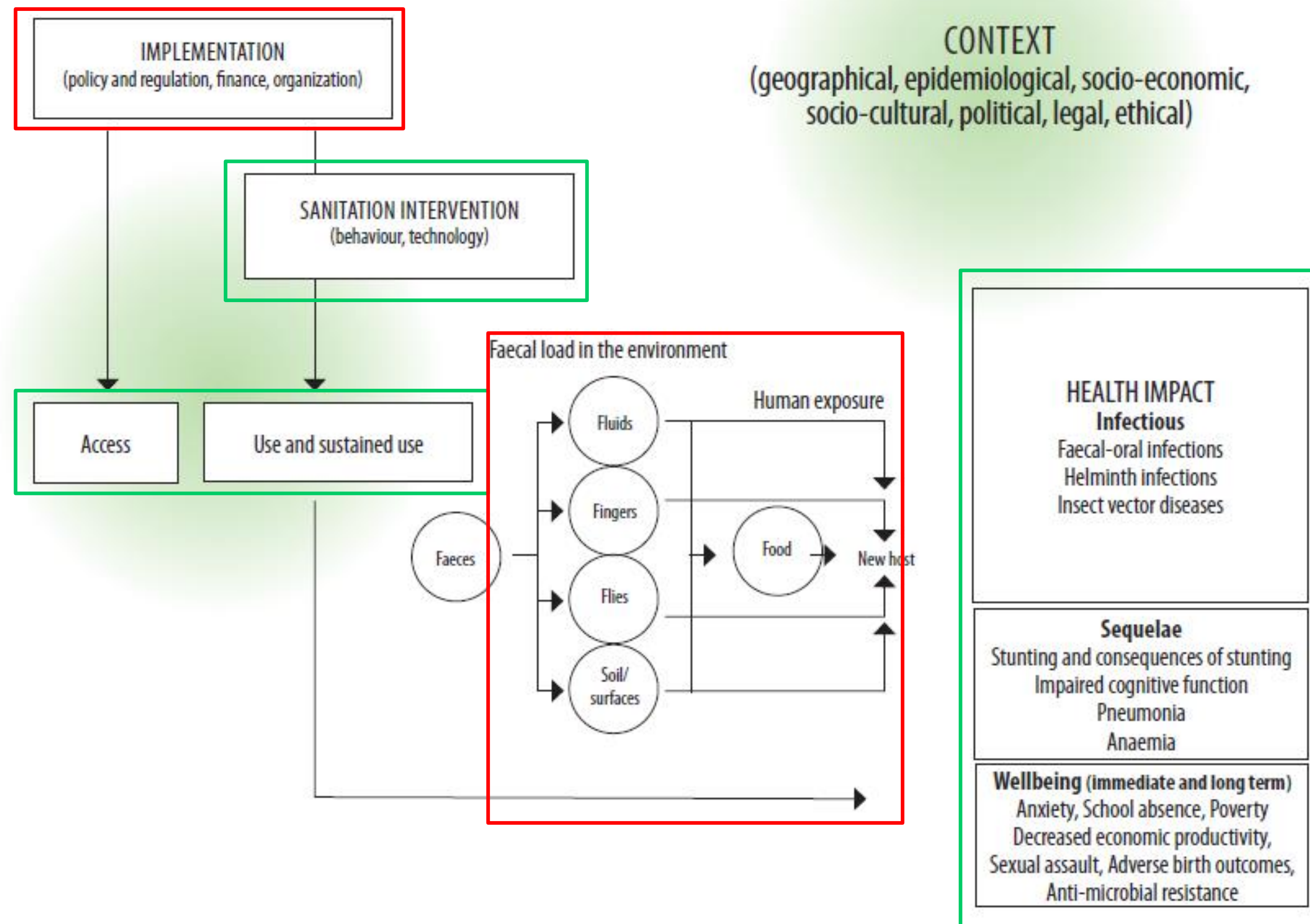
Jennyfer Wolf^{a,*}, Richard Johnston^a, Paul R. Hunter^{b,c}, Bruce Gordon^a, Kate Medlicott^a, Annette Prüss-Ustün^a



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6. Evidence gaps on sanitation and health



Source: WHO Guidelines on Sanitation and Health 2018

Implementation

- Which interventions are most appropriate for a given setting, disease?
- How best to deliver those interventions?

Impact on faecal and pathogen load in the environment



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Evidence into practice - country examples

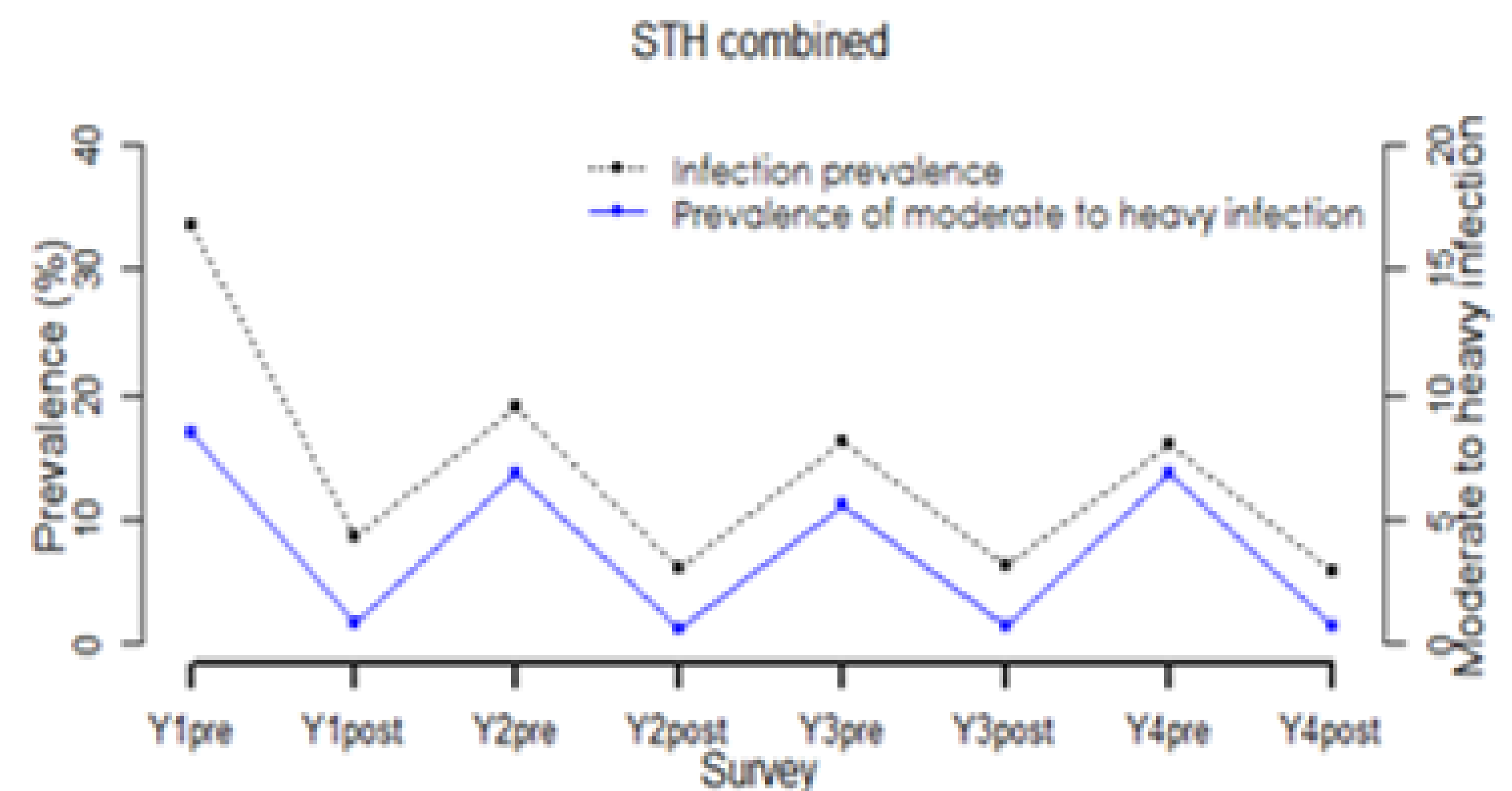


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Evidence into practice in Kenya

- The Kenya Breaking Transmission Strategy (BTS) was launched in 2019
- It covers four WASH-related NTDs which are endemic in Kenya: soil-transmitted helminthiasis (STH), schistosomiasis, lymphatic filariasis (LF) and trachoma
- A post-MDA bounce-back trend inspired focus of 3 pillars in the BTS
 - Increasing MDA coverage
 - Mainstreaming Behaviour Change Communication
 - Expanding WASH interventions



Evidence into practice in Kenya: expansion of WASH interventions

- Emphasis is on strengthening collaboration between the NTD and WASH sectors
 - Regular joint meetings involving policy makers at national and regional level
 - A common data collection, storage and sharing platform
 - Production and regular updating of common maps, overlaying NTD distribution and WASH coverage
 - Common operational research to inform policy formulation across sectors
 - Prioritization of NTD endemic areas for implementation of WASH interventions/Recognition of NTD endemicity as an important indication for implementation of WASH interventions
- Net effect is an increase in WASH coverage across NTD endemic areas



Evidence into practice in Kenya: conclusion

- Availability and effective use of WASH facilities
 - Accelerates progress towards elimination of WASH-related NTDs
 - Keeps the prevalence and intensity of WASH-related NTDs low after effective reduction by MDA interventions
 - Is the cornerstone for effective morbidity management and disability prevention (in the case of lymphoedema management)
- WASH interventions are on their own capable of significantly reducing the burden of NTDs, hence elimination is more realistic
 - The case of trachoma in Kitui county in Kenya
 - The potential for upwards of 75% reduction in the burden of schistosomiasis



Evidence into practice in Uganda: The problem

- **Data driven decision making** involves data collection, analysis, and use to inform actions and strategies.
- Much WASH and NTD information exists in the health and water sectors without linkages between the two.
- NTD data showed persistence of Trachoma in only three WASH constrained districts out of the original 51 endemic districts (MOH 2019)
- Allocation of WASH infrastructure was based mainly on poverty indicators (MOWE)



THE REPUBLIC OF UGANDA

Government of Uganda
Ministry of Water and Environment

**Water and Environment
Sector Performance Report 2019**



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Evidence into practice in Uganda: the intervention

- Data showed a need for collaboration between sectors for sustainability of the gains made against NTDs (esp. trachoma and SCH).
- Data sharing between the MoH and MWE has been initiated guided by the WASH/NTD guidance by WHO and NNN
- A national NTD/WASH framework will be used to advocate for allocation of WASH resources to the most NTD affected districts, and inform joint planning
- Joint sector reviews will be held to maintain the collaborative momentum
- Regional level collaboration efforts between WASH and NTDs will be initiated in the last quarter of 2020



Evidence into practice in Uganda: Key lessons

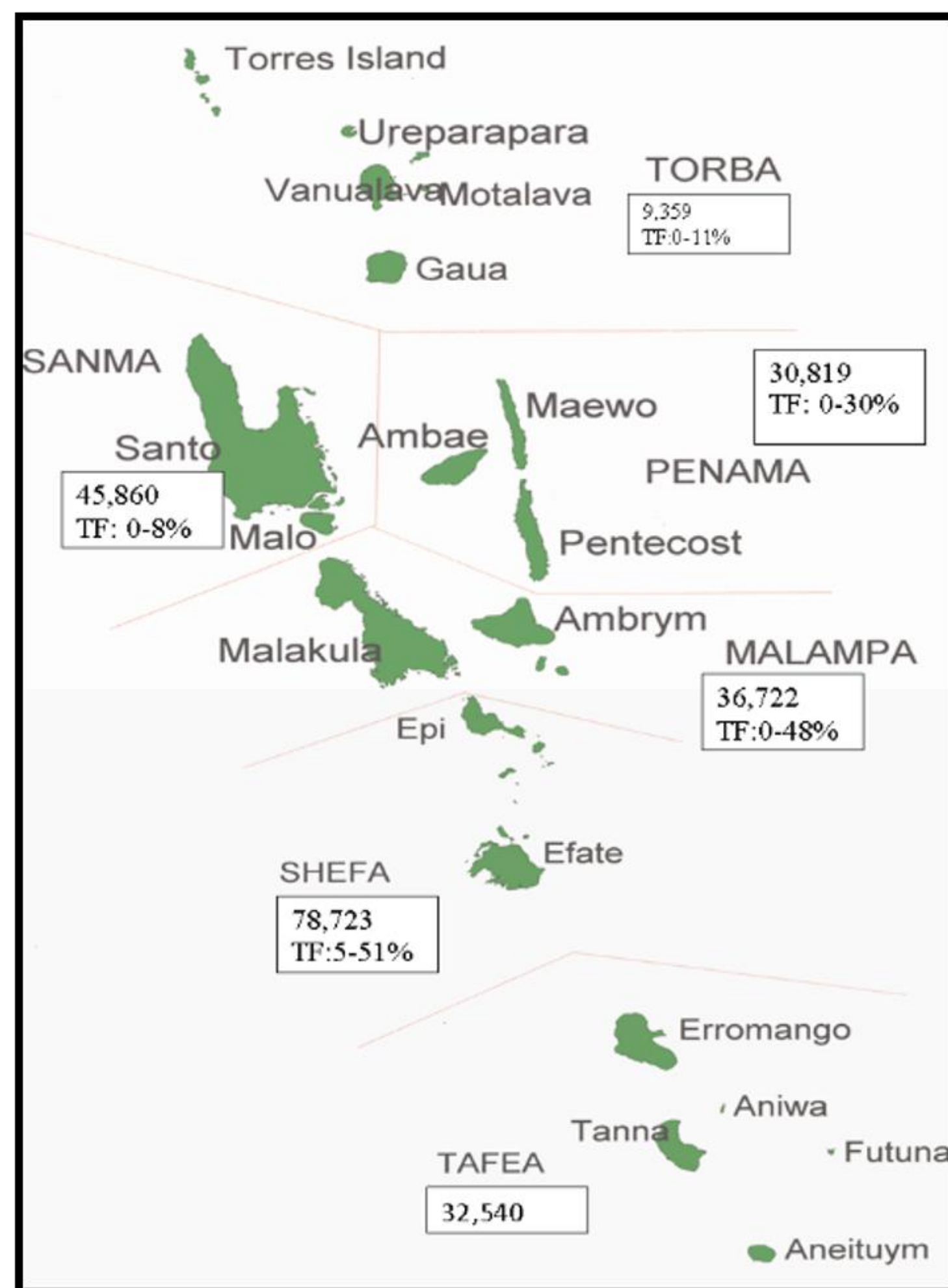
- Evidence plays a significant role in decision making for WASH NTD advocacy and resource allocation
- Multi-sectoral data sharing will be vital for WASH NTD program sustainability
- The data sharing should be promoted at the lowest administrative level
- Evidence must be appropriately packaged and delivered to the lowest administrative level to be effective
- Strong Partnerships are vital in using data for decision making across sectors



Evidence into practice in Vanuatu: The context



- 83 islands in 6 provinces
- 289,115 people (2009 Census estimate)
- 80% of population live a rural and traditional way of life



7 NTDs endemic :

1. **Yaws**: <100 confirmed cases reported annually, after a few rounds of MDA
2. **STH**: 60-75% treatment coverage annually
3. **Scabies**: 1000 cases reported
4. **Lymphatic filariasis**: eliminated as a PH problem in 2016
5. **Trachoma**: elimination dossier submitted to WHO Nov 2019
6. **Leprosy**
7. **Dengue**



Evidence into practice in Vanuatu

– Atypical presentation of trachoma



Atypical presentation in Melanesian countries:

- Above threshold levels of TF prevalence
- Well below threshold levels of TT prevalence - little evidence of blinding trachoma

The Pacific Enigma Research Study:

- A partnership between Ministries of Health, LSHTM and The Fred Hollows Foundation
- Solomon Islands and Vanuatu (Fiji still in-field)
- Pre-MDA +/- post-MDA research activities (PCR for *Chlamydia trachomatis* (Ct)infection and serology).



Evidence into practice in Vanuatu

– Trachoma's atypical presentation



Findings: of PCR and Serology:

Prevalence of ocular *Ct* infection much lower

- Antibodies to the *Ct* infection do not accumulate throughout childhood years
- Decision to carry out ancillary surveys, novel methodology to look at levels of scarring in 10-14 years old children in high TF areas

Findings of Ancillary Surveys:

- Conjunctival scarring and limbal signs were low, unlikely leading to TT

Implications for practice and policy:

- Evidence used by global experts to determine that no further MDA needed in Vanuatu.
- Vanuatu prepared and submitted its dossier in August 2019.



Evidence into practice in Vanuatu



Source: Global NTD Day celebration 23rd Jan 2020

GOAL:

Vanuatu Free from NTD and COVID19

TANKIU TUMAS.



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Discussion – Experience sharing

- How do you document and share best practices within your work?
- How do you find and use evidence when developing programmes?
- What has worked well for you and why?



How do you document and share best practices within your work?

Case studies

Reports

Presentations in meetings and
conferences


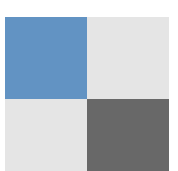
Social media

Blogs

Project evaluations

I want to document but don't have
time/resources

I don't document or share best practices



How do you find and use evidence when developing programmes?

Scientific journals

Learning from the experience
of other countries

Working with the national
research institutes

Conferences

National level meetings

Exchange visits

I don't; I just do what I have
always done

WASH and NTDs research agenda

- Research, development, and innovation are fundamental enablers of programmatic progress for all NTDs
- Achievement of targets identified in the Road Map for NTDs 2021-2030, will depend in part on our ability to innovate and learn
- There is limited research funding available for NTDs

The NNN WASH Working Group and WHO has initiated development of an 'Integrated NTD and WASH Research and Innovation Agenda' to:

- Eventually form a component of a more comprehensive research and development plan for NTDs.
- Encourage coordination of research activities, and the effective targeting of research investments.



WASH and NTDs research agenda

Four step process for developing the agenda

Step 1: Elicitation of research questions

Step 2: Rapid literature review

Step 3: Consolidation and analysis of research questions

Step 4: Scoring and prioritisation of research themes

Your input...

https://www.surveymonkey.com/r/WASH_NTD_Research_Agenda

And, please take the time to forward the link to one other person/group that you believe will have valuable insights to contribute.



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Group work (4 groups)

Groups 1 and 2: *How can the NNN community of practice assist programmers to access and use available evidence in ways that might strengthen WASH programmes?*

Groups 3 and 4: *How can the NNN community of practice assist programmers to generate evidence through their programmes and share this evidence and their experiences with others?*



Wrap up



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