

TRACHOMA PROGRAMMING STRATEGY

A Guide for Developing an Integrated, Evidence and Theory Based Water, Sanitation and Hygiene (WASH) and Trachoma F and E Programme

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OROMIA WASH / TRACHOMA PROGRAMMING STRATEGY

Executive Summary

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BACKGROUND

Trachoma is a neglected tropical disease (NTD) and the leading infectious cause of blindness globally. The WHO-endorsed SAFE strategy (Surgery, Antibiotics, Facial Cleanliness and Environmental Improvement) provides a framework to guide trachoma elimination efforts with all four components necessary for effective disease control. Oromia in Ethiopia is the most trachoma-endemic region, in the most trachoma-endemic country in the world. In 2018, the need for a new F and E strategy for Oromia was recognised.

Building upon the International Coalition for Trachoma Control's (ICTC) guiding principles for F and E, formative research, lessons learned from previous programming, and drawing upon theory and process frameworks common practice in health promotion and behavioural science, a new region wide approach to F and E programming is proposed. The approach seeks to find a balance between the importance of contextualised, locally relevant solutions and the need to deliver to scale an effective region wide F and E program.

STRATEGY INPUTS

The Oromia WASH and Trachoma F and E Programming Strategy is grounded in the results of a cross-sectional study of environmental health conditions, and the hygiene and sanitation related practices, perceptions, and knowledge of community members from target woredas. The strategy also draws upon national and sub-national WASH and NTD policies and guidelines, a consultant led programme review, and relevant evidence and theory.

STRATEGY

The Oromia trachoma F and E strategy comprises several components: 1) guiding principles; 2) target behaviours, audiences and programme settings; and 3) trachoma F and E programme objectives, indicators and approaches.

These can be used to develop a new integrated WASH and trachoma F and E programme, or adapt an existing WASH programme to interrupt trachoma transmission.

Programme developers must identify from the options presented who their intervention will seek to target, in which settings they will implement their strategies, and what specific approaches they will employ.

Guiding Principles

The ICTC has published a set of ten principles for F and E and these were identified as appropriate to adopt: 1) country ownership of national programs; 2) sustainability; 3) partnership and participation; 4) equity, inclusion and non-discrimination; 5) integration; 6) use of evidence; 7) joint advocacy; 8) context driven social and behaviour change; 9) tracking progress and measuring success; and 10) viable financing.

Programme Settings, Target Behaviours and Audiences

For a programme to encourage interruption of trachoma transmission, it should target the following behaviours (and audiences):

- B.1. Effectively wash own hands and face with soap, at least three times per day (all community members)

- B.2 Effectively and consistently use improved latrines for defecation (all community members)
- B.3 Effectively and consistently keep open spaces in household compounds, schools and public spaces, free of human and animal excreta (all community members)
- B.4 Effectively wash young children's hands and face with soap, at least three times per day (caregivers of young children)
- B.5 Regular prompting and supervising school children's hand and face washing with soap (teachers, community leaders, caregivers)
- B.6 Regular prompting children to use latrine (teachers, community leaders, caregivers)
- B.7 Consistently praise/encourage children for washing with soap, using latrines, and having clean faces and hands (teachers, community leaders, caregivers)
- B.8 Purchase soap to ensure consistent supply in households and schools (heads of households)
- B.9 Consistently grant permission, supply money, and encourage purchase of soap (heads of households)
- B.10 Construct fixed facilities for washing (heads of households)
- B.11 Maintain fixed facilities for washing (heads of households)
- B.12 Construct improved latrines (heads of households)
- B.13 Maintain improved latrines (heads of households)

Programmes will seek to address the behaviours noted above as a pathway to reducing the prevalence of trachoma within target communities. Programmes will not directly target behaviour or trachoma however, they will operate by: 1) strengthening the knowledge and skills needed to engage in the target behaviours; 2) improving access to appropriate WASH infrastructure and supplies; and 3) increasing motivation to engage in the target behaviours.

It is important to ensure F and E programs are comprehensive in that they contain several key components: a) **school-based interventions** that directly (and indirectly via teachers) target hygiene and sanitation in children at school; b) **household level interventions** that directly (and indirectly via male heads of household and community leaders) target primary caregivers as key influencers of the behaviour

of children and key actors in trachoma transmission within households; c) **community level interventions** that harness the influencing power of community leaders to trigger collective action and changes to social norms.

It is recognised that in some instances, programmes need to prioritise what and whom they target, and/or phase activities to address different audiences, settings or target behaviours over time. Programme designers should carefully select targets considering available resources and evidence relating to current practices, and ensure they are effectively evaluating their programs to allow for further evidence to be developed over time.

The review of evidence and policy also highlight the **benefit of approaching trachoma F and E by integrating efforts to develop knowledge, skills and motivation relating to face washing, into ongoing WASH development activities**. Given their scale of investment, collaboration with the WASH sector is the most efficient route to improving WASH services and hygiene and sanitation behaviour change for trachoma in disease-endemic areas. Effective control and sustainable prevention of trachoma (and other NTDs) requires disease-specific messaging, interventions, and indicators be mainstreamed across existing WASH packages. Alone, the existence of WASH hardware does not mitigate the transmission of trachoma, but access to safe water, and local maintenance of WASH systems are necessary preconditions for F and E behaviour change.

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BACKGROUND

Trachoma is the leading infectious cause of blindness, with 142 million people remaining at risk of the disease globally¹. The WHO-endorsed SAFE strategy (Surgery, Antibiotics, Facial Cleanliness, and Environmental Improvement) provides a framework to guide trachoma elimination efforts.²

The F and E components of the SAFE strategy are critical to the elimination of trachoma as a public health problem. A range of environmental features and hygiene practices within communities contribute to trachoma transmission, including poor sanitation infrastructure, high fly presence, sub-optimal face washing practices, and the sharing of bedding.^{3,4} F and E interventions are therefore complex and comprise interacting strategies that target a range of behavioural, socio-cultural and environmental factors in low-resource settings. This complexity presents challenges for program design, monitoring, and evidence synthesis and sharing, and has slowed the development of preferred practice. No standardised approach to F and E programming has yet been developed. Preferred practice, as outlined in the International Coalition for Trachoma Control's (ICTC) 2015 F and F programming guidance,⁵ involves local collaborative program development informed by a sound understanding of the local environment and community.

The Oromia Trachoma Elimination Program

With over 25 million people living in trachoma endemic areas and over 200,000 people at risk of blindness, Oromia, Ethiopia is the most trachoma-endemic region in the world.⁶ Between 2012 and 2014 the Global Trachoma Mapping Project (GTMP) found that approximately 41% (109/265) of districts were hyper-endemic (TF prevalence greater than 30%), and 56% (149/265) were meso-endemic (TF prevalence between 10 and 30%).⁶

Working in partnership the Oromia Regional Health Bureau (ORHB) and The Fred Hollows Foundation (The Foundation) has implemented a large-scale trachoma elimination program across the region since 2013. Although critical to interrupting trachoma transmission and sustaining elimination, hygiene and sanitation behaviour change has historically been overshadowed by efforts to reduce the TT surgery backlog and treat infection with mass drug administration (MDA). Efforts to improve hygiene practices and improve environmental health conditions are now needed more than ever to interrupt transmission and maintain the gains achieved through mass drug administration campaigns.

From 2013, F and E programming in Oromia has been implemented by ORHB and The Foundation. Consistent with the One WASH National Programme (OWNP), Community-Led Total Sanitation and Hygiene (CLTSH) was the key intervention approach, supplemented with small-scale water infrastructure, the training of community WASH Committees (WASHCOs) to manage and maintain facilities, mass media communication, and the delivery of school-based trachoma education.

The SNV, Oromia Regional Health Bureau and The Fred Hollows Foundation Partnership

In 2017, SNV, The Fred Hollows Foundation and The Oromia Regional Health Bureau (ORHM) established a partnership to strengthen efforts to interrupt trachoma transmission in Oromia. The Water, Sanitation, and Hygiene for Trachoma (WASH-Tra) represents the first phase of this partnership and is a three year (2018-2021) project being implemented in several woredas across Oromia regional state in

Ethiopia: Gasera, Gololcha woreda of Bale, Jima Geneti woreda of Horo Guduru Wallage, Chaliya woreda of West Shoa, Wara Jarso and Degum woredas of North Shoa and Shashemene woreda in West Arsi zones. The project and the partnership are a recognition of the importance of government, WASH and trachoma organisations forming partnerships to address NTDs in Ethiopia.

The Oromia WASH and Trachoma F and E Programming Strategy

The new Oromia WASH and Trachoma F and E Programming Strategy (The Strategy) draws upon the collective expertise of SNV, ORHB and The Fred Hollows Foundation, upon formative research conducted in 2019, upon national and sub-national frameworks and policies, and upon available evidence and theoretical approaches to health promotion and behaviour change programming. This report provides an overview of the new strategy and its development, discusses the emerging implications for the Oromia trachoma elimination program, and outlines next steps towards preferred practice in trachoma F and E programming.

The Strategy is intended to guide development of WASH and Trachoma F and E Programming in Oromia (and beyond).

STRATEGY INPUTS

The Oromia WASH and Trachoma F and E Programming Strategy is grounded in the results of a cross-sectional study of environmental health conditions, and the hygiene and sanitation related practices, perceptions, and knowledge of community members from target woredas. The strategy also draws upon national and sub-national WASH and NTD policies and guidelines, a consultant led programme review, and relevant evidence and theory. A summary of these are detailed below.

Cross sectional study

Approach

A mixed methods cross-sectional study design was used, including surveys conducted with community members, household observations, and key informant interviews. The objective of the study was to provide insights into current infrastructure, behaviours, knowledge and attitudes in target districts to inform the design of a program to promote face and hand washing with soap, hygienic use and maintenance of toilets. It covered assessment of current face and hand washing practices, use and maintenance of toilets, and factors that drive and facilitate and/or affect target behaviours.

The study was undertaken in 11 kebeles (i.e. villages) in five zones of Oromia regional state: Gololcha woreda in Bale zone, Jimma Geneti in Horo Guduru Wallage zone, Chaliya in West Shoa zone, Wara Jarso in North Shoa, and Shashemene Zuria Woreda in West Arsi zone. 597 women participated in the survey: 133 from Gololcha, 52 from Jimma Geneti, 128 from Chaliya, 112 from Wara Jarso, and 172 from Shashemene Zuria. Observations were undertaken in 123 of the recruited households. Ten key informant interviews were undertaken: two woreda health office staff from Gololcha woreda, one primary health care unit director and one religious leader from Jimma Geneti, one health extension worker and one religious

leader from Chaliya, one health extension worker and one zonal environmental health expert from Wara Jarso, and one religious leader and one disability advisory from Shashemene Zuria.

Further detail is provided in the study report⁷.

Results

Face washing with and without soap. 100% of study participants reported they had washed their faces the day before the survey was conducted, suggesting likely bias in responding which should be noted here. Self-reported hygiene practices outlined below are likely to be overestimates. 72% of study participants reported the use of soap to wash their faces. 52% of caregivers reported that children washed their faces two or more times a day, with 67% reporting their children use soap.

Facial cleanliness. Observations of facial cleanliness revealed 63% of children had at least one sign of an unclean face, and 31% were observed as having nasal discharge, ocular discharge and flies on their face. Rates varied from community to community, with the highest rates observed in Wara Jarso and Shashemene.

Use and maintenance of toilets. Most households (72%) were observed not to have an improved latrine. Human and/or animal faeces was observed in nearly half (42%) of the households, and one in five latrines had faeces present on the slabs.

Barriers and motivator associated with face washing. The most cited motivators of face washing were *purity* (47%), *comfort* (28%), and *not to look disgusting* (13%). Most participants reported trachoma as a reason to wash their face (93%), with skin problems also noted as key reason (40%). 18% of the respondents said that water alone was preferred for face washing, with many women citing that soap causes discomfort, that soap wasn't necessary for disease control, that soap was prioritised for laundry or bathing, that the use of soap required more time, or that the cost of soap was prohibitive (particularly where oil or lotions also need to be purchased where soap is used for face washing). Further detail relating to reported barriers and motivators for face washing are noted below in Table 1.

Table 1: Summary of barriers associated with face washing with soap

Dimensions	Factors
Opportunity	Access to washing facility, access to soap (including availability and affordability), access to lotion perceived as required after face washing (including availability and affordability), access to water
Capability	Belief that you need to wash only when you appear dirty or smell bad, uncertainty about the relationship between trachoma and washing with soap,
Motivation	Forgetting to wash, perception that soap affects the taste of food, perception that washing is time consuming, perception that soap is more important for laundry/close washing and bathing,

Recommendations

The study highlighted the need for F and E programmes in this area of Oromia to focus on all the behaviours (and associated determinants) understood to be important to minimise trachoma transmission. None of the target behaviours were observed to already be habitual or cultural norms. Programmes should therefore focus on: 1) washing faces at least three times per day with soap; 2) construction and maintenance of

washing stations to enable and promote face washing practice; 3) construction and maintenance of improved latrines to enable and promote latrine use; 4) consistent use of latrines (**Recommendation 1**).

The findings also suggest that to increase motivation to engage in face washing, programmes should emphasise the aspiration of *purity* or other identified motivational drivers. Educational messages around the health benefits of washing hands and faces for the control of trachoma and other diseases should be maintained but health messages alone are unlikely to motivate the significant community wide shift towards routine hygiene practices that is sought.

Programmes that can trigger, develop and maintain a *community movement* that motivates individuals and generates social pressure to wash more regularly with soap are likely to overcome many of the barriers reported in the study, given that most reported barriers are not significant (i.e not insurmountable for most community members should they feel significantly motivated to find solutions for them) (**Recommendation 2**). Programmes should also improve access to wash stations in homes (**Recommendation 3**), address skill deficits associated with wash station and latrine construction and maintenance (**Recommendation 4**), and increase reminders to wash at critical times (**Recommendation 5**).

Consultant led programme review

Approach

A consultant with experience supporting the design of trachoma activities led a two week review of program implementation in Oromia. The review assessed existing strategies and how they aligned with ICTC guiding principles and preferred practices, and sought to identify ways to simplify and strengthen F and E programming. The consultant conducted a desk review and then worked with key stakeholders to understand the current program, learn about government expectations, and brainstorm opportunities to improve the program. The outcomes of the review were discussed with key stakeholders in a workshop.

Further detail is provided in the review report.⁹

Results

The review revealed several key strengths of the Oromia region approach to F and E programming. The relationship between The Foundation and ORHB provided an important program cornerstone, as was strong alignment with the Federal Ministry of Health's (FMoH) NTD Master Plan.⁸ Other key strengths included the strong coordination function provided by ORHB, strong commitment to deliver full SAFE across the region despite limited funding to support F and E activities, and strong alignment between program activities and identified community need.

Several opportunities for program improvement (in areas of design, implementation and monitoring) were also identified through the review. The scale of the program stretched limited resources and resulted in a shallow dispersal of F and E activities. The program also relied on a top-down cascading project management approach whereby design and planning decisions occurred centrally and key stakeholders at zonal, district and sub-district levels were then progressively engaged. As responsibility for implementation was devolved, insufficient mechanisms were instituted to ensure fidelity of implementation and monitor program effectiveness.

Recommendations

Key recommendations arising from the review included the development of a regional strategic framework for F and E (**Recommendation 6**), phased implementation in order to ensure intensity of behaviour change strategies at the district level (**Recommendation 7**), the testing of novel intervention approaches (**Recommendation 8**), stronger partnerships with WASH actors (**Recommendation 9**), and advocacy for the mainstreaming of trachoma messaging in WASH programs (**Recommendation 10**).

Rapid review of best practice approaches

Approach

A rapid literature review was undertaken to identify strategies used to engage communities in a) face-washing; b) hand-washing; c) laundry; d) latrine construction and use; or e) fly management. The review also sought to identify reported efficacy of the strategies, and any factors limiting or enabling their successful implementation. The review included peer review literature published in English since January 2010, and focused only on research examining strategies delivered within low- and middle-income countries, and Indigenous Australia. Health behaviour change and health promotion literature were also explored to identify theories and practice frameworks applicable as guides for the design of F and E interventions in low resource settings.

In addition to review of published literature, the review also collected and analysed grey literature describing the results of studies and evaluations of NTD and WASH programs delivered in Ethiopia from 2012. The analysis explored the barriers and enablers to NTD and WASH programming, particular to the Ethiopia context, and the nature and effectiveness of reported program strategies.

Further detail is provided in the review reports.^{10,11}

Results

Analysis of peer review literature. Of the 614 studies initially identified through electronic database searches, 33 articles were included in the review. The studies reported mixed results from a diverse range of projects delivered in different settings. The systematic reviews examined were not able to draw conclusions about the efficacy of any approach.¹²⁻¹⁶ Studies frequently used generalised terms such as hygiene education and health promotion when describing intervention components, which limited the ability to draw meaningful conclusions about best practice approaches.

Of the reviewed primary studies, approaches to hygiene and environmental sanitation behaviour change focused on school-based interventions, community-led total sanitation, and social marketing. School-based interventions frequently reported changes in hand-washing behaviour, but face-washing was inconsistently included in programs. Community-based sanitation and hygiene and education programs largely focused on the reduction of open defecation and increased latrine use. Across these studies, the impact of the interventions on trachoma outcomes were rarely assessed. Published studies of social marketing strategies reported increases in knowledge from some programs, while others reported that mass media messaging alone was ineffective in improving knowledge. Social marketing studies also noted that awareness was often not associated with any change in behaviour. Whilst the experiences reported in primary research studies provide some insights to program designers, no definitive guidance regarding best practice in F and E programming emerges from the literature.

Review of grey literature. The review of grey literature outlining Ethiopia WASH and NTD program studies and evaluations identified 23 documents. The publications reviewed outlined programmes that were mostly limited in their focus, focusing on a limited set of behavioural changes, or employing a limited set of intervention strategies. The more successful programs reported appeared to: 1) carefully define the behavioural targets of the programme¹⁷; 2) design programmes to address not only knowledge gaps, but also social norms, community demand for sanitation and hygiene infrastructure, and motivation to trigger and sustain community practices¹⁸; 3) employ multiple strategies simultaneously¹⁹; 4) deliver strategies in locally relevant ways¹⁷; 5) integrate strategies into existing educational and health programmes¹⁹; and 6) take a multi-sector approach that sought to coordinate NTD prevention and control initiatives with WASH promotion. ^{18,20}

Review of theoretical frameworks. In lieu of clear evidence of best practice in F and E programming, the broader health promotion and health behaviour change literature can be drawn upon to provide guidance. Several frameworks were identified from the literature as potentially helpful for development of F and E interventions, and these might be described as supporting three key programming decisions:

- 1) ***what process to follow to ensure effective, evidence based, contextualised design, implementation and evaluation (e.g. PRECEDE PROCEED framework,²¹ Intervention Mapping,²² and Ophelia Approach²³).***

These frameworks provide guidance for the process of design, development, implementation and evaluation of health behaviour change interventions. Intervention Mapping (Bartholomew et al, 2011) maps the pathway from recognition of a need or problem, through to identification of a solution in six steps. Whilst described as a series of steps, the planning process is seen as iterative rather than linear. Similarly, the PRECEDE PROCEED model provides a structure for applying theories and concepts systematically during the planning and evaluation of health behaviour change interventions. It describes four situational analysis and design phases of work and four implementation and evaluation phases. A third, more recently published framework, the Ophelia Approach draws upon Intervention Mapping and incorporates aspects of realist approaches and continuous quality improvement collaboratives. It outlines a three phased approach: 1) situational analysis; 2) intervention co-design; and 3) implementation, evaluation, and ongoing improvement.

Anecdotally, it is observed that F and E programming has its strengths in drawing upon situational analyses and its use of the WHO endorsed SAFE strategy. Limitations in design, implementation and evaluation appear however to rest in a neglect of the use of theory, evidence and program logic to develop comprehensive, multi-levelled programs, in the absence of participatory approaches to program design, and in weak evaluation design and insufficient reporting of evaluation results.

- 2) ***what type of intervention to develop (e.g. Behaviour Change Wheel²⁴, Socio-ecological model²⁵, Social Cognitive Theory²⁶, Communication for Water Treatment and Hygiene Framework²⁷).***

A second class of frameworks guide determination of the sort of intervention required to achieve the desired change. For example, should an intervention seek to influence behaviour through changes to legislation, through fiscal measures, or through a community based program? It is critical that existing theoretical understanding of behaviour and behavioural determinants form the foundation of F and E programs. A key challenge here is the sheer number and diversity of behaviour change theories contributed by a range of social science disciplines.

Recent advances have however culminated in development of synthesised theoretical frameworks. One such framework is Michie et al's (2011) Behaviour Change Wheel, which proposes a high level model of the essential conditions required for a given behaviour (capability, opportunity and motivation) and identifies seven categories of policy focused intervention types, and nine intervention functions (e.g. education, modelling, coercion), that can be employed to influence these conditions.

The Socio-Ecological Model also remains a useful supplement to the Behaviour Change Wheel. It highlights how behaviour is influenced by factors across multiple domains: a) behaviour is influenced by factors internal to the individual (e.g. knowledge, beliefs, and attitudes); b) behaviour is influenced by interpersonal interactions and considerations (e.g. support systems, peer pressure, roles and responsibilities); c) behaviours is influenced by cultural and social factors operating at the community level (e.g. culture, politics, social networks); d) behaviour is influenced by organisational factors (e.g. the structure, functioning and rules associated with political and social institutions); e) behaviour is influenced by the policy and physical environment (e.g. local laws, availability of infrastructure).The model underscores the need to focus behaviour change interventions at multiple levels of the system, and at multiple audiences in both direct and indirect ways.²⁵

Experiences from other sectors suggest that health issues often require a complex, multi-level and evolving combination of intervention strategies over an extended period of time, in order for change to be realised and sustained. The use of frameworks such as the Behaviour Change Wheel help to ensure consideration is given to the most appropriate and strategic approach to achieve and sustain the desired change over time. For F and E programs, they can assist to ensure designers stretch their frame of thinking beyond interventions focused on raising awareness of trachoma and environmental improvement programs.

- 3) **what specific program components to include in the intervention design (e.g. Behaviour Change Technique Taxonomies²⁸)**. A third class of frameworks offer more detailed guidance regarding intervention elements to select. Behaviour change technique taxonomies, and in their absence, the findings of primary research studies, assist program designers to drawn from theory and evaluations of past interventions to decide upon a set of program elements that can reasonably be expected to achieve the desired program outcomes.

One critical limitation of current F and E program reporting, is the lack of specificity and consistency in the way programs are described. Without an agreed language to describe the behaviour change strategies employed, their evaluation, consistent implementation over time and across settings, and replication and scale up cannot be reliably achieved. In relation to F and E programs for example, what are the critical (and potentially redundant) ingredients of Community Led Total Sanitation (CLTS) or existing school based programs? What other techniques are needed to supplement those currently employed?

The Behaviour Change Technique Taxonomy project (2010-2013), funded by the UK's Medical Research Council involved development of a comprehensive, consensually agreed list of behaviour change techniques (BCTs); 'the smallest components of behaviour change interventions that on their own in favourable circumstances can bring about change'. The taxonomy is hierarchically structured and contains 93 distinct BCTs. The BCT taxonomy can be tailored to particular behavioural targets (e.g. face washing) to act as a critical foundation for trachoma intervention design, evaluation and evidence synthesis.

Recommendations

Seven high level recommendations emerge from the analysis of evaluation reports and formative research study findings: 1) programs should clearly identify the behaviours and behavioural determinants they are targeting for change (**Recommendation 11**); 2) programs should focus on multiple venues (e.g. schools, households) and target audiences (e.g. mothers, children, community leaders) to create widespread and sustained change (**Recommendation 12**); 3) programs should seek to enhance capability, opportunity and motivation (**Recommendation 13**); 4) programs should adopt a multi-sectoral, coordinated approach (**Recommendation 14**); 5) programs across Ethiopia should adopt a common set of performance indicators that allow change across programs to be observed and compared (**Recommendation 15**); 6) programs

should be grounded in relevant behaviour change theory (**Recommendation 16**); and 7) programs should be developed, implemented and evaluated in ways consistent with best practice approaches to health promotion (**Recommendation 17**).

Policy Analysis

Approach

An analysis of Ethiopian NTD and WASH policies was undertaken. Only the current and latest versions of documents were analysed. Documents were sourced from the Ministry of Health, NGOs and the ORHB. Documents reviewed included policy, strategy documents, NTDs and WASH programs guidelines and plans, as well as national roadmaps. Analysis on the policy documents was guided by the following analysis questions: 1) What national and regional policies, strategies, and guidance exist related to the delivery of WASH and/or NTD programs in Ethiopia? 2) To what extent do each policies, strategies and guidance prioritises and operationalise a commitment to WASH programming related to each NTD? 3) What guiding principles for NTD programming in Ethiopia are evident within policies and strategies? And 4) What value do available policies and guidance hold in assisting the design of new programs relating to each of the NTDs?

Further detail is provided in the policy analysis report.²⁹

Results

In total, 20 policy documents were collected and analysed. The analysis found that overall, while WASH and NTD programs are identified as strategic priorities consistently in policy documents, integration between the two sectors are not always emphasised and not all the policy documents that prioritise trachoma and WASH programs, address face cleanliness and face washing as a prevention intervention. More recently published policies and guidelines more consistently discuss integration and provide more practical guidance around how to approach this work.

The analysis identified a number of key policies and guidelines to consider when developing programmes, including the National Health Promotion and Communication Strategy (2016-2020)³⁰, the Tackling Neglected Tropical Diseases through water, sanitation and hygiene: A national framework to guide integrated programmes in Ethiopia³¹, the Elimination of Neglected Diseases (NTDs) in Ethiopia: Woreda Level Coordination Toolkit for the WASH and NTD sectors³², the National Hygiene and Environmental Health Communication Guideline³³, the National Sanitation Marketing Guideline³⁴, National School Water, Sanitation and Hygiene (SWASH) Strategy and Strategic Action Plan³⁵, and the National Framework for Effective SBCC³⁶.

The National Framework for Effective SBCC for example consists of strategies and approaches that can be used to align communication activities with national policies, strategies and plans. It highlights several strategic considerations for SBCC activities: 1) Promoting multi-level advocacy; 2) Strengthening household and community outreach; 3) Igniting community-based approaches to change; 4) Providing media support; 5) Increasing the availability and affordability of hygiene and sanitation products; 6) Promoting school hygiene and sanitation; and 7) Providing demonstration latrines and hand washing stations.

In addition to the Ethiopia level policies and guidelines, there are several WHO guidelines of note: 1) the WHO Water, sanitation and hygiene for accelerating and sustaining progress on neglected tropical diseases. A global strategy 2015-2020³⁷; and 2) the recently published WHO and NNN WASH and health working together: A 'how-to' guide for Neglected Tropical Disease programmes³⁸. This toolkit “provides step-by-step guidance to NTD programme managers and partners on how to engage and work collaboratively with the WASH community to improve delivery of water, sanitation and hygiene services to underserved population affected by many neglected tropical diseases”.

Recommendations

The policy analysis reveals a broad range of frameworks, strategies and guidelines to support development of programmes WASH and NTD programs. Most of these policies are consistent in their messages that programmes should be evidence based, coordinated and integrated, and locally relevant. Programmers should be familiar with these key resources and draw upon them as appropriate during the design of their interventions (**Recommendation 18**). The National Framework for Effective SBCC also offers key recommendations of relevance: 1) promoting multi-level advocacy; 2) strengthen household and community outreach; 3) ignite community-based approaches to change; 4) provide media support; 5) increase the availability and affordability of hygiene and sanitation products; 6) promote school hygiene and sanitation; and 7) provide demonstration latrines and hand washing stations (**Recommendation 19**).

OROMIA WASH AND TRACHOMA F AND E PROGRAMMING STRATEGY

This section of the report brings together the recommendations arising from the review of evidence, theory and policy detailed above and present a region-wide approach to F and E program design and evaluation. The Strategy comprises several components: 1) guiding principles; 2) target behaviours, audiences and programme settings; and 3) trachoma F and E programme objectives, indicators and approaches. These can be used to develop a new integrated WASH and trachoma F and E programme, or adapt an existing WASH programme to interrupt trachoma transmission. Programme developers must identify from the options presented who their intervention will seek to target, in which settings they will implement their strategies, and what specific approaches they will employ.

Guiding Principles for Trachoma F and E Programming

Guiding principles allow articulation of foundational commitments that direct how work is planned and undertaken. The ICTC has published a set of ten principles for F and E and these were identified as appropriate to adopt: 1) country ownership of national programs; 2) sustainability; 3) partnership and participation; 4) equity, inclusion and non-discrimination; 5) integration; 6) use of evidence; 7) joint advocacy; 8) context driven social and behaviour change; 9) tracking progress and measuring success; and 10) viable financing.³⁹ These principles are largely consistent with those articulated (either implicitly or explicitly) in policies reviewed.

Target Behaviours, Audiences and Settings for Trachoma F and E Programmes

For a programme to encourage interruption of trachoma transmission, it should target the behaviours, audiences and settings (where there is evidence to suggest practice of these behaviours is limited) outlined in Table 2. It is recognised that in some instances, programmes need to prioritise what and whom they target, and/or phase activities to address different audiences, settings or target behaviours over time. Available evidence does not allow for the provision of guidance about whether programs must target all of these behaviours, or just some. Programme designers should carefully select targets considering available resources and evidence relating to current practices, and ensure they are effectively evaluating their programs to allow for further evidence to be developed over time.

See Figure 1.

Trachoma F and E Programme Objectives and Approaches

Programmes will seek to address the behaviours noted in the previous section as a pathway to reducing the prevalence of trachoma within target communities. Programmes will not directly target behaviour or trachoma however, they will operate by: 1) strengthening the knowledge and skills needed to engage in the target behaviours (see Table 3); 2) improving access to appropriate WASH infrastructure and supplies (see Table 4); and 3) increasing motivation to engage in the target behaviours (see Table 5).

It is important to ensure F and E programs are comprehensive in that they contain several key components: a) **school-based interventions** that directly (and indirectly via teachers) target hygiene and sanitation in children at school; b) **household level interventions** that directly (and indirectly via male heads of household and community leaders) target primary caregivers as key influencers of the behaviour of children and key actors in trachoma transmission within households; c) **community level interventions** that harness the influencing power of community leaders to trigger collective action and changes to social norms.

The review of evidence and policy also highlight the **benefit of approaching trachoma F and E by integrating efforts to develop knowledge, skills and motivation relating to face washing, into ongoing WASH development activities**. Given their scale of investment, collaboration with the WASH sector is the most efficient route to improving WASH services and hygiene and sanitation behaviour change for trachoma in disease-endemic areas. Effective control and sustainable prevention of trachoma (and other NTDs) requires disease-specific messaging, interventions, and indicators be mainstreamed across existing WASH packages. Alone, the existence of WASH hardware does not mitigate the transmission of trachoma, but access to safe water, and local maintenance of WASH systems are necessary preconditions for F and E behaviour change.

Table 2: Behavioural targets for trachoma F and E programmes

Behaviors (B)	Level of importance for interruption of trachoma transmission	Target group	Programme setting	Possible indicators
B.1. Effectively wash own hands and face with soap, at least three times per day	Critical importance	All community members	Households, schools, communities	Increased percentage of sample observed or reported to be performing hygiene behaviours correctly and at critical times (recommended)
B.2 Effectively and consistently use improved latrines for defecation	Modest importance	All community members	Households, schools, communities	Increased percentage of sample observed or reported to be performing sanitation behaviours correctly and at critical times
B.3 Effectively and consistently keep open spaces in household compounds, schools and public spaces, free of human and animal excreta	Modest importance	All community members	Households, schools, communities	Increased percentage of households, schools and community spaces with low, moderate or high levels of excreta observable in open areas
B.4 Effectively wash young children's hands and face with soap, at least three times per day	Critical importance	Caregivers of young children	Households	Increased percentage of sample observed or reported to be assisting children to perform hygiene behaviours correctly and at critical times (recommended)
B.5 Regular prompting and supervising school children's hand and face washing with soap	Supports B1	Teachers, community leaders, caregivers	Households, schools, communities	Increased percentage of sample observed or reported to be prompting and supervising children to perform hygiene behaviours

				correctly and at critical times (recommended)
B.6 Regular prompting children to use latrine	Supports B2	Teachers, community leaders, caregivers	Households, schools, communities	Increased percentage of sample observed or reported to be prompting children to use latrines
B.7 Consistently praise/encourage children for washing with soap, using latrines, and having clean faces and hands	Supports B1 and B2	Teachers, community leaders, caregivers	Households, schools, communities	Increased percentage of sample observed or reported to be praising/ encouraging children for washing with soap, using latrines, and/or having clean faces and hands (recommended)
B.8 Purchase soap to ensure consistent supply in households and schools	Supports B1 and B4	Household member and school staff responsible for market purchases	Households, schools	Increased percentage of sample (typically female heads of household) reported to be regularly purchasing soap; level of soap sales in local market
B.9 Consistently grant permission, supply money, and encourage purchase of soap	Supports B8, and therefore B1 and B4	Household and school leaders	Households	Increased percentage of sample (typically female heads of household) reported to be provided permission, money and encouragement from spouse to purchase soap
B.10 Construct fixed facilities for washing	Supports B1 and B4	Household leaders (typically fathers), community and school leaders	Households, schools	Increased percentage of sample (typically male heads of household) observed or reported to have constructed household washing station (recommended)
B.11 Maintain fixed facilities for washing	Supports B1 and B4	Household leaders (typically fathers),	Households, schools	Increased percentage of sample (typically male heads of household) observed or reported to be

		teachers/school staff, community leaders		undertaking maintenance of household washing stations
B.12 Construct improved latrines	Supports B2	Household leaders (typically fathers), community leaders	Households, schools	Increased percentage of sample (typically male heads of household) observed or reported to have constructed household improved latrine
B.13 Maintain improved latrines	Supports B2	Household leaders (typically fathers), teachers/school staff, community leaders	Households, schools	Increased percentage of sample (typically male heads of household) observed or reported to be undertaking maintenance of household improved latrine

Table 3: Knowledge and skill gaps to be narrowed through a trachoma F and E programme

Capability [C] to be achieved (knowledge and skills)	Target group	Intervention approach	Delivery modality	Possible indicators
C.1 Understand trachoma is an infectious disease, that discharge from eyes and nose is associated with trachoma, that trachoma can be passed from person to person through touch, and that trachoma leads to blindness	School children and adults	Education - To raise awareness and knowledge	Interactive interpersonal communication - one-on-one, pairs, family groups, school classes, school clubs, small community groups. Mass media – radio and television if accessible to target groups	Increased percentage of sample who correctly identify trachoma as an infectious disease, that discharge from eyes and nose is associated with trachoma, that trachoma can be passed from person to person through touch, and that trachoma leads to blindness (recommended)
C.2. Understand that effective hand and face washing with soap three times per day reduces the risk of trachoma	School children and adults			Increased percentage of sample who correctly identifies that effective hand and face washing with soap three times per day reduces the risk of trachoma (recommended)

C.3. Can wash own hands and face with soap using an effective technique	School children and adults		Local performances, events and announcements – using regular community gatherings as opportunities to share messages, and more one-off or irregular events	Increased percentage of sample observed to be using correct technique to wash hands and face
C.4. Can wash young children's hands and face with soap using an effective technique	Caregivers		<p>SMS messages</p> <p><i>Note: local influencers and role models should be used as appropriate to communicate messages, activities and messages should be engaging, localised messages in local language should be used, literacy levels should be considered, and rates of TV and radio use should be considered.</i></p>	Increased percentage of sample observed to be using correct technique to wash childrens' hands and face
C.5 Can construct and maintain a functional wash station	Household leaders (typically fathers), community leaders	Training - To build skills	Local performances and events with training component – using regular community gatherings, or one-off or irregular events as	Increased percentage of sample observed to construct a functional wash station

			opportunities to provide practical training	
C.6 Can construct and maintain a functional improved latrine	Household leaders (typically fathers), community leaders		Interactive interpersonal communication and training - one-on-one, pairs, family groups, school classes, school clubs, small community groups as forums to provide practical training	Increased percentage of sample observed to construct a functional improved latrine
C.7. Can troubleshoot reduced access to water in dry season and continue to prioritize water for hand and face washing with soap	Adults			Increased percentage of sample able to describe approach to managing water supply in dry season in order to continue to prioritise water for hand and face washing with soap
C.8 Can troubleshoot complaints of young children during washing	Caregivers			Increased percentage of sample able to describe approach to managing complaints of young children during washing
C.9 Can troubleshoot periods of reduced income and continue to prioritize purchase of soap	Household member responsible for market purchases	Enablement - to address complex interpersonal and socio-economic barriers to engaging in the desired behaviours	Interactive interpersonal communication - one-on-one, pairs, family groups, school classes, school clubs, small community groups as opportunities to provide tailored support to address particular challenges being encountered	Increased percentage of sample able to describe approach to managing reduced income in order to continue to prioritise purchase of soap

Table 4: WASH infrastructure and supply enablers to be addressed through a trachoma F and E programmes

Opportunity (O) to be achieved (infrastructure and supplies)	Programme setting	Intervention approach	Delivery modality	Possible indicators
O.1. Functioning and hygienic fixed facilities for washing are available and accessible	Households, schools	Environmental restructuring - to address physical barriers to engaging in the desired behaviours and create the required enabling environment for change	Construction service – undertaking the construction and/or maintenance	Increased percentage of households and schools with functioning and hygienic fixed facilities for washing (recommended)
O.2. Functioning and hygienic improved latrine are available and accessible	Households, schools		Service / business development support – providing technical advice to support establishment of a business or service	Increased percentage of households and schools with functioning and hygienic improved latrines
O.3 Engaging, accessible, appropriate, strategically placed washing prompts/cues are visible	Households, schools		Training – building the skills required for construction and/or maintenance	Increased percentage of households and schools with visible washing prompts/cues (recommended)
O.4. Sufficient and reliable supply of affordable water	Households, schools		Provision of supplies – providing and/or funding provision of supplies	Increased percentage of households and schools with sufficient and reliable supply of affordable water
O.5 Sufficient and reliable supply of affordable soap	Households, schools		Advocacy – influencing other actors to provide supplies, construction services or training	Increased percentage of households and schools with sufficient and reliable supply of affordable soap

Table 5: Beliefs and perceptions to be built through a trachoma F and E programmes

Motivation (M) to be built (perceived importance and value, self-efficacy, peer pressure)	Target audience	Intervention approach	Delivery modality	Possible indicators
M.1. Perceive soap as important to use each time hands and faces are washed	School children and adults	Persuasion, role modelling, incentives - to provide examples of people to imitate and aspire to, increase positive or negative feelings that encourage people to take action, and increase the rewards associated with engaging in the desired behaviours	As per Table 3	Increased percentage of sample reporting that soap is important to use each time hands and face are washed (recommended)
M.2. Perceive effectively washing face at least three times per day as important	School children and adults			Increased percentage of sample reporting that it is important to wash face at least three times each day (recommended)
M.3. Perceive consistently using a latrine to defecate as important, for all family members	School children and adults			Increased percentage of sample reporting that it is important for all family members to consistently use the latrine
M.4 Perceive discharge as disgusting and dangerous to health	School children and adults			Increased percentage of sample reporting that discharge is disgusting and dangerous to health (recommended)
M.5 Perceive open defecation as disgusting and dangerous to health	School children and adults			Increased percentage of sample reporting that open defecation is disgusting and dangerous to health
M.6 Accept responsibility for hygiene of young children	Caregivers			Increased percentage of sample reporting a sense of responsibility for the hygiene of young children (recommended)
M.7 Willing to pay for soap for face washing	Heads of households			Increased percentage of sample reporting a willingness to pay for soap for face washing

M.8. Willing to prioritise water for face washing	Heads of households			Increased percentage of sample reporting a willingness to prioritise water for face washing
M.9 Self efficacy relating to construction and maintenance of functional wash station	Household leaders (typically fathers), community leaders			Increased percentage of sample reporting confidence in their ability to construct and maintain a functional wash station
M.10 Self efficacy relating to construction and maintenance of improved latrine	Household leaders (typically fathers), community leaders			Increased percentage of sample reporting confidence in their ability to construct and maintain an improved latrine
M.11 Perceive an expectation from neighbours to maintain clean faces of self and family	School children and adults			Increased percentage of sample reporting a sense of expectation from neighbours, to maintain clean face of self and family
M.12 Perceive an expectation from neighbours to consistently use latrines	School children and adults			Increased percentage of sample reporting a sense of expectation from neighbours, to consistently use latrines
M.13 Perceive an expectation from other household members to maintain clean faces of self and children	Household members			Increased percentage of sample reporting a sense of expectation from household member, to maintain clean face of self and children
M.14 Perceive an expectation from other family members to consistently use latrine	Household members			Increased percentage of sample reporting a sense of expectation from household member, to consistently use latrine

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