The National Assessment of the Ethiopian Health Extension Program

Poster Book

Dissemination Workshop
Skylight Hotel
Addis Ababa, Ethiopia
November 11, 2019

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

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Introduction

The 2019 National Assessment of the Ethiopian Health Extension Program was conducted from October 2018 to June 2019. Findings of the assessment are prepared in different formats including a comprehensive report, an abridged report, presentations, and posters. This poster book includes a compilation of 43 posters organized under nine categories:

Category	Theme	# of posters
Category 1	Methods of the National HEP Assessment	4
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The posters include methods, results, conclusions, and recommendations extracted from the comprehensive assessment, with a focus on key findings on selected topics. Explanations about each of the posters and on addition will be presented by experts parallel to the dissemination workshop. More details about findings presented in this poster book can also be found in the comprehensive assessment report.

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Category 1

Methods of the National HEP Assessment

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National HEP Assessment 2019

NATIONAL ASSESSMENT OF HEP IN ETHIOPIA
METHODS
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Background

THE NATIONAL ASSESSMENT ON HEP: WHY?

- Mixed thoughts about the current status of HEP
  - Administrative reports were the only source of information about several aspects of HEP
- Major shortfalls in previous studies
  - Focus on very specific aspects of HEP
  - Do not show the influence of factors at different levels of the health system
  - Mostly not linked to the decision making process in the health system
- Major decisions regarding the future of the HEP are currently looking for comprehensive evidence.

Objectives

1. To assess the relevance of components of the HEP to the health needs of Ethiopians
2. To assess the implementation status of the HEP
3. To assess the population coverage of essential services related to the HEP
4. To assess adequacy of resources for the implementation of the HEP
5. To explore the contribution of HEP to recent gains in health status
6. To identify determinants of implementation of HEP at different levels
7. To determine key areas of intervention for future improvement of HEP

Assessment Framework - PHCPI

- **System**
  - Governance and leadership
  - Adjustment to population health needs
- **Inputs**
  - Human Resource
  - Infrastructure and facilities
  - Pharmaceuticals
  - Finance
  - Information system
- **Service Delivery**
  - Relevance
  - Access
  - Quality
  - Community engagement
- **Outputs**
  - Coverage of HEP related services
- **Outcome**
  - Contribution of HEP to health status, health behavior, and health service utilization
  - Cost-effectiveness

Method

Component 1: Primary data with mixed Methods
A comprehensive nation-wide assessment employing **quantitative and qualitative** methods

+

Component 2: Systematic review on HEP
Review of published and gray literature with and without meta analyses

→

Component 3: Synthesis and recommendation
A participatory process of synthesizing evidences and formulating recommendations

Component 1: Primary data with mixed methods

1. Quantitative study

Facility-based assessments (rural)

	Agrarian	Pastoralist	Total
HPs	235	108	343
HEWs	414	170	584
Cluster HCs	139	40	179

Household survey (rural)

	HHs (n= 6,504)	WDA HHs (n=618)	Total (n=7,122)
Women	6,430	613	7,043
Men	4,416	389	4,805
Youth Girls	900	120	1,020
Total	11,746	1,122	12,868

Urban HEP Assessment

- 1,735 households
- 581 HE Professionals
- 132 Health Centers

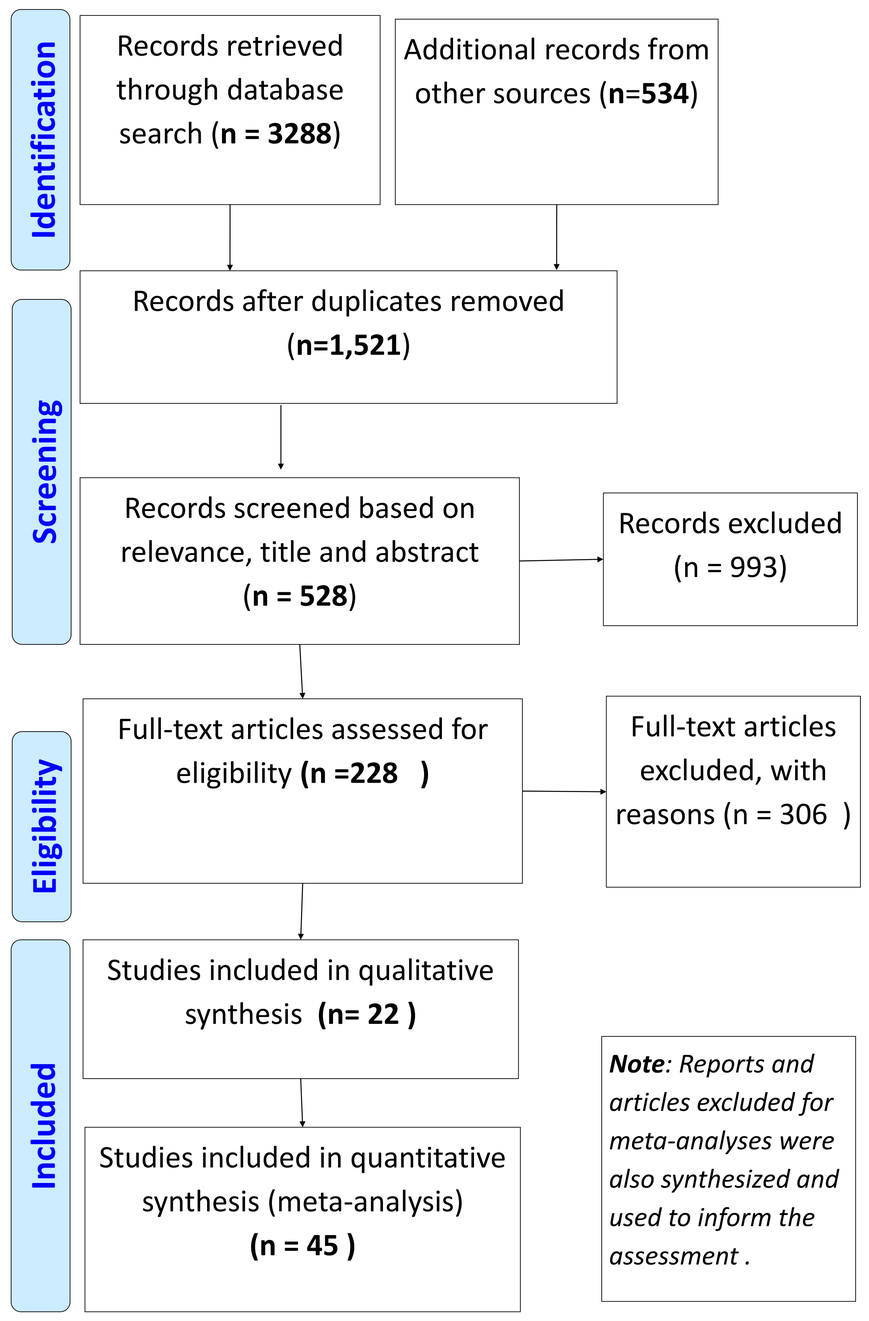
2. Qualitative study

Level	Method	Number of interviews/discussions				
		Agrarian	Pastoralist	Urban	Others	Total
Community and HP	FGD	42	39	57		138
	KII	17	24			41
HC	KII	14	19	32		65
Woreda	KII	21	16	19		56
Region	FGD	2	2			4
	KII	7	4	5		16
Federal	FGD				5	5
	KII				8	8
Total	FGDs	44	41	57	5	147
	KIIs	59	63	56	8	186
	All	103	104	113	13	333

3. Additional in-depth studies

	HP	HC	Hospital	WoHO	Colleges
Attrition of HEWs				✓	
Economic evaluation of selected HEP intervention	✓	✓		✓	
The role of HEP in PHEM	✓	✓		✓	
Attitude of clinical staff towards the HEP		✓	✓		
HEW training institution assessment					✓

Component 2: Systematic review/MA



***Note**: Reports and articles excluded for meta-analyses were also synthesized and used to inform the assessment .*

Component 3: Synthesis and recommendation

✓ Findings synthesis workshop → ✓ Collective interpretation of key findings

✓ Recommendation formulation workshops
✓ Debate on alternative courses of actions → ✓ Final set of recommendations

✓ Dissemination (reports and workshops)

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AGRARIAN AND PASTORALIST STUDY SITES

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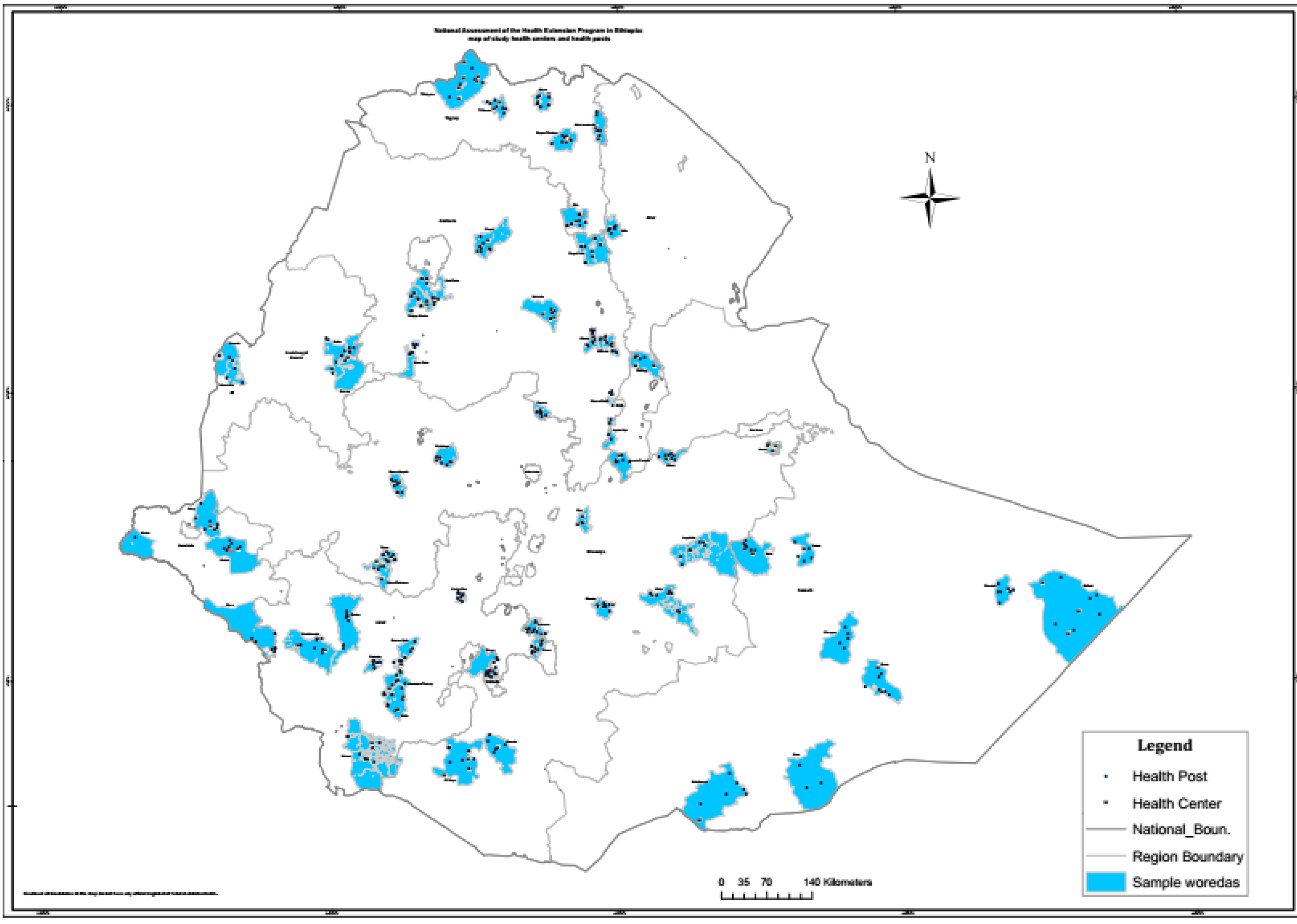

All regions

62 Woredas

353 Kebeles

343 HPs

584 HEWs

179 HCs

7122 HHs

12,868 respondents

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National HEP Assessment 2019

NATIONAL ASSESSMENT OF HEP IN ETHIOPIA

Data Quality Assurance Procedures

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Introduction

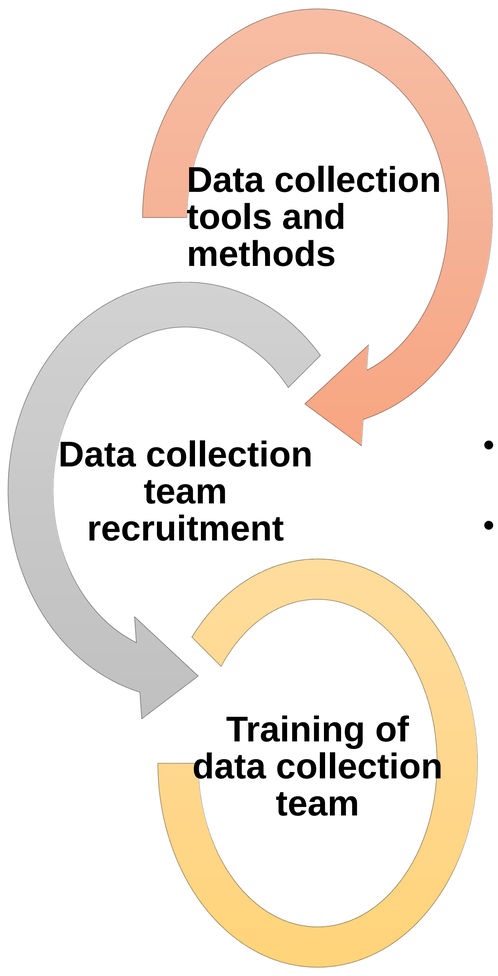
- Assuring quality of data has been a major challenge of large scale national studies in developing countries.
- The 2019 National Assessment of the Health Extension Program involved quantitative and qualitative data collection at different levels of the health system.
- More than 200 field workers were involved as quantitative data collectors, qualitative research assistants, and supervisors.
- Assuring the quality of data was critical to ensure the validity of assessment findings.
- In this poster, we described data quality assurance methods employed in the 2019 National Assessment of the Health Extension Program.

The Quality Assurance Process

✓ Multiple phases
- ➢ Pre-data collection
- ➢ During data collection
- ➢ Post data collection

✓ Multiple layers of quality assurance teams
- ✓ Field level
- ✓ Central

Phase 1: Pre data collection



- Standard questions whenever applicable
- Pre-testing
- Translation and back translation into five local languages

- Subject matter expertise/experience
- Data collection experience

- Intensive training
- Involve data ion team in pre-testing

Phase 2: During data collection

Field level spot checks
- Supported data collectors for first few days of data collection period
- Supervisory team members deployed and each team was followed and supported

Review of data uploaded to the server
- Data quality and IT teams identify issues/problems
  Check location of data collection using geo-points
- Daily phone calls to each team addressing identified issues
- Daily back-up of dataset from the server

Continuous follow-up and feedback
- Designated follow up team based on teams/routes
- Feedbacks to the teams on corrections/process adjustments
- Daily progress report to the core team

Phase 3: Post data collection

Submission of Data
- Data backup
- Materials and Notes

Quality check/ Verification
- Recheck for quality using pre-defined quality check do files
- Discussions with data collectors on identified issues

Hand over and Clearance
- Finalization of administrative issues
- Clearance

Example of flowchart used for clearance

Back from field site
- Complete upload of data to server, if not completed in the field

Confirm upload to the server
- IT and follow-up team confirm data uploaded

Address data quality problems/issues
- DQA and IT teams further recheck correction and errors

Confirm storage of the final dataset
- IT Team

Return all materials/equipment and reimbursement
- Finance and Asset team

Complete clearance

Challenges and Actions

- Internet connection problem in some remote areas
- Security issues in some areas
- Logistics issues (vehicles)

- Dedicated survey monitoring team – central to deal with each incident
- Replacement of few study sites with second round random selection from similar settings

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National HEP Assessment 2019

NATIONAL ASSESSMENT OF HEP IN ETHIOPIA

Stakeholder Engagement During the Design Phase

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Background

- Early involvement of stakeholders is one of the major factors determining the success of program assessments in terms of their ability to generate better data, better understanding of the data, more appropriate recommendations, and better use of findings.
- One of the major concerns in participatory approaches to program assessment/evaluation is the threat of bias because of vested interest of stakeholders to be involved.
- The 2019 National Assessment of the Health Extension Program employed a process that combines ensuring utilization through stakeholder participation and maintaining independence as core principles.
- The objectives of stakeholder engagement during the design phase of the assessment were to:
  - Explore information needs of HEP stakeholders to ensure comprehensiveness of the assessment
  - Create the base for utilization of assessment findings
- This poster describes the process of stakeholder engagement during the design phase of the assessment

The Process of Stakeholder Consultation During the Design Phase

Major Steps	Outputs
Step 1 • Design assessment protocol, dimensions, sub-dimensions, and data need of the assessment by an independent team of researchers using PHCPI framework	• Independently designed assessment protocol outlining data need at all levels
Step 2 • Identification of relevant stakeholders (intended users of the assessment) in consultation with PHC and HEP Directorate at FMoH	**Five categories of stakeholders were identified** 1. FMoH and RHBs (HEP staff, specific program staff) 2. Donors 3. Non-government implementing partners 4. Research institutes 5. Policy advisors and experts in the area of PHC
Step 3 • Individual and group interviews with relevant stakeholders	**26 Sessions facilitated with a simple guide** *If a comprehensive assessment of the HEP is conducted, what are the priority questions you would like the assessment to answer?*
Step 4 • Coding and thematic synthesis of stakeholders' information needs using NVIVO qualitative data management software	**Thematic areas identified** 1. Leadership & Governance 2. Supervision Support 3. Responsiveness 4. Coordination & Collaboration 5. Human Resource 6. HEP Financing 7. Pharmaceuticals & Supplies 8. Physical facilities 9. Relevance 10. Community Engagement 11. Level of implementation 12. Contribution of HEP
Step 5 • Reviewing list of dimensions, sub-dimensions, and data needs against information needs of stakeholders • Revising data need at different levels of the health system	• Final set of dimensions, sub-dimensions, and data needs used for use in the development of data collection tools

Reflections of stakeholders and lessons

Summary of reflections of stakeholders (from meetings before and after the assessment)

- The assessment is timely.
- Involving stakeholders at the early phase of the assessment facilitates relevance of the assessment for future decisions.
- We will wait for the results to make programmatic and policy decisions.
- This approach (involving stakeholders during the design, not at the end) should be adopted for all future program assessments.

Lessons learned

- Early involvement of stakeholders during assessment of large scale programs creates interest for utilization of findings.
- The PHCPI framework accommodates information needs of stakeholders proofing its comprehensiveness for assessment of programs involving service delivery.

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Category 2

Relevance of HEP and its components

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Relevance of Health Extension Program (HEP) Service Delivery Modalities

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Introduction

- HEP services are delivered mainly through home-visit, outreach sessions, and static (health post-based service delivery).
- There is limited information regarding the need for and acceptability of these approaches by the current population of Ethiopia.

Methods

- Qualitative and quantitative methods were used to assess the appropriateness and relevance of these service delivery modalities.

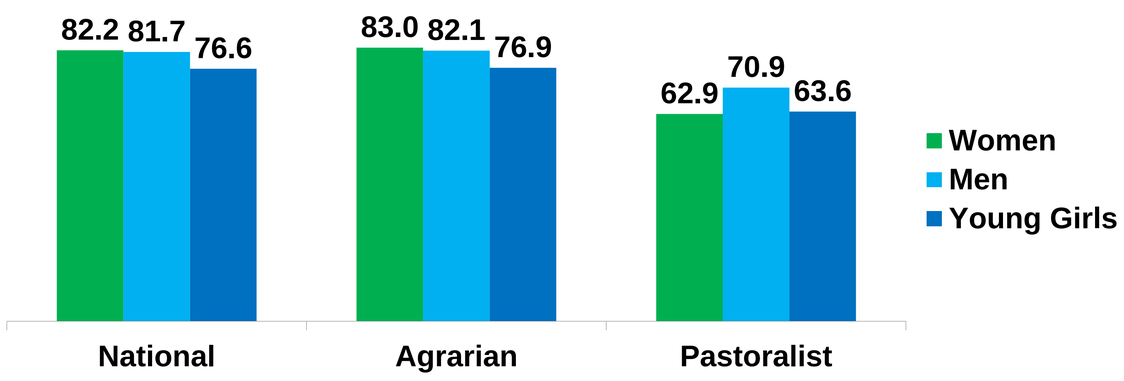
Results

The nature of services provided through HEP (clinical, community-based, targeting healthy clients…) demand all the three modalities

1. Home Visit

- Home visit is relevant for screening of people with communicable disease, immunization and to implement hygiene and environmental sanitation packages.

Figure 1. Percent of HH members who had agreed on appropriateness of service provision through home-visit



Screening

"…. For mothers, HEWs provide services on family planning, checkups of pregnant women, postnatal care…. Other services that they provide include screening for TB and pregnancy related problems and referral of identified cases to health post…."

KII, HEW

Child Immunization

"HEWs go to the houses of postnatal women and vaccinate 45 day old children. They [HEWs] give powder and plumpy' nut for other kids and mothers. They serve all the kebele residents by giving necessary service and education…."

FGD, WDA

Improved latrine utilization

"…The HEWs give health education about the negative effect of open defecation during house to house visit. As the result of this health education majority of our community have toilets even if the toilets are not modern….. "

KII, Kebele leader

2. Outreach service

- The importance of outreach service delivery modality depends on the type of service packages

- For example:
  - During immunization, outreach is relevant to reach difficult places. Linkage with one-to-five group and social and religious associations are good strategies to make outreach service effective.

Working with one-to-five group

"…we inform 1-5 network leader and 1-30 group leader to mobilizes the society for vaccination and provide vaccination in one appropriate place…."

Harar, HEWs

Working with social and religious associations

"… Even if it is difficult to visit house to house, they [Children] didn't miss any vaccination program. There are ten religious institutions in this kebele, and they [HEWs] reach all these religious institutions…."

Kebele leaders, Amhara Region

- However, HEWs employ campaign which is not appropriate for activities that needs multi-sectoral collaboration like sanitation and latrine construction.

Forced to adopt the desired behavior

"…. HEWs go around and tell people to dig latrine…saying those who don't have latrines will be punished…"

BG, WDA

3. Service delivery at Health Post

- HEP service delivery through static (Health Post) modality was seamlessly integrated at the primary healthcare system and found to be appropriate.

- Among the 18 packages, some of them are mainly delivered at HP since they need medical equipment and drugs. Thus, HP based service modalities are relevant to improve access for such services.

Relevance of HP service for maternal and child health:

"…. Services given by HEWs cover wide range of diseases, for example, when you go to HP, we [HEWs] treat children for pneumonia and diarrhea, and give ANC and PNC services for women."

Amhara region_KII_HEW

Relevance of HP service for adult health:

"…. when men come to HP to check their blood pressure, we measure and refer them to health center. But they [Men] need to be treated here and receive the medication which is impossible…."

Oromia region, KII, HEW

Conclusion

- Existing service delivery modalities are necessary and accepted; however, matching services to the right modalities needs a theory-based approach.

Recommendation

- All the three service delivery modalities should be continued.
- Selection of implementation modality for specific services has to be guided by behavioral theories adapted to each outcome and context.

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National HEP Assessment 2019

Relevance of HEP Packages in Addressing Major Causes of Morbidity and Mortality

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Background

- The Ethiopian government designed 16 HEP packages under the umbrella of four categories: hygiene and environmental sanitation, disease prevention and control, family health services, and health education in 2003 to respond to the disease burden at the time.
- The main objective of this study was to assess whether the Packages were relevant and are still relevant in addressing the health needs of Ethiopians.

Methods

- The analysis compared HEP packages against current disease burden.
- The analysis also looked at community's perception of HEP packages and HEP's reflexivity overtime through survey, KIIs and FGDs.

Results

Major causes of death, disability, and major risk factors (Source: http://www.healthdata.org/ethiopia)

1. Top ten causes of premature death didn't show major change

Communicable, maternal, neonatal, and nutritional diseases
Non-communicable diseases
Injuries

2007 ranking		2017 ranking		% change 2007-2017
Neonatal disorders	1	1	Neonatal disorders	-26.7%
Lower respiratory infect	2	2	Diarrheal diseases	-12.2%
HIV/AIDS	3	3	Lower respiratory infect	-42.7%
Diarrheal diseases	4	4	Tuberculosis	-43.1%
Tuberculosis	5	5	HIV/AIDS	-76.5%
Measles	6	6	Congenital defects	14.4%
Protein-energy malnutrition	7	7	Protein-energy malnutrition	-47.9%
Meningitis	8	8	Meningitis	-37.0%
Whooping cough	9	9	Whooping cough	-40.7%
Congenital defects	10	10	Ischemic heart disease	-1.8%
Ischemic heart disease	15	14	Measles	-78.5%

2. Top ten causes of disability remained the same with only minor reshuffle

Communicable, maternal, neonatal, and nutritional diseases
Non-communicable diseases
Injuries

2007 ranking		2017 ranking		% change 2007-2017
Vitamin A deficiency	1	1	Low back pain	37.5%
Low back pain	2	2	Depressive disorders	34.2%
Depressive disorders	3	3	Dietary iron deficiency	38.1%
Dietary iron deficiency	4	4	Headache disorders	35.9%
Headache disorders	5	5	Neonatal disorders	114.3%
Blindness and vision impairment	6	6	Vitamin A deficiency	5.1%
Anxiety disorders	7	7	Blindness and vision impairment	40.6%
Age-related hearing loss	8	8	Anxiety disorders	34.1%
Diarrheal diseases	9	9	Age-related hearing loss	37.6%
Neonatal disorders	10	10	Diarrheal diseases	24.7%

3. Major risk factors driving most deaths and disabilities didn't change

Metabolic risks
Environmental/occupational risks
Behavioral risks

2007 ranking		2017 ranking		% change 2007-2017
Malnutrition	1	1	Malnutrition	-33.6%
WaSH	2	2	WaSH	-16.1%
Unsafe sex	3	3	Air pollution	-38.9%
Air pollution	4	4	Dietary risks	-1.2%
Dietary risks	5	5	High fasting plasma glucose	-1.0%
High fasting plasma glucose	6	6	Unsafe sex	-72.9%
Alcohol use	7	7	Occupational risks	12.6%
Occupational risks	8	8	Alcohol use	-7.0%
High blood pressure	9	9	High blood pressure	6.5%
Tobacco	10	10	Tobacco	-22.3%

- HEP Packages are relevant to address major causes of morbidity and mortality in Ethiopia
- The recently added packages allow addressing the increasing burden of NCDs and mental health issues (33% of DALYs lost)

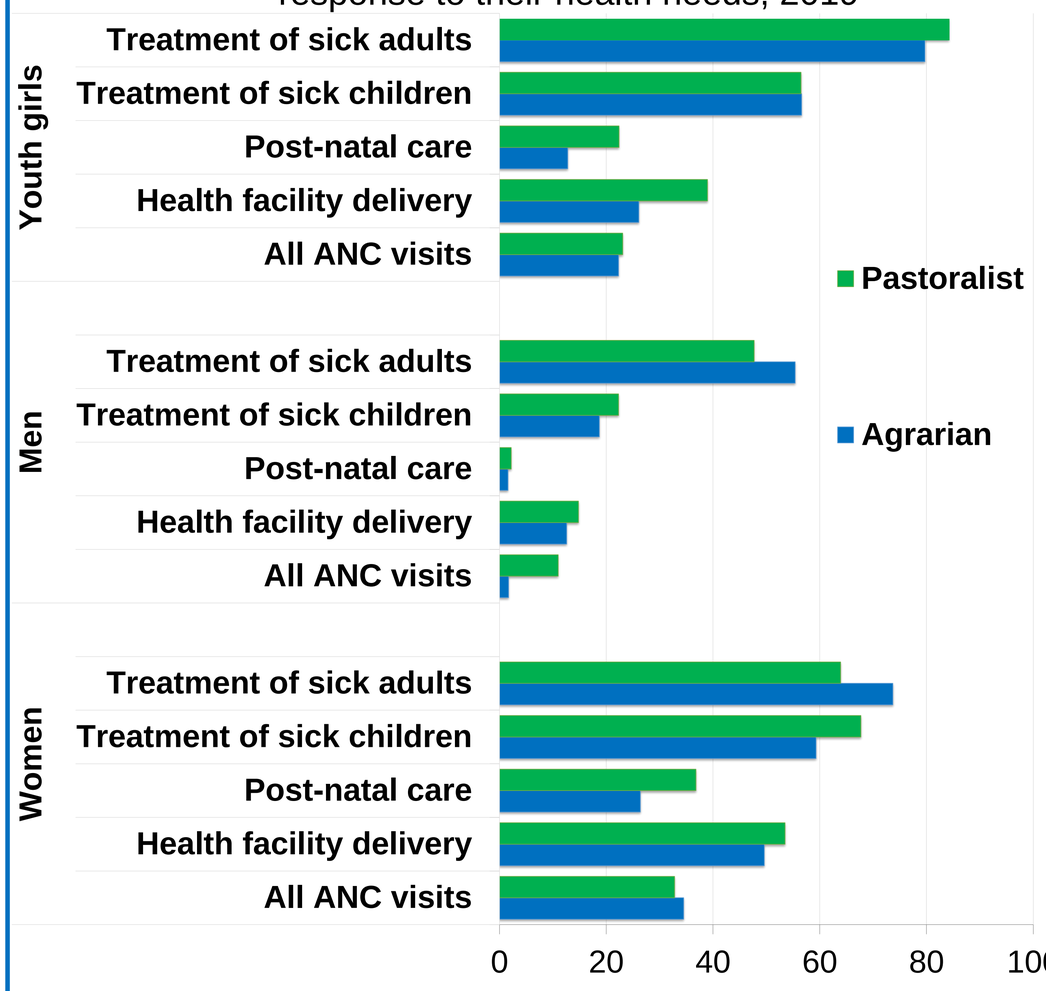
- **Hygiene & environmental sanitation**
  - Safe excreta disposal
  - Safe solid waste disposal
  - Food hygiene
  - Healthy home environment
  - Arthropods & rodent control
  - Personal hygiene
- **Disease prevention and control**
  - HIV/AIDS
  - TB
  - Malaria
  - First Aid
- **Family health services**
  - MCH
  - Family planning
  - Immunization
  - Adolescent RH
  - Nutrition
- **Health education and communication – cross-cutting**

→
- Enteric infectious diseases **(18%)**
- Infectious disease other than enteric **(18%)**
- Injuries, violence & accidents **(8%)**
- Maternal and neonatal disorders **(18%)**
- Nutritional disorders **(5%)**

Communities perceived HEP packages as relevant but demanded additional curative services

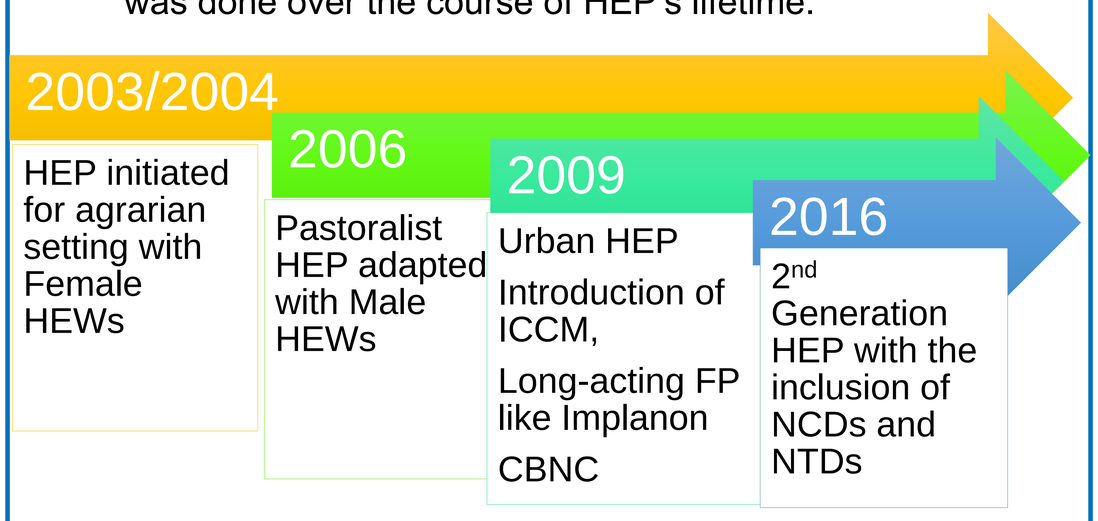
- All activities of HEWs were reported as important by all categories of FGDs (men, women, WDAs) among community members
- No service was considered as "not important"
- Health managers and HEWs also believe in the importance of all the packages
- However, there is expectation for additional clinical services among community members.

Percent of household members who ever visited a HP that recommended additional services in response to their health needs, 2019



Adaptation of HEP Packages

- Program adaptation to the communities' health needs was done over the course of HEP's lifetime.



Conclusions and Recommendations:

- All the HEP packages are relevant to the disease burden in Ethiopia, and the adaptations were relevant.
- The community is in need of additional curative services.
- For the packages to bring about expected outcomes, addressing the implementation challenges important, mainly:
  - Plan for the long term evolution of HEP:
    - Phased approach to implementation of HEP at community level
    - Graduating packages upon achievement of preset criteria
  - Increase attention to health literacy either through a separate package or as part of existing packages
  - Incremental expansion of packages towards more comprehensive services at HP
  - Allow packages to vary across settings

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National HEP Assessment 2019

Evolution of Ethiopia's Health Extension Program: Has it been responsive?

MERQ Consultancy PLC

Background

- Programs are complex systems of actions through which actors mobilize resources to achieve positive changes in social conditions. Effective leadership and program management ensures that changes in program components allow responding to emerging needs and realities of potential users (Louise Potvin)
- How HEP evolved to its current state and the extent to which it used context specific evidence before decisions on scale up, revision of strategies, and addition of new interventions is not well documented.
- This study explored major changes that the HEP passed through since its inception.

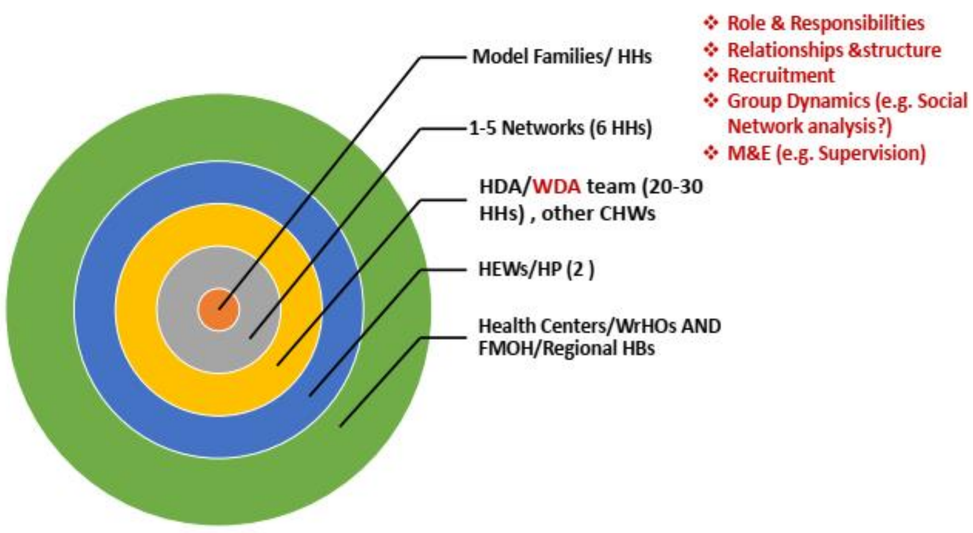
Methods

- Systematic Review of studies done in Ethiopia was conducted.

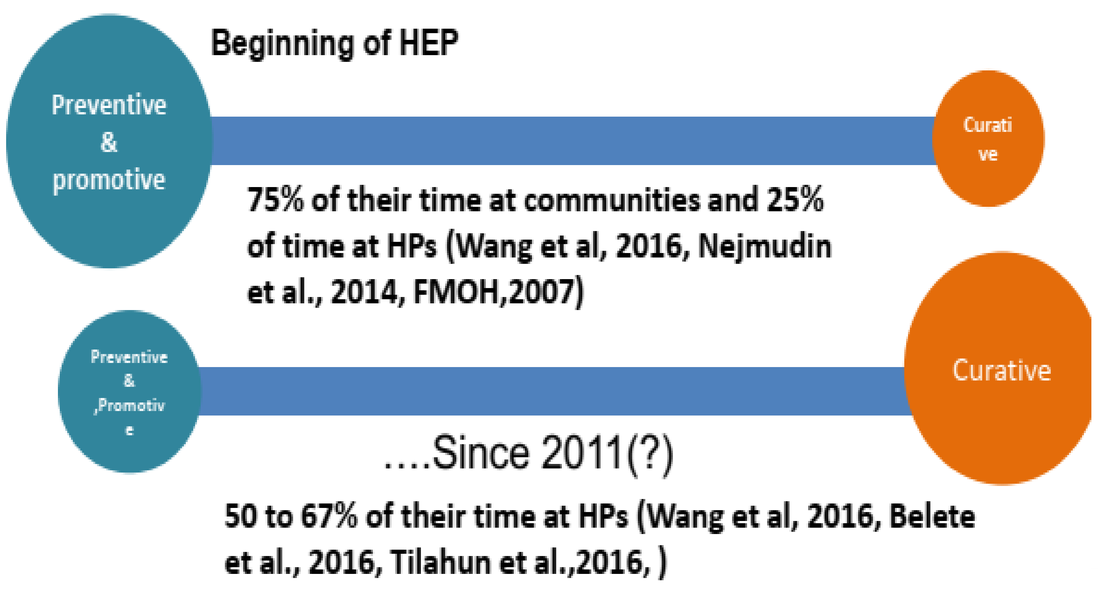
Results

- HEP has been undergoing through a process of evolution and there have been numerous changes in the program. HEP has been flexible, adapted to various contexts and evolved over time.

Structure of HEP



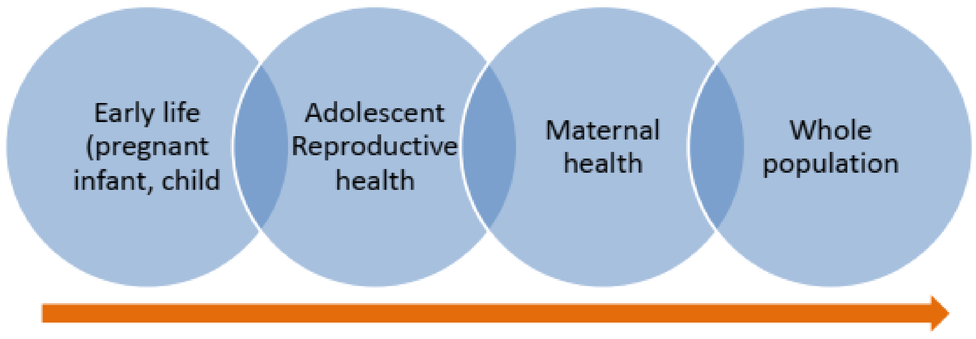
Spectrum of services: Time allocation



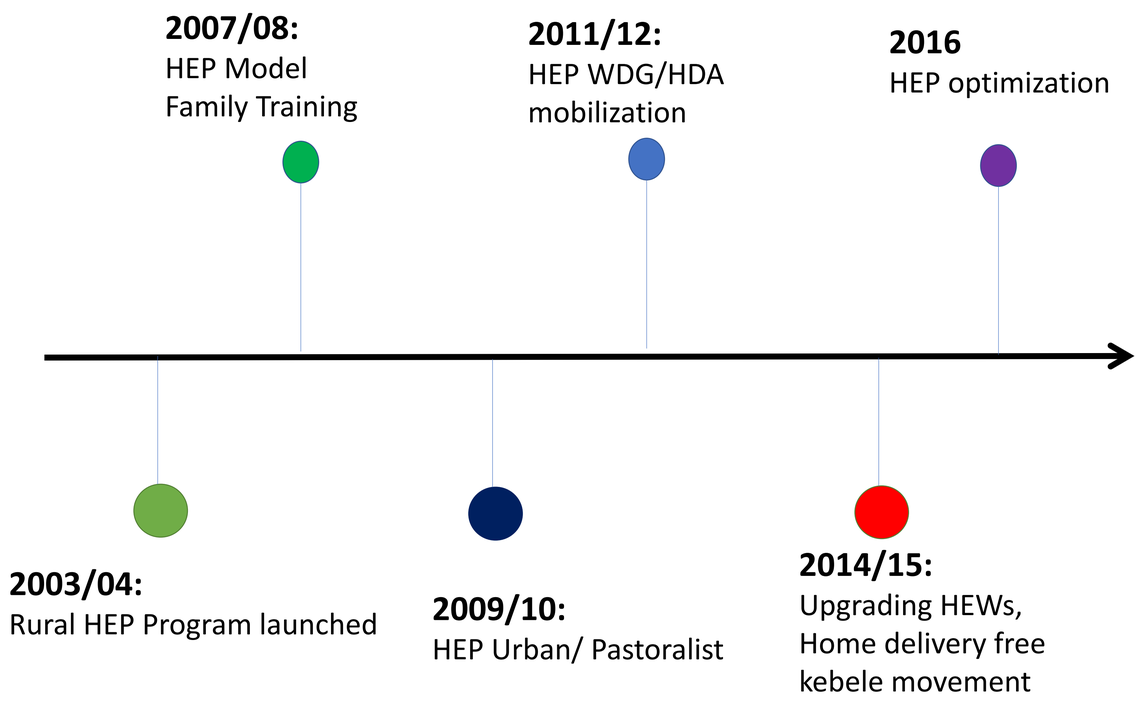
Selectively implementation among the 15 packages.

E.g. environmental health and sanitation, home testing and counseling for HIV/AIDS, family planning (FP), antenatal care (ANC), some infectious disease management, and non-communicable disease monitoring are the main targets (Lucy et al, 2012, Teklehaimanot A et al, 2010)

Continuum of care in HEP



Evolution of HEP through time



Outstanding Issues

- Prioritization of packages: Some packages have disproportionate cognitive load on HEWs. How should HEWs prioritize among HEP package in their daily and weekly routines?
- Do we have a system to routinely synthesize evidences and inform changes in features of HEP?
- Structural relationship between HEWs and WDAs:
  - To what extent can volunteerism work?
  - What should HEWs engage in controlling WDAs?
- HEWs increasing preference for provision of curative than preventive and promotive services - open for criticism
- HEP largely ignores adolescents/Youths despite the existence of a specific package for it.
- Adequacy and timeliness of adaptations to the changing needs and expectations of communities

Conclusion and Recommendation

- HEP has been undergoing through a process of evolution; there have been several changes in the HEP- the program has been complex. But, it is flexible, adapted to various contexts and evolved over time.
- There is a trade-off between number of HEWs, number of packages, and number of HHs reached.
- There is need for skills training on priority settings for HEWs.
- HEP is a complex program.
  - Systems thinking should be incorporated in the decision making process.
  - Any change on any of its features requires phases for generation and synthesis of evidence.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Theoretical underpinning of Ethiopia's Health Extension Program

MERQ Consultancy PLC

Question

- What are the theoretical underpinnings of Ethiopia's Health Extension Program?

Objective

- To examine the theoretical underpinnings used in Ethiopia's Health Extension Program

Methods

We conducted Systematic Review of studies (observational and experimental) conducted in Ethiopia.

Results

- HEP doesn't begin in a vacuum. Rather it has been built on the contribution of several theories, models and guiding principles from other frameworks.

A. HEP has adopted Primary Health Care

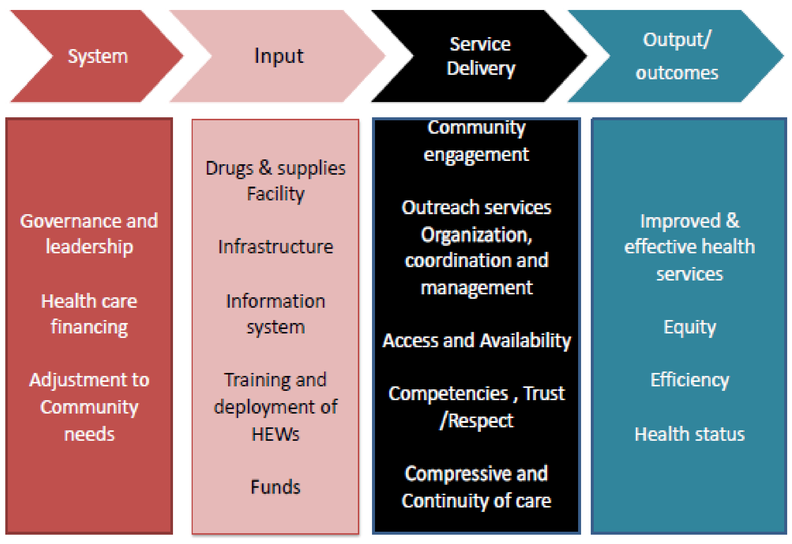
- HEP is complex and dynamic program that PHC has emerged as a key element of HEP.

- HEP is designed based on the concept and principles of PHC

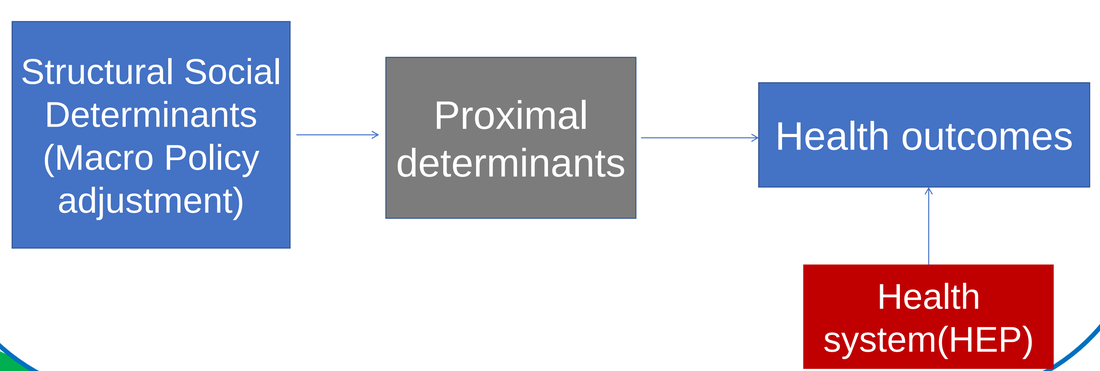
(FMOH.,2007).

HEP focuses mainly on providing quality promotive, preventive and selected curative health care services in an accessible and equitable manner (FMOH,2007)

The "Black Box" of HEP? Potential Mechanisms?



B. HEP and Social Determinants of Health



C. HEP and Socio-Ecologic Model and Social Cognitive Theory

e.g. **Modeling** in model Family Training

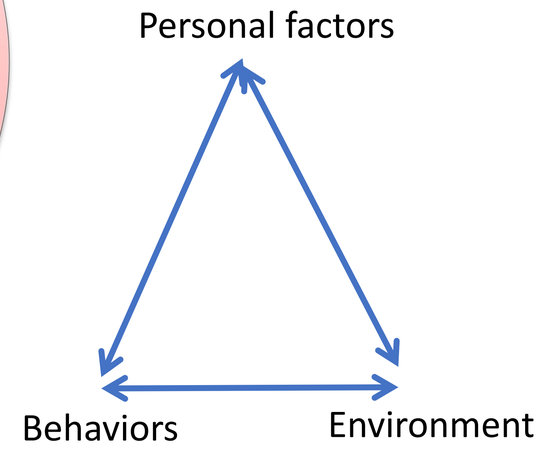
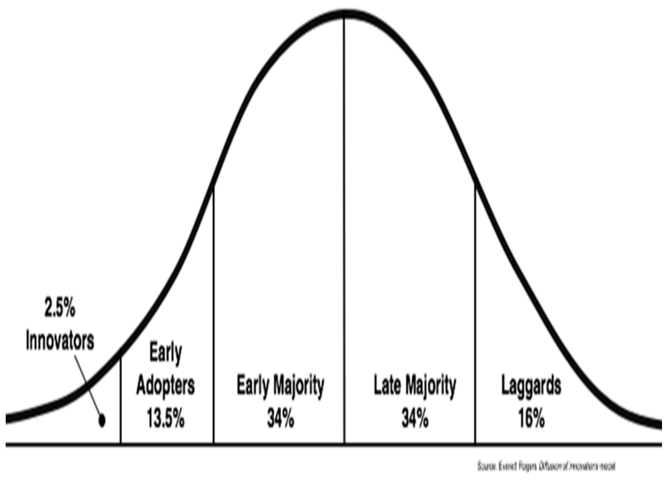


Figure 1. HEP and the Social Ecological Model.

D. HEP and Diffusion of Innovation Theory



HEWs identify and train model families that have acceptance and credibility by the community, as early adopters of desirable health practices to become role models leading to the adoption of the desired practices and behaviors by the community.

(FMOH, HEP Profile,2007, Nejmudin,2014)

However,

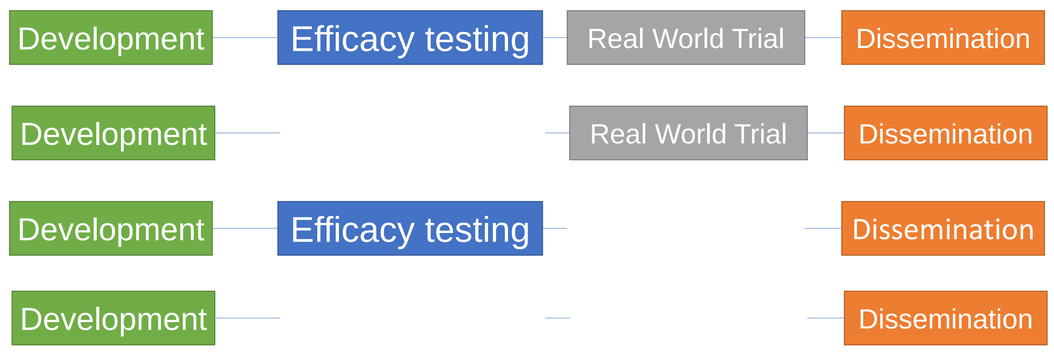
- The psychographics of Model family (so called early adopters) and their recruitment process has a form of "coerced participation"

- **The tipping point/Chasm/ or Tripping point** is not clear. When should we stop cascading or should bring "new" interventions?

- HEP is complex and all packages may not have same cumulative diffusion curves.

E. HEP and Scaling Up strategy

Scaling up refers to *"deliberate efforts to increase the impact of successfully tested health interventions so as to benefit more people and to foster policy and program development on a lasting basis"*



- No framework explaining scaling up pathways
- Art of timing
- Evidence based decision

Conclusion and Recommendation

- Although the national strategic documents do not explicitly state which theory/models have given more attention, some authors suggested that HEP has used different contemporary models at different time.
- There is a need to move to theory-based programming, implementation, and monitoring and evaluation.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Category 3

Human Resource and Other Inputs of the Health Extension Program

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Adequacy of Health Post Infrastructure and Basic Utilities

MERQ Consultancy PLC

Background

- Primary Health care units from low income countries including Ethiopia often lack basic infrastructure and utilities affecting quality of care and client satisfaction.
- Health infrastructure standards of Ethiopia recommend construction of one health post for every 5,000 population expected to live in a kebele.

Methods

- The 2019 HEP National Assessment assessed availability of health posts in 353 randomly selected rural kebeles.
- The status of physical facilities and basic utilities was assessed among available health posts.
- Data was collected by interviewing HEWs and observing physical structures.
- Weighted descriptive statistics were computed.

Results

- 97.4% of kebeles had at least one health post.
- Health post to population ratio was 1:5760 in agrarian and 1:2919 in pastoralist settings
- Fifty nine percent of health posts have access to all-weather road to reach to the nearest referral center.
- 18% of HPs have regular electricity and 27% have improved water sources.

"…. we need light for diagnosing malaria and also, we are forced to serve at night (duty) but there is no light source. … the house, which was constructed for us, is not comfortable, we finished it by ourselves and (it has) no furniture …."

HEW, SNNP

"….we expect her to spend night duty but health post should look like health post…(it should have) water, electricity, night duty station… she is not a (useless) property to be dropped at a compound where there is no fence, building or proper house at all."

Key Informant, RHB

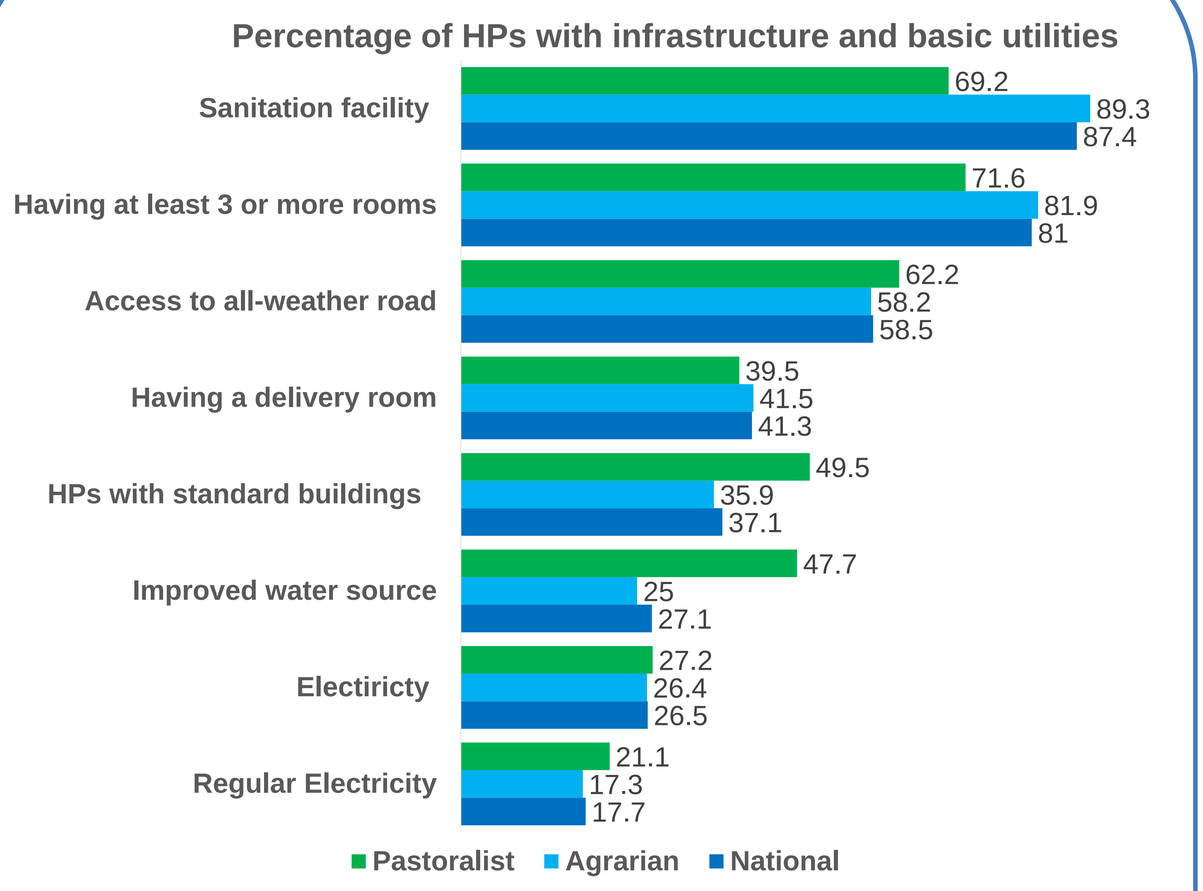
- Majority (63%) of Health Post buildings fail to meet the required minimum building standards (floor made of cement/ceramic, wall made of brick and cement, and roof iron sheet and related materials)

"…. I have worries regarding rooms where we provide medicine for TB patients, … the room does not have windows so the ventilation is poor. I have fear not to acquire the disease…what we are using is an old one because the one which has recently constructed has gone out of service…."

HEW

"…. it would be difficult to work day and night, because … our health post and living house has no fence and we have no guard. Thus, we have no guarantee if the health post gets robbed. …there is uncertainty on our security. If someone requires your service at night, for example sick child, you will take the responsibility by yourself…."

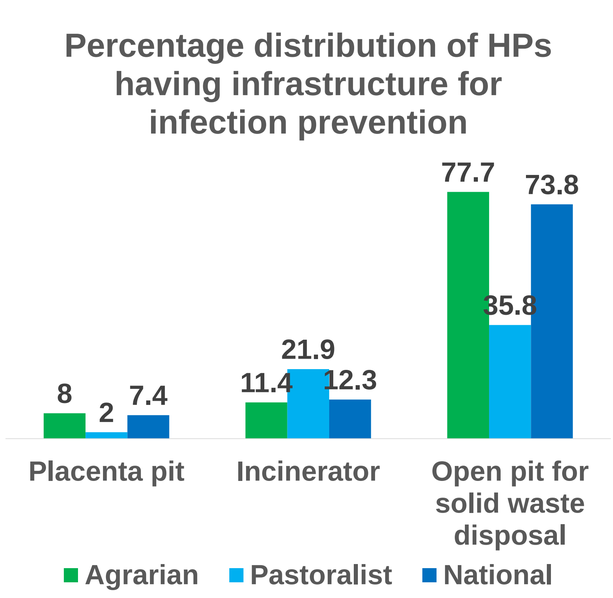
HEW

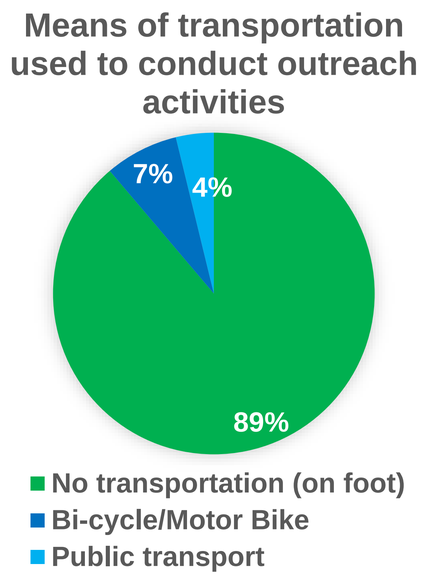


- Only 12% of health posts had incinerator and 7% had placenta pit for infection prevention.
- Outreach activities in majority of health posts were performed by walking on foot.

"…. Additionally, there are services like immunization that should be given out of (the) HP. … we might go far away through forests … which may have (higher) safety concerns, if we don't have supporting groups…. It is impossible to travel, even, by animal, … no transportation, no bicycle, (For home visits, I used to walk …."

HEW





Conclusion

- Majority of health posts had sub-standard buildings and lack basic utilities such as water and electricity which compromise quality of health service provide by health posts.
- Absence of means of transportation to provide outreach services could affect implementation and coverage of services in villages far from health posts.

Recommendation

- Re-build or renovate health posts with sub-standard buildings.
- Involve stakeholders to improve basic utilities such as water and electricity.
- Avail means of transportation for outreach activities.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Availability of Essential Drugs and Medical Equipment in Health Posts

MERQ Consultancy PLC

Background

- HEP packages have increasingly included services that require equipment, drugs, and other medical supplies.
- Availability of functional equipment and uninterrupted supply of drugs and other medical supplies is an important determinant of service availability
- This study aimed to assess availability of functional medical equipment and uninterrupted supply of drugs and other medical supplies among available health posts.

Methods

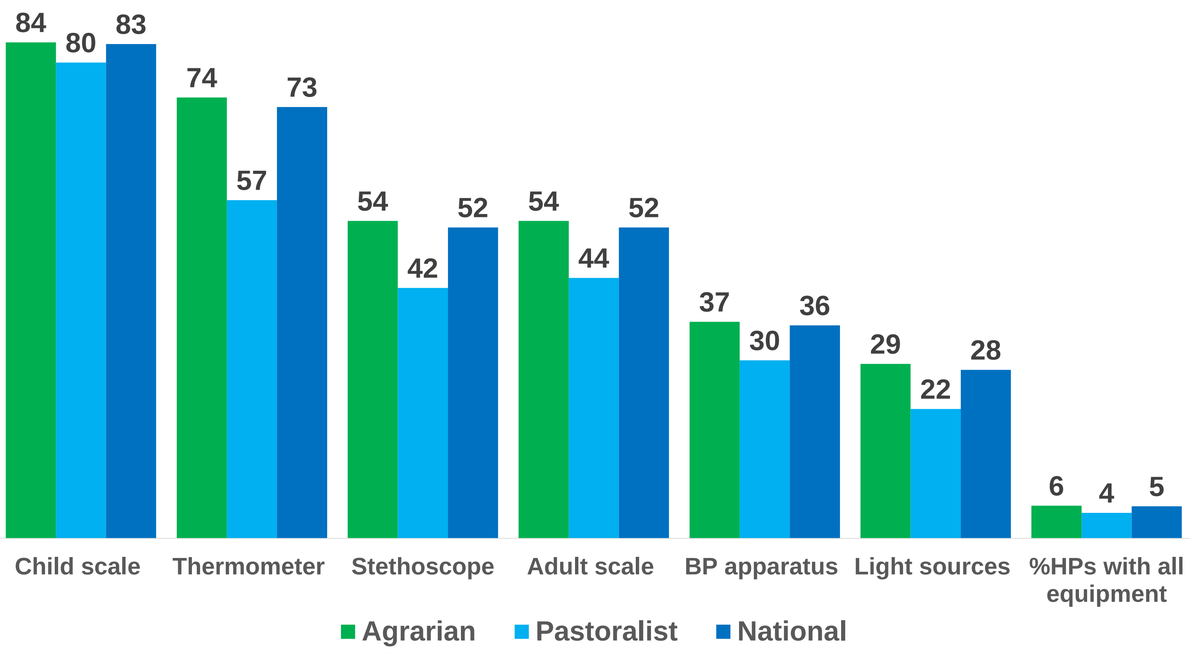
- A sample of 343 health posts were assessed.
- Data was collected by interviewing HEWs and reviewing bin cards and stock cards.
- Six tracer equipment and 14 tracer drugs were assessed.
- Weighted descriptive statistics were computed to estimate key indicators on availability of medical equipment, drugs,

Results

Availability of Basic Equipment

- Only 5% of health posts have all basic equipment, such as BP apparatus, stethoscope, thermometer, adult scale, child scale and artificial light sources.
- Availability of basic equipment is better in health posts located in agrarian communities as compared to health posts in pastoralist communities.

Percentage Availability of Basic Equipment



In qualitative study, community member stated the problems related with drugs

"…. The HP does not have medication. The government did not supply medication. The community is complaining about lack of medical drugs. They are complaining after constructing the health facility and hiring health professionals, the facilities are not supplied with medication and this makes all the government activities and spending worthless... We are forced to buy from private pharmacies……"

Community member, SNNPR

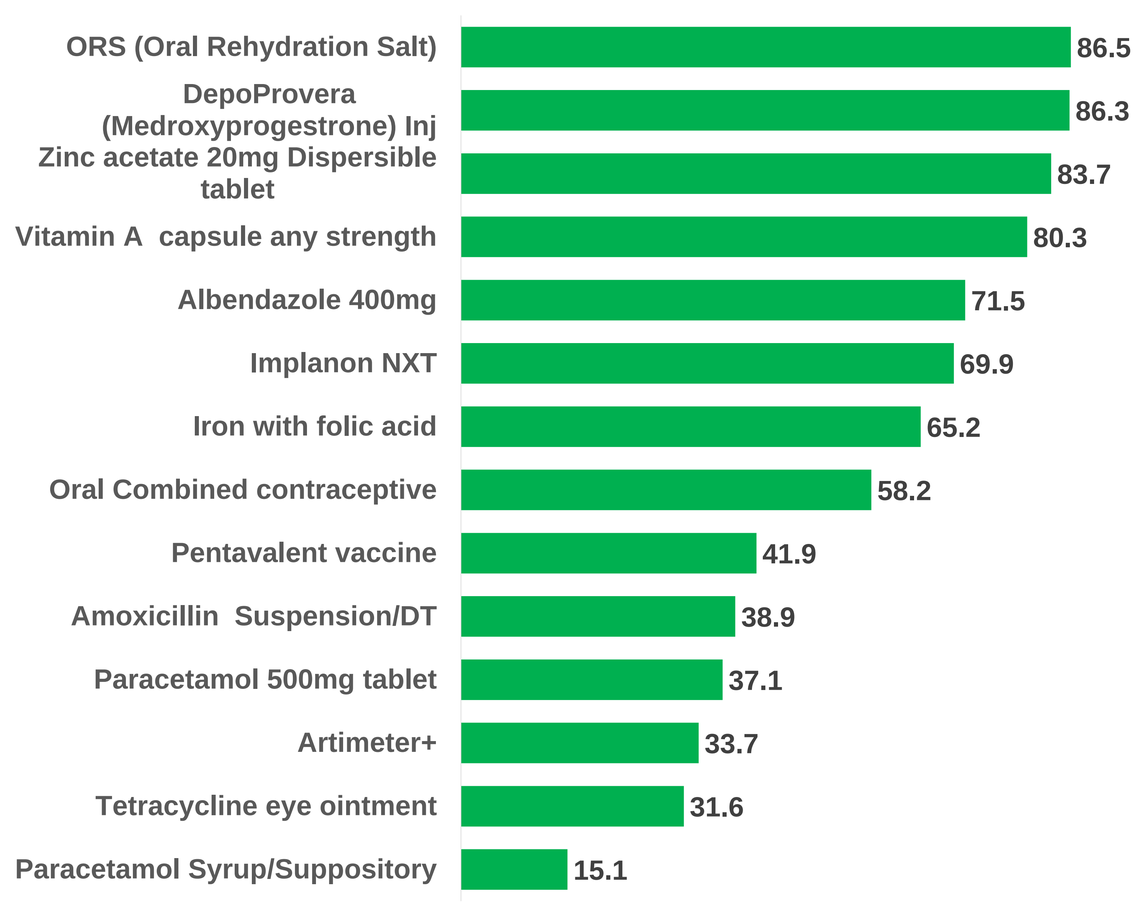
"If the shortage of supply resolved, we can get treatment early… If material, equipment's are available in our area, it would solve our problem and suffering. . . ."

Community member, Amhara Region

Availability of Essential Drugs

- There is shortage of essential drugs and basic equipment.
- Highest proportion of health posts have ORS (87%), followed by Medroxyprogesterone injection (86%) and Zink acetate 20 mg dispersible tablet (84%).
- Amoxicillin suspension/dispersible tablet was available only in 37% of health posts.
- The least available drug was paracetamol suspension (15%).
- Stockouts of drugs in the past six months indicated that an average stock out duration ranges from 30 to 60 days.
- The reasons for stock out were poor logistic supply management system at the health posts and irregular supply from health centers.

Percentage availability of drugs



In qualitative study, HEWs stated the problems related with drugs

"…. The drug for treatment service is not available at HP and we are unable to conduct growth monitoring. We are sending pneumonia, cough, measle cases to HC, we are trained about these diseases but we couldn't provide service due to lack of drug…"

HEW in Oromia Region

"…. We advise them to treat any water before drinking it.…They used to get medicines to treat water from health posts. But now it does not exist…. Even we ask the woreda, but it is not available. Because of this, boiling the water is what they used nowadays…."

HEW in SNNPR

Conclusion

- There was extensive stock out of essential drugs during the day of study visit and stock out in the past six months was also very common.
- Shortage of basic equipment and supplies was observed in majority of health posts.

Recommendation

- Strengthen logistic supply management system at the health post by training HEWs, and allocating earmarked budget for health posts.
- Strengthen the linkage between health center and health posts to ensure timely supply of essential drugs.
- Improve the quality and durability of medical equipment through better quality control.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

HOW WAS THE HEALTH EXTENSION PROGRAM BEING FINANCED?

MERQ Consultancy PLC

Background

- Ethiopia has been investing a huge amount of money for the implementation of HEP since 2003.
- The main sources of finance have been government, community and the rest of world.
- This study explored total HEP spending trends as the share of total health spending, financing source and spending by service type and input and economic classification.

Methods

1.Define the total value of HC and HP expenditure from National Health Accounts (NHA)

2. Define the HC and HP expenditure by source (Government and rest of the world)

3. Identify and allocate HC and HP expenditure From NHA

4. Identify and allocate health post level (HEP) expenditure using unit annual expenditure of facilities (both HC and HP)

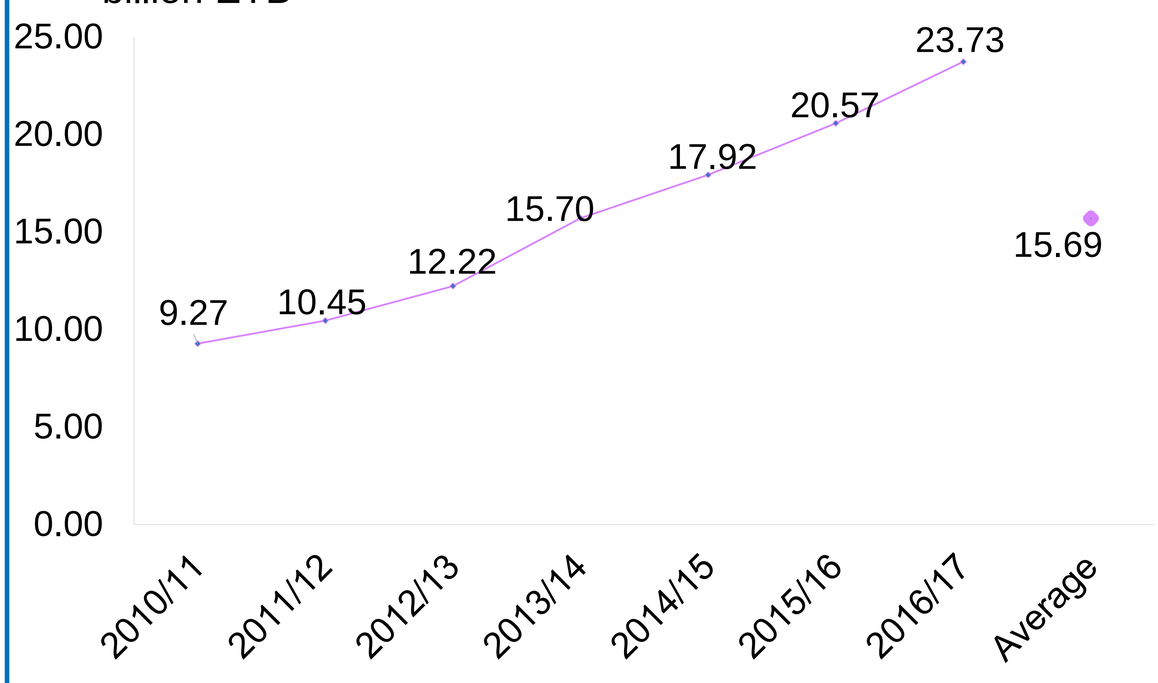
5. Identify and allocate expenditure by type and sources at HP level (HEP)

6. Allocate all expenditure to final expenditure using service distribution keys (unit cost*utilization of each services) Refer Annex 1

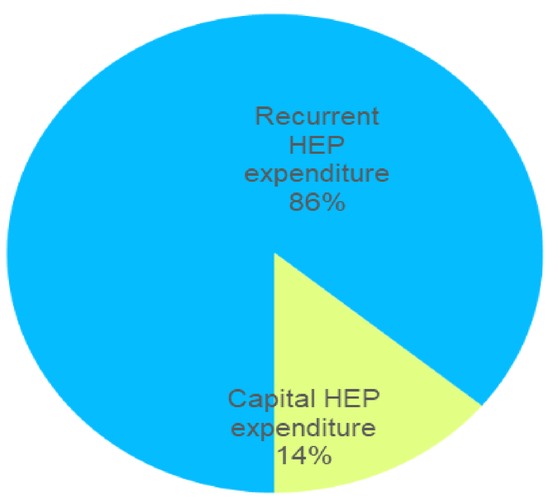
7. Compute total and average HEP expenditure for each final expenditure center and major departments

Results

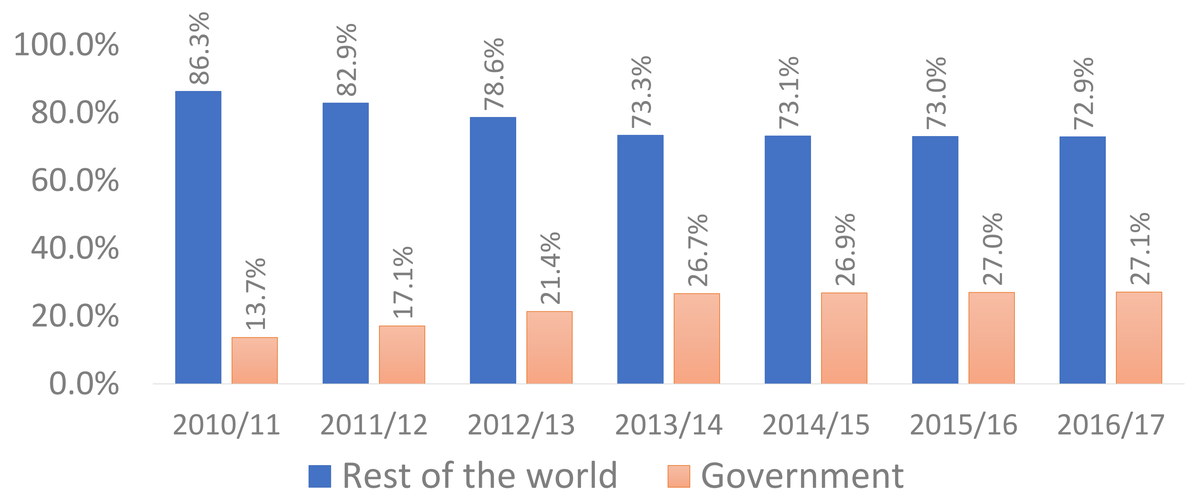
Total HC and HP expenditure trend 2010/11 to 2016/17 in billion ETB



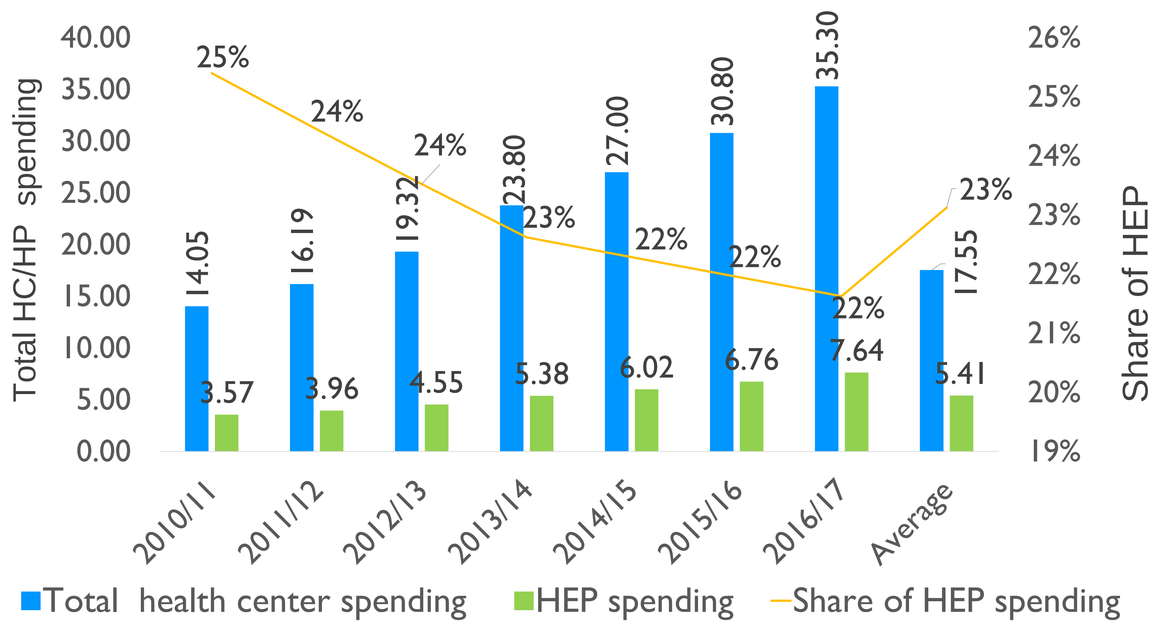
Average total HEP spending share by economic classifications 2010/11- 2016/17



Trends in source of HEP expenditure 2007/08 to 2016/17 (in billion ETB)

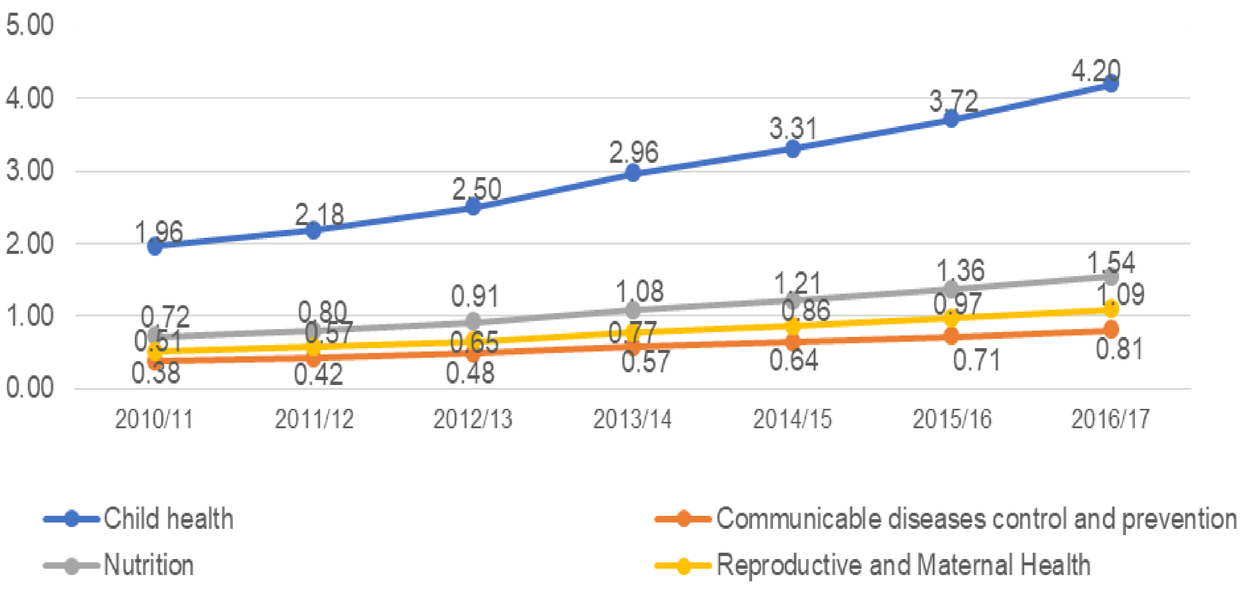


Total share of HEP expenditure from total HC and HP expenditure is slowly declining.



Child health constitutes the largest category of HEP spending (related to the cost of vaccines and other supplies)

Total HEP spending by type of health services in billion ETB 2010/11- 2016/17



Conclusion

- ❑ Investment on HEP has been increasing in nominal terms. However, the share of spending on HEP in relation to total expenditure at health center and health post level has been continuously declining since 2010.
- ❑ Except for voluntary contribution of time/labour at community level, government and donors are almost the only financing sources of HEP.
- ❑ Government share in financing HEP has been increasing over the years. However, HEP is still a highly donor dependent.

Recommendation

- ❑ Increase the rate at which domestic financing schemes substitute donors with the ambition of ensuring financial sustainability of HEP
- ❑ Consider alternative ways of financing HEP including CBHI

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Pre-Service Training of HEWs: Curriculum to Barriers of Learning

MERQ CONSULTANCY PLC

Background

- More than 40,000 HEWs have been trained since the launching of HEP.
- Previous studies identified gaps in the competency of HEWs.
- The objective of this study was to assess relevance of the curriculum, adequacy of training facilities and materials, quality of course delivery, assessment methods and perceived competence of trainees among HEW training institutions.

Method

- Mixed parallel quantitative and qualitative research methods were applied in 21 of the 22 colleges across all the regions of Ethiopia.
- 1600 students were selected using systematic random sampling from which 1245 (77.8%) have participated in the study.
- A sample of 192 instructors were also included as key informants.
- Qualitative interviews were conducted with 43 key informants (deans, department heads, instructors, trainees, preceptors, COC assessors, and focal persons).
- Data management and analysis were done using Stata 14 and NVivo12 soft wares.
- Qualitative data was transcribed, coded and thematic framework analysis was used

Result

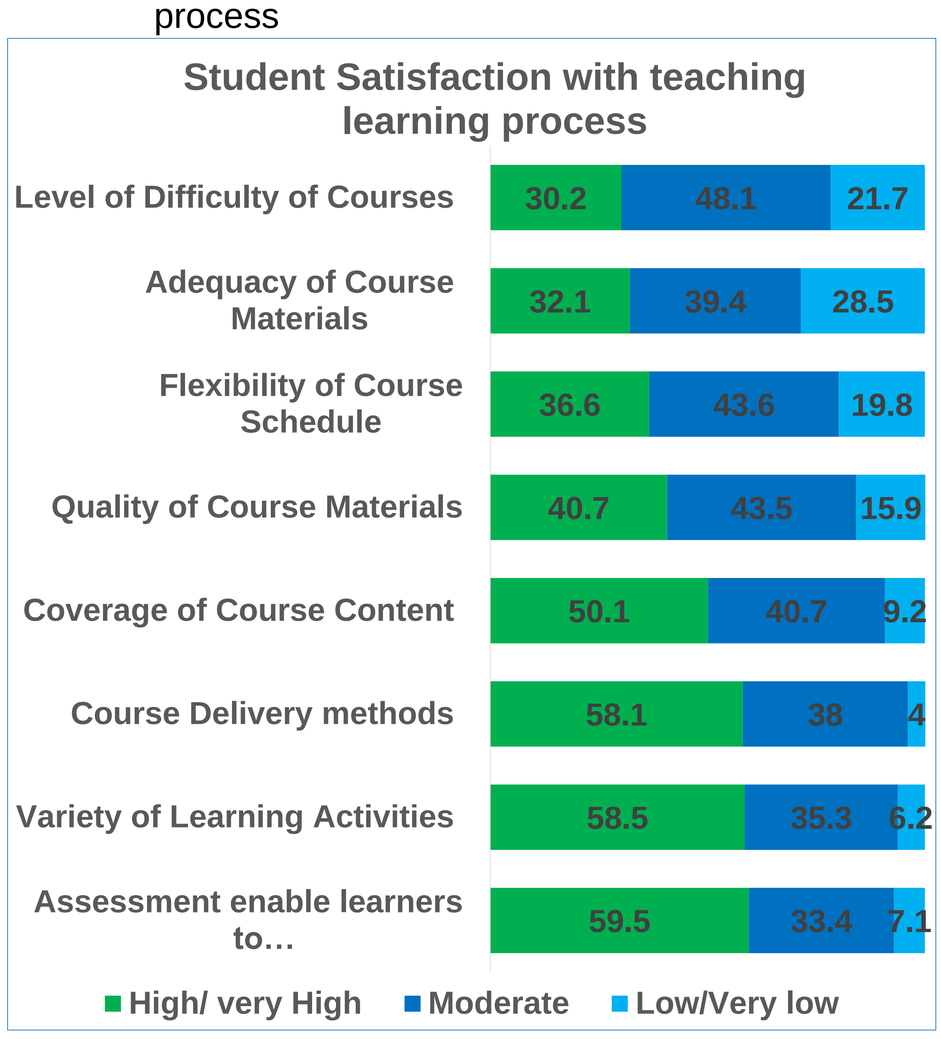
- 76% of instructors and 81% of students believed that the curriculum is relevant to produce professionals who could meet the health needs of the community.
- Core competencies of the curriculum were said to be beyond the learning scope of candidates.
- Training modules have good quality in terms of relevance, content and clarity but they are outdated and do not have enough copies given the large number of students.
- Majority of teachers have required qualification and subject matter competency but they lack refresher trainings about updates on HEP and other health topics.
- Majority of HEW trainees rated their instructors as very good using different parameters (ranging from 69.4% for giving feedback to 84.4% for competency in subject matter)
- Majority of HEW trainees were said to be unfit to the scope of the curriculum: they have academic and language deficiencies and joined have low interest to the program.
- Practical learning of both skill lab and community/clinical attachment were not adequately implemented.
- Re-exams of internal assessments were said to be abused for the sake of reducing attrition rate and COC examination is not properly implemented.
- Training institutions, especially TVET colleges, lack infrastructure and administrative capacities to train HEWs.
- The HEP curriculum is poorly implemented for multiple reasons starting from student selection/enrolment to provision of final competency examination.

Table 1: Number of Instructors by Field of Specialization in RHSCs (2018/19 A.Year)

College	Field of Specialization						
	HO	Nursing	EH	MW	LT	Other	Total
Debre Tabor	0	22	4	11	15	18	70
Minilik	0	2	1	3	0	4	10
Gondar	6	17	4	12	7	7	53
Metu	11	7	1	4	0	5	28
Negele Borena	11	10	1	7	0	4	33
Dire Dawa	3	7	2	5	0	0	17
Gambela	0	3	1	0	2	0	6
Bahir Dar	4	22	2	8	5	16	57
Hosana	20	9	5	5	0	0	39
Mekelle	0	24	3	9	9	17	62
Arba Minch	33	1	2	1	11	0	48
Debre Berhan	22	26	4	10	8	1	71
Semera	2	17	0	4	2	0	25
Mizan	28	22	4	10	19	10	93
Dessie	11	22	2	8	12	22	77
Total	151	211	36	97	90	104	689

HO= Health Officer, EH= Environmental Health, MW= Midwife, LT= laboratory Technician, Other= MPH, MSC,

- Majority of HEW trainees' have good & moderate level of satisfaction with the overall training process



- ***What are those reasons?***

Figure: Factors Compromising Quality of HEW* Training *in Ethiopia, May 2019

Conclusion

- The Curriculum for HEWs was found to be relevant for the current Ethiopian health policy and to produce professionals that could meet the health needs of the community.
- For multiple reasons, the curriculum was not fully implemented during Teaching and Assessment process and this was found to be compromising competency of HEWs.
- The current recruitment process of HEWs lacks mechanisms to enroll trainees with adequate language and other competencies meeting requirements of HEW training curricula.

Recommendations

- Student selection Criteria and Procedure should be revised to enroll candidates with better learning potential.
- Ensure adequacy of teaching resource & infrastructure at TEVET or switch HEP training to RHSCs
- Monitor implementation of students' practical learning, community attachment and assessment modalities based on the curriculum.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Intention to Leave and Attrition Rate among HEWs in Ethiopia

MERQ CONSULTANCY PLC

National HEP Assessment 2019

Background

- Human resource constitutes the most important building block of any health system particularly at community and primary healthcare level.
- Attrition of health workers is a common challenge in the provision of primary healthcare in developing countries
  - Interruption of service delivery
  - Loss of experienced staff
  - Breakage in institutional memory
- The purpose of this analyses was to estimate the magnitude of attrition and intention to leave among HEWs in Ethiopia

Methods

- Attrition, leaving work as HEW for any reason including resignation, disappearance, and death regardless of the duration of stay, was assessed among 2850 ever deployed HEWs in sample woredas by reviewing personnel records.
- Intention to leave, plan to quit work as HEW and look forward to finding another job in the near future, was assessed among 584 HEWs currently working in 62 study woredas.

Results

Intention to Leave

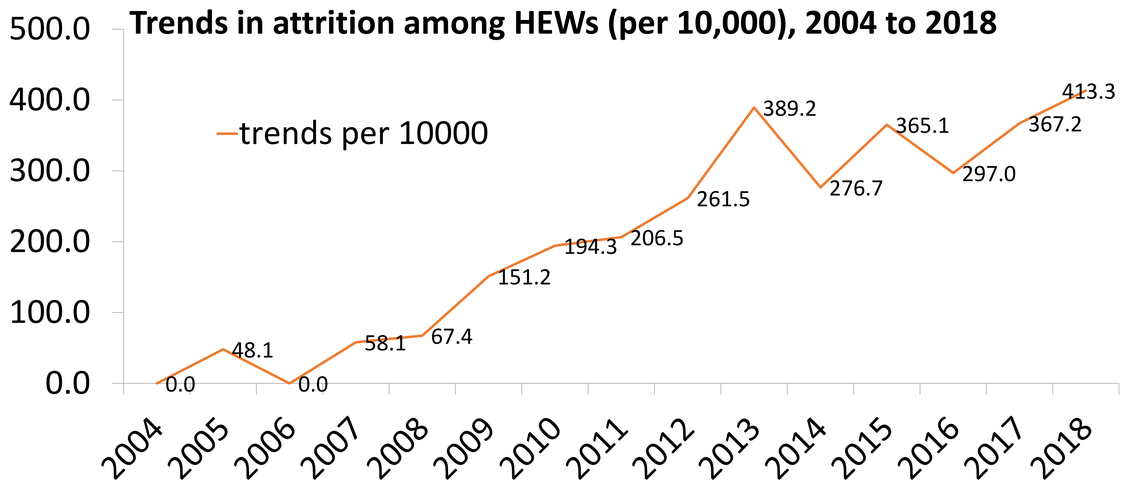
- ✓ Five hundred eighty four HEWs were asked about Intention to leave;
  - ✓ One in four HEWs intend to work as a HEW for life.
  - ✓ Additional 11% intended to work for >=3 more years
  - ✓ Intention to leave after two years was 21%
  - ✓ 17% reported that they are currently looking for another job.
  - ✓ Intention to leave in the current year vary by region
    - ✓ Highest in Gambella and Amhara - 45% and 42%, respectively
    - ✓ Lowest in Tigray - 1.9%

Reason for Intention to Leave

- Low salary (31%), Lack of career development (25%),
- Want to live in urban area (18%) Work load (15%).

Attrition

- Average rate of attrition was 2.9% per year
- Overall attrition was 21.1% for the program's life (2004 to 2019)
- Median service year at attrition was 5.9 years (IQR: 2.9, 8)
- High regional variation
  - Highest attrition in Afar (36.1%) followed by Amhara (25.3%);
  - Lowest attrition was observed in Oromia (15%).
- Attrition rate seems to have stabilized at a rate of 2-4% since 2013.



Reason for Attrition

Quantitative

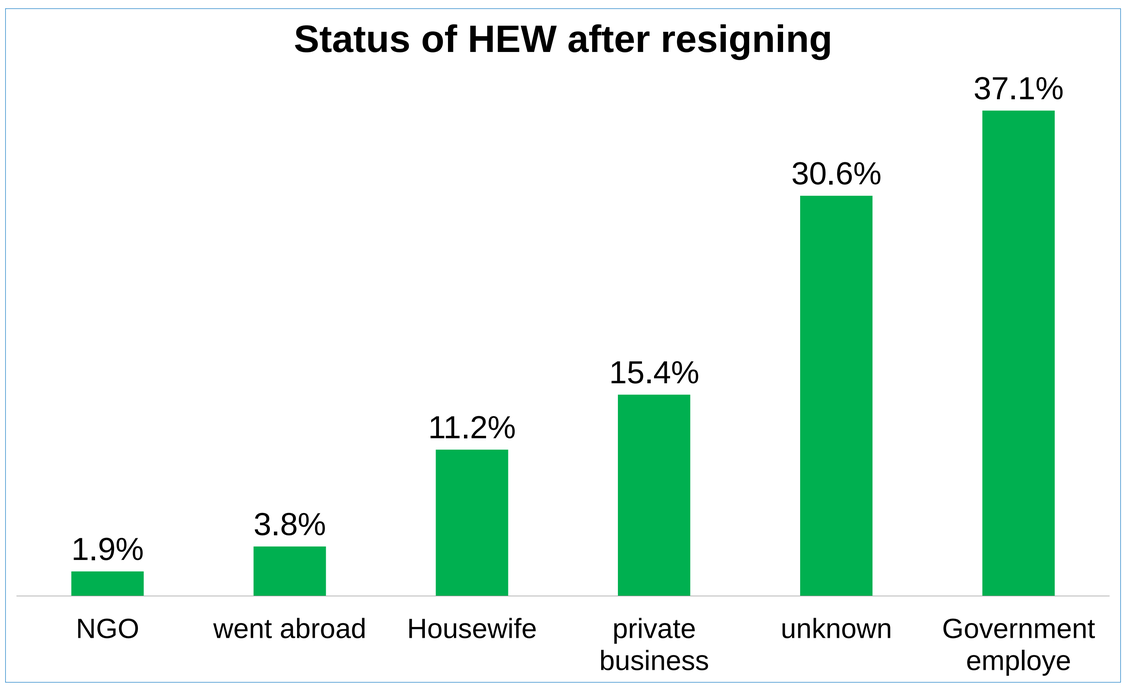
- Disappeared 41%)
- Resignation (25.4%),
- Change in qualification (13.5%),
- Transfer out (8.5%),
- Dismissal (7.2%),
- Death (4.6%).

Qualitative Findings

- Lack of educational opportunity
- Denial of annual leave
- Unfair wage
- Poor support from leadership
- Difficult Working condition

Where are HEWs after resignation?

- Most of them (37.1%) have become government employees other than HEW.
- 11.2% of them become housewife.



Conclusion

- The study has found high level intention to leave but attrition was relatively low implying large number of demotivated staff, filtering out of more capable staff, and high risk of unexpected loss of workforce for other future opportunities.
- Low salary, lack of carrier development, perceived high work load, administrative problems like problem in transfer and promotion are some of the reasons for intention to leave and attrition.
- Trend of attrition shows gradual increase over time especially during the past five years.

Recommendation

- Strengthen motivation strategies for HEWs to ensure that HEWs in the system are interested and happy with their job.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Depression Among Health Extension Workers in Ethiopia

MERQ CONSULTANCY PLC

Background

- Functionality of a healthcare system is heavily dependent on the wellbeing of its healthcare providers.
- The wellbeing of health providers is essential to enhance their efficiency, productivity, professional motivation, and commitment.
- Common mental disorder is one of the most important public health problem due to significant disability that it causes .
- Globally, depression affects more than 300 million people; which accounts for 4.4% of the world's population.
- Studies have consistently demonstrated that there is a high level of mental health problems among health care providers.
- But, there is no study on the mental health status of HEWs who are the backbone of HEP.
- Therefore, this study intended to assess the prevalence of depression among HEWs in Ethiopia.

Method

Study design	▪Cross sectional survey
Study area	▪ 62 Woredas from 9 regions, Ethiopia
Sampling	▪ Six kebeles were selected from each woreda using random sampling ▪ All HEWs who work in those kebeles were included.
Sample size	▪ 584 HEWs from 352 kebeles
Instrument	▪ Patient health questionnaire 9 (PHQ-9). ▪ Validated locally to assess depression
Variable: Probable depression	▪ Depression is defined based on score of >=10 on PHQ-9
Analysis	▪ We used weighted prevalence ▪ Algorism based diagnosis using responses on PHQ-9 items was used for prevalence of major depression ▪ Severity of probable depression using PHQ-9 score : 5-9 = mild, 10- 14 = moderate, 15-19 = moderately severe, and 20-27 = severe

Result

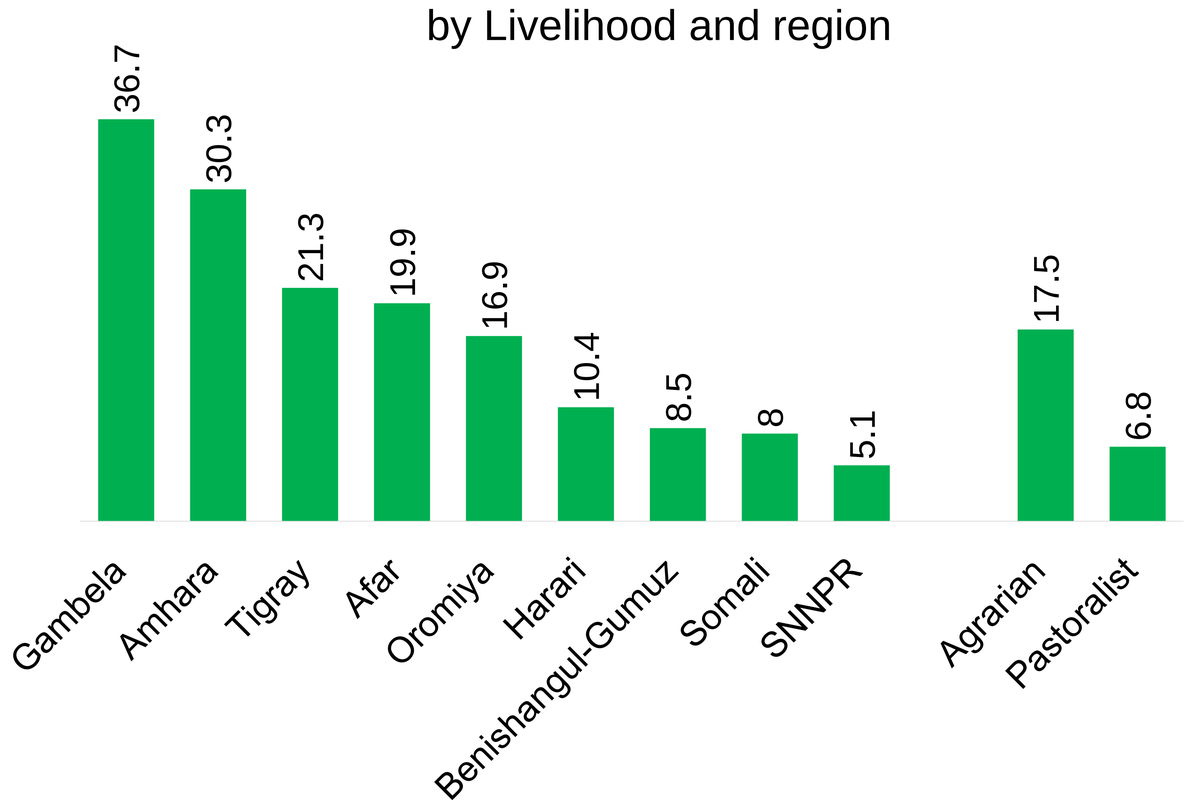
Socio-demographic characteristics

- Mean age of HEWs: 26.4 (SD:± 4.8) years
- 68.3% of them were married.
- 61.8% of them worked as HEW for more than 5 years

Prevalence of depression

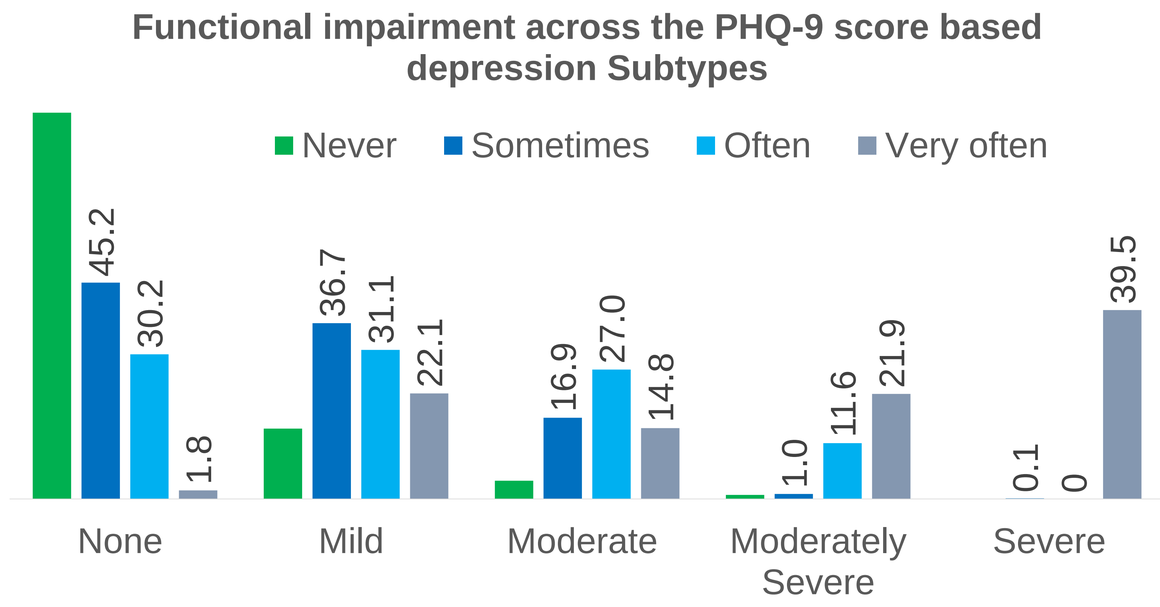
- Using PHQ-9 score of >=10: 16.5% (95%CI: 12.9%, 18.9%) of the participants had probable depression
- Using Algorism based diagnostic criteria from DSM V, 5.9% (95%CI:4.2%, 8.1%) had major depression

Prevalence of score based probable depression by Livelihood and region



Functional impairment as the result of depressive symptoms

- 95% of those with probable depression reported at least some degree of impairment.
- Level of functional impairment increases as severity of depressive symptoms increases.



Conclusion and Recommendation

- The prevalence of depression among HEWs is very common and severity of depressive symptoms is associated with compromised functioning
- Further studies should investigate factors associated with depression among HEWS
- Strategy should be in place on how HEWs can benefit from the mental health services that should be integrated into primary health care units

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Job Satisfaction among Health Extension Workers in Ethiopia

MERQ Consultancy PLC

Background

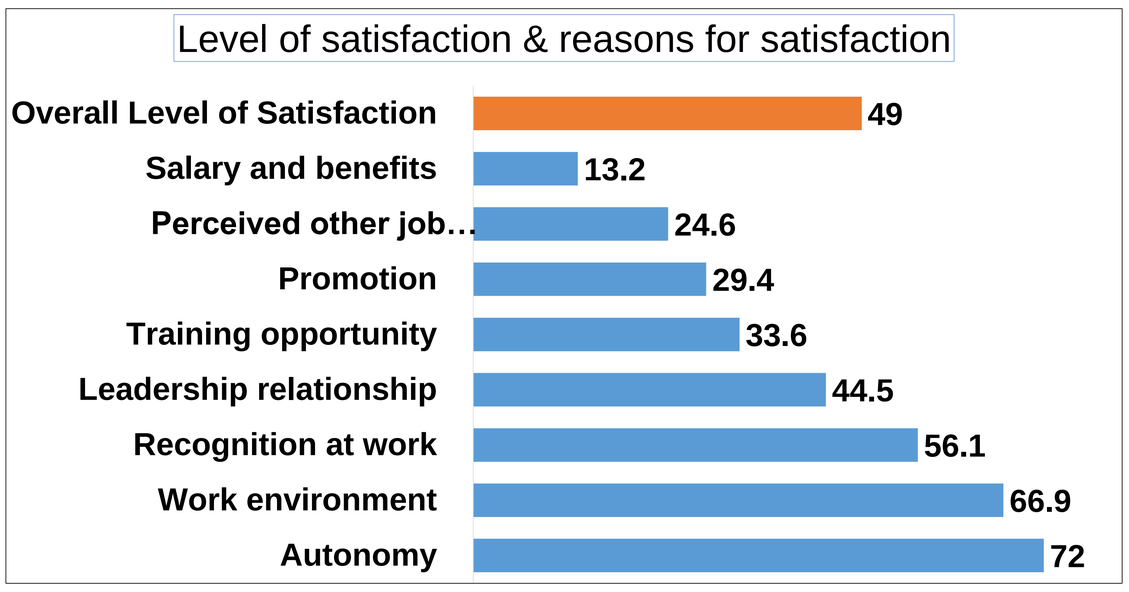
- Job satisfaction among health workers has a positive effect on job performance, quality of healthcare delivery, health worker retention and client satisfaction.
- The objective of this study was to assess the level of job satisfaction and associated factors among Health Extension Worker (HEWs).

Methods

- A cross-sectional survey was conducted among 584 HEWs from nine regions of Ethiopia.
- A Likert-type scale measurement consisting of 33 items was used to assess job satisfaction.
- All items were answered on a 4-point scale ranging from 1 for "very dissatisfied" to 4 for "very satisfied".
- Mean of the scale was used to define job satisfaction as a cut-off point.
- Above the mean as satisfied, and those who score mean and below the mean as dissatisfied.
- Chi-square test was used to explore associated factors.

Results

- More than half (51%) of HEWs were dissatisfied.
- Satisfaction by salary and benefits was only 13% and only 29% of HEWs are satisfied by presence of opportunity for promotion.
- 60% of HEWs reported that their level of satisfaction has been decreasing over time.



- Satisfaction of HEWs decreases as their age and work experience increases.
- HEWs residing in the kebele where the HP is located were more satisfied by their job as compared to HEWs who live in a different kebele or in a nearby town.
- Satisfaction of HEWs significantly vary across regions
- Pastoralist HEWs were more satisfied (68.0%) as compared to agrarian HEWs (47.0%)

Results from qualitative findings

Causes for satisfaction

- **Improved health outcome in the community**

"…. I [HEW] felt proud when I compared the situation before this program started like maternal death, children death, malaria. It is very useful program to the society and when I think about this, I feel proud…" Amhara region, KII, HEW

Helping own community

"…. First of all, whom we are helping are our fathers, mothers, brothers and sisters. So, helping them, changing their mind is a lot for me. …when I help anyone, who has come here being sick and see him some other day feeling healthy, that makes me feel happy…."

SNNP region, KII, HEW

Acquiring skills

"…. Working as HEW make you have good communication skill with the community and understand the community's behavior. This gives satisfaction when we [HEWs] give the knowledge we have and helping community in need…."

Oromia region, KII, HEW

Reasons for dissatisfaction

Lack of career advancement opportunity

"…. After I up-graded and I assigned in a place where I have been working. The farmers say 'don't you have a promotion?' That's what I hate very much. I don't get promotion …There should be something that will help you to be promoted… People laugh at you saying 'you are farmer's diaper changer' and so on…." Amhara, KII, HEW

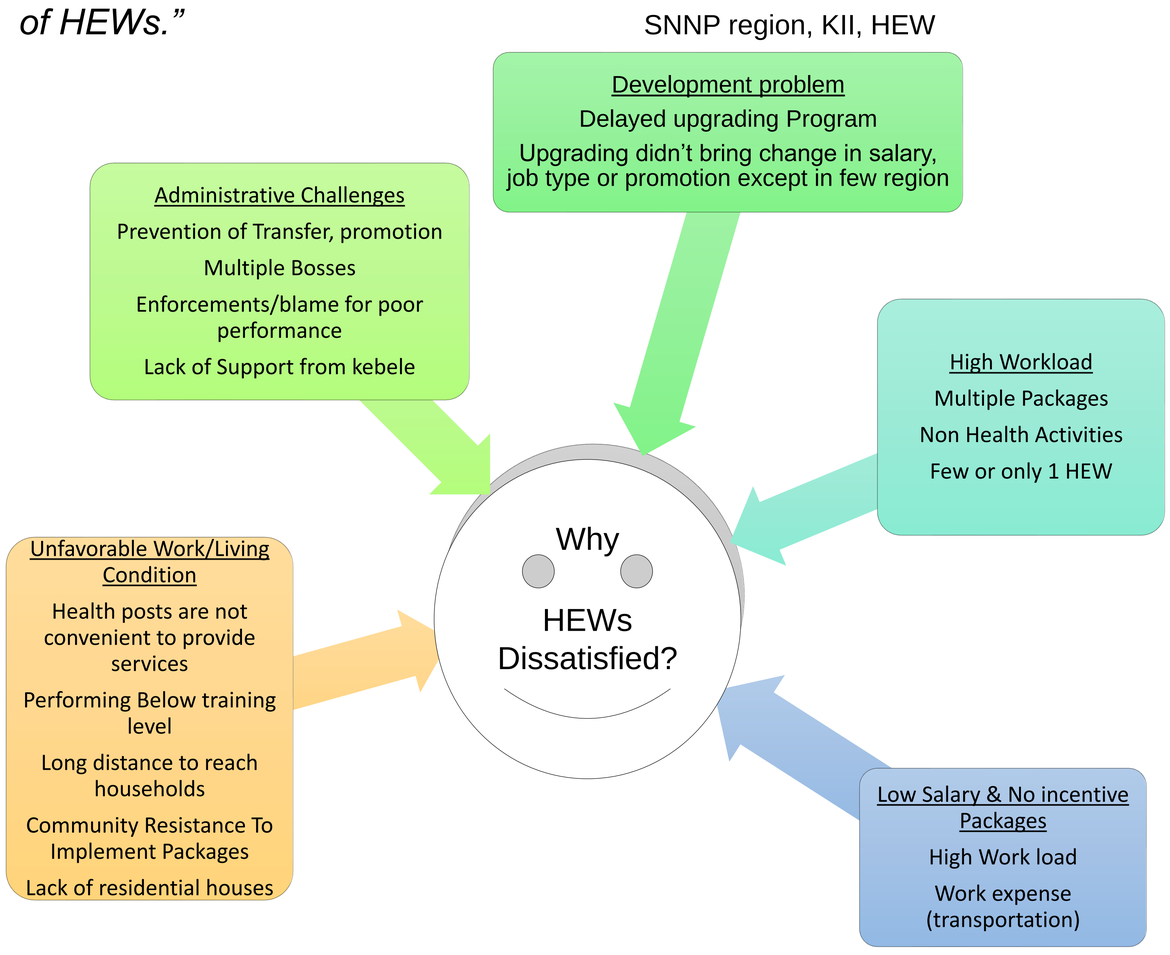
Inadequate salary and absence of incentives

"…. our work and salary are unmatched with our work, the work is hard compared with what we earn. The education opportunity that is began very recent was not satisfactory…In the case of transfer there is unfair treatment among the HEWs. It is not based on our request, rather based on favoritism…." Oromia region, KII, HEW

- **Work load and not getting transfer**

"… even if the program is good for the community, it is creating a problem for HEWs. Because we are not getting transfer and there is also shortage of HEWs."

SNNP region, KII, HEW



Conclusion

- Job satisfaction among HEWs was very low. Low salary, limited opportunities for transfer and official leave, lack of promotion, workload, and limited career development opportunities were major dissatisfies.

Recommendation

- Increase the number of health workers per health post to alleviate high workload.
- Improve career advancement opportunities for HEWs.
- Manage expectations, improve benefits and respect the rights of HEWs as civil servants.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Are HEWs trusted by the community?

MERQ Consultancy PLC

Background

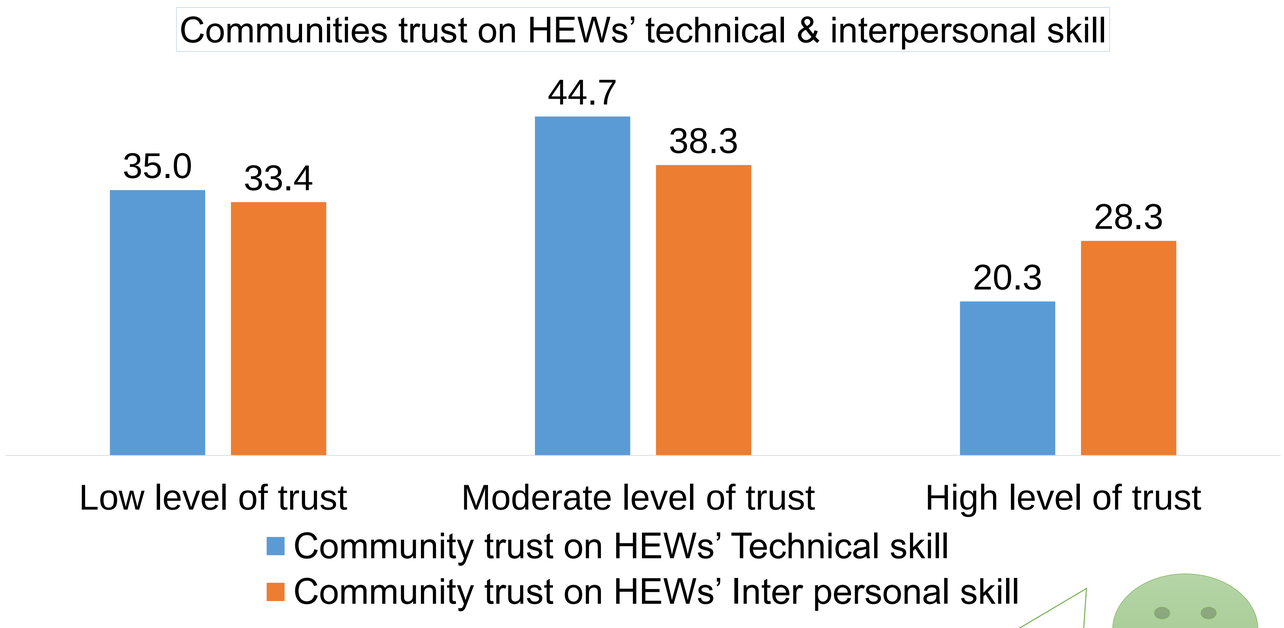
- Patient trust increases uptake of, engagement with and optimal outcomes from healthcare services and is therefore central to health policy, planning, and practice.
- Distrust in healthcare professionals is problematic because of its negative impact on client satisfaction, compliance with recommended care, and thus health outcomes.
- This paper explores the level of the community trust towards HEWs and components of trust.

Methods

- 28 items of community trust scale (CTS) were used.
- Principal components analysis (PCA) was used to calculate weights of each item.
- Community trust items were categorized into two dimensions (technical and interpersonal skill) based on PCA result and screen plot inspection.
- Three scale measurement: Low, moderate and high level of trust.
- In addition, communities' perception on HEWs knowledge, friendliness, and over all acceptance was assessed based on two scale measurement (agree and disagree).

Results

- The community have more than average trust towards HEWs. However, a third of respondent have low level of trust to HEWs.
- HEWs are friendly to the community
- HEWs are perceived to have the knowledge and capacity to deliver services. However, trust is mostly expressed in reference to the provision of health education activities. HEWs are mostly bypassed for clinical services mainly because of the perception that they are not capable of providing clinical services.
- The community in general accepts HEWs.

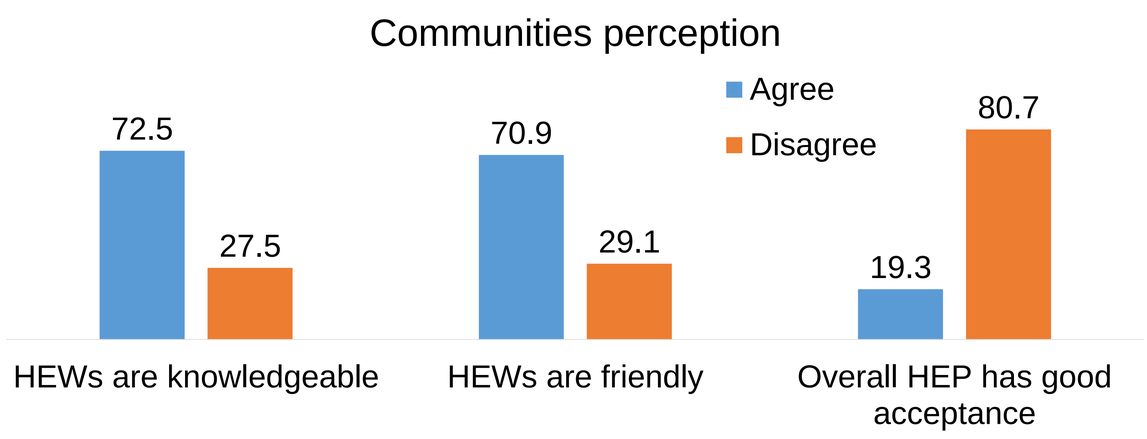


Community trust level on HEWs

". . . .. The community believes as HEWs are lifesavers. . .the people have due respect on HEWs and consider them, as they are the gifts of God to the health of mothers and children. . . . The society has confidence on them staring from younger children to the adult people. They love them; everybody considers them like his/her own child."

FGD participant, community

Community perception on HEW knowledge, friendliness and overall acceptance



HEWs are friendly to the community

"HEWs are friendly. Especially what I like about them is, when they move house to house, they seem like the member of the family, they go up to the kitchen and act like their own house."

FGD participant

HEWs have knowledge and capacity to deliver services

. . . They have good knowledge because they have learned well by those who know more than them and we approved by the change we observe after they come. They didn't keep the knowledge they have for themselves but they shared it to the community by moving from place to place to bring change."

FGD with women community

Community acceptance

"The community accepts HEWs' teaching. The community has apply what they learn from HEWs. For example, people put hand washing water beside latrines. They also use bed nets to prevent malaria."

FGD with men community leaders

Despite high level of community acceptance in general, men have reservations on HEP services; there is a feeling of being excluded among men.

"…. Women accept services but men are not so much accepting it because most of the time our close contacts are women. When we go for home visits, we contact women. Because of this reason men complain that the focus of HEP is only on women and children…. they developed an attitude of complain on service giving is women focused … For example, when men come for blood pressure we measure their BP and refer them to health center. But they want to be treated here but that is not impossible.

Oromiya, KII, HEW

Conclusion and recommendation

- There is good level of community trust to HEWs that could facilitate interpersonal relationships of HEWs with actors from the community.
- Trust particularly in the area of technical capacity of HEWs is mostly in reference to provision of health education services. Inclusion of clinical services at health posts should be accompanied with mechanisms to promote health posts as providers of more comprehensive care.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Category 4

Implementation of HEP

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Implementation Intensity of the Health Extension Program

MERQ Consultancy PLC

Introduction

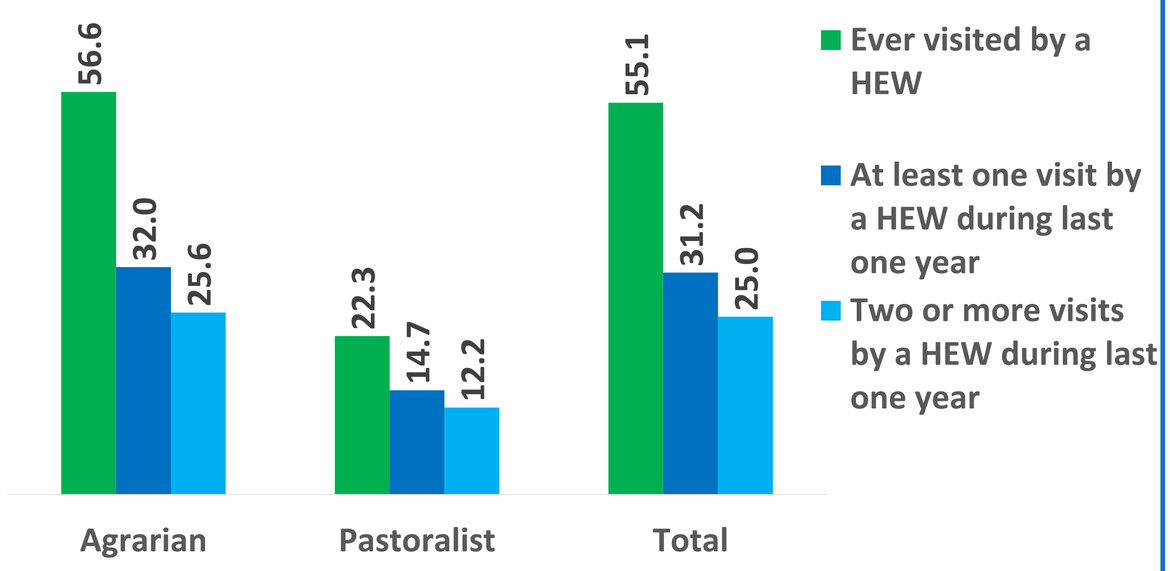
- The health extension program has been considered as a primary mechanism for the provision of health promotion and disease prevention services at the community level.
- Exposure of household members to health extension workers and their services is a key assumption linking investment in HEP with expected behavioral change at household level.
- Households could be exposed to HEP in one or more of the three service delivery modalities:
  - Home visit
  - Health post visit
  - Other settings (outreach)
- The 2019 National HEP Assessment assessed intensity of HEP implementation through these three service delivery modalities.

Methods

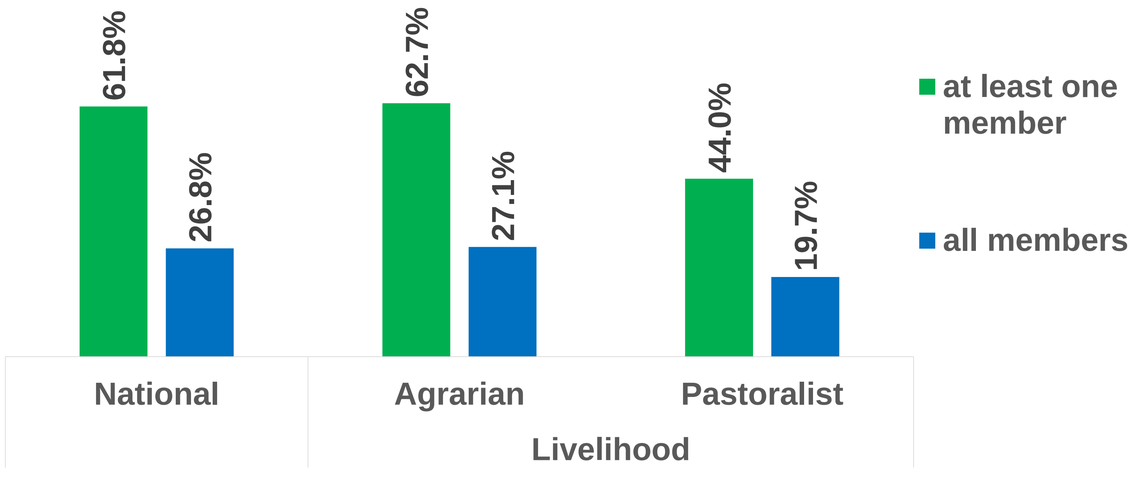
- Intensity of implementation of HEP was assessed as the proportion of households, women, men, and youth girls exposed to HEP through home visit, health post visit, and outreach service delivery modalities.
- Factors associated with intensity of HEP implementation were identified by regressing kebele level covariates on proportion of households exposed to HEP through each of the three service delivery modalities.

Results

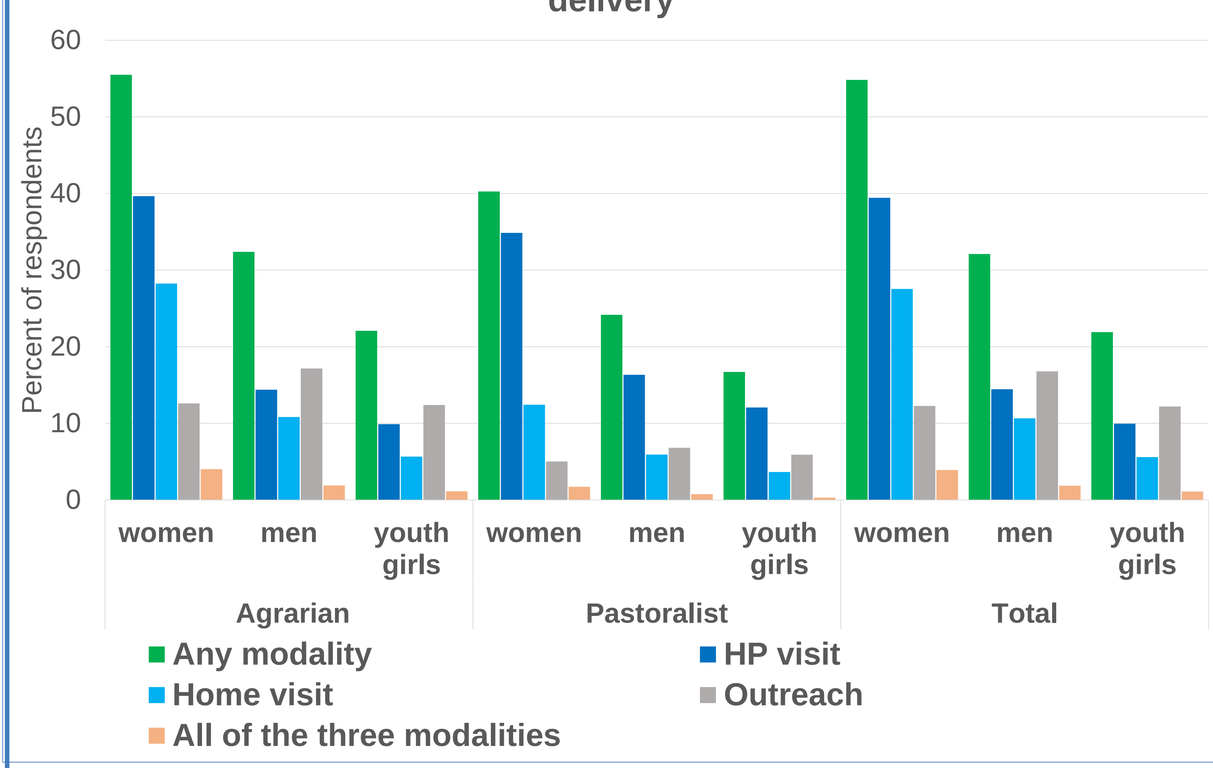
Proportion of households visited by HEWs among agrarian and pastoralist households



Proportion of households with at least one member and all members reporting exposure to HEWs through any modality during the previous one year



Proportion of respondents who interacted with HEWs at least once during the last one year by modality of service delivery



Factors associated with HEP implementation intensity
B coefficients from regression of HEP implementation intensity measures on inputs of HEP

Covariates	Proportion of households reached with HEP during the last one year through:		
	Home visit	HP Visit	Outreach
Population (in thousands) per HP	-1.95*	0.01	0.63
Proportion of villages within 5 km from HP	0.07	0.04	0.05
Number of infrastructure/facility standards met (maximum of 8)	2.49*	1.60	0.81
Population (in thousands) per HEW	1.32	0.44	1.05
Availability of at least one midwife or nurse	11.06*	22.37*	3.42
Availability of at least one level IV HEW	9.44*	9.50*	2.45
Number of required equipment and supplies available (out of 29 items)	**	0.44	**
Number of drugs and supplies without stockout in six months (out of 20 items)	**	0.44	**

Potential confounders accounted for: livelihood, formal education, wealth index, median age of women
** P value < 0.05*
*** P value >0.1 during first step*

Conclusion and Recommendation

- Households are not adequately exposed to HEP packages.
- Exposure to HEP is becoming increasingly for health post based services than community-based services.
- Men and youth girls are highly marginalized from HEP services
- Professional mix at HP or level of education of HEWs, in stead of number of HEWs in a health post were associated with better implementation of HEP
- Revise HEP inputs and services in a way that allows uninterrupted provision of health post based services without compromising community-based activities including provision of health promotion and disease prevention services through home visits and outreaches.
- HEP implementation may benefit more by considering assignment of additional categories of health workers and/or upgrading HEWs to level IV than adding more HEWs with in a health post.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Household level Implementation of the Health Extension Program

MERQ Consultancy PLC

Introduction

- Adoption of healthy lifestyle at the household level is the primary intention of HEP.
- Exposure of household members to HEP through different service delivery modalities is expected to lead to adoption of healthy life style including utilization of health services.
- HEP intends to influence the behavior of households in the areas of:
  - Family health
  - Disease prevention
  - Hygiene and environmental sanitation
- The 2019 National HEP Assessment assessed households for their status in adopting desired health behaviors.

Methods

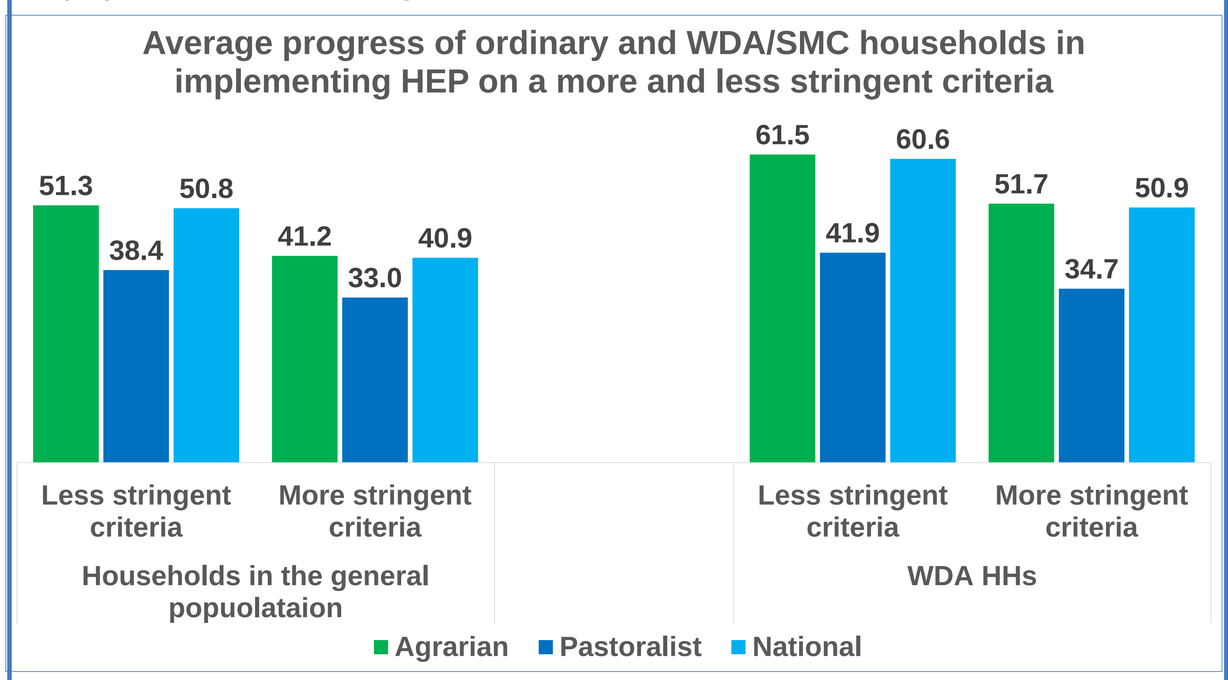
- Households were assessed on 21 criteria related to 17 household characteristics that HEP intends to influence.
- Each household was assessed first for eligibility for each criteria and then eligible households were assessed if they meet criteria for which they are eligible for.
- Level of implementation of HEP was determined for each HH as the proportion of criteria for which the household is eligible that are actually met.
- Findings were averaged across households to determine overall progress in HH level implementation of HEP.
- Factors associated with HH level implementation of HEP were identified by regressing HEP implementation intensity measures and other kebele level covariates on average progress of HH level implementation at kebele/HP level

Criteria for assessment of HH Level HEP implementation

Assessment checklist	Less stringent criteria	More stringent criteria
ANC	At least one visit	At least four visits
Place of delivery	Health facility	
PNC	Within one week	
Family planning	Any method – ever use	Long acting – ever use
Child vaccination	Complete by first birthday	
Growth monitoring	For all <2 years children	
Latrine	Any type	with handwashing facility
Personal hygiene	Observed for: - Hand and face - Clothes - Shoes/sandals	
Shower		Shower room/place
Housing	Observed for cleanliness	
Solid waste disposal	Pit	
Liquid waste disposal	Pit	
Livestock		Separate from living room
Kitchen		Separate from living room
Malaria control activities		Participation of any HH member
Spray	Spray and do not paint	
ITN	Use by all HH members	

Results

HH level implementation of HEP was low both in the general population and among WDA leader households



Factors associated with HH level implementation of HEP: Association between exposure to HEP and HH level implementation of HEP

	Agrarian settings			Pastoralist settings		
	B	95% CI		B	95% CI	
		LL	UL		LL	UL
Had home visit during last one year	6.35*	4.78	7.91	5.56*	2.37	8.75
Had HP visit during last one year	1.20	-0.15	2.55	2.74*	0.07	5.41
Received HEP service through outreach	3.03*	1.27	4.80	-4.00	-9.84	1.83
Model family training						
Not aware about training	0.00			0.00		
Aware but not enrolled	4.57*	2.86	6.28	-1.03	-7.15	5.10
Enrolled but not completed	6.96*	1.13	12.78	7.40	-4.10	18.89
Completed training	11.75*	7.86	15.63	2.76	-7.49	13.02

Potential confounders accounted for: age of woman, education, wealth quintile

- P value < 0.05

Note: HEP related variables explained only <20% of HH level implementation of HEP.

Factors associated with HH level implementation of HEP

- Home visit, exposure through outreach sessions, and model family training in agrarian settings
- Home visit and HP visit in pastoralist settings
- HEP implementation increases with level of exposure to model family training (awareness, enrollment, completion)

Conclusion and Recommendation

- Current HEP strategies may not be enough to achieve desired behaviors at household level
- Model family training can be considered an effective strategy to achieve household level behavior change. Reversing the diminishing attention to model family training may lead to more gains in changing the behavior of households.
- Modifiers of HH level behaviors differ for agrarian and pastoralist settings.
- Increasing HH level implementation of HEP requires improving contents as well as increasing coverage of HEP services (home visit, HP visit, outreach)
- Customize HEP based on life styles of communities.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Referral Linkage: Are Health posts serving as the first point of contact for illnesses?

MERQ CONSULTANCY PLC

Background

- ✓ Health posts/HEWs are expected to serve as first points of contact for several conditions including health promotion and disease prevention services and treatment of common childhood illnesses.
- ✓ Weak referral system is one of the challenges in the provision of health services in the four tiered healthcare delivery system of Ethiopia.

Methods

- ✓ Women from a random sample of 6504 households were asked if a household member visited a health facility other than HP during the one year period preceding data collection.
- ✓ Those who visited other health facilities were asked if there was referral from HP/HEW.
- ✓ Those who bypassed HPs/HEWs were asked for their reasons to bypass HPs/HEW

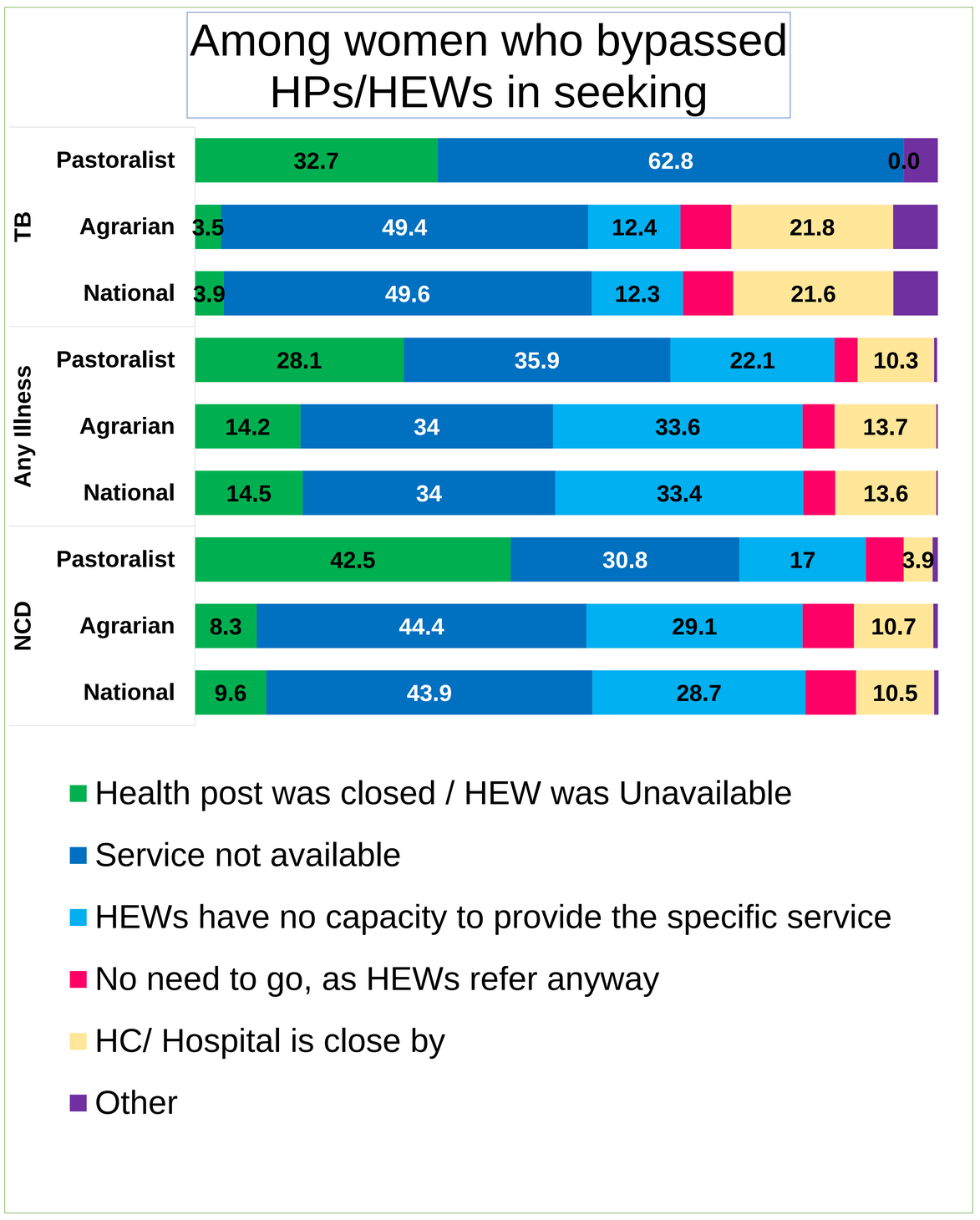
Result

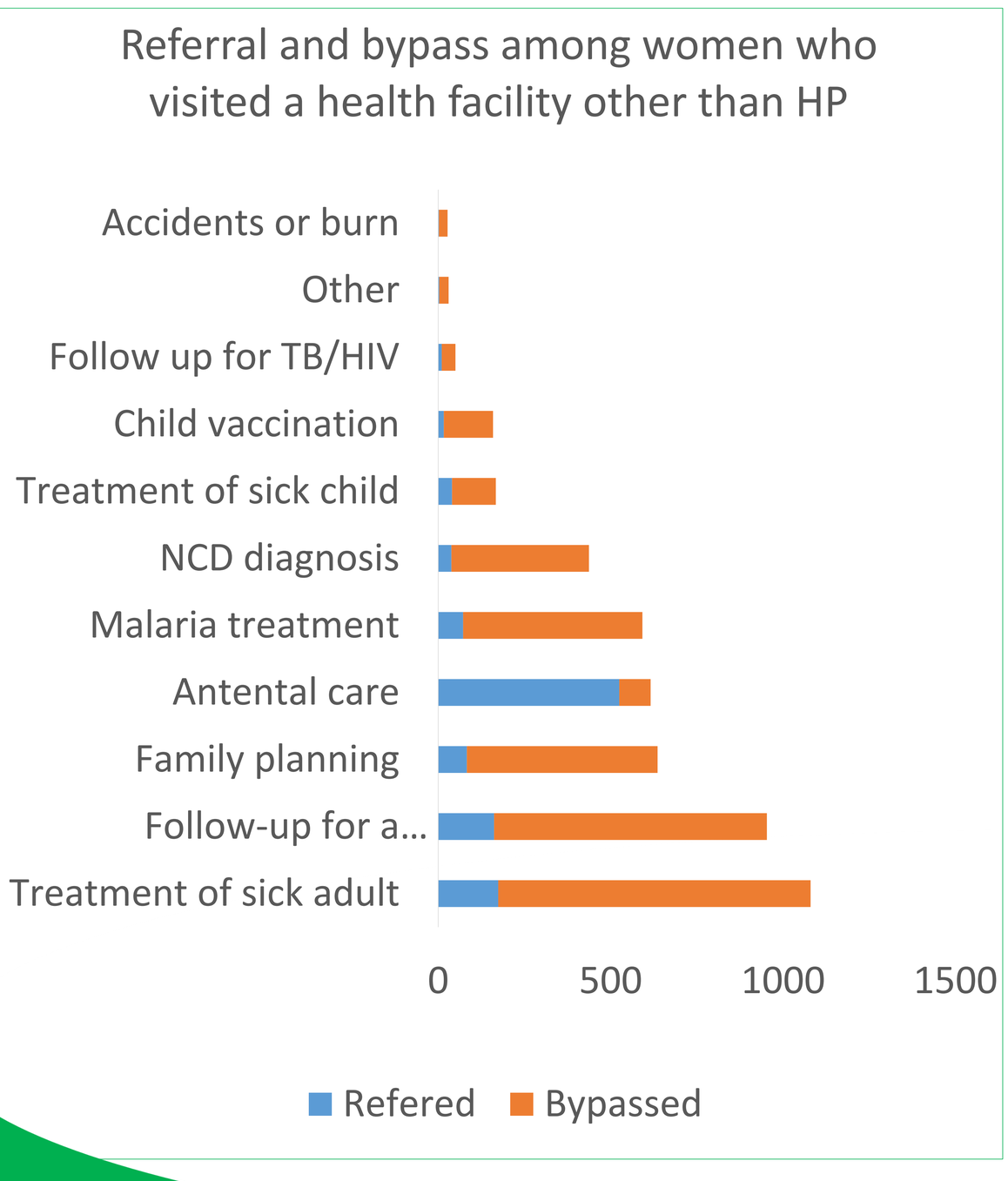
Bypass of HEWs/HPs for care of a mother or child

- ✓ 62% of women reported that there was at least one visit to a health facility other than HP during the last one year.
- ✓ Among women who visited a facility other than HP for their own or other members of their only 23.7% visited a higher level facility through verbal or written referral from HP/HEWs
- ✓ High rate of referral from HP/HEWs was observed for women who visited higher level health facilities for antenatal care.
- ✓ All other services including treatment of sick children and adults involved high rates of bypass of HPs/HEWs.

Reasons for bypassing HPs/HEWs in seeking care from higher level health facilities

- ✓ The commonest reason for bypassing HPs/HEW are
  - ✓ Perceived/actual unavailability of services
  - ✓ Perception that HEWs do not have capacity provide specific services
  - ✓ Health post was closed or HEW was not available
- ✓ In pastoralist setting HP closed or HEWs unavailability are the commonest reason followed by service not available.





Conclusion

- Bypassing HPs/HEWs is a common among rural-dwelling households seeking health services at health facilities other than health posts.
- Bypass is relatively minimal for maternal health services for which women seeking care from higher level health facilities received referral from health posts.
- By pass was highest for several clinical conditions suggesting the low level of confidence communities have on HEWs in relation to provision of clinical care.

Recommendation

- Ensure that communities have adequate information about services available at HP by strengthening health literacy.
- Services added to HEP should be accompanied by appropriate promotional messages to facilitate the use of HPs as first point of contact in the provision of healthcare.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Category 5

Community Engagement in HEP

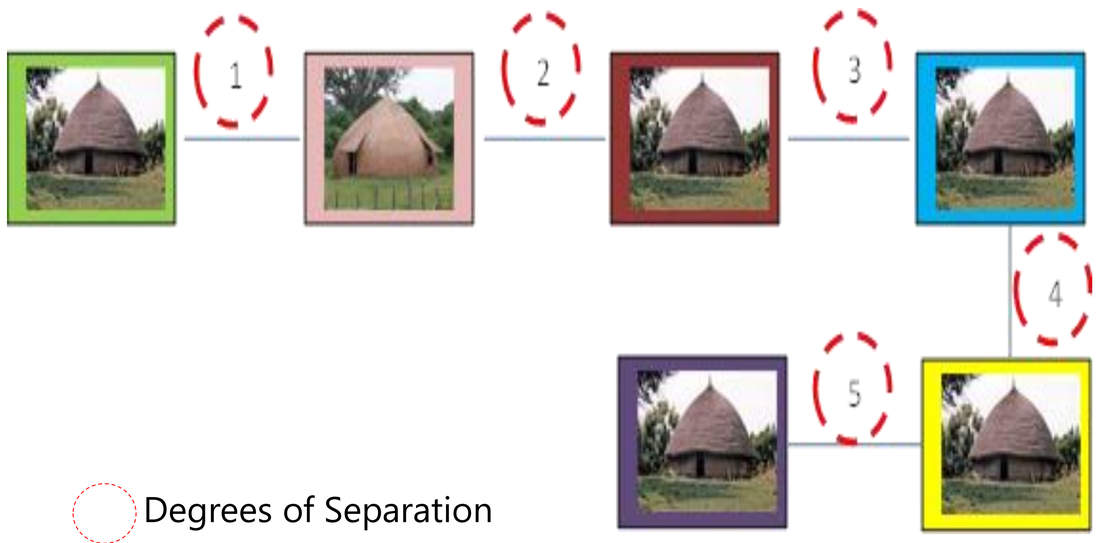
Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Reflections on the Structure of 1-5 network in Ethiopia's Health Extension Program: 5 Degrees or 6-Degrees of Separation or Less?

MERQ Consultancy PLC

Introduction

1-5 networking is one of HEP strategies employed to diffuse innovations in the communities. However, its functionality remain a pressing challenge throughout the program.



Questions unanswered

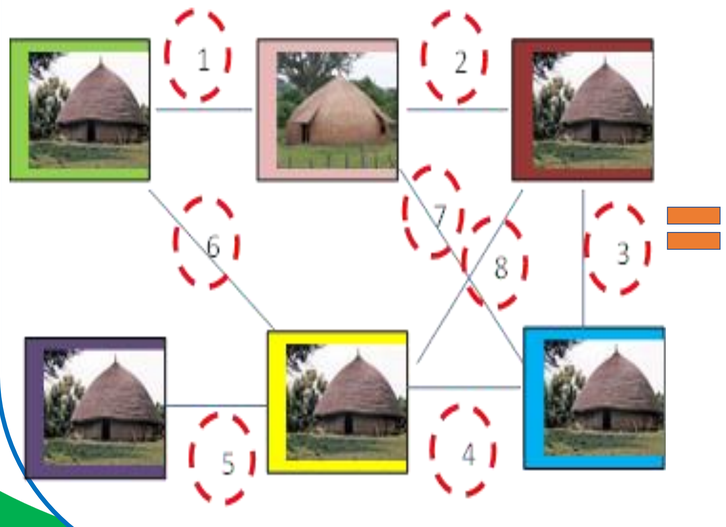
1. Where does the 1-5 network structure come from? Is it evidence based? How are these six households or their group leader(WDA leader) are selected?
2. What are the characteristics of their network?
3. Are our communities connected to each other with small or larger degrees of separation?
4. Are there any missed opportunities?

Methods

We conducted Systematic Review of studies.

Results

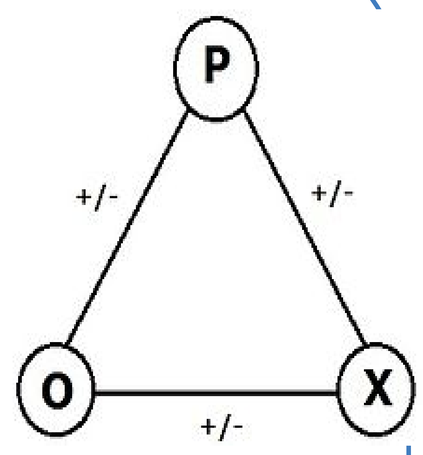
- No studies explicitly examined the social networking structure. However, some grey literature suggested the 1-5 network structure is based on geographic proximity.
  - *Does physical proximity predict social distance?*
- Nature of prior relationships in terms of degree centrality, closeness, betweenness, homophily or heterogeneity of neighborhoods are not documented.
- There could be possible 15 number of connections in 1-5 network. However, no documentation on the actual number of connection hence, the clustering coefficient of 1-5 network is not clear.



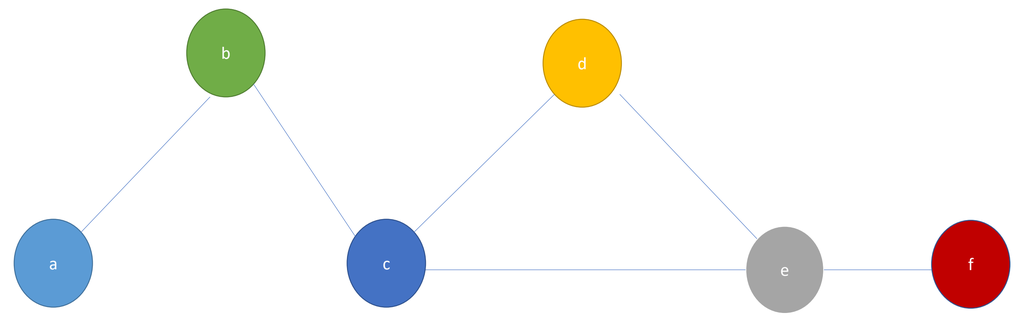
	HH 1	HH 2	HH 3	HH 4	HH 5	HH 6
HH1	0	1	0	0	1	0
HH2	1	0	1	1	0	0
HH3	0	1	0	1	1	0
HH4	0	1	1	0	1	0
HH5	1	0	1	1	0	1
HH6	0	0	0	0	1	0

Results...

- The extent to which 1-5 networks take into account social balance given our diverse social, geographic, and cultural context is not clear.



- The structure of 1-5 network largely ignores "The strength of weak ties" OR "small world" phenomenon.
- There could be "social disintegration" due to social transformation (urbanization, technology, etc.) that might affect our social capital



Implications:

- The structure of social network among different Ethiopian communities should be examined because the links between Ethiopian communities (neighborhood) might be shorter /close or sometimes longer/far.
- Group dynamics of 1-5 networking might benefit if it accounts other social structural characteristics beyond physical proximity.
- The 1-5 network seem to follow ego-centeric social network approach.
- The leader (influential of influential) is chosen by HEWs or Kebele chairpersons to monitor group activities. However, the criteria for WDA leader selection would be better if it depends on clustering coefficients, degree centrality

  "Striking the true "Herd" is good to scatter the sheep"
- The strength of weak ties is the missed opportunities that could be explored by HEWs.

Conclusion and Recommendation

- The theoretical underpinning of 1-5 network should be re-examined and documented.
- Existing evidence is negligible. Further Social Network Analysis among diverse communities(rural, urban, pastoralists) has public health importance. For example other scaling of network such as six degrees of separation or less might be efficient.
- It is important to train HEWs on group dynamics and simple social network analysis.
- Selection of group leader could be based on degree centrality and clustering coefficient analysis than setting criteria which is prone to selection bias.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Coverage and Effectiveness of Model Family Training

MERQ Consultancy PLC

Introduction

- Community engagement and ownership is a major pillar of the Ethiopian health sector in general and that of HEP in particular.
- Current strategies for community engagement and ownership rely on two major approaches
  - Model family training
  - Women Development Armies and/or Social Mobilization Committees.

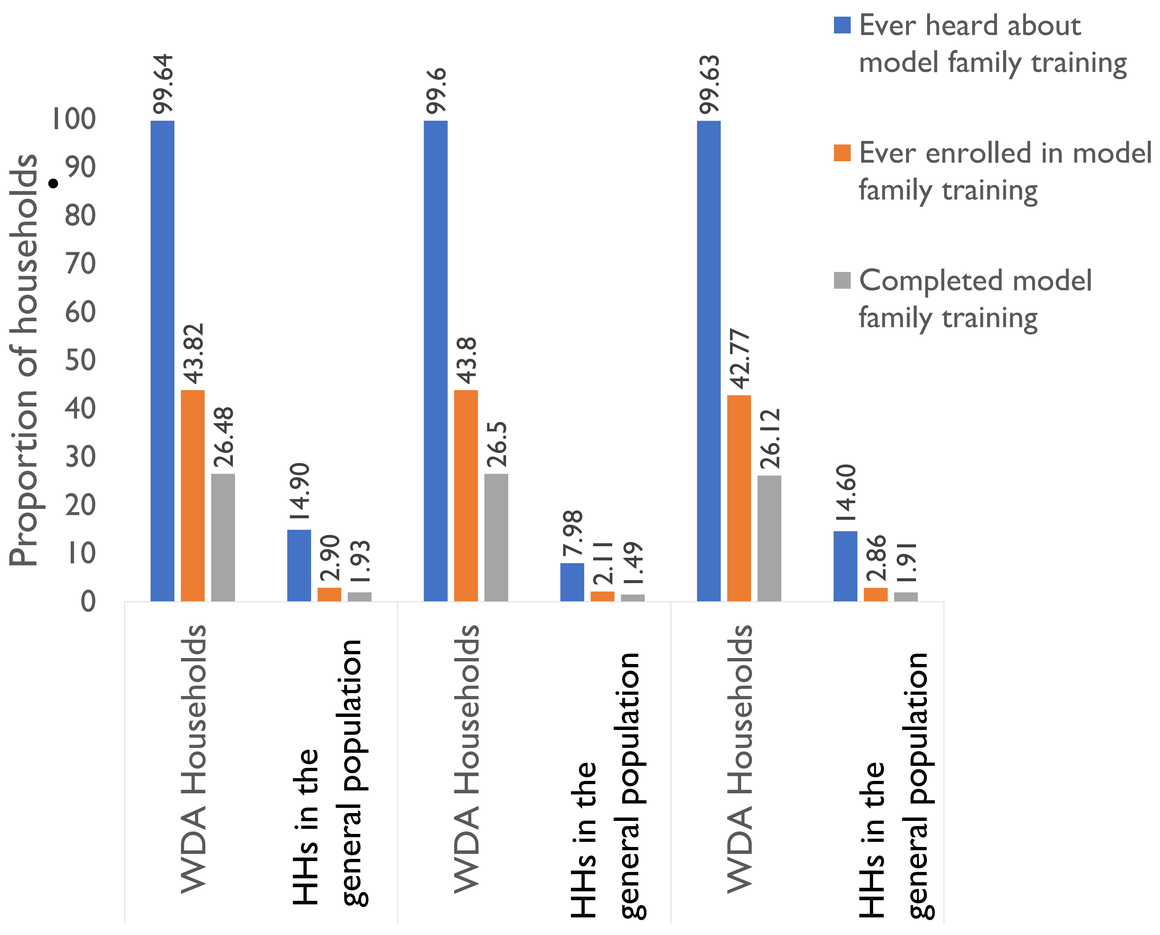
Methods

- Coverage of model family training was assessed for 6,504 households as part of the household survey in the 2019 HEP assessment
- Women were asked if they are aware and whether they have participated in model family training. Variables were:
  - Awareness about model family training
  - Enrollment in model family training
  - Completion of model family training
- The effectiveness of model family training in ensuring adoption of HEP at household level was assessed by regressing awareness, enrollment, and completion of training on progress of households towards full implementation of HEP.

Results

- Awareness about and enrollment in model family training has been low in the general population.
- Enrollment is low even among women development army leaders who are expected to provide leadership to their neighbors and relatives.

Awareness, enrollment, and completion of model family training among HHs in the general population and WDA households



- Model family training was an effective strategy to increase adoption of HEP at household level. However, its coverage is very low.
- Compared to women who are not aware about model family training, women who are aware, enrolled, and completed the training have 4.6%, 7.0%, and 11.8% higher progress towards full implementation of HEP at household level in agrarian settings.

	Agrarian settings			Pastoralist settings		
	B	95% CI		B	95% CI	
		LL	UL		LL	UL
Had home visit during last one year	6.35*	4.78	7.91	5.56*	2.37	8.75
Had HP visit during last one year	1.20	-0.15	2.55	2.74*	0.07	5.41
Received HEP service through outreach	3.03*	1.27	4.80	-4.00	-9.84	1.83
Model family training						
Not aware about training	0.00			0.00		
Aware but not enrolled	4.57*	2.86	6.28	-1.03	-7.15	5.10
Enrolled but not completed	6.96*	1.13	12.78	7.40	-4.10	18.89
Completed training	11.75*	7.86	15.63	2.76	-7.49	13.02
Potential confounders accounted for: age of woman, education, wealth quintile						
* P value < 0.05						

- Most women who completed model family training played different roles in teaching other communities including demonstration of behavior for other women in their villages through different mechanisms:
  - Leader in community networks
  - Demonstration of household behavior to others
  - Teaching other community members

Conclusion

- Community participation and ownership has been an important component of HEP throughout the life of the program.
- Model family training is an effective strategy to increase household level implementation of HEP. However, only a very small portion of the population are aware, enrolled, and completed the training.

Recommendation

- Revitalize model family training by providing clear guidelines, increasing HEWs' time spent for training of families and arranging experience sharing sessions between model families and others.
- Provide tools that help HEWs in tracking enrollment, progress, and completion of model family training

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Availability and Functionality of Community Structures Supporting HEP

MERQ Consultancy PLC

Introduction

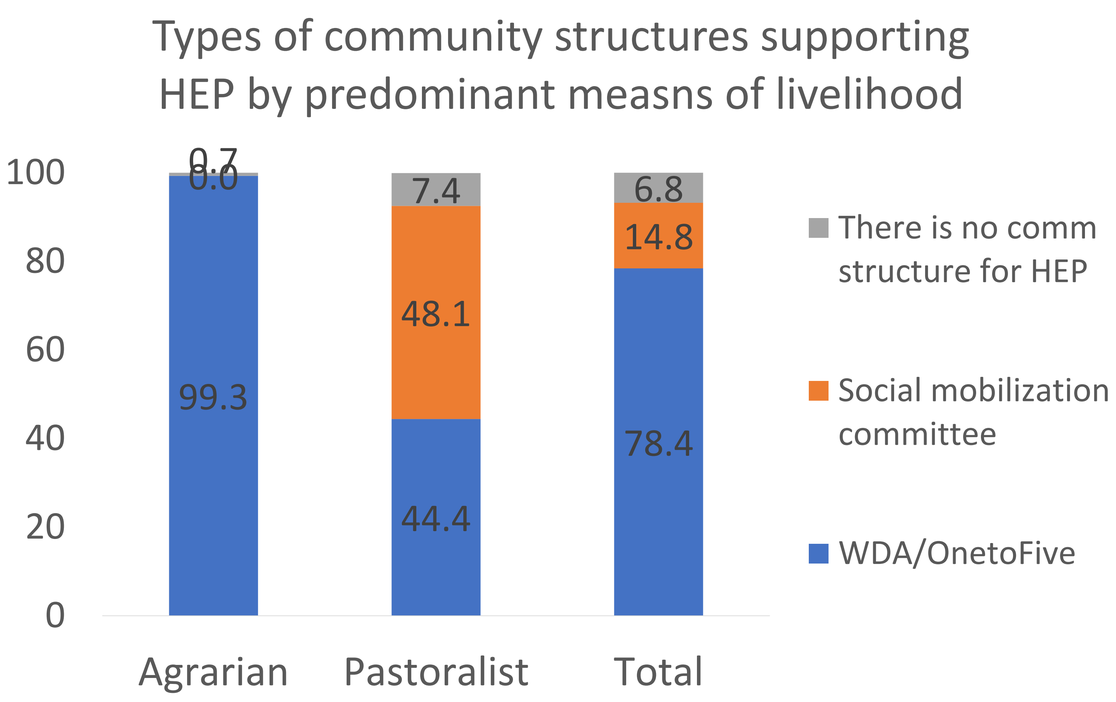
- Women Development Army/Group (WDA) and Social Mobilization Committees (SMC) have been important community structures used as mechanism for community engagement in agrarian and pastoralist settings.
- Implementation of HEP by engaging these community structures has been acknowledged for supporting HEWs in reaching more households in shorter time.
- The current status of these structures is not well understood

Methods

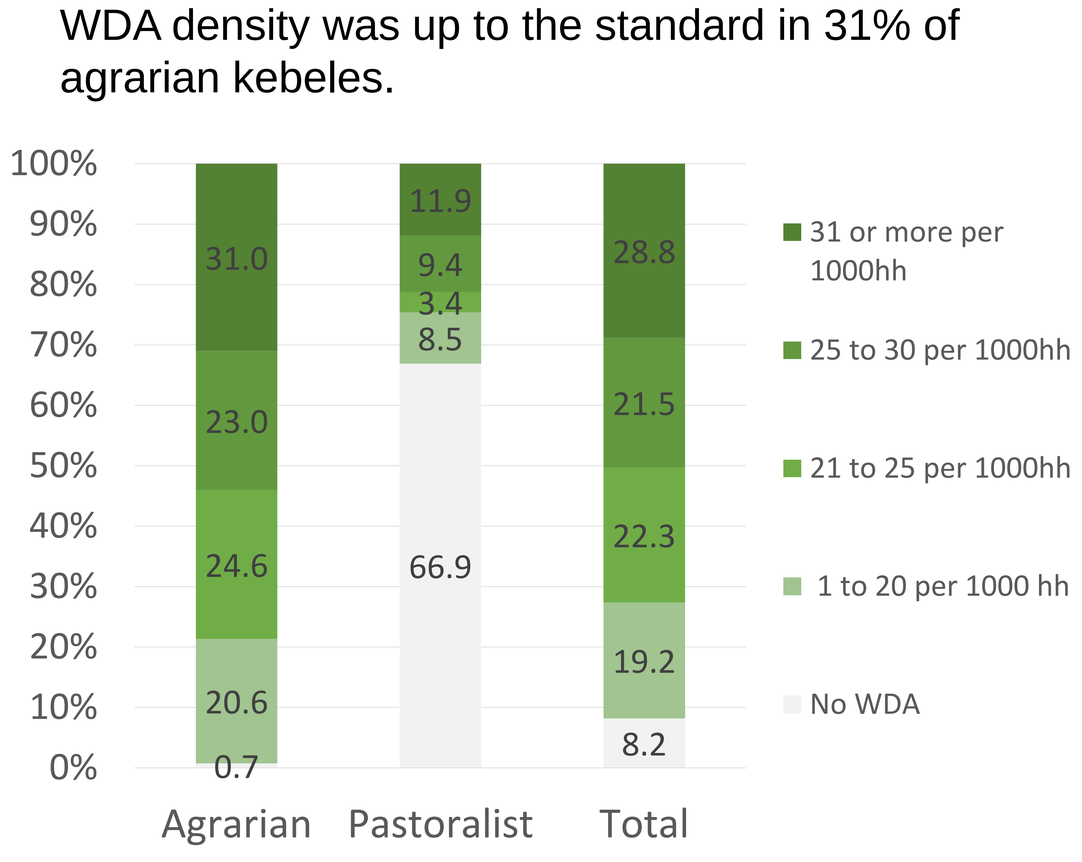
- 343 health posts were assessed for existence, type, and functionality of community structures supporting HEP.
- In addition to responses of objective evidences of functionality were assessed
- Characteristics of WDA leaders including their health behavior were assessed by comparing them with households from the general population

Results

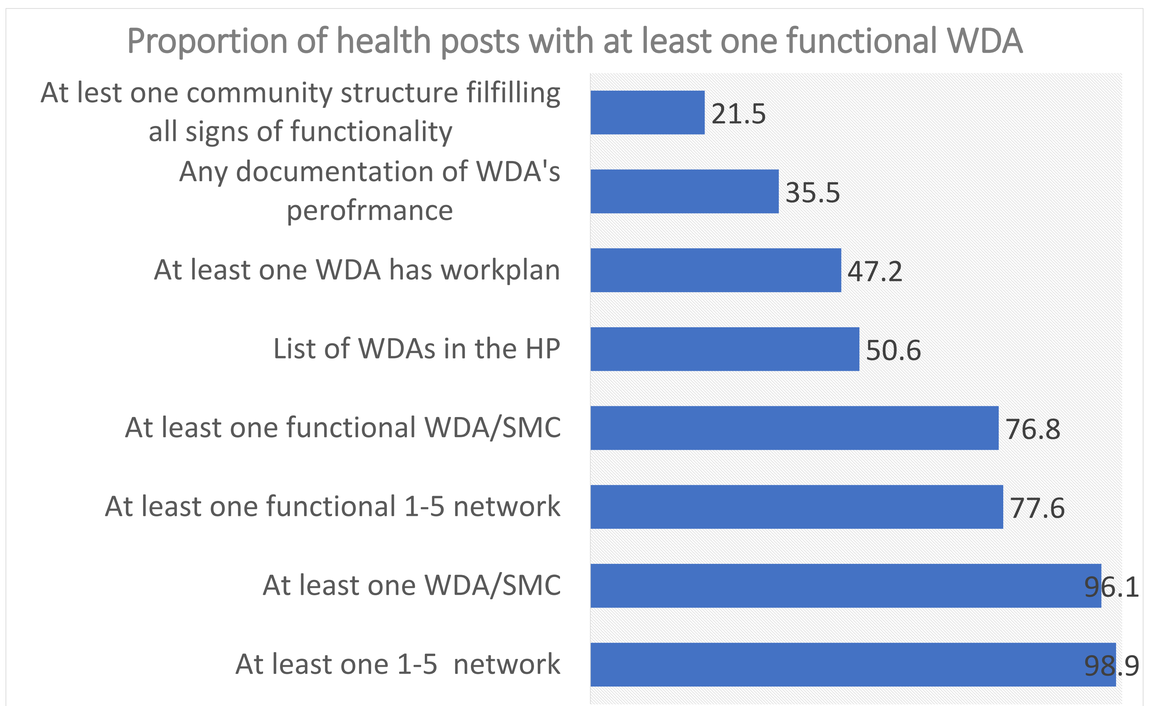
- Community structures supporting HEP are widely available.
- The commonest type of community structure was WDA.
- The density of WDAs is below the standard of 1 to 30 households in most of the study kebeles.



WDA density was up to the standard in 31% of agrarian kebeles.



- Only 21.5% of the study health posts had at least one functional WDA structure.



- Reasons for non-functionality of WDA structures were related to inappropriate selection criteria, low community acceptance of WDA leaders, and unrealistic expectations.

How do WDA leaders compare to the general population?

- WDA leaders are wealthier and more educated than women from the general population. However, most of them are still illiterate despite the availability of educated women in the general population.
- More educated WDA leaders had better HEP related behavior than those with lower educational status.
- WDA leaders are mostly better in their health behavior but with a level far behind what is expected from a model family.

SN	Indicator	Women from general population	WDA Leaders
1	Attended formal education	28.0%	40.0%
	CPR	46.6%	50.8%
3	ANC -4	48.3%	62.0%
4	Facility delivery	55.1%	52.2%
5	PNC (at least one visit)	25.5%	15.5%
6	Full basic vaccine	35.7%	42.7%
7	Latrine availability	71.5%	84.2%

Conclusion

- WDA and/or SMC structures are widely available. Their functionality in supporting HEP is however very limited.
- WDA leaders are not models in their health behaviors.
- Roles and responsibilities of WDA leaders overestimate their capacity and volunteerism.
- The use of WDAs alone has resulted in underutilization of community potentials including that of men, religious leaders, and traditional leaders.

Recommendation

- Ensure all community volunteers are selected among model families.
- Redesign community structure for HEP with renewed branding, capacity, and responsibilities to maximally use community potentials.
- Incentivize volunteerism and limit duration of service to a pre-defined period of performance.
- Make maximal use of opportunities created by increasing literacy, high level of school enrollment among youth, and the increasing use of communication technologies including cellphone and the internet.
- Avoid reliance on single approach to community participation
- Avoid creating expectations of becoming salaried workers among volunteers

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Category 6

Governance, Leadership, and Information System for HEP

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Leadership, Management and Governance of HEP

MERQ Consultancy PLC

The 2019 HEP National Assessment of the HEP examined a number of LMG related issues including availability of standards/guidelines and the practices of supervision, planning, and M&E. This poster presents selected findings on standards, supervision and related issues.

Standards and strategies are available and updated but they lack clarity and not adequately distributed

"Available guidelines inform what is expected from HCs and HPs, provision of this information will play a role in bringing change. It informs each actor what is expected from them"

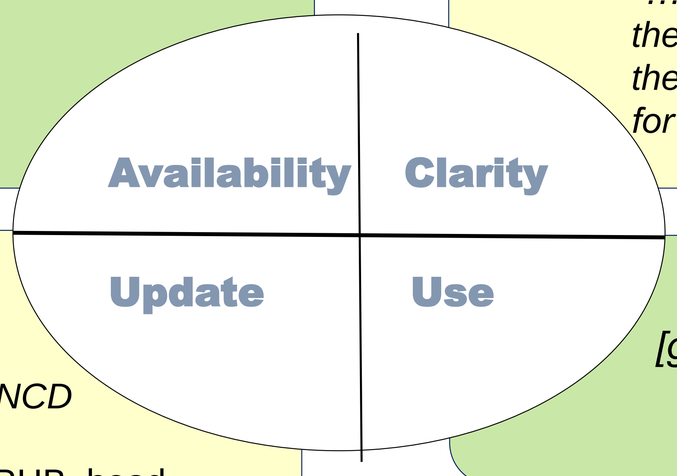
Oromia, WoHO, process owner

"…there is a huge gap in making the professionals know and understand the guidelines…"

Amhara, WoHO, head

"….Guidelines are not understandable to HEWs because they were written in Amharic. If they are translated into their mother tongues, they will be more understandable for HEWs"

Gambella, WoHO, HEP coordinator



"…there were 16 health care packages at the beginning but it has now been increased to 18 packages…one reason is epidemiological transition, in particular NCD have been included…"

RHB, head

"….we are not implementing the manuals well . It [guideline] has been distributed a long time ago…."

Amhara, WoHO, head

What are the perceived strengths and challenges in supportive supervision?

Strength

Health Centers Support HEWs in case consultation and training

"….we work together when they have case consultation and also give them training on new guidelines …."

SNNP_KII_HC head

Health Centers give feedback for HEWS for their further improvement

"….we prepare written feedback for both health center and the health post. We also discuss and try to fill the gap observed during supervision …"

Afar_KII_HC head

But,

- Supervision differs in quality and frequency based on proximity of health posts to the woreda or health center
- Regularity of supportive supervision is better in Agrarian compared to pastoralist setting

Challenges in supervision

HCs staffs perceived that they are overloaded to supervision HEWs

"…The HC's catchment population is 28,000 and there are 10 HEWs. but, the HC had only 11 health professionals. It is difficult for the HC staff to conduct supervision …"

Oromia, KII, HEP coordinator

Proper supervision require multiple professional competence

"….I was assigned to support one HP…but, I don't know how to support them because I have been on clinical work …. It is shame to be called supervisor but do nothing …have no adequate knowledge on the health extension packages…."

SNNP, KII, HC head

"….The woreda supervisors reflect only about their departments. There was a guy who came from Trachoma and he was talking about trachoma in all the house, schools…it should be done in integrated way…"

Amhara, KII, HEW

Health Centers do not consider supervision as one of their responsibilities

"…The head and staff of the HC are not doing what is expected …they don't have obligation because they say why should I go leaving my work here for which I am paid for? …. They simple post a schedule on the notice board but they don't use it…"

Harari, KII, Woreda head

Supervision is inadequately resourced (for Transport and other facilities)

"…HC supervisors use public transport for supervision covering the cost from their pocket which is not reimbursed …. It is the supervisor that takes the medicine, vaccines to HP. …"

Tigray, KII, HEWs supervisors

What are the perceived strength and challenges in HEP leadership and management ?

Strength

Government showed High Priority & Commitment for HEP

"….HEP is one of the highest priority for the government ... the evidences show that the government recruits and pay salary for more than forty thousand HEWs both in urban and rural… and work on infrastructures for more than ten thousand HPs…."

Implementing partners

The Capacity Building for HEWs is getting Priority

"….Ministry of health allocated budget from SDG and global fund for upgrading of HEWs from level III to level IV which shows government priorities every year. When program started, it was political agenda at prime ministry level and much priority was given…."

FMoH

Challenges

There is inadequate Management Structure for HEP, specially at lower level

"…At this office [FMoH] there are around 13 professionals assigned for HEP but, in regions, zone and woreda, there are two to three, one or two and one person, respectively…"

FMoH

HEP is Characterized by Multiple Lines of Accountability and Reporting at HP Level

"HEWs' bosses are many indeed countless…they are doing everything and receiving order from any governmental body…who is her boss? Health center head, kebele admin, or…. woreda cadre? This should be clearly written on Human Resource document. . ."

RHB_Other program officers

Inadequate Use of Evidences for Decision Making

"…. We do data analysis and send them to the concerned bodies but the use of these data for implementation is very weak …"

RHB

There has been limited guidance on how HEP should evolve in the future

"…HEP lacks a standalone strategic plan/ document…"

FGD, Implementing partners

Lack of educational/career opportunity is a standing question of HEWs

"….The work is really hard, even the society gave us nicknames as "burned faces"…I feel aggrieved when I work as HEW because there is no advancement…no incentive, no educational opportunities…"

Amhara_KII_HEW

The share of spending on HEP as a proportion of total health expenditure declined from 13.5% in 2010/11 to 10.6% 2016/17

Conclusion

- Despite strong expressed government commitment towards HEP, relative attention to financing HEP has been declining.
- Lack of clear line of accountability of HEWs, inadequate capacity at lower levels, human resource, and limited use of data have been challenges in the areas of LMG.

Recommendation

- Strengthen supportive supervision for HPs
- Clearly define and enforce a single line of accountability for HEWs.
- Improve practice of evidence-based decision making

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Coordination and Collaboration in implementing HEP

MERQ Consultancy PLC

Background

- Proper implementation of HEP requires multi-sectorial coordination and collaboration.
- The structure of HEP stretches from the federal level down to the community level and nested within the healthcare delivery system.
- HEP has multiple stakeholders at the federal, regional, woreda and kebele levels whose interest and concerns could only be addressed through well-established functional structure.
- Aim of this study is to explore the strength and challenges of coordination and collaboration of HEP activities.

Method

- Study Design - qualitative and systematic review of evidence
- Participants of qualitative study
  - FMoH, RHB, WoHO HEP coordinators, heads and process owners
  - HEWs, Kebele leaders , HC head and supervisors
  - Policy advisors
  - Implementing partners and donors

Result

Coordination and collaboration

Coordination within the health sector

"…Ethiopian health service delivery uses three-tier system: primary, secondary, and tertiary. This system is working in coordination and collaboration with other sectors and NGOs…"

Tigray, RHB

"….there is linkage among key players starting from federal up to kebele level. However, there is bypass by RHBs"

Gambela, RHB

Sectors collaborate and facilitate the HEP activities in various ways

"…One of the goals of HEP is to have a clean and healthy environment. So, while agriculture professionals do their duties, they also teach farmers to build latrines. This is integrating HEP activities that facilitates inter-sectorial collaboration…."

Amhara, KII HEW

NGOs and private sector also collaborate with HEP

✓ helps to fill budget gaps and also they provide technical support

"….Some NGOs that have roles in supporting HEP provide us budgets for trainings. When new health project is signed with FMOH, the project channels funds for the trainings in line with their scope of the project. They help us in printing of manuals, assist us in implementation of the packages, provide immunization, nutrition supplements, and job-aids…."

Gambela, RHB

"….They [NGOs] provide trainings on child feeding. They also provide feeding bowls and shoes to the development groups to motivate them …"

Amhara, KII HEW

Challenges in coordination and collaboration

There is limited involvement of other government sectors in HEP

"….HEWs teach about sanitation… but, garbage is not collected properly, and there is no vehicle for transporting it…"

Benshangul Gumuz, WoHO

".. she [HEWs] advices woman about the importance of water like sanitation. If there is no access to clean drinking water, the community blames her [HEWs] for not providing that. The society doesn't differentiate the tasks of different sector offices…So, they [HEWs] need support on this…."

Harar, RHB

Support has been declining overtime

"…. While the government budget for the HEP has increased significantly over the years, support from external sources has declined substantially…. So, there is no question that it will decline further.,. This is now going to be Inevitable, we should prepare ourselves to fund our health programs by ourselves…."

FMOH

"Donor assistance has declined dramatically both in terms of financial and material support… This is one of the reasons behind the decline in the HEP's performance because some program areas are donor dependent. The reason may be the effect of global politics and the recent instability in our country. The decline is not only in the HEP. There is a huge shortage of support in other sectors as well…."

Amhara, RHB

External financial resource is increasingly becoming inconsistent and unpredictable. This is creating uncertainties in the sustainability of health programs

"…. HEP mainly relies on the support of NGOs. And when NGO projects phase out, the program encounters a problem because the government is not ready to take over"

Amhara, RHB

"….NGOs not integrate with our plan… Regulations have to be prepared and distributed …"

Benshangul Gumuz, WoHO

Conclusion and Recommendation

- HEP has both structural and functional problems in coordination and collaboration with other government sectors and non-governmental organizations.
- Financial dependence of HEP on external sources is one of the key threat for its sustainability.
- Hence, HEP requires redefining its multi-sectorial approach to make it sustainable and maximize its contribution to the achievement of health outcomes. Such rethinking should involve actors out side the health system to clearly redefine their roles and responsibilities; there by boost their attention towards HEP.

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National HEP Assessment 2019

Adequacy of the Community Health Information System to monitor the HEP: Desk Review

MERQ CONSULTANCY PLC

Background

- Community Health Information System (CHIS) is an information system designed to manage and monitor the health extension program (HEP) activities including the promotive, preventive and basic curative health services. It is the standard source of information which draws its data from routine health service delivery.
- Given the design and implementation of CHIS to manage and monitor the HEP package, understanding the adequacy of the system is critical to identify challenges and put recommendations. To this end, this assessment tried to review the adequacy of the CHIS system in terms of the design, indicators, simplicity and cost.

Methods and Materials

- Documents, including the revised health extension program (HEP) implementation guide, CHIS implementation guide, the revised HMIS indicator definition guide, the revised CHIS tools, findings of the current HEP assessment and other related studies on CHIS were reviewed.
- The assessment included the design, indicators, data sources, simplicity, and cost of the current CHIS

Results

Adequacy in terms of design

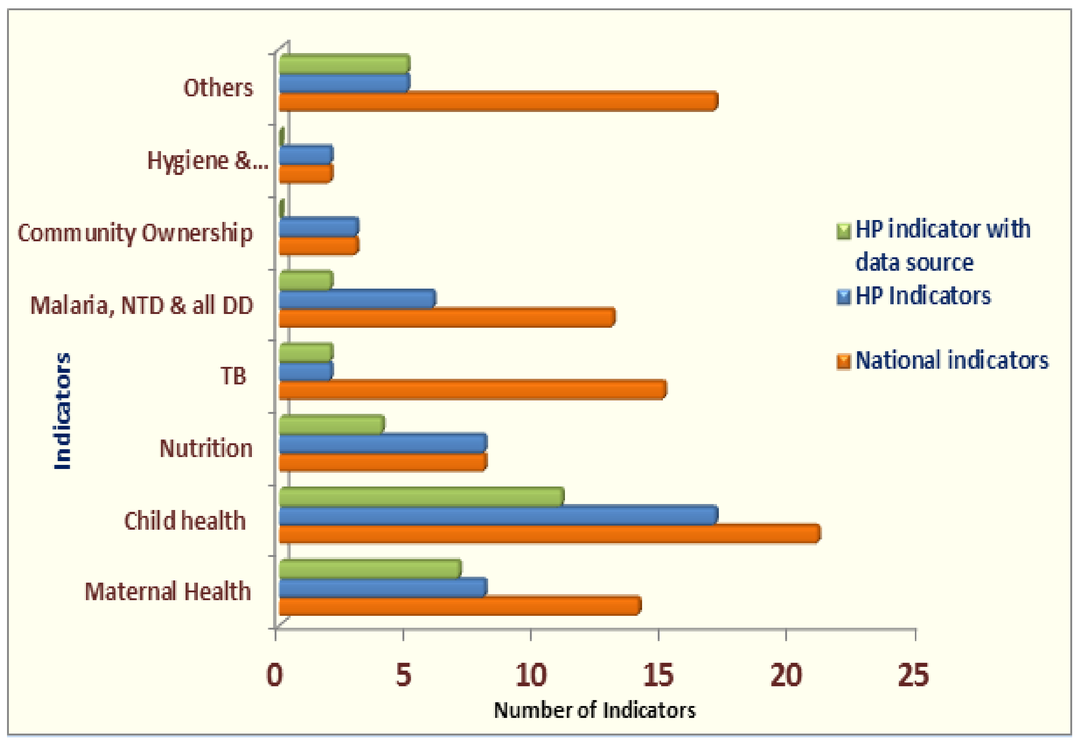
- HEWs spend more than 30% of their time in environmental health and sanitation (time motion study, 2015), however, the CHIS captures only a small part of these activities using the family folder pouch, where it is expected to be updated annually.
- Although HEWs are responsible to monitor the performance of community development team, the CHIS focused only to the activities of HEWs; it doesn't have tools to capture the activities of community volunteers, and linkage between community volunteers and HEWs.

Adequacy in terms of Indicators

- The FMOH has recently revised the agrarian CHIS, looking at the number of indicators, of the total 131 indicators, about 50 of them are collected from health posts.
- Indicators currently used by HEP have major gaps in terms of monitoring performance particularly at lower levels:
  - Focus only on outputs of specific programs reportable to higher levels
  - Limited attention to the process of HEP
  - Definitions involving unrealistic targets (HDF, ODF, 100% CBHI enrollment)
  - Poorly defined data sources/method of measurement leading to unreliable reports

Adequacy in terms of Data Sources

- Adequacy of data sources was done based on the existing CHIS, as the revised CHIS data sources are not in place.
  - Only 31 (of the 51) indicators have data sources in the existing CHIS, the remaining 20 indicators don't have data sources including PCV, Rota, IPV, HPV, and measles 2 immunizations.
  - This showed that, the existing CHIS data sources are inadequate to collect all the required indicators.



- According to this study, significant number of HPs are using non-CHIS or alternative recording and reporting tools due to the fact that WorHOs, HCs and the HP itself required additional data; which implied, the exiting CHIS doesn't meet the data needs of the health units.

Simplicity

- Simplification included user friendliness, reducing the data burden and should consider the capacity of users.
  - Retrieving cards and filling information, updating the family folder at least on yearly basis, and updating cards after providing the service in outreach sites were time consuming.
  - HEWs spent on average 13% of their time in record keeping, managing family folder and reporting (time-motion-study, 2015)
  - Besides, according to this assessment, CHIS tools are not simple, CHIS is time consuming, the capacity and workload of HEWs and its being prepared in English language affects the CHIS user-friendliness and usability, among others.
  - Only two third (66.7%) of HEWs had positive attitude towards the CHIS and believed that CHIS tools are easy (study conducted in Gurage zone, in 2015)

Cost

- As compared to registers, CHIS cards were found to be more costly.
  - During 2014 and 2017 indicator revision, new indicators were included and some were modified, however the CHIS tools revision were delayed till April 2019, as the revision, printing and implementation of the revised version is time consuming and costly.

Conclusion

In general, it can be concluded that the existing CHIS system is not adequate in terms of its design, availability of indicators and data sources, user-friendliness and cost. This will limit usability of the system and will lead to the introduction of multiple parallel recording system; which will finally affect the data quality and data use for improvement.

Recommendation

The HEP monitoring system, the CHIS in particular should be further evaluated and the system should be modified and/or redesigned in such a way to develop appropriate HIS.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Data Accuracy and Consistency at Health posts level, Ethiopia

MERQ CONSULTANCY PLC

Introduction

- Data quality should be ensured at all levels of the health system to make certain that data used for decision making is sound and accurate.
- MOH gives due emphasis on strengthening HIS to produce better quality data. Though data quality has many attributes, this assessment considered the two main characteristics – data accuracy and data consistency.

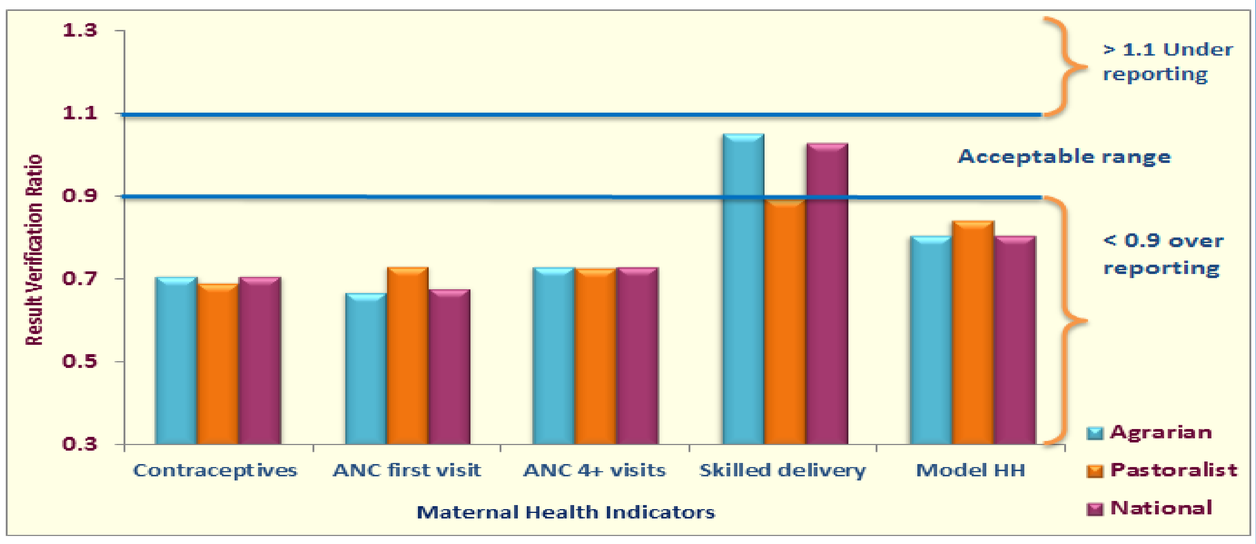
Methods and Materials

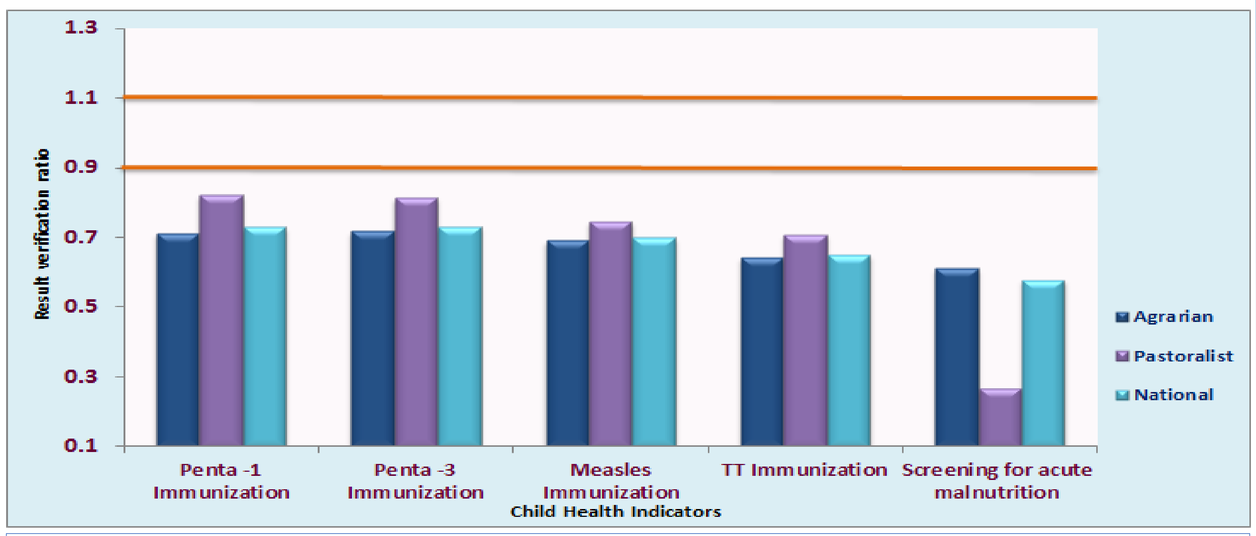
- The assessment is based on data from 343 health posts.
- Result verification ratio (RVR) or verification factor (VF) was computed as the proportion of recounted values from data sources (including health cards, registers or tally sheets) over the reported value to the next higher level (PHCU or WorHO).
- According to the measure evaluation data accuracy standard, the acceptable accuracy level is between 0.9 - 1.1. VF < 0.9 or 90% signifies over reporting, and > 1.1 (110%) signifies under reporting.

Results

- All indicators except skilled delivery were over reported
- RVR ranged from 0.26 to 0.84.

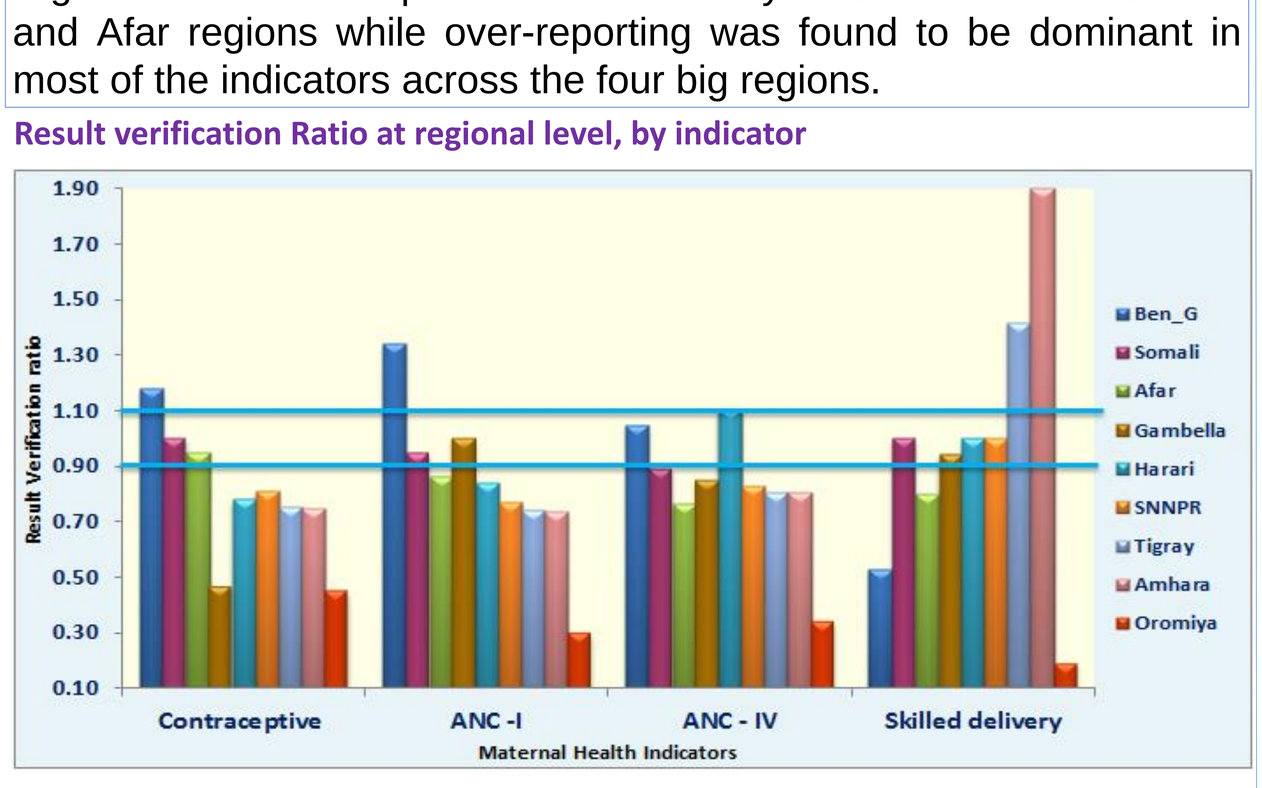
Result verification ratio at national & sub-national level, by indicator

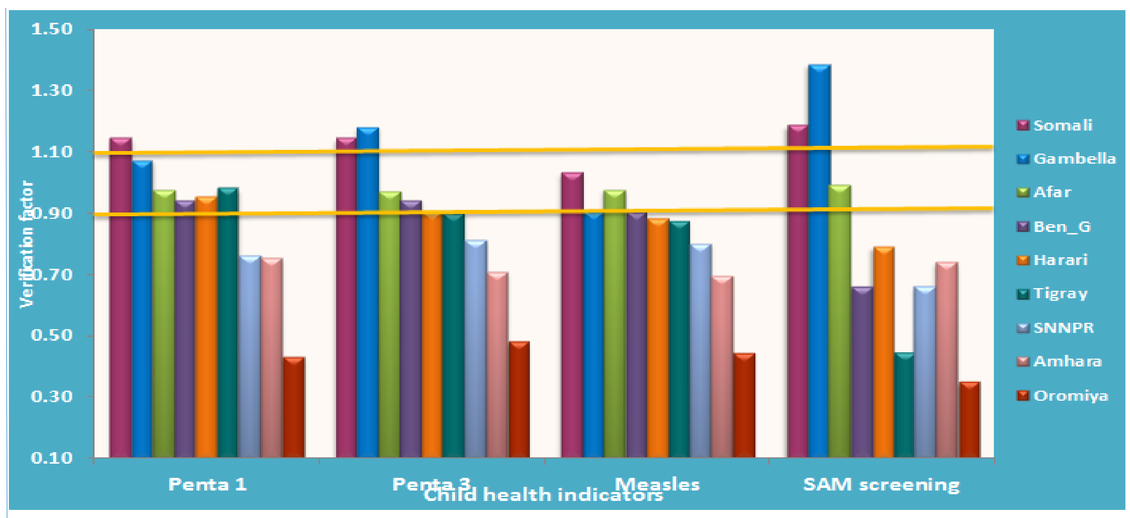




Highest level of acceptable data accuracy was observed in Somali and Afar regions while over-reporting was found to be dominant in most of the indicators across the four big regions.

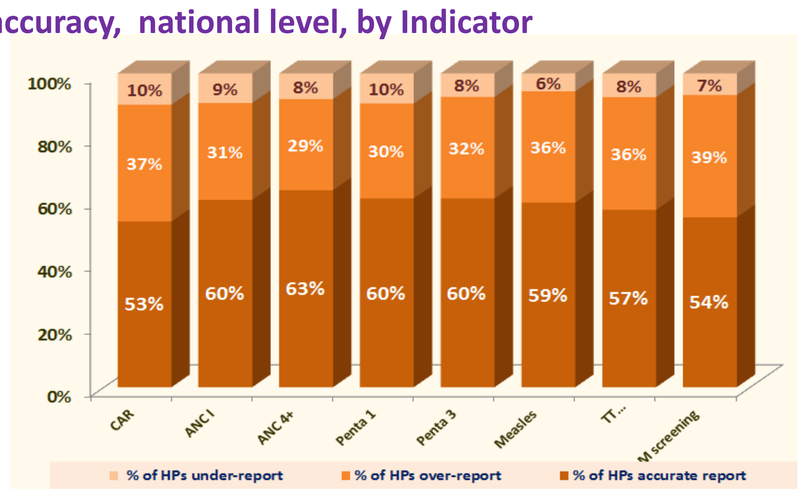
Result verification Ratio at regional level, by indicator





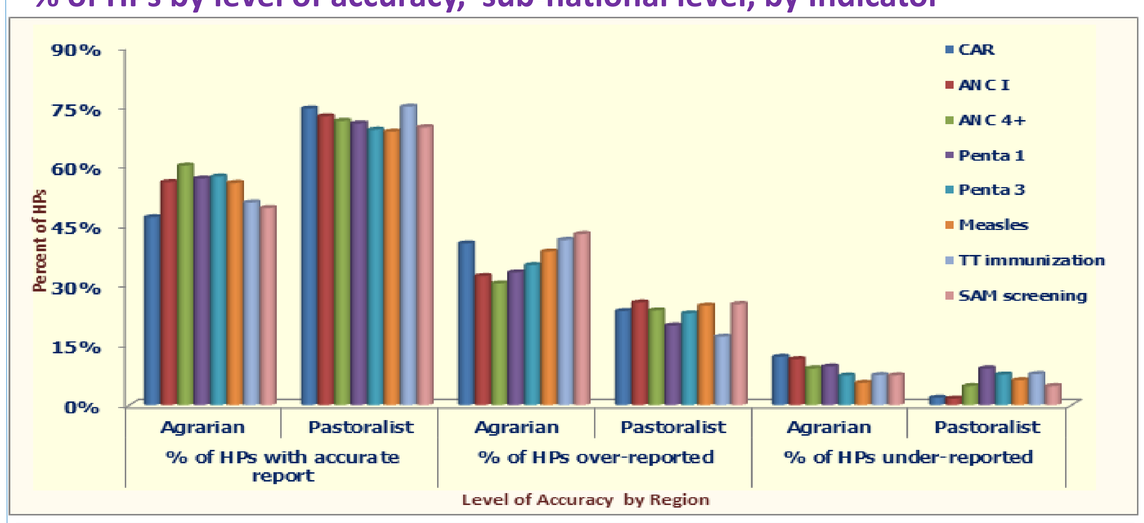
% of HPs by level of accuracy, national level, by Indicator

Although the accuracy level in the majority (53 – 63%) of HPs is within the acceptable range, significant number (nearly a third) of HPs over-reported the respective indicator.



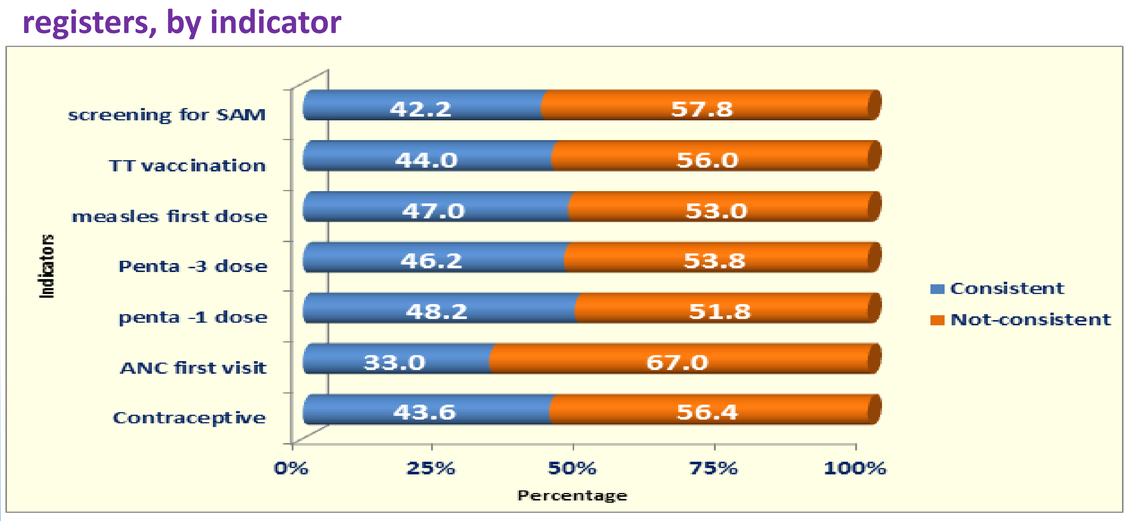
Higher number of HPs (60 – 75%) in pastoralist areas had accurate data; conversely, higher level of inconsistency was noted in agrarian areas.

% of HPs by level of accuracy, sub-national level, by Indicator



Consistency was also checked by taking a randomly sampled record from the tally sheet with health cards or available data sources. Only less than 50% of cases were available in the data source i.e. the data sources were incomplete, and inconsistency was found to be common across indicators, which indirectly proved the over-reporting finding above.

Record or data consistency between tally sheet and health cards or registers, by indicator



> ***"We have health professionals who witnessed few facts: a toilet was said to have been constructed; children have been vaccinated; mothers had given birth in the HCs and HPs; etc - in reality these may not happened at the ground. This is a clear indication of false reporting…"*** Woreda Health Officer, Tigray

Reasons for Low Data Accuracy

- Data manipulation to meet unrealistic targets
- Delay in update of CHIS along with the emergence of new indicators;
- The belief of HEWs that CHIS is not simple and it is time consuming;
- Lack of commitment and limited knowledge of HEWs and supervisors on CHIS
- In adequate level of supervision and support on CHIS
- Additional data demand by HCs and WorHOs
- High work load of HEWs to update CHIS cards

Conclusion

Data quality is compromised across all major indicators. This will predominantly affect the practice of data use for improvement by creating mistrust towards the HIS in general. Poor quality data will also cover program implementation gaps and lead to wrong decisions.

Recommendation

Improving data accuracy should be prioritized in efforts to improve information use in the health sector. It is important to understand and remove all formal and informal incentives that encourage over reporting of performance at all levels. CHIS needs revision to allow adequate M&E Of HEP.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Health Extension Program in Ethiopia: Current Evidence and Evidence Gaps

MERQ Consultancy PLC

Background

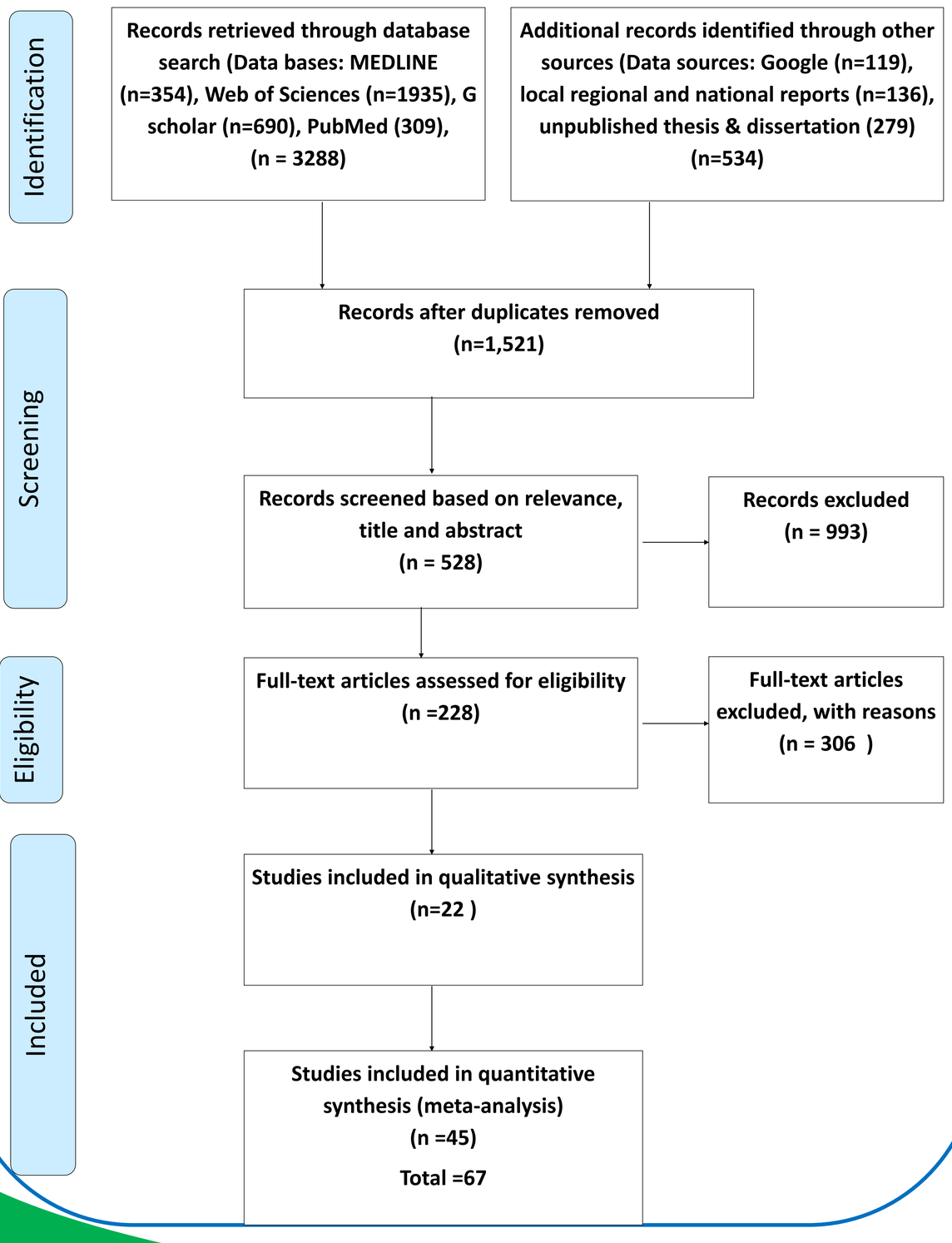
- The theoretical framework, implementation status, and outcomes of HEP have not been adequately evaluated. Hence, little is known about the impact of the health the extension program.
- Most studies conducted so far are heterogeneous and evidence of impact is mostly inconclusive.
- It is relevant that lessons from large scale program are synthesized and provide evidence for what works.
- Given the lack of impact studies (e.g. RCT), this systematic review intended to provide policy relevant insights into the performance of the program.

Methods

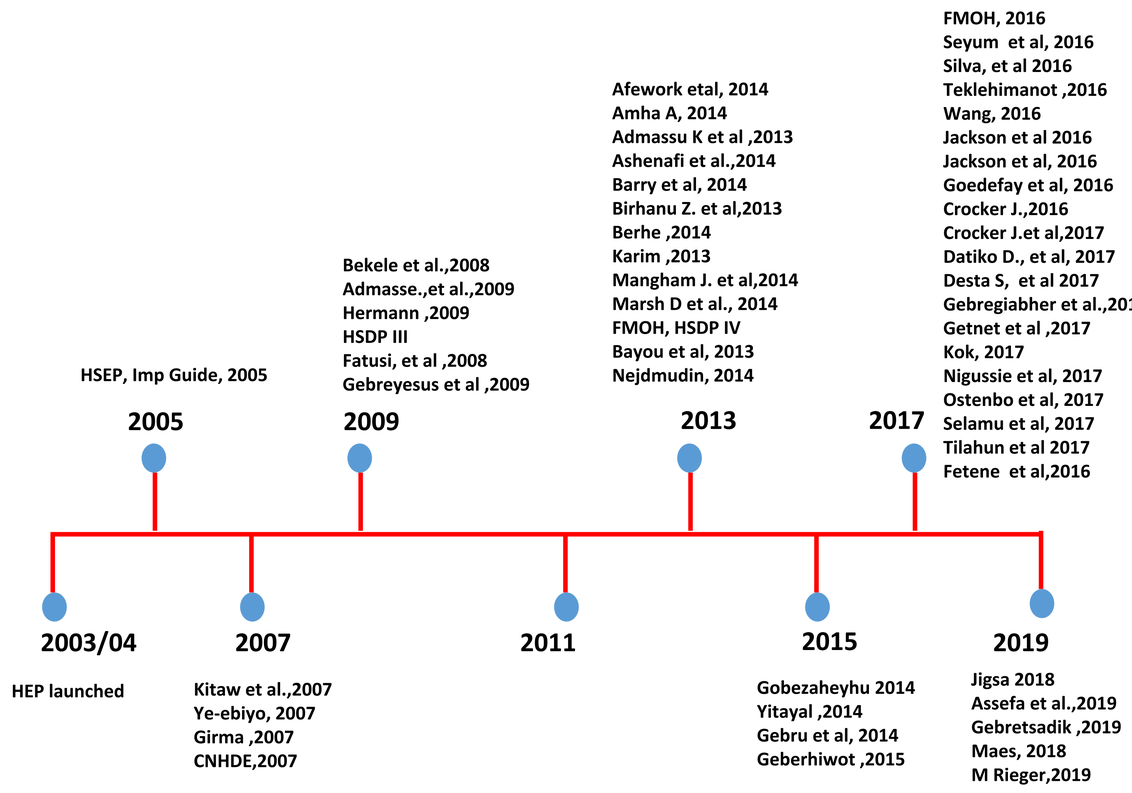
We conducted systematic review of studies.

Search Strategy (Engine and PICO criteria, Study eligibility criteria, Data extraction, Quality assessment , Analysis and synthesis)

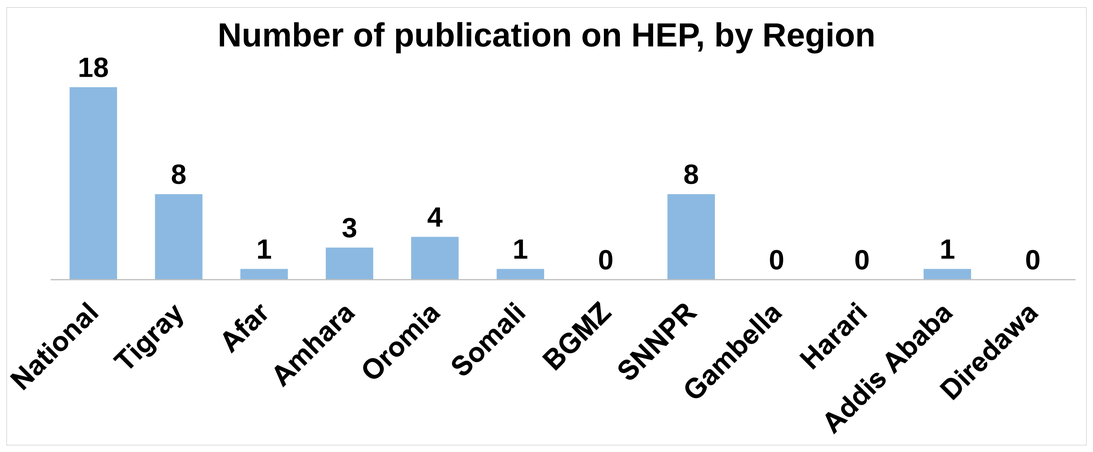
Results



Characteristics of the studies



Regional inequality/inequities of HEP research



Research/Evidence Gaps

- Existing studies are heterogeneous.
- No studies on impact of HEP on nutrition, adolescent health, first aid, NCDs, and mental health
- No studies evaluated effectiveness of behavioral change communications and effectiveness of 1-5 networks.
- Quality of care provided by HEWs is not studied adequately
- Limited studies explored the role of political contexts

Conclusion and Recommendation

- Only few studies examined the impact of HEP using counterfactual model. Little is known about what would have happened if HEP was not implemented.
- Similar programs should be supported by strong monitoring, evaluation, reporting and learning and research with robust design from their beginning to ensure generation and use of adequate evidences on effectiveness.
- Missed opportunities (use of local universities and research centers to generate evidence)
- There is need for more evidence based decision making. There are areas we do not have enough information /evidence (e.g. some topics of research, regional inequity)
- Association is not necessary causation. Careful consideration on establishing causality . This could have an implication on scaling up, and guidelines development.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Category 7

Coverage of HEP Services

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Coverage of Water and Sanitation Facilities

MERQ CONSULTANCY PLC

Background

- Water supply and safety measures, food hygiene, and sanitation are among the major priorities of HEP.
- These packages are perceived to be high impact low cost interventions for rural parts of Ethiopia.
- HEP has been implemented for a decade and half with these packages as major areas of emphasis.

Methods

- The 2019 National Assessment of HEP included assessment of hygiene and environmental sanitation indicators among 7,122 households.

Definitions

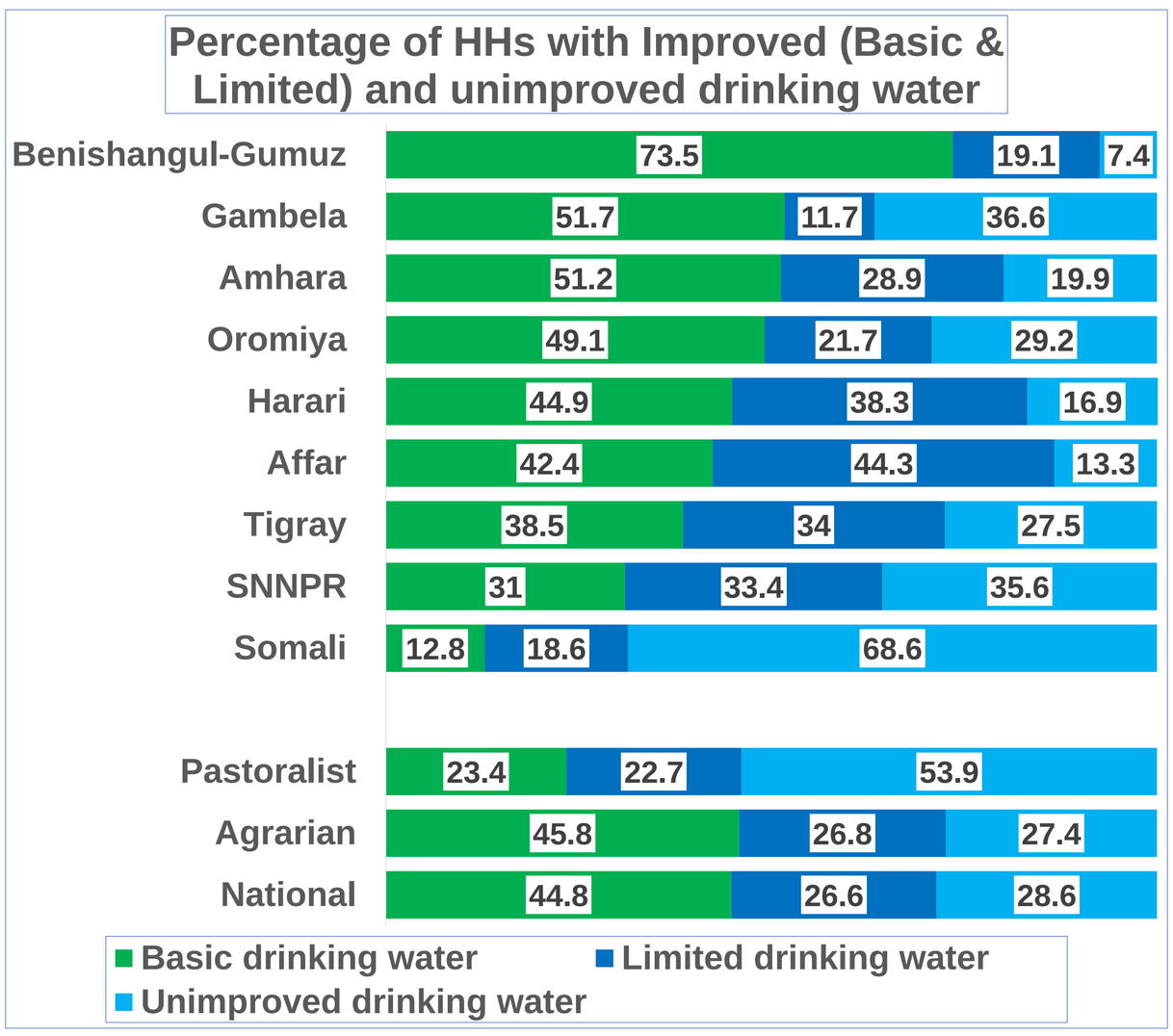
- Improved water sources are water sources from piped water, protected well and spring water, rain water are unimproved water sources.
  - Basic drinking water service: improved water source available within round-trip collection time of 30 minutes or less
  - Limited drinking water service: improved water source, available at a place with round-trip collection time of more than 30 minutes.
- Unimproved water sources are water source from unprotected well and spring, water from car and streams.
- Improved sanitation facilities: latrines with a slab or composting toilet.
- Unimproved sanitation facilities: latrines without slab or open.

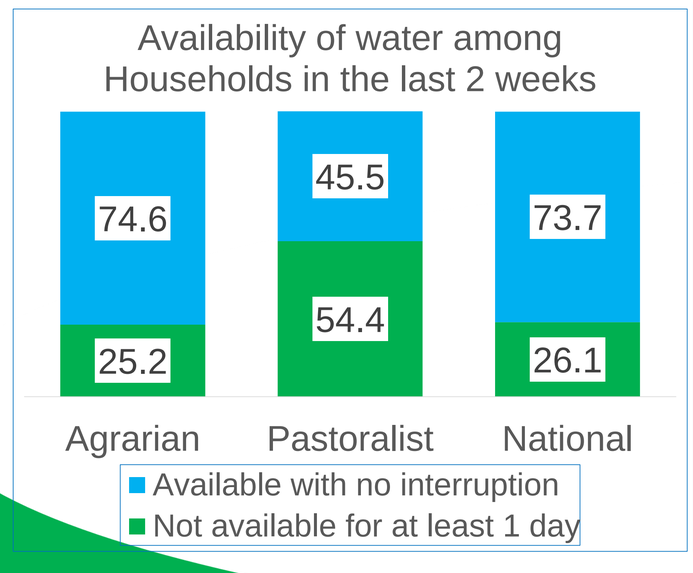
Results

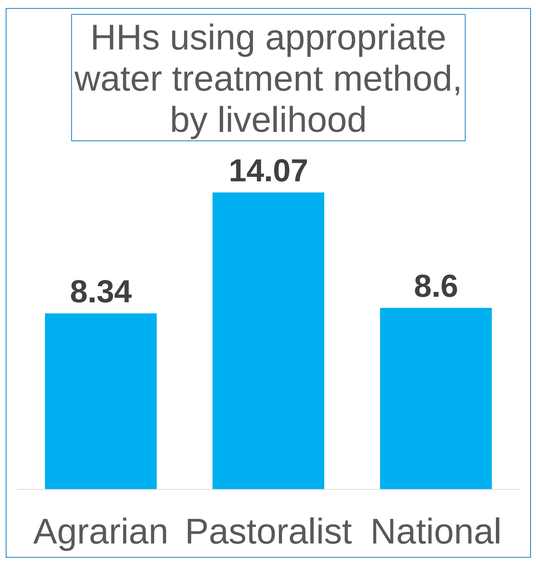
1. Water Supply and Safety Measures Extension Package

✓ More than a quarter of HHs have unimproved water sources, in pastoralist areas around 54% HHs use unimproved water sources.

✓ More than half traveled more than 30 minutes to collect water

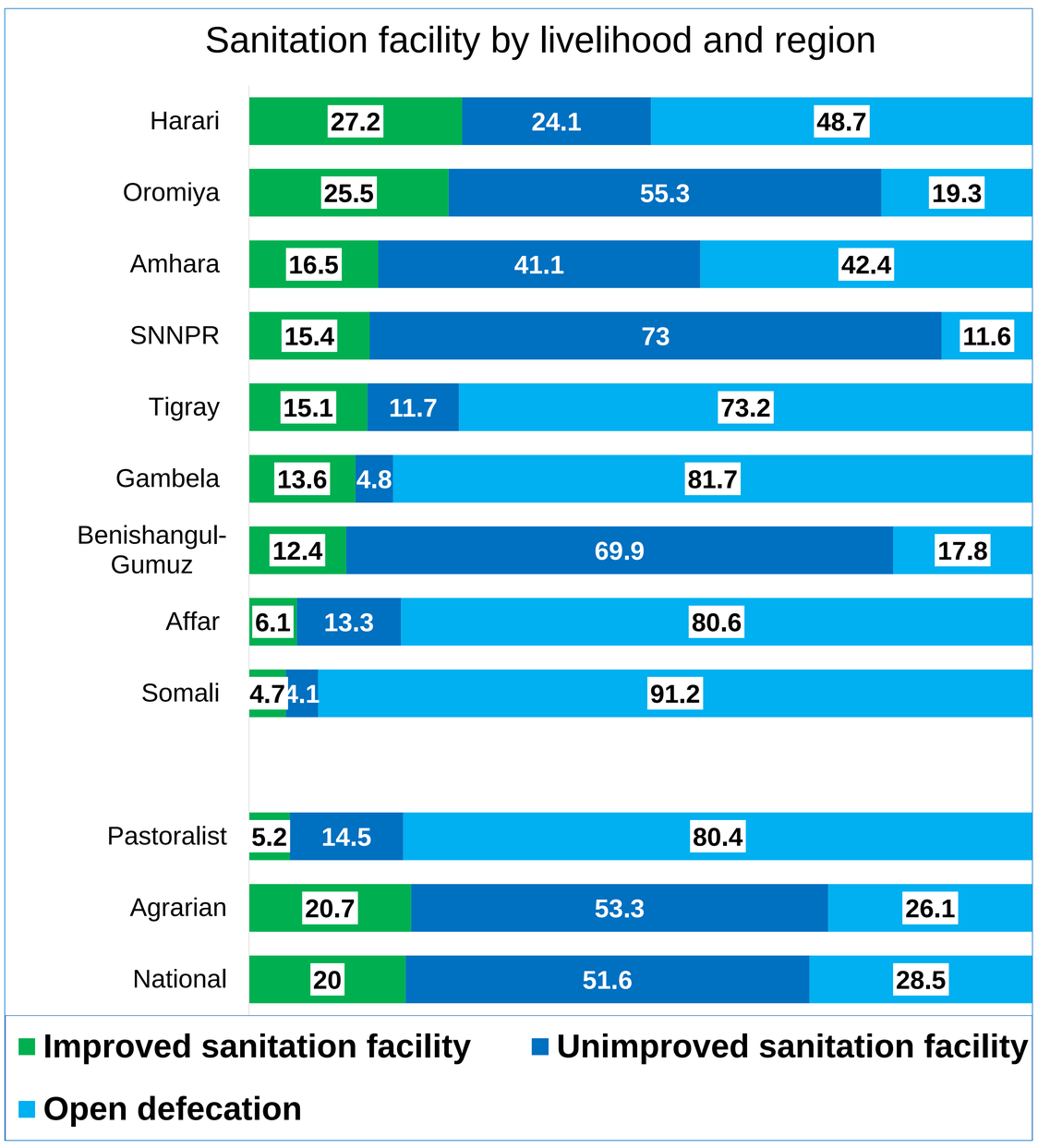




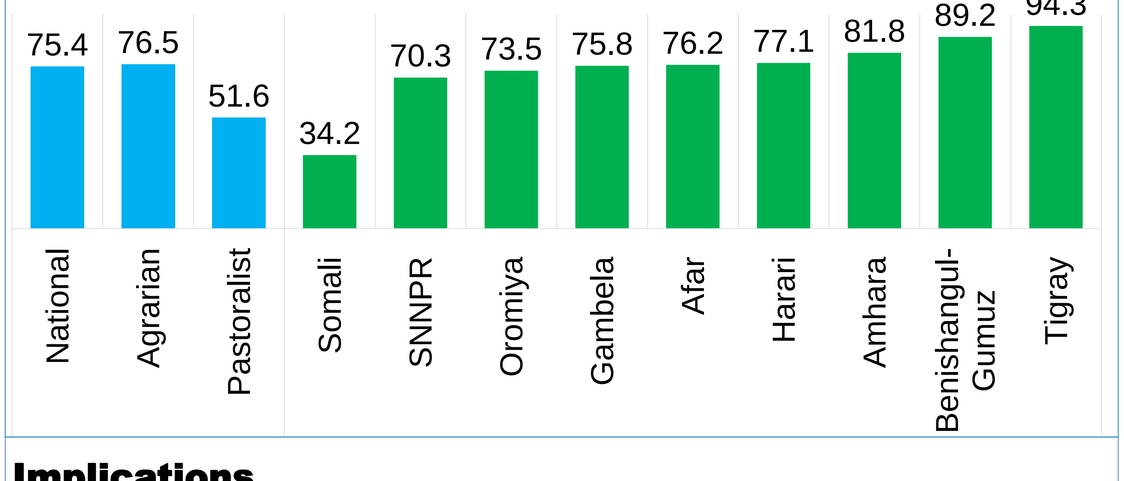


2. Sanitation Facilities

❑ Availability of improved sanitation is too low, with high percentage of HHs with open defecation particularly among pastoralist HHs



3. Personal Hygiene Extension Package



4. Food Hygiene Extension Package

❑ Majority of HHs covered or protected their food from flies

Implications

- The availability of hygiene and sanitation facilities is improved as compared to EDHS 2016, but they are far to reach HSTP targets.
- The quality of hygiene and sanitation facilities is consistently low.

Areas of Action

- Improving the exposure of HHs through household visits;
- Enabling HEWs to have adequate time for household visits
- Diversifying intervention strategies

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Coverage of Selected Environmental Sanitation Facilities and Practices: the Role of HEP

MERQ Consultancy PLC

Background

- Seven of the eighteen HEP packages focus specifically on hygiene and environmental hygiene.
- HEP is the primary mechanism for promotion of environmental sanitation services in the Ethiopian health sector.
- Achievements gained in hygiene and sanitation are highly attributable to the effective implementation of HEP.
- The coverage of selected environmental sanitation facilities and practices (waste disposal, healthy home environment and vector control) are reported hereunder.

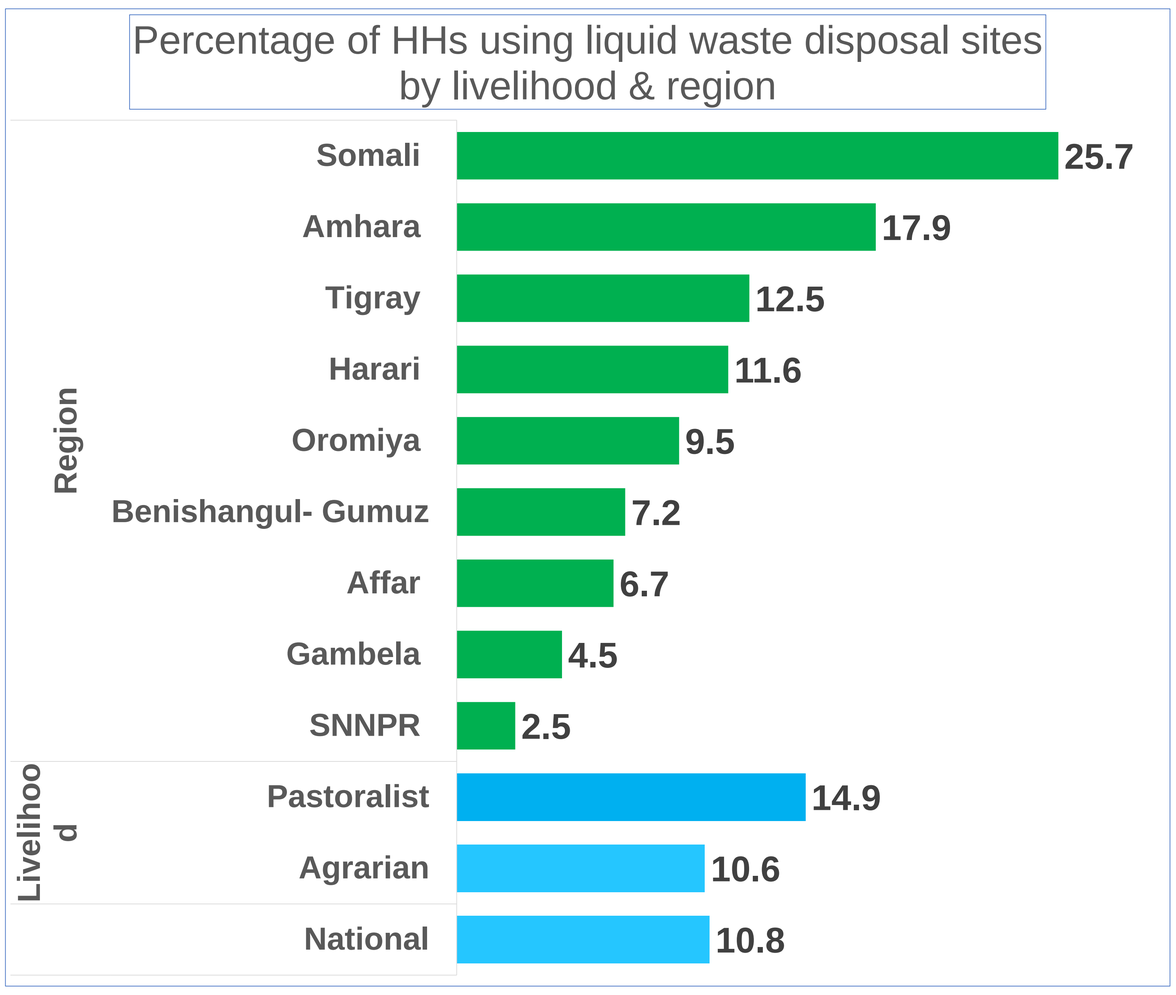
Methods

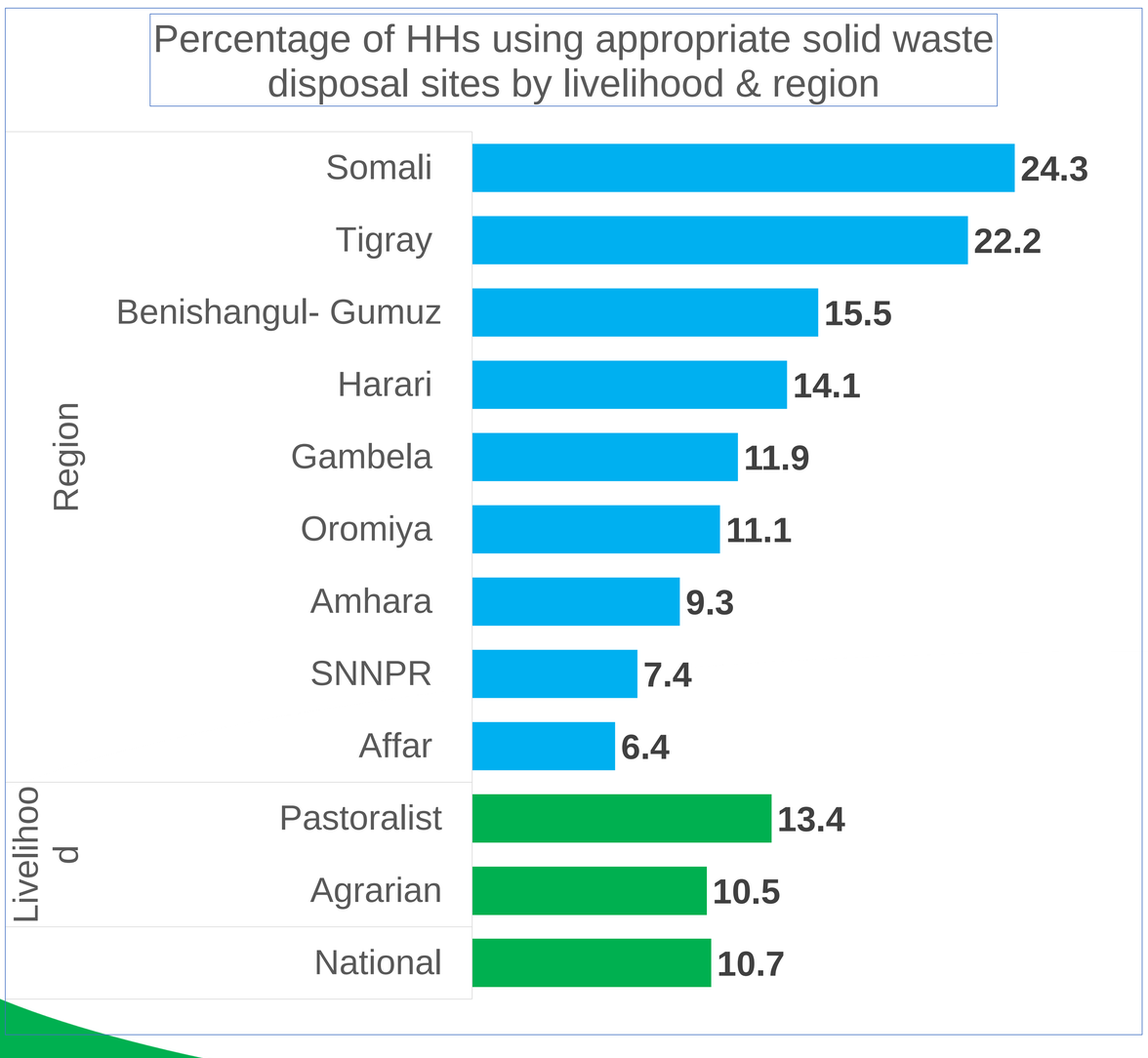
- 6,504 households from 62 woredas were assessed for availability of environmental sanitation facilities.
- Data was collected by interviewing women and making household observations

Results

1. Solid and Liquid Waste Disposal Extension Package

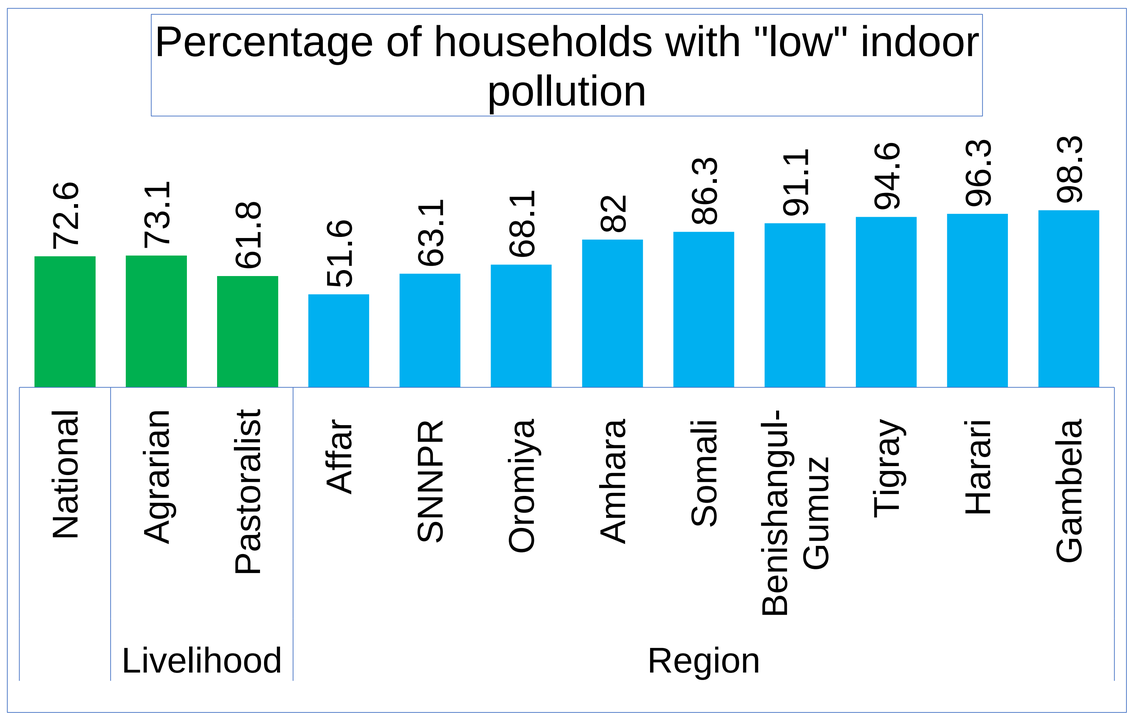
- One out of ten HHs have liquid and solid waste disposal sites.
- There is regional variation in coverage of waste disposal sites.

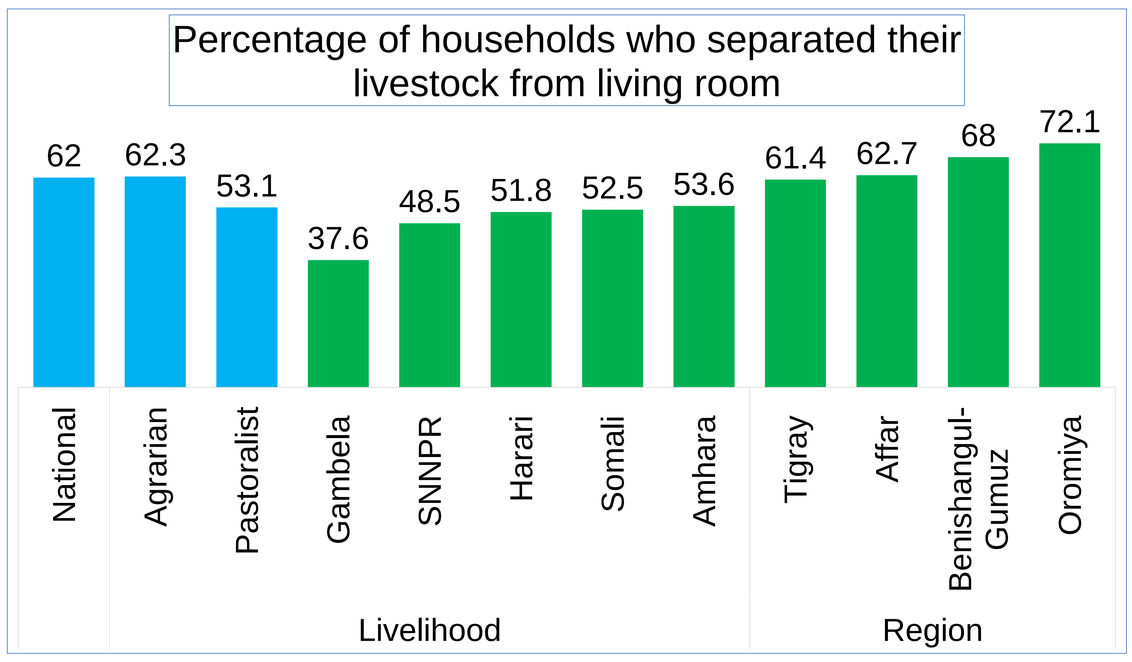




2. Safe and Health Home Extension Package

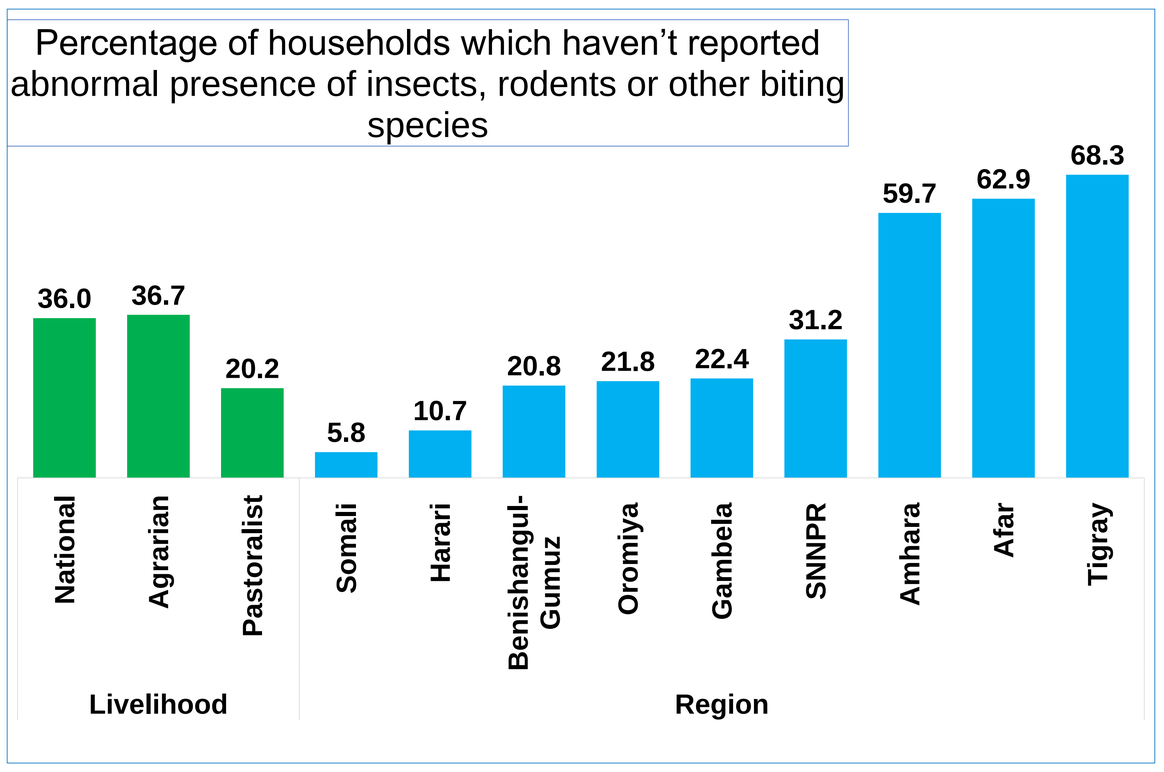
- ✓ Majority of HHs have low indoor air pollution (separated their place of cooking) from their living home
- ✓ Majority of HHs separated their livestock from their living home





3. Control of Insects, Rodents and Other Biting Species Extension Package

- ✓ Majority of HHs reported abnormal presence of insects, rodents and other biting species in their home.



Conclusion

- Despite long time investment in environmental health services as a priority of HEP, the coverage of environmental sanitation facilities is consistently low across packages.

Recommendation

- Keep environmental sanitation as a priority of HEP.
- Revise behavior change strategies that HEP has been using so far to ensure effectiveness of efforts.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Coverage of Maternal Health Services and the role of HEP as source of Information/Service

MERQ Consultancy PLC

Background

- ✓ Over the years, the Ethiopian Health System has made tremendous strides in improving access health service.
- ✓ Maternal, neonatal, childhood, and nutritional disorders are still major causes of morbidity and mortality.
- ✓ The HEP has given substantial emphasis to identification of pregnant mothers, provision of antenatal care, PNC and linking mothers with HCs for facility delivery.

Methods

- Face to face interview with women and youth 15-49.
- Eligibility criteria:
  - Family planning: women of reproductive age group (15-49)
  - ANC: Most recent completed pregnancy in the last five years
  - Delivery: For the youngest child in the last 5 years.
  - PNC: For the youngest child in the last 2 years.

Results

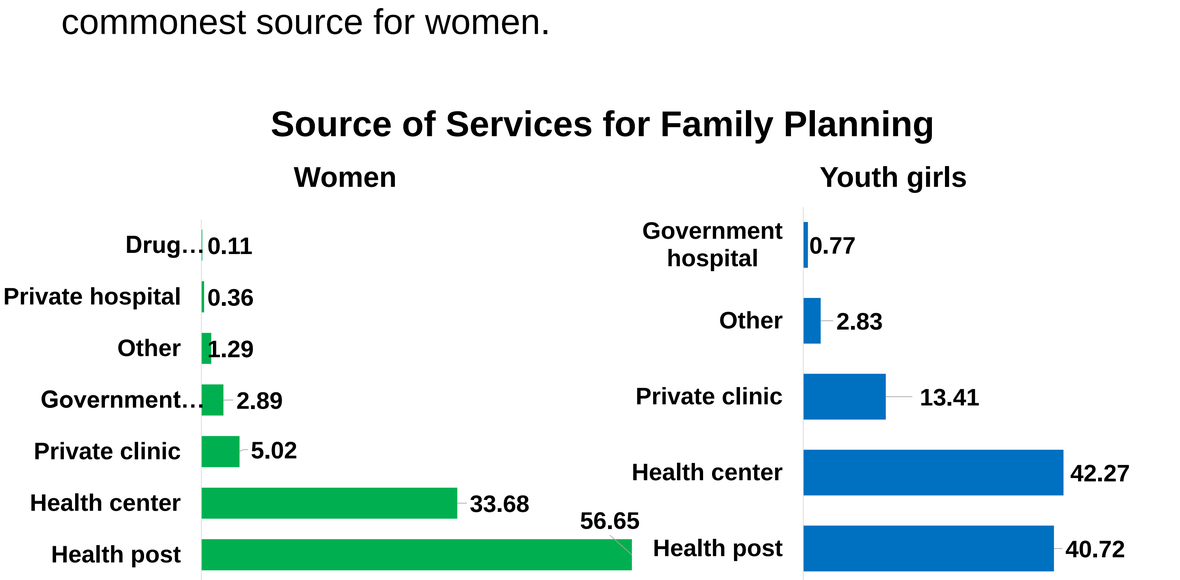
Maternal Health Service Utilization

MHS	HEP Assessment finding		HSTP (2020)Target
	National	Range across regions	
CPR	46.6%	0% - 55.3%	55%
LARC	11.2%	0% - 21.7%	50%
Unmet need for FP	22.5%	9.7% - 34.5%	10%
ANC1	85.7%	9.9% - 94.4%	95%
ANC4	48.3%	1.2% - 72.1%	95%
Facility delivery	54.9%	7.3% - 80.2%	90%
PNC	25.5%	0.4% - 60.1%	95%

Role of HEW/HP

Awareness on Family Planning (FP):

- ✓ All respondents know at least one FP method.
- ✓ HEWs were the main source of information for women and men.

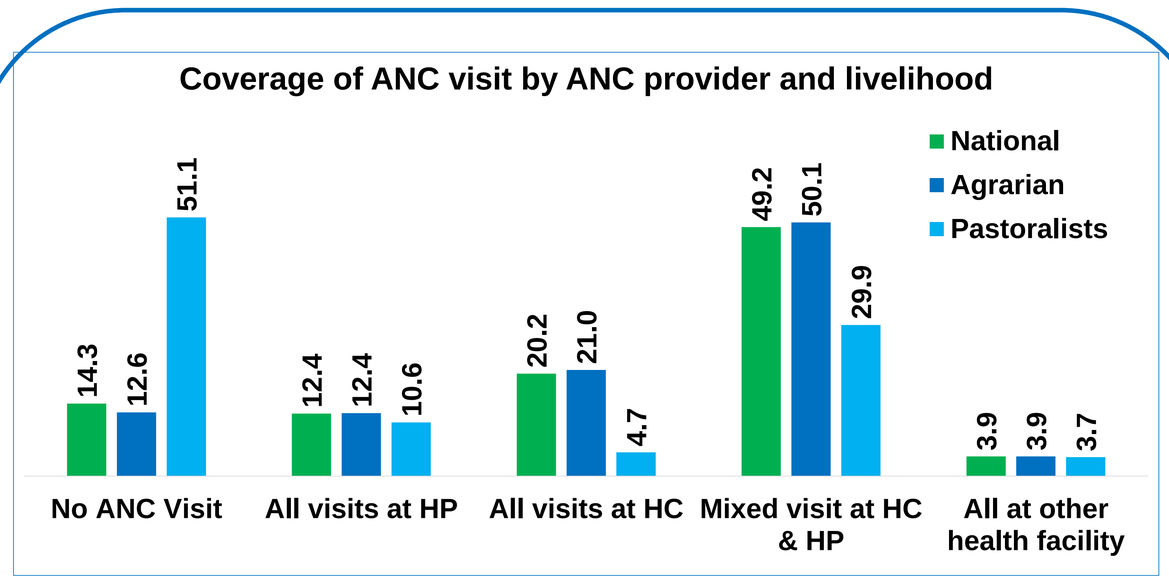


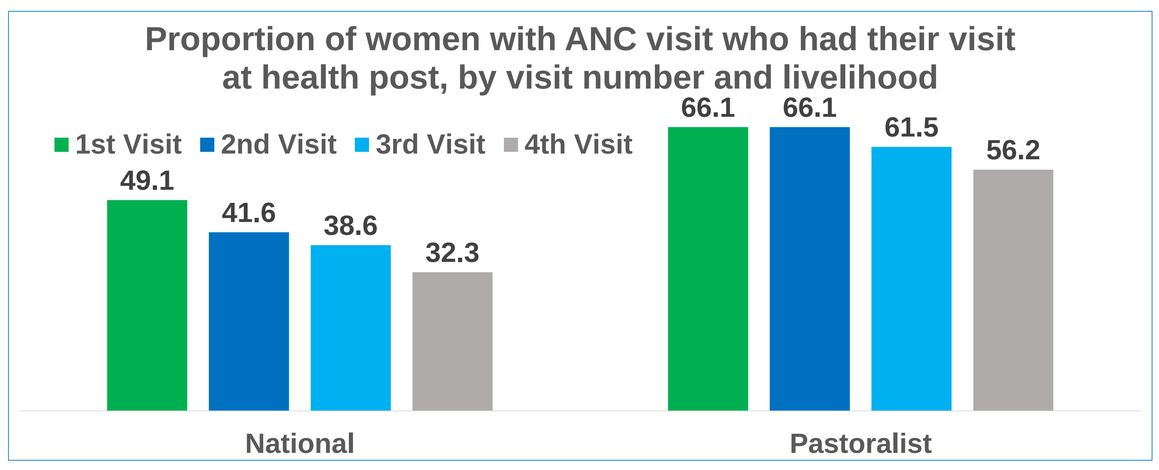
Source of Family Planning Service for Women & Youth Girls:

- ✓ HP & HC are the common source of FP, particularly HP is the commonest source for women.

Health Post as a Source of ANC:

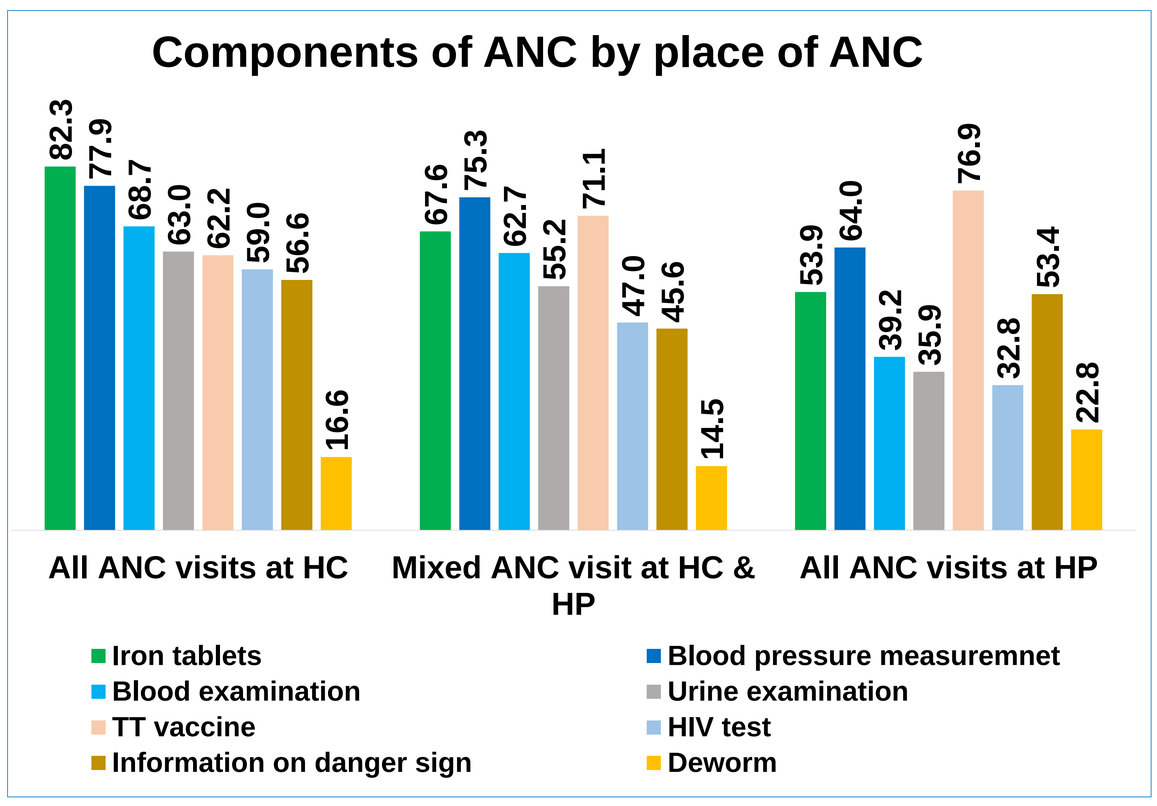
- ✓Higher number of women Particularly in pastoralist areas follow their 1st and 4th ANC visit at the HP.
- ✓12.4% of women had all visits at HP.
- ✓20.2% of women had all visits at HC.





Components of ANC by place of ANC

- ✓ Women who received ANC from health posts received less number of ANC components compared to those who received services from HCs

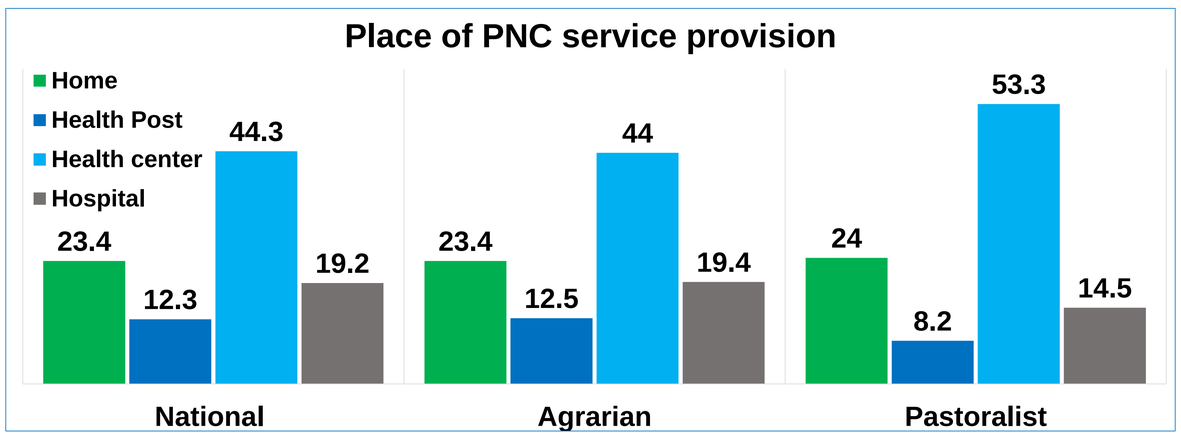


Delivery Assistance

- ✓ 51.8% of women delivered with the assistance of health professionals.
- ✓ HEWs attended 3.7% of deliveries.

Place of PNC

- ✓ HC is the commonest place for PNC service followed by home.



Summary of Findings

- ✓ MHS uptake is very low as compared to the national planned target.
- ✓ HP & HEW are the commonest source of FP service & FP information while their role for delivery & PNC service is low.
- ✓ Some women are receiving ANC -1 & 4 at HP against the recommendation of the national guideline.
- ✓ Providing ANC at HP results in compromised quality of care.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Maternal Health Continuum of Care

MERQ Consultancy PLC

National HEP Assessment 2019

Background

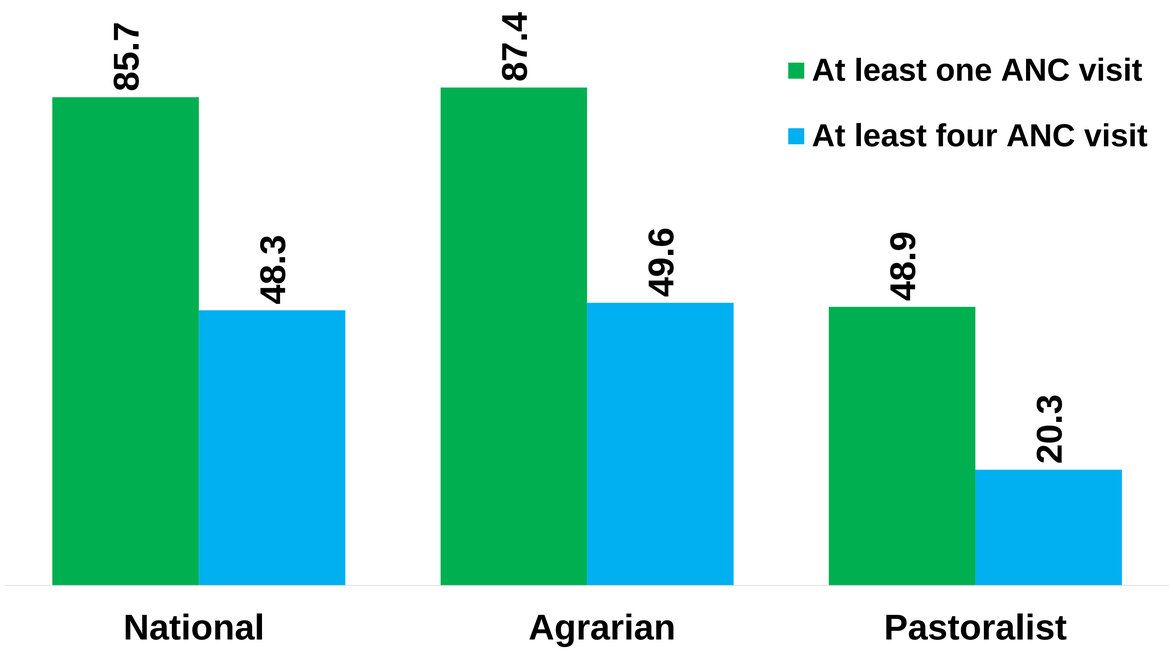
- ✓HEWs are expected to provide maternal and child health services as the first point of contact for rural dwelling women
- ✓Their role and the adequacy of service components is not well understood.
- ✓The role of HEP as a service delivery point for MCH services is compared with the services delivered at Health centers.

Methods

- ✓Continuum of care was assessed by exploring the level of continuity from ANC 1 to ANC4, facility delivery, and PNC.
- ✓Women who delivered their most recent child during the last five years were included in the analyses.
- ✓Analyses was stratified by place of ANC visit to explore possible differences in quality of ANC by type of providers

Results

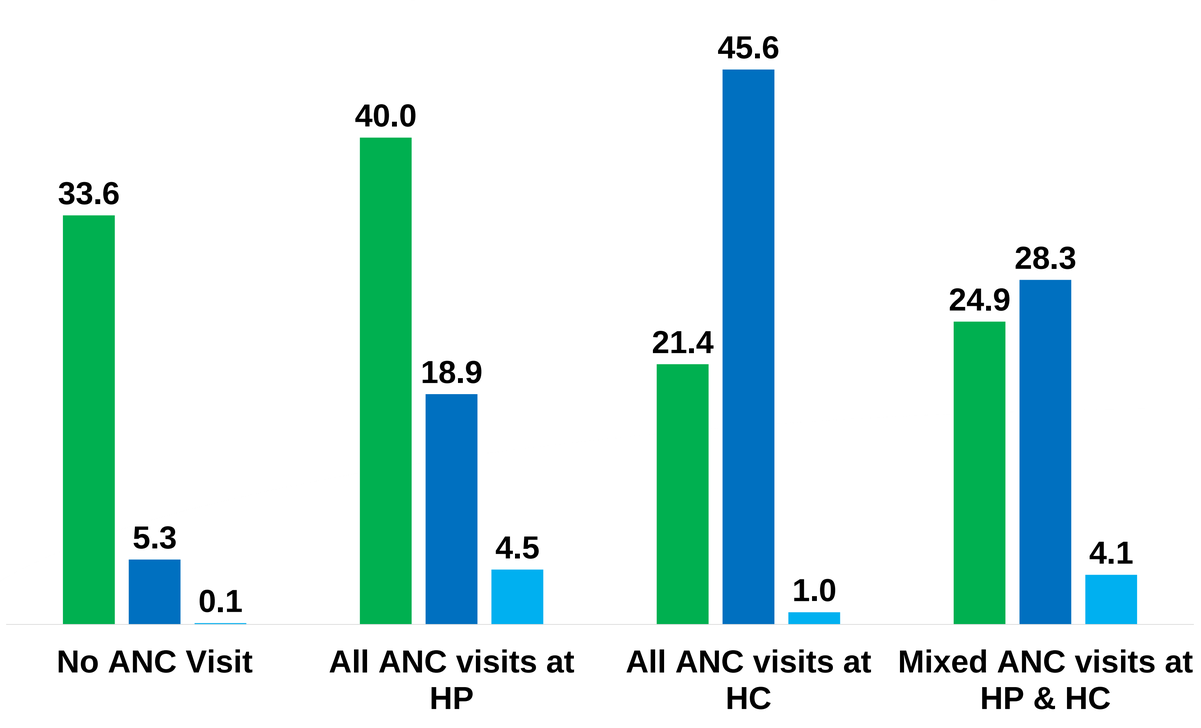
ANC 1 to ANC 4 drop out by livelihood



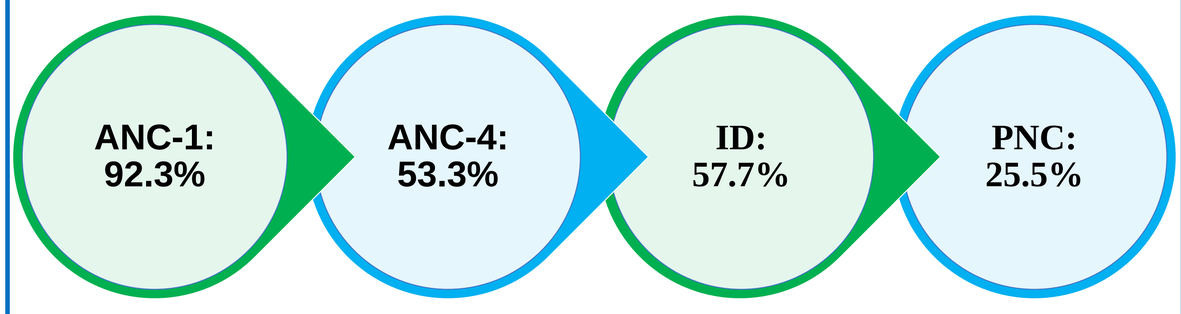
Place of delivery by place of ANC

- ✓As compared to women who had all ANC visits at HC, women who had all their ANC visits at HP had higher rate of home delivery and lower rate of facility delivery.
- ✓Mixing ANC visits to include at least one visit at health center increases facility delivery as an outcome but facility delivery among these women is still lower than those who had all their ANC visits at HC.

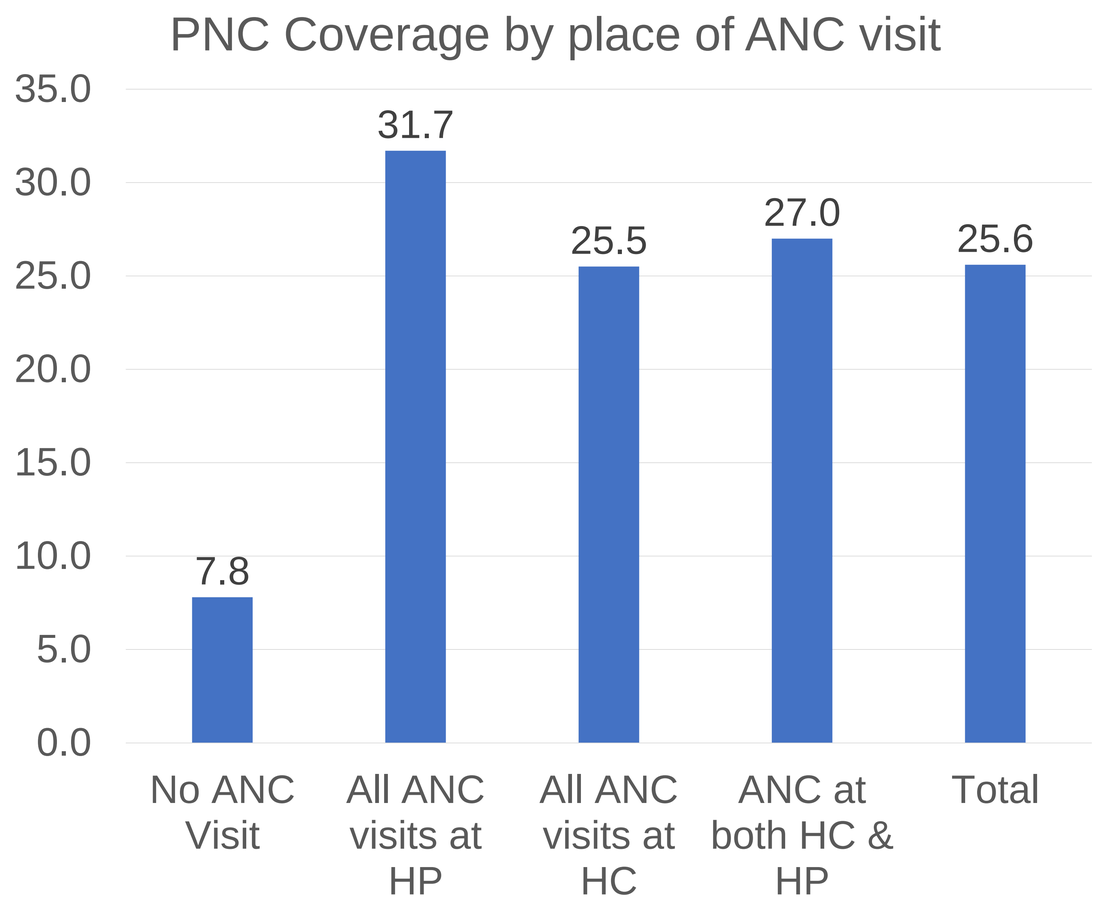
Place of delivery by place of ANC visits



Drop out in the continuum of care among a fixed cohort of women who delivered during the last two years



- ✓Women who received ANC were more likely to receive PNC services too. However, linkage between ANC and PNC is very low.
- ✓PNC coverage was 25.6% among all women
  - ✓7.8% among women who had no ANC visit
  - ✓31.7% among women who had all their ANC visits at HP
  - ✓25.5% among mothers who had all their ANC visits at HC
  - ✓25.5% among mothers who had all their ANC visits at HC



Conclusion

- ❑ Continuity of care is limited. Mothers who had access to a health facility for initial visits are not staying in the system throughout the continuum of care process.
- ❑ Maternal health services provided at health post including counseling as part of antenatal care services are sub-optimal compared to similar services provided at HC and other health facilities.

Recommendations

- ❑ Strengthen counseling services provided for mothers during any contact with the health system to ensure continuity of care.
- ❑ Strengthen human resource capacity at health posts to ensure provision of adequate services for all mothers.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Coverage of Child Health Services

MERQ Consultancy PLC

National HEP Assessment 2019

Introduction

- Ethiopia has been successful in reducing child mortality over the last decade; however, child mortality is still high.
- Most of the causes of child mortality can be prevented if appropriate interventions are in place.
- HEP has specific packages focusing on child vaccination, childhood illness management and child feeding.
- The 2019 national assessment on HEP assessed the coverage of child vaccination, treatment of childhood illness and health education on IYCF among eligible children and their care givers.

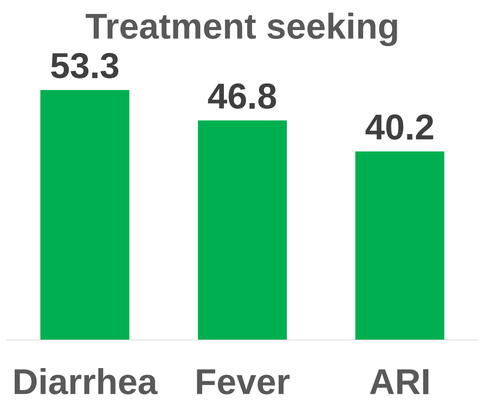
Methods

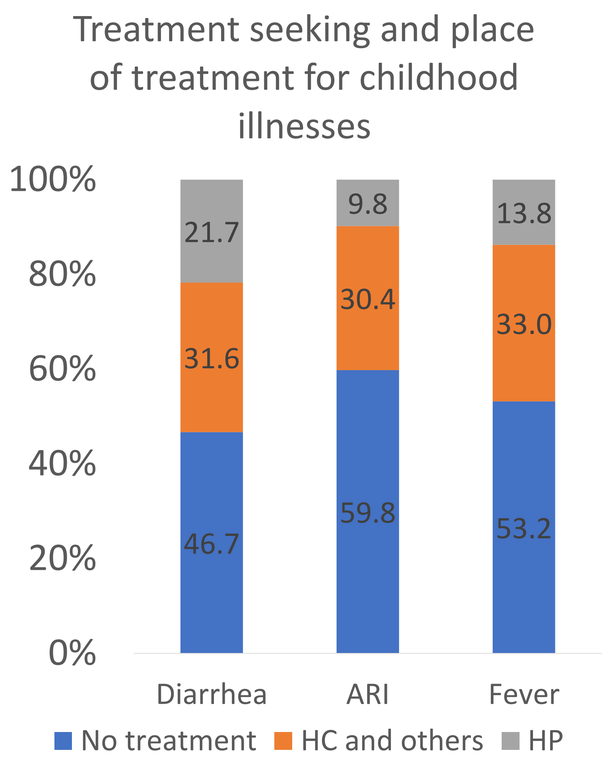
Child health services	Eligibility (recall period)	Composite indicators /definition
Childhood illness (n=2936)	< 5 years youngest child had symptom of illness in the last two weeks	
All basic full vaccination (N=795)	Youngest child 12-23 months	BCG=1 dose Penta = 3 dose Polio =3 dose Measle = 1 dose
Minimum meal frequency (MMF) N=1057	6-23 month	Complementary and minimum • BF 2 times /day, 6–8 months • BF 3times /day, 9–23 months • Milk 4 times for non-BF 6–23 months
Minimum Dietary Diversity (MDD)	6–23 months	Children who receive foods from 4 or more food groups
Minimum Acceptable Diet (MAD)	6–23 months	• MMD+MMF • Non-breastfed who received at least 2 milk feedings and MMD

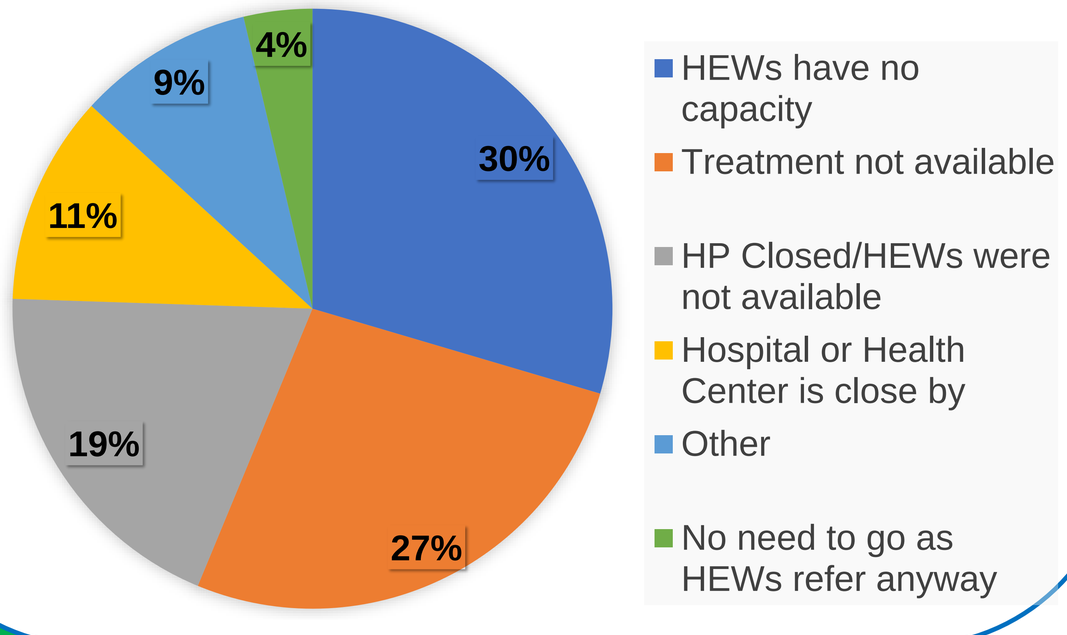
Results

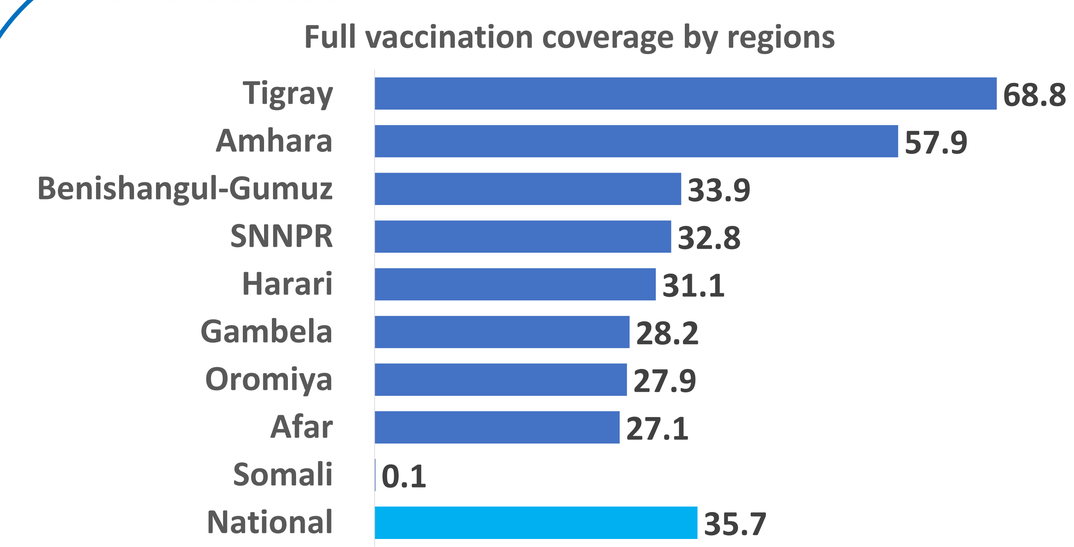
Childhood illness occurrence in 2 weeks

- Fever: 19.6%
- ARI: 17.9%
- Diarrhea: 10.6



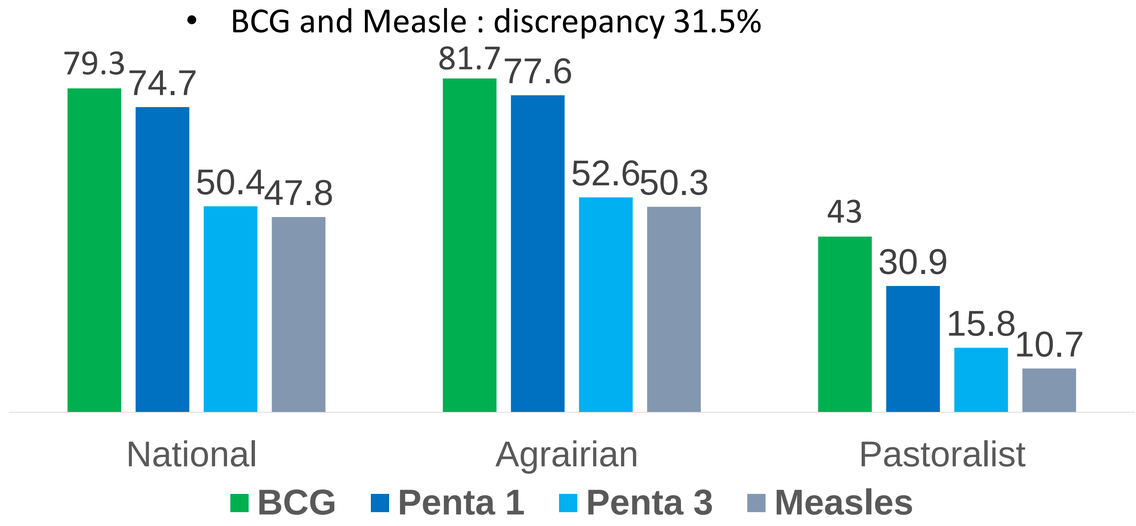






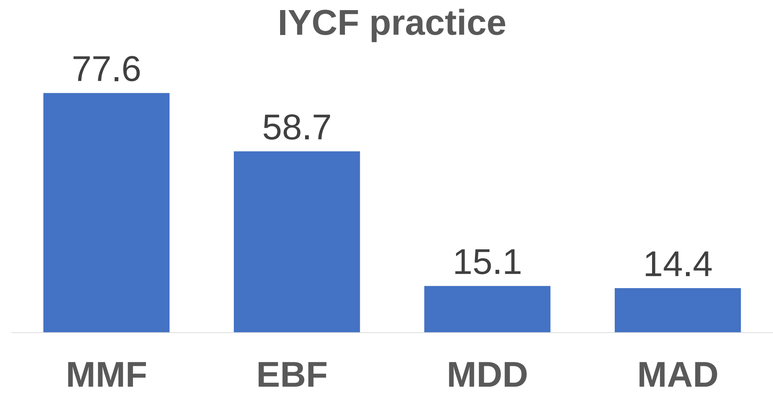
Drop out of child vaccination

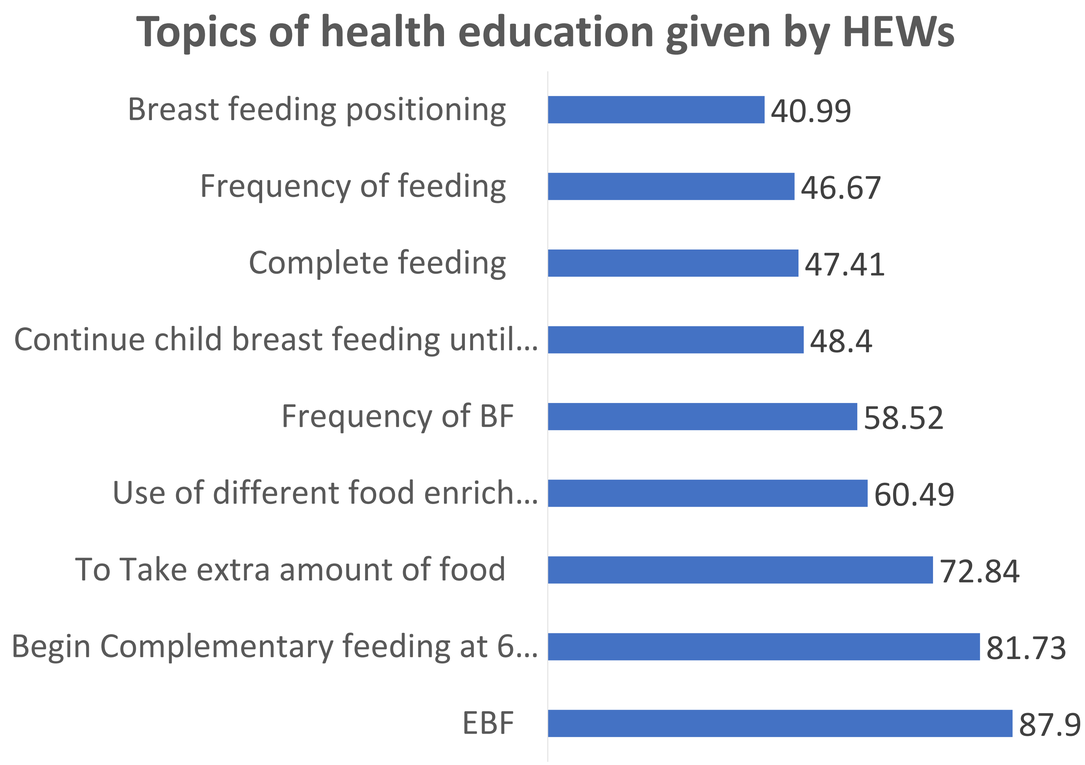
- Penta 1 and Penta 3: discrepancy 24.3%
- BCG and Measle : discrepancy 31.5%



Infant and young child feeding (IYCF)

- 28 % of the HH received Health education about IYCF from HEWs
- Time of EBF and complementary feeding are the major area of counseling by HEWs during home visit





Conclusion

- Coverage of child health services provided through HEP is low compared to HSTP targets.
- HPs have been sources of service for large number of sick children but still they are very often bypassed.

Recommendation

- Strengthening HPs to deliver quality child health services.
- Increase community awareness about services available at health posts.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Coverage of Malaria Prevention and Control Services

MERQ CONSULTANCY PLC

Background

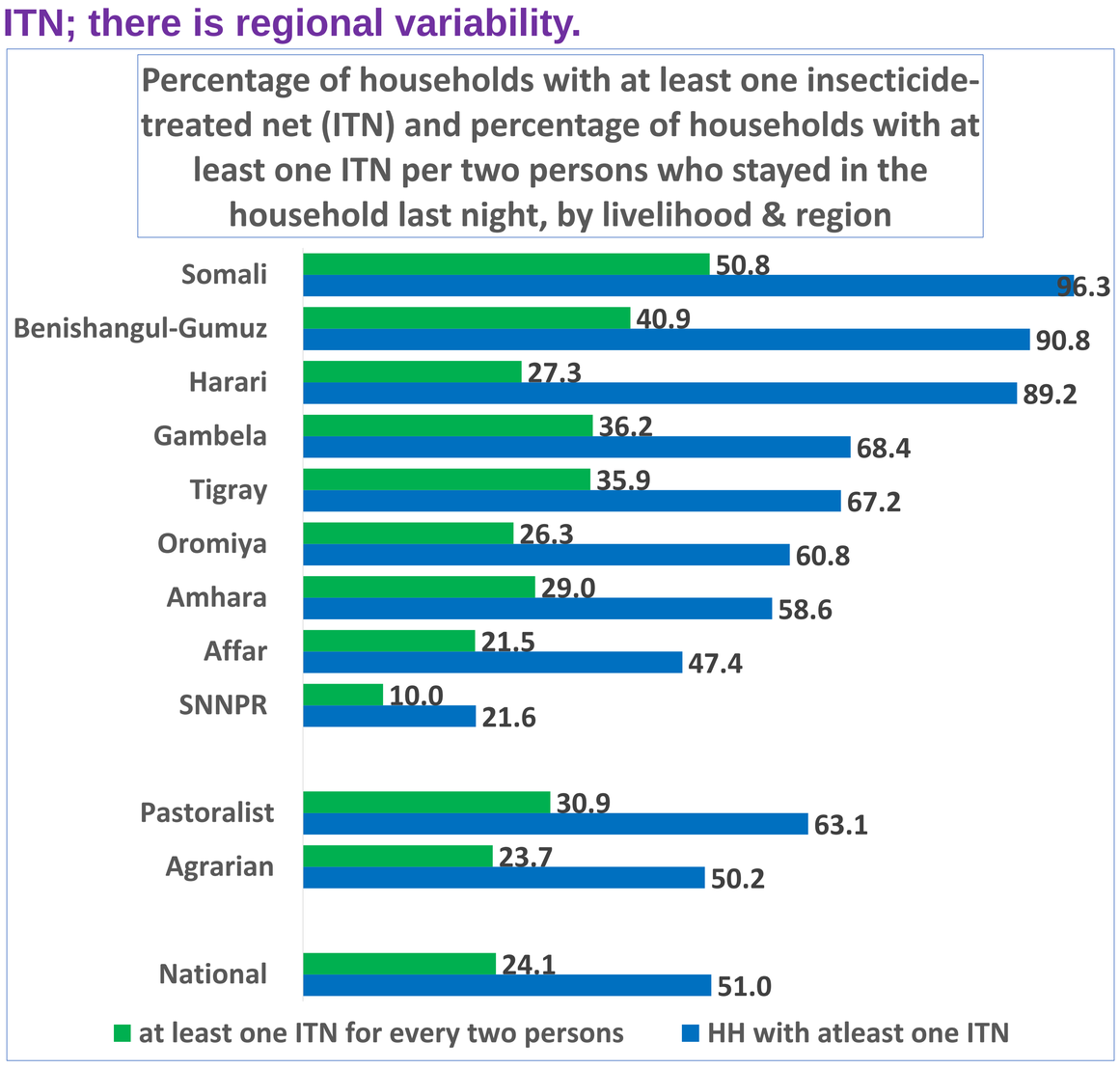
- Despite decreasing incidence, malaria is still a major cause of preventable morbidity and mortality in Ethiopia.
- Malaria prevention and control is one of the HEP packages on disease prevention and control.
- Health posts are involved in providing health education, distributing insecticide treated mosquito nets, organizing indoor residual spray, and diagnosis and treatment of malaria.

Methods

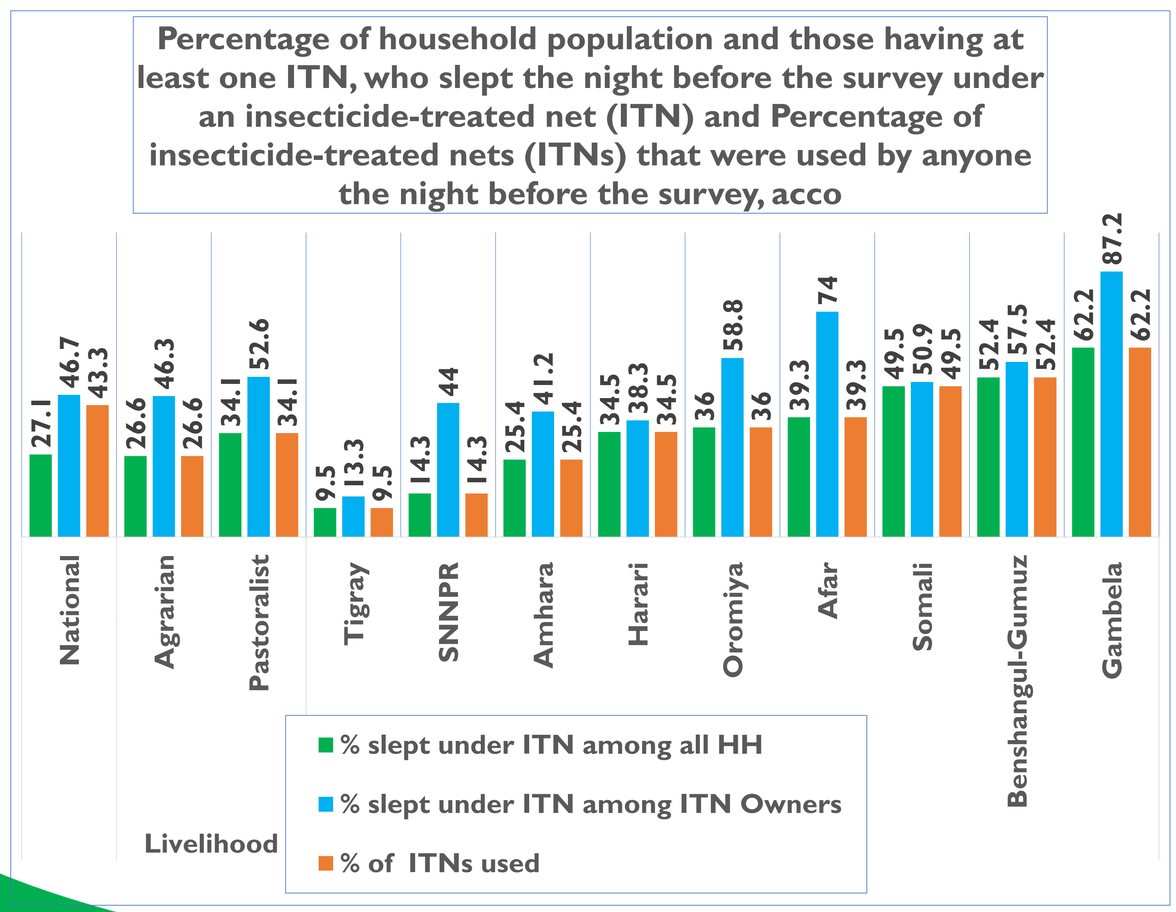
- As part of the 2019 national assessment of the HEP, receipt of health education on malaria prevention and control and coverage and utilization of ITN were assessed
- Data was collected by interviewing women from households in malarious areas in 62 randomly selected woredas.

Results

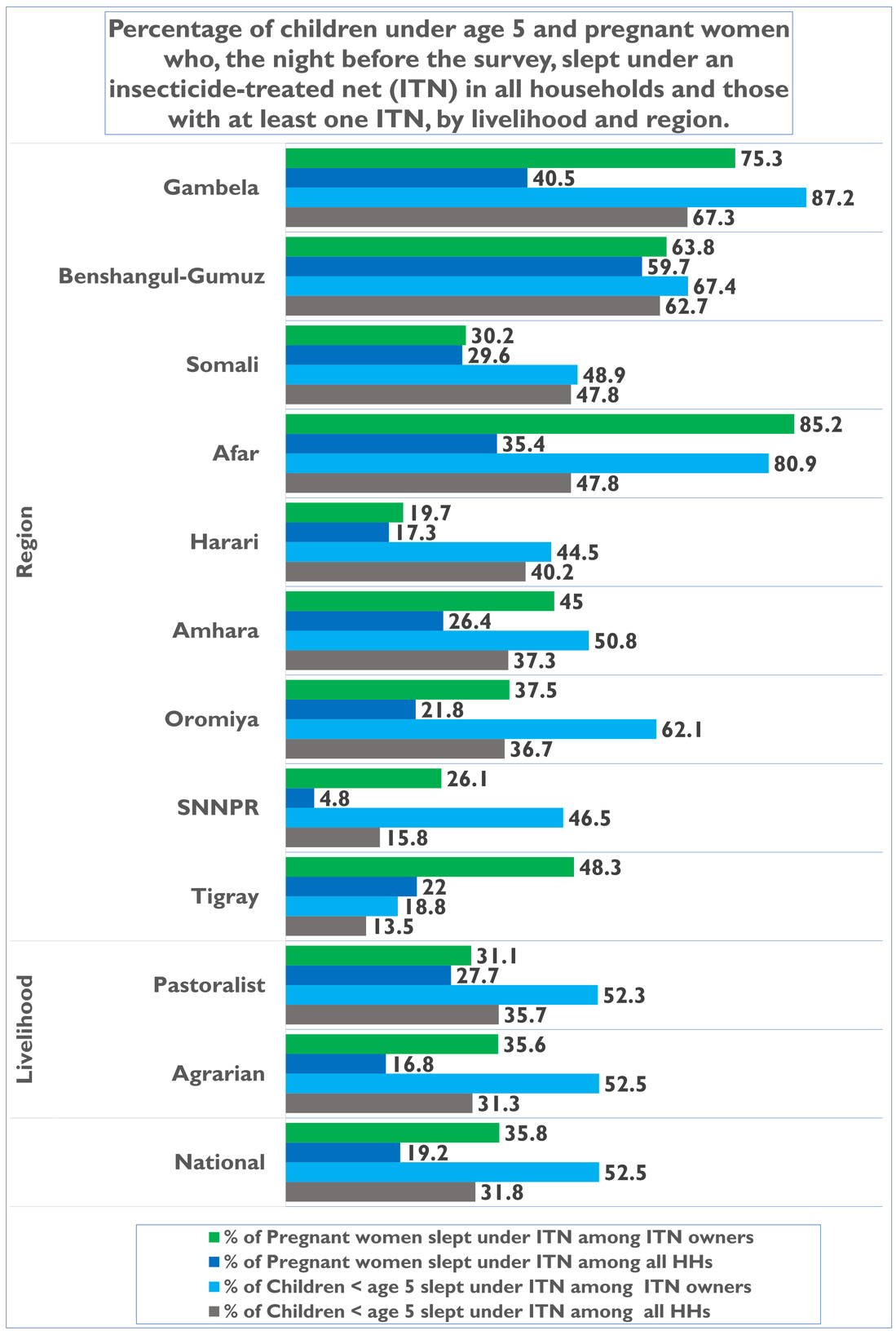
Half of the households in malarious areas own at least one ITN; there is regional variability.



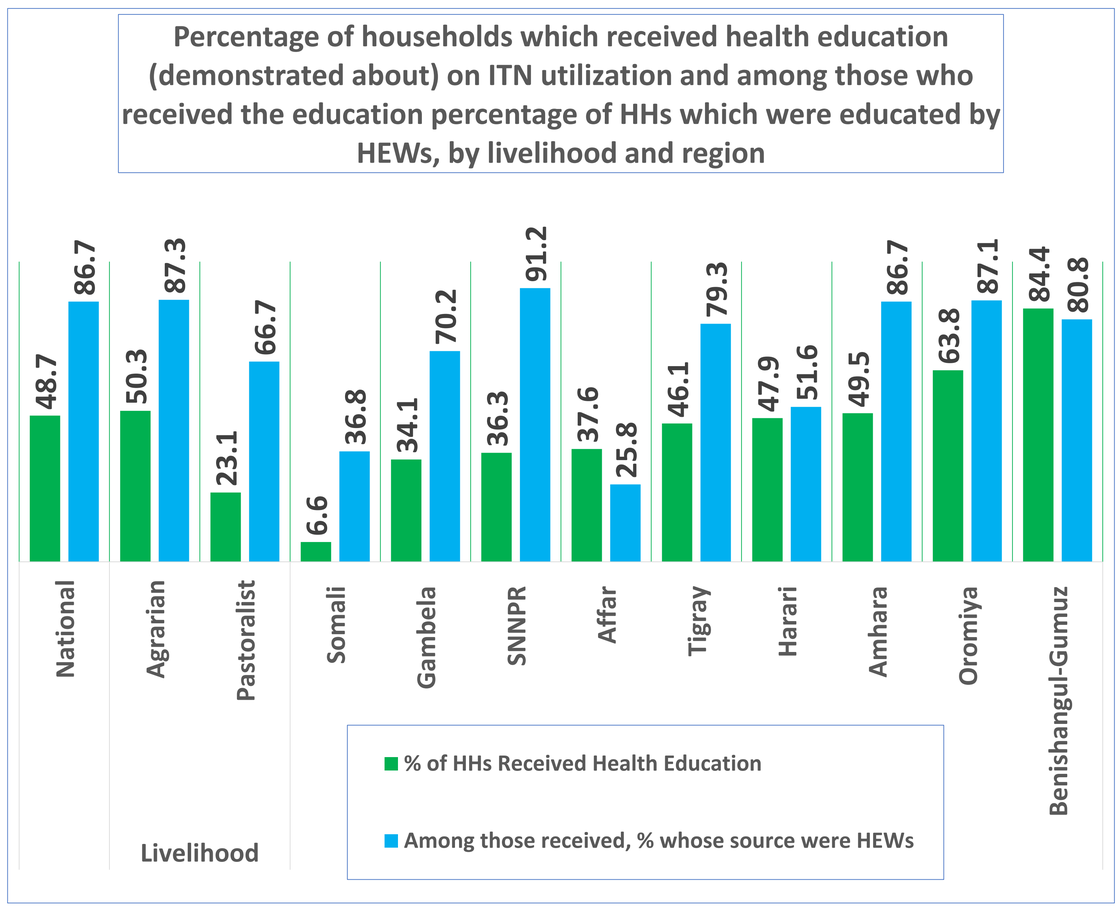
Available ITNs are not being utilized optimally



ITN use among pregnant women and under five children is low even among households owning ITNs



Only half of the HHs received health education on ITN use, but HEWs serve as major source of health education on ITN Utilization



Conclusion

- ITNs are available only in half of households in malarious areas and available households are mostly not adequate for household members.
- Available ITNs are not optimally used.
- Pregnant women and under-five children are not adequately utilized.

Recommendation

- Strengthen provision of health education and ITN demonstration as part of ITN distribution efforts.
- There is need for distribution of additional ITNs to realize the ambitious goal of eliminating malaria.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Coverage of HIV/AIDS and TB Prevention and Control Services: the Role of HEP

MERQ CONSULTANCY PLC

Background

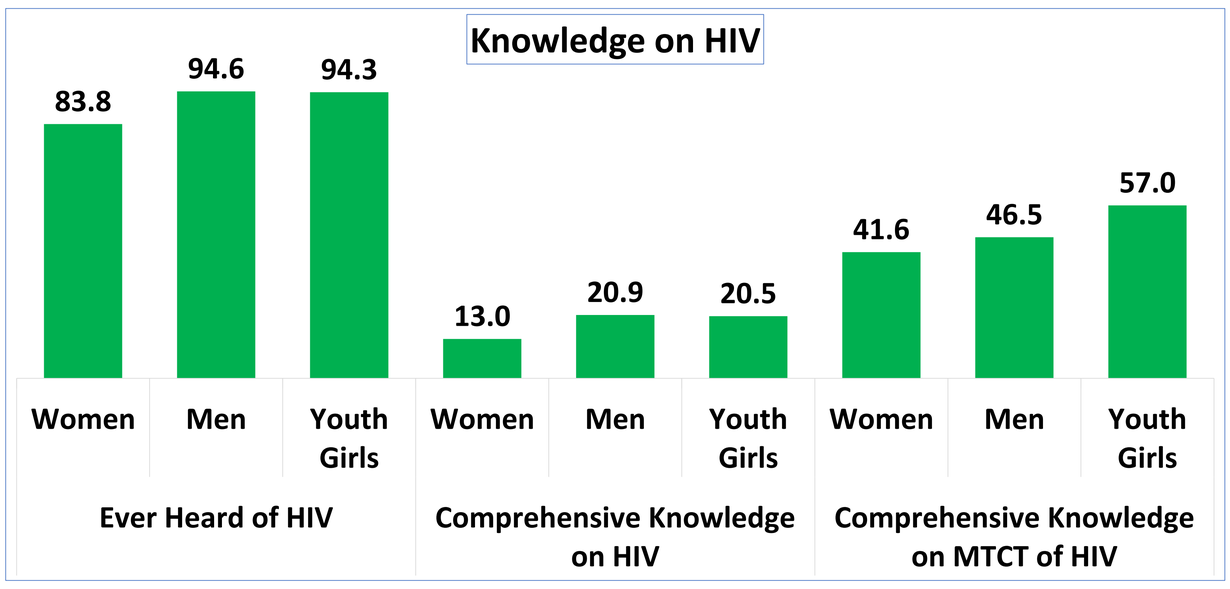
- The prevalence of HIV/AIDS decreased remarkably in the past two decades. But, these advances appear to be confronted by complacency in primary HIV prevention interventions.
- There has also been major decline in incidence of TB associated deaths in Ethiopia. However, TB still remains to be a major public health problem. Ethiopia is one of the 30 countries with high burden of TB, TB-HIV and DR-TB.
- HEP has specific packages for prevention of TB and HIV among rural communities.
- HEWs are responsible for the provision of health education, counseling and testing, and other HIV/AIDS and TB prevention and control activities including provision of follow-up treatment for patients with TB.

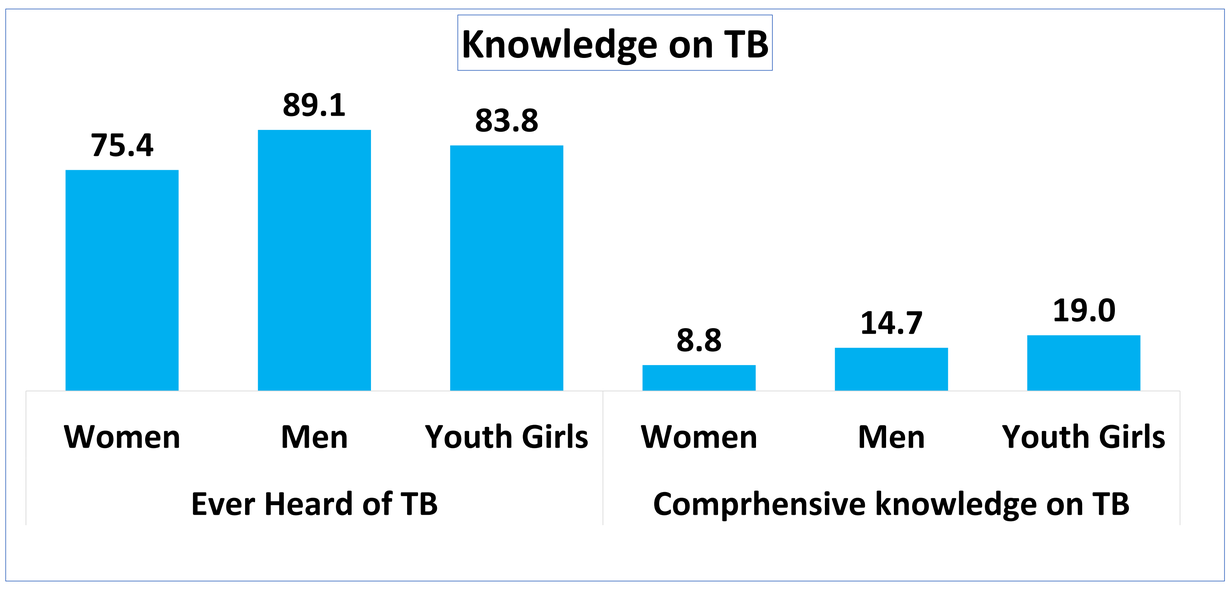
Methods

- The 2019 HEP assessment measured standard indicators on the coverage of TB and HIV related interventions and knowledge of respondents among household members in 62 woredas.
- Awareness and comprehensive knowledge of the community members (women, men and youth girls) and contents of services people received from HEP were assessed.

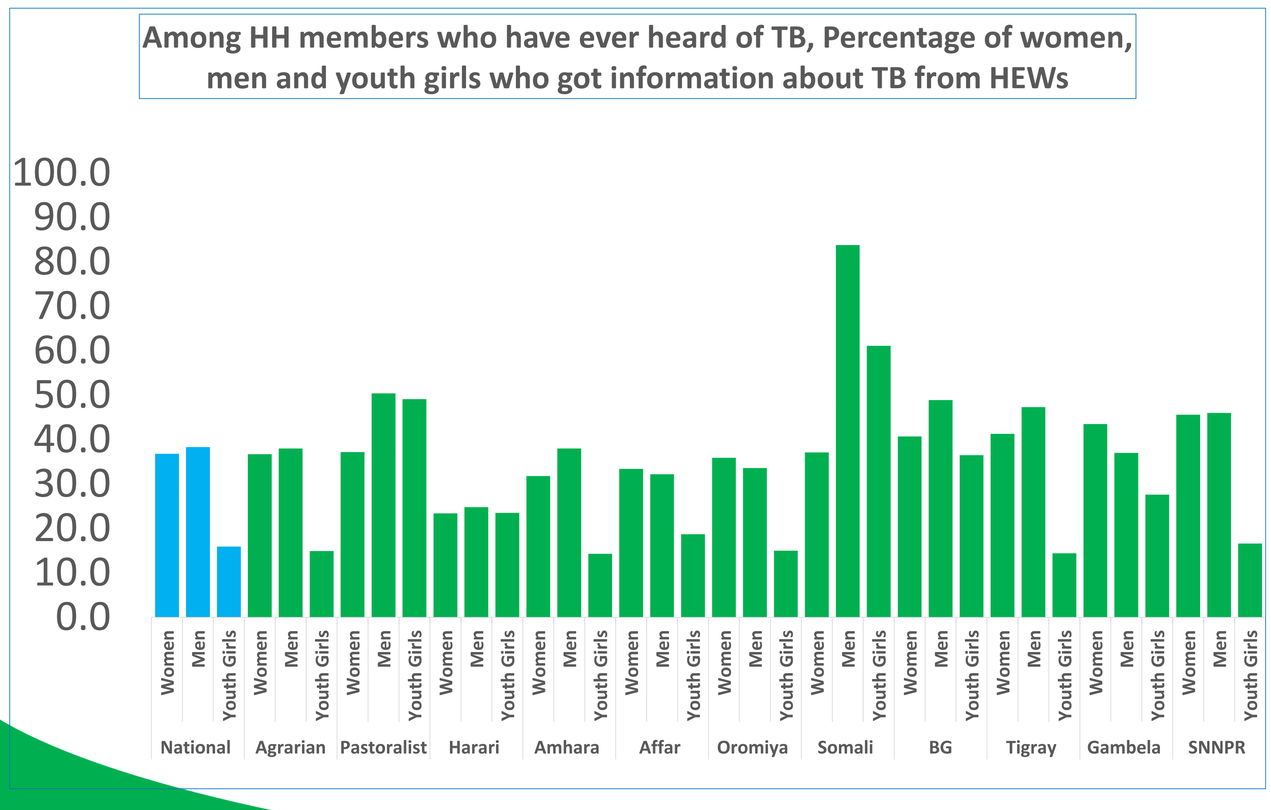
Results

Communities have high level of awareness about HIV/AIDS and TB but low level of comprehensiveness

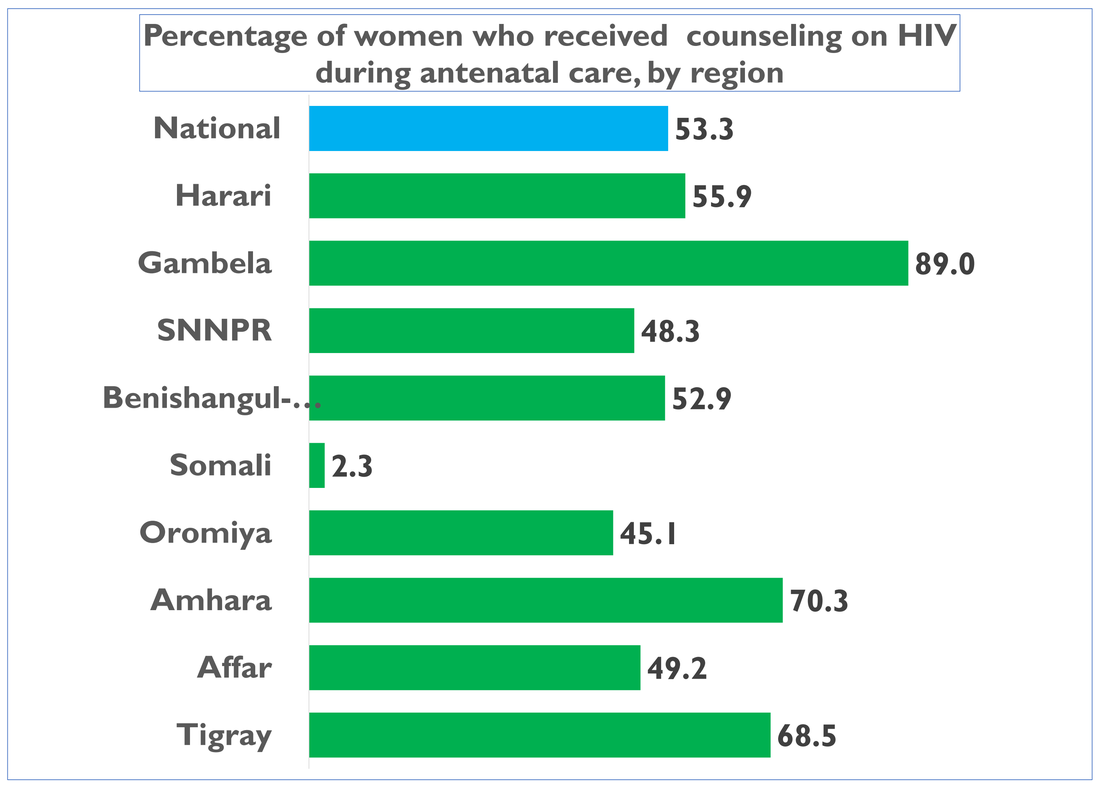


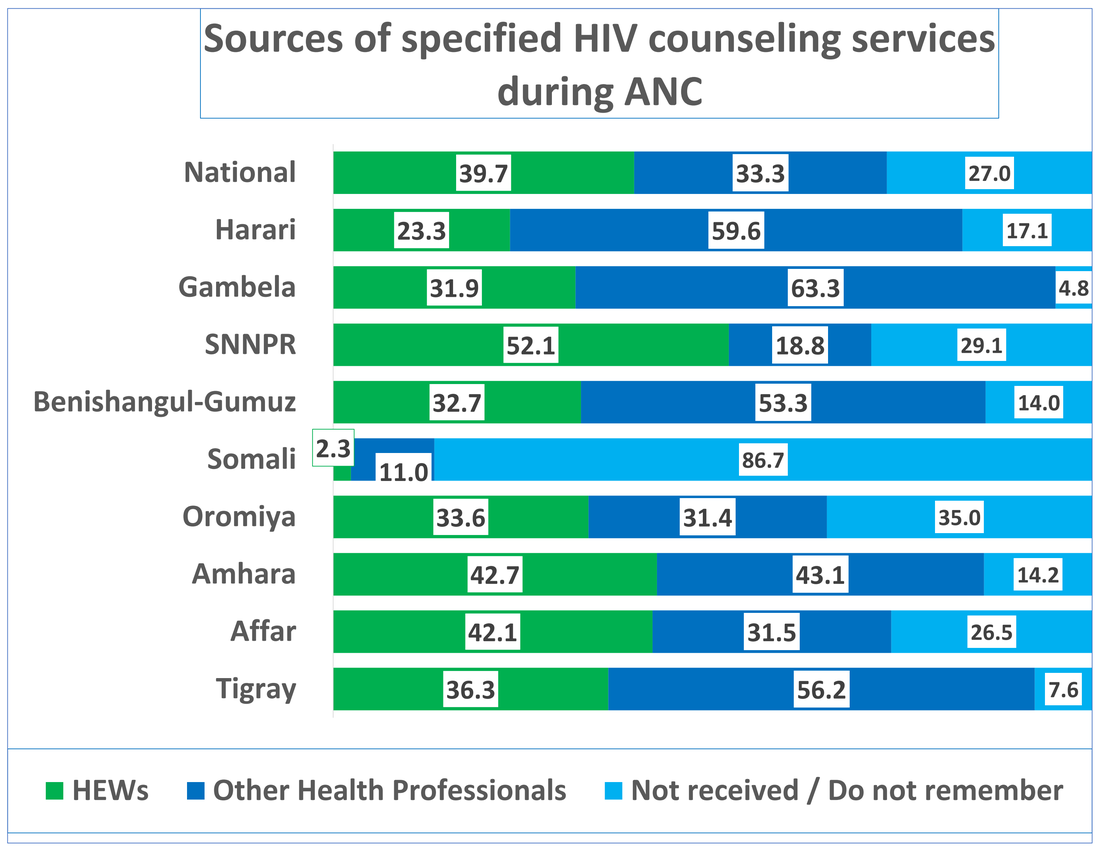


HEWs are good sources of information for women & men, about diseases (eg. TB)

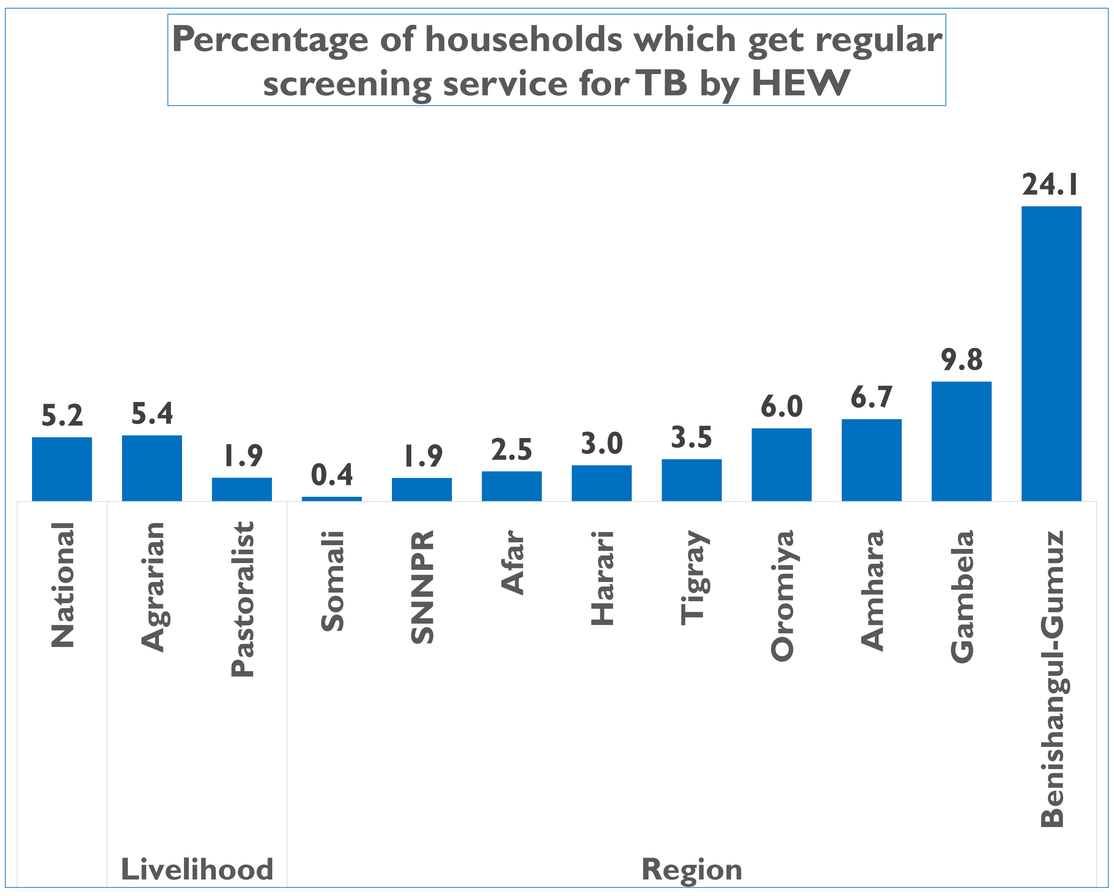


HEWs are serving as sources of HIV/AIDS Prevention & Control Services





HEWs are providing services to a smaller portion of the households (Eg. TB Screening)



Conclusion

- Awareness about communicable diseases including TB and HIV is high; however, communities do not have comprehensive knowledge on these diseases.
- HEWs have been important sources of information about TB and HIV but had limited role as service providers..

Recommendation

- Ensure comprehensiveness and effectiveness of health education sessions on TB and HIV.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

The Role of HEWs in NCD Prevention and Control in Ethiopia

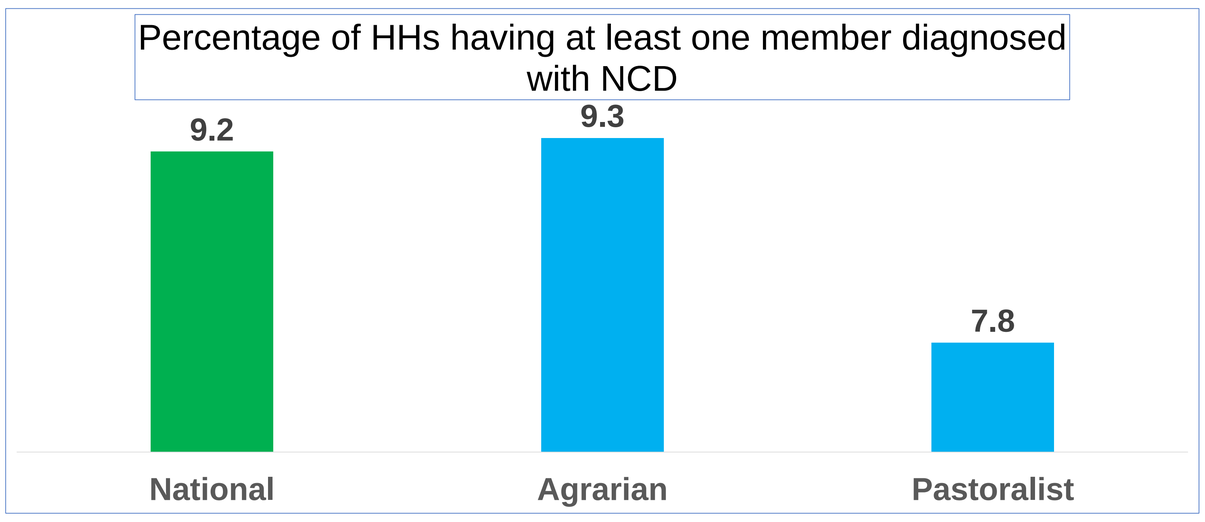
MERQ CONSULTANCY PLC

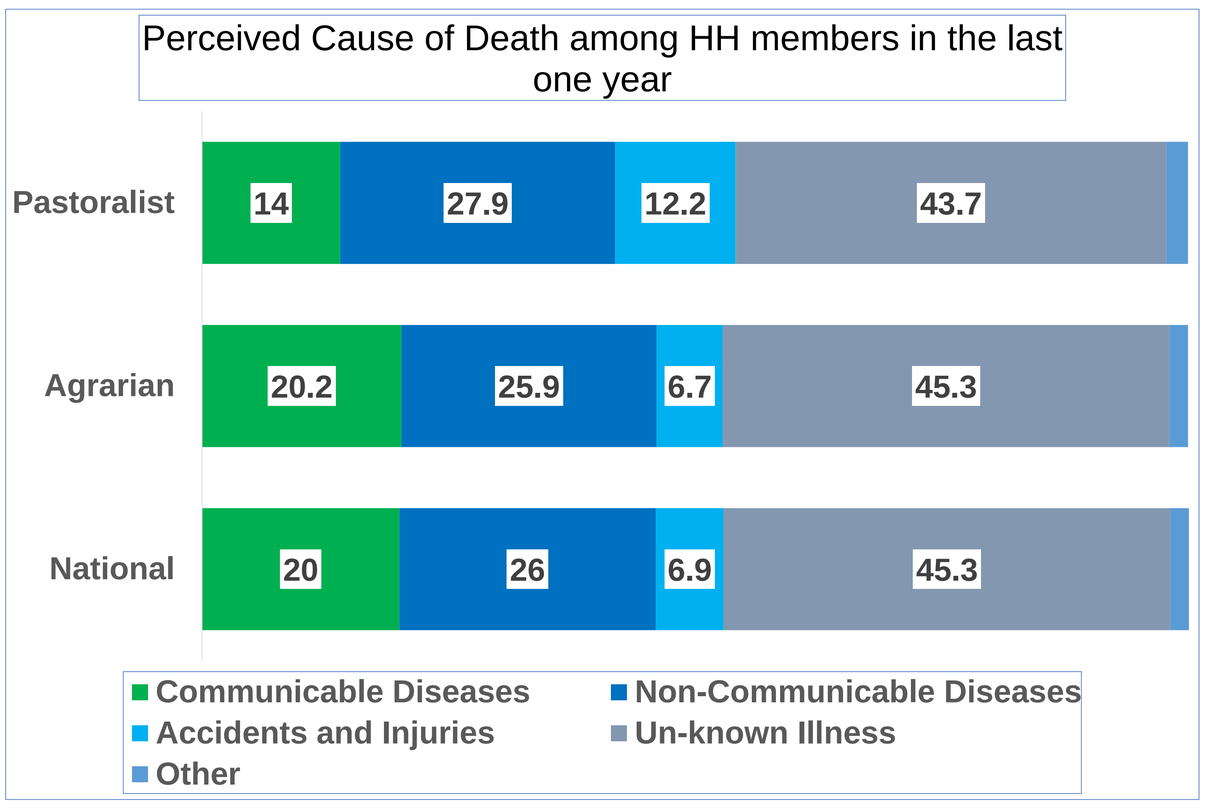
Background

- The growing burden of non-communicable diseases (NCDs) in developing countries like Ethiopia has long been a challenge for the already constrained health system.
- Risk reduction by creating awareness and early detection and treatment efforts is an integral part of the comprehensive NCD prevention and control strategy of Ethiopia.
- Prevention and control of NCDS is one of the recently added packages of HEP.
- This poster presents the findings of the 2019 HEP assessment on community awareness on NCDs, the occurrence of NCDs, and diagnosis practices.

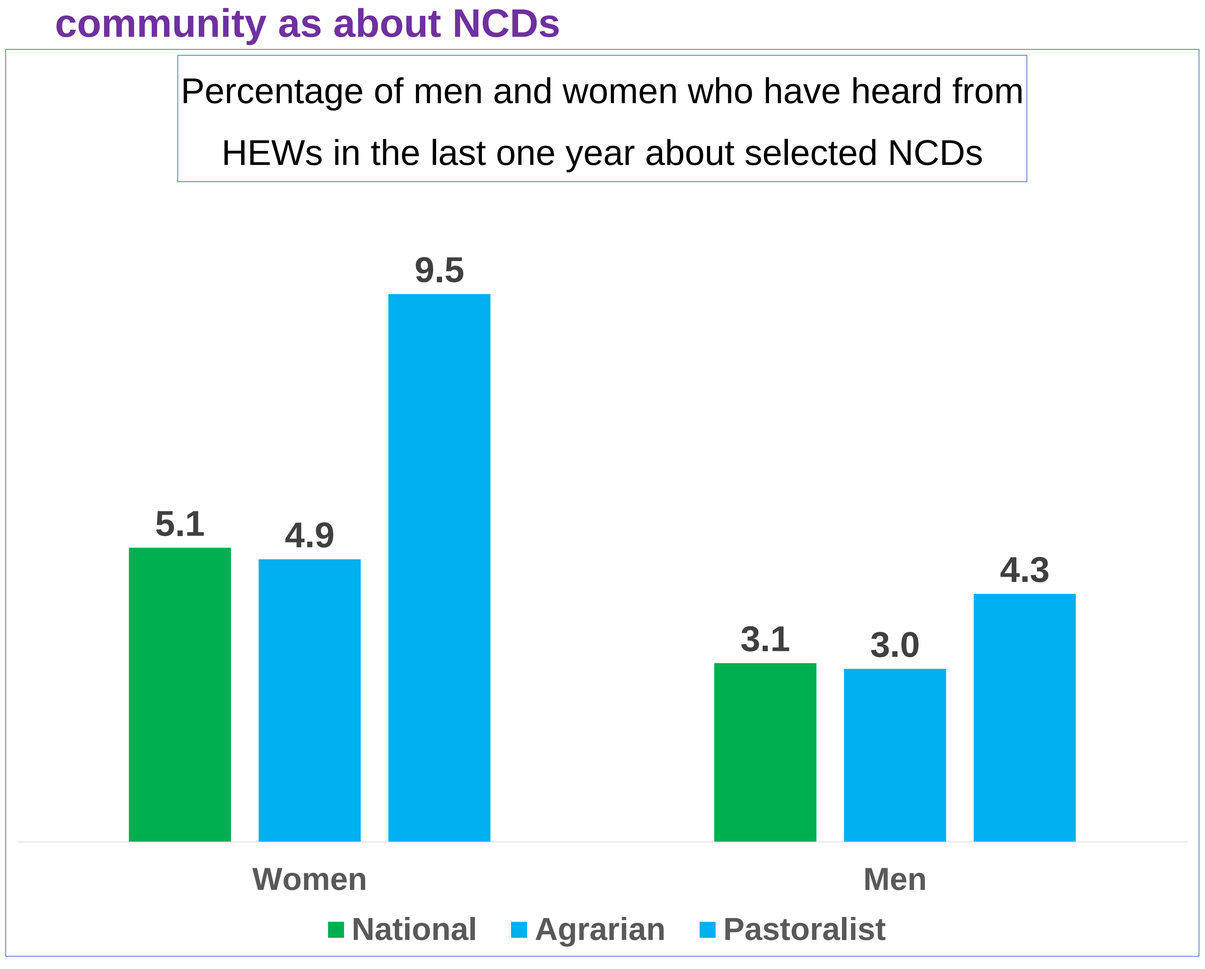
Results

❑ NCDs are common causes of illness and death

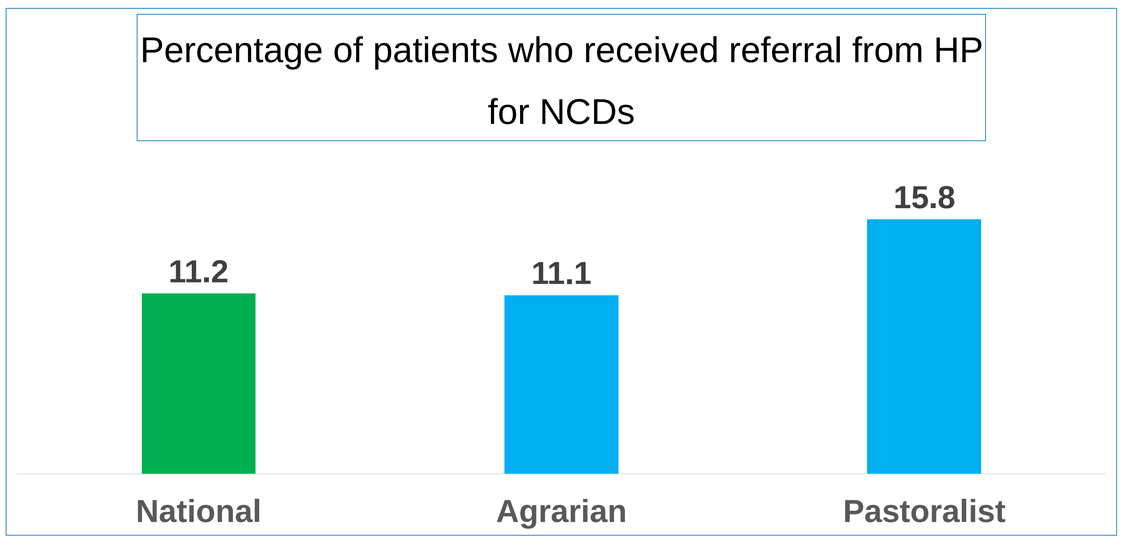




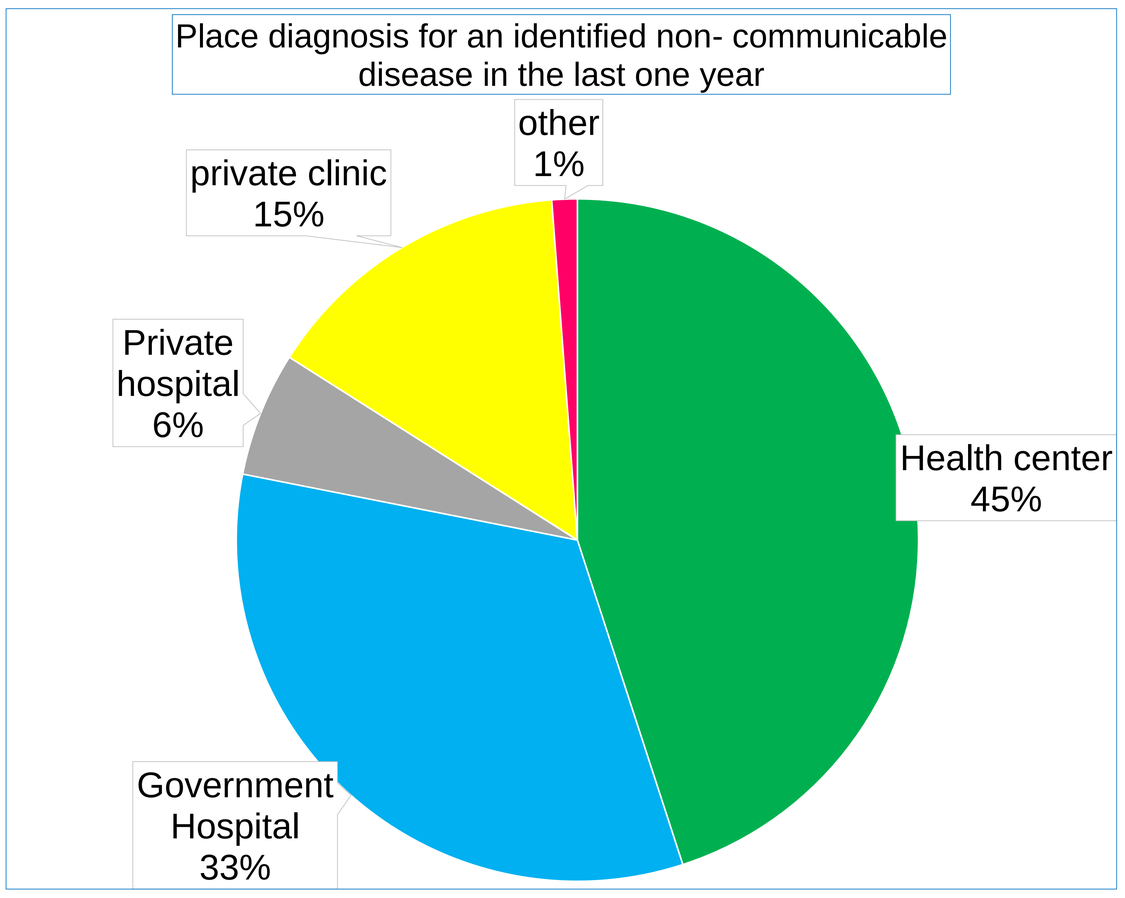
The HEWs are the lowest source of information for the community as about NCDs



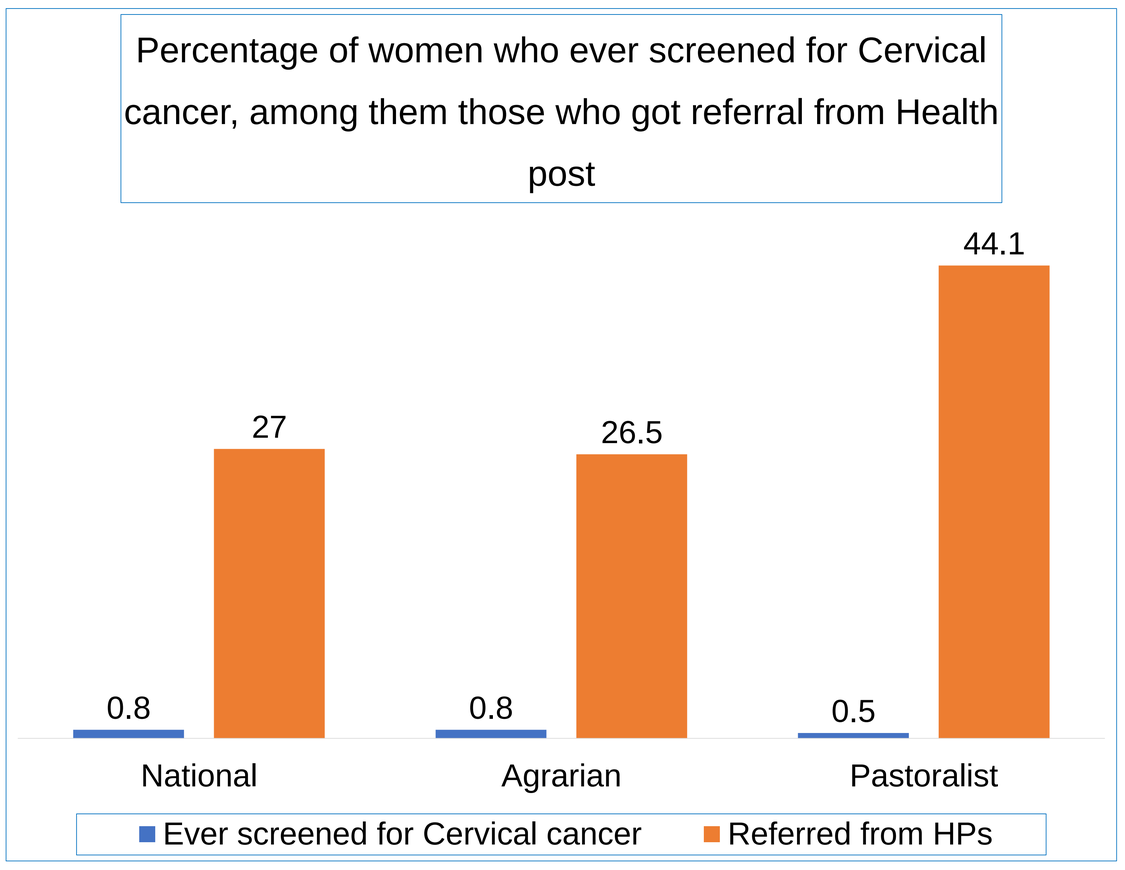
Small proportions of patients received referral from HPs for NCDs



Health Centers are serving as service centers for NCDs



❑ The coverage of cervical cancer screening among women is too low, while the HEWs referred a quarter of those screened



Conclusion

- ✓ The role of HEWs in creating awareness among household members, about common NCDs, is too low.
- ✓ The coverage of cervical cancer screening among women is extremely low, and health posts are not serving as the first place of contact for referral for common NCD diagnosis.

Recommendation

- Improving the role of HEWs in NCDs prevention and control should be strengthened.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Category 8

In-depth look to other specific features of HEP

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Health Extension Program: Did it provide good value for money?

MERQ Consultancy PLC

Background

- HEP is a flagship of Health Sector Development Program.
- Remarkable achievements on MCH outcomes have been achieved through HEP.
- Economic evaluations can identify interventions against HEP representing best value for money and whether an intervention is more or less cost-effective compared with alternative for decision-making.
- This study assesses the cost and cost-effectiveness of selected HEP interventions in Ethiopia.

Methods

- A full economic evaluation is conducted

Costing

- Perspective: Provider
- Time frame: One-year
- Top-down and bottom up approach
- Cost centres: Building, Equipment, drug and supplies, Personnel costs.
- Capital costs are annuitized
- Cost discount: 3%
- Both primary and secondary data is used
- Price year: 2018

Effectiveness: Life years gained

- Health system coverage with and without HEP is collected from scientific studies.
- Lives saved tool is used to change the coverages to number of lives saved.
- Impact of HEP is the difference between health system with HEP and health system without HEP.
- Remaining life year estimated from Ethiopia's life table
- Health discount: 3%
- Life years gained= remaining life year multiplied by number of lives saved.
- Final summary measures = net cost per life year gained (ICER)

21 HEP Intervention

Family Health service: Antenatal care, family planning (i.e. condom, COC, Injectable, Implant), pentavalent vaccine, pneumococcal vaccine, measles vaccine, tetanus toxoid, iron folate.

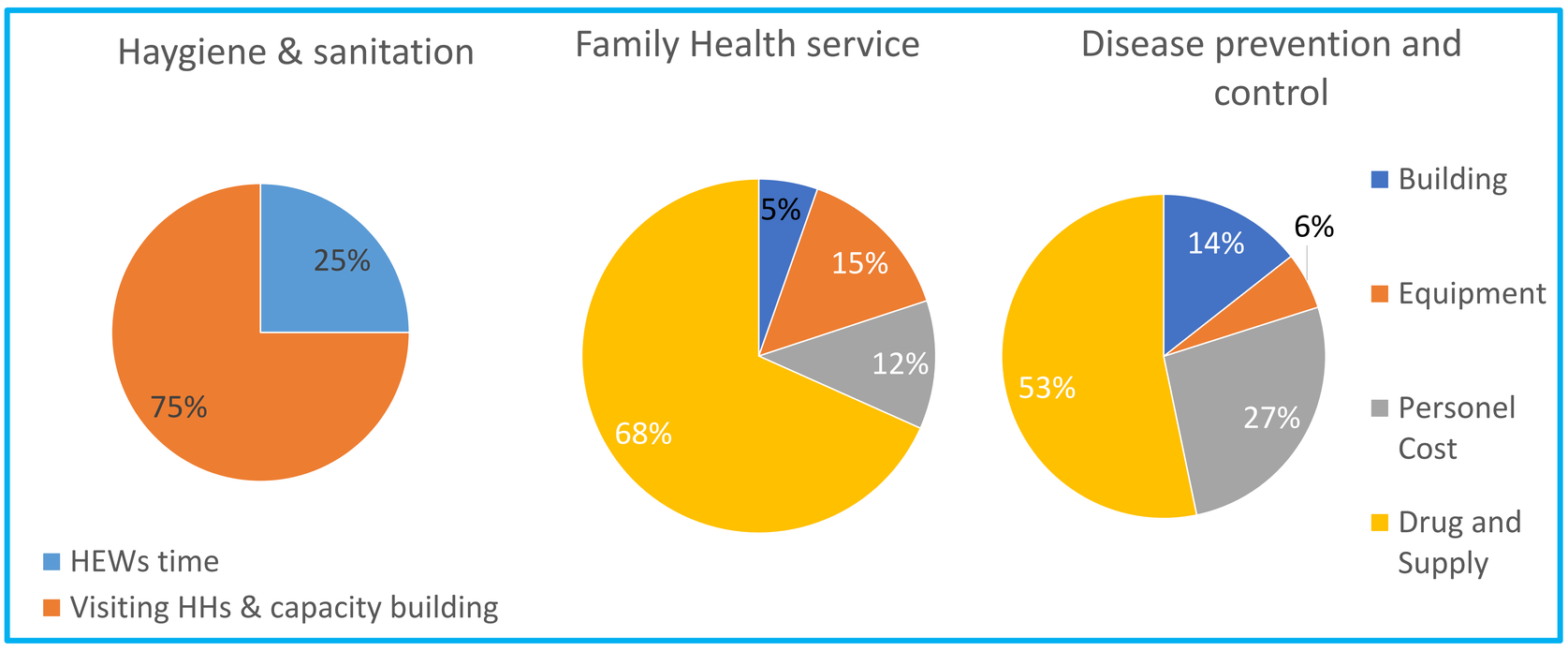
DPC: HIV/AIDs prevention and control, TB-DOTs, malaria case management, malaria prevention (IRS,LLIN), Diarrheal management, Pneumonia treatment).

Hygiene and Sanitation : Improved water source, Hand washing with soap, Utilization of latrine, Hygienic disposal of children's stool Health outcome: cost per client served, cost per health post, cost per life year gained

Result

- Average Unit cost of providing Family health service is $4.9, $7.4 for disease prevention & control, and $0.7 for Hygiene and sanitation.
- Major cost driver are; drug and supply 53%-68%, and personnel cost 12%-27% of the unit cost. For example, drug and supply for pentavalent accounts 78%, for TB 54%, for diarrhoeal case management 34%.
- The cost-effectiveness of HEP is $ 77.4 for every additional life year gained.

Unit Cost disaggregated by cost center and HEP components



Package	Service Type	Unit cost ($)	Lives saved	ICER per LYG
Hygiene and sanitation	Utilization of latrine	0.8		
	Improved water source	0.6	369.2	21.6
	Hand washing with soap	0.7	248.1	33.7
	Hygienic disposal of children's stool	0.7		
	Weighted Average cost of Hygiene and sanitation	**0.7**		
Family Health services	ANC	1.9	505	47.2
	Family planning (FP) –OCP	1.2		
	Family planning (FP) –Condom	1.8	536	295.4
	Family planning (FP)-Injectables	3.2		
	Family planning (FP) -Implant	10.5		
	Pentavalent vaccination	15.2	3,311	64.8
	Measles Vaccine	2.5	1,068	30.8
	Tetanus toxoid	3.0	330	42.8
	Iron Supplementation	0.7	160	57.5
	Pneumococcal vaccine	9.4	3,311	64.8
	Weighted Average cost of Family Health services	**4.9**		
DPC	HIV/AIDS testing and counselling	3.7		
	TB treatment (DOTs)	43.1	95	113.8
	Malaria Case Management	1.8	85	81
	Long lasting insecticide net	2.1	67	162.8
	Malaria prevention -IRS	3.4		
	Diarrheal disease management (Zinc and ORS)	2.0	1,468	78.1
	Oral rehydration solution (ORS)		1,301	80.8
	Oral antibiotics for pneumonia	2.6	804	67.2
	Weighted Average cost of DPC services	**7.4**		

Conclusion

- Average unit cost of providing HEP services is $4.9 for family health, $7.4 for disease prevention and control, and $0.7 for Hygiene and sanitation.
- Addition of one personnel to the existing composition will bring additional incremental of 12-27% of the unit cost.
- The potential client saving was $2.3 per year.
- All selected interventions were very cost-effective (<1 times GDP) that represent investing in the HEP provides a good value for money.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Role of HEP in Addressing Basic Process of PHEM System at Community Level

MERQ Consultancy PLC

Background

- Public Health Emergency Management (PHEM) system requires active involvement of Primary Health Care (PHC) facilities and the wider community.
- HEWs are well placed within the community
  - To detect and monitor health events at grass root level
  - To mobilize community action
  - To request external assistance or access resources.
- Despite the involvement of the community and HEP in PHC level surveillance, the contribution and actual role of HEP in preparedness and response activities for PHEs is not studied well
- This study assessed the role of HEP in addressing basic processes of PHEM for Public Health Emergency Preparedness and Response at community level.

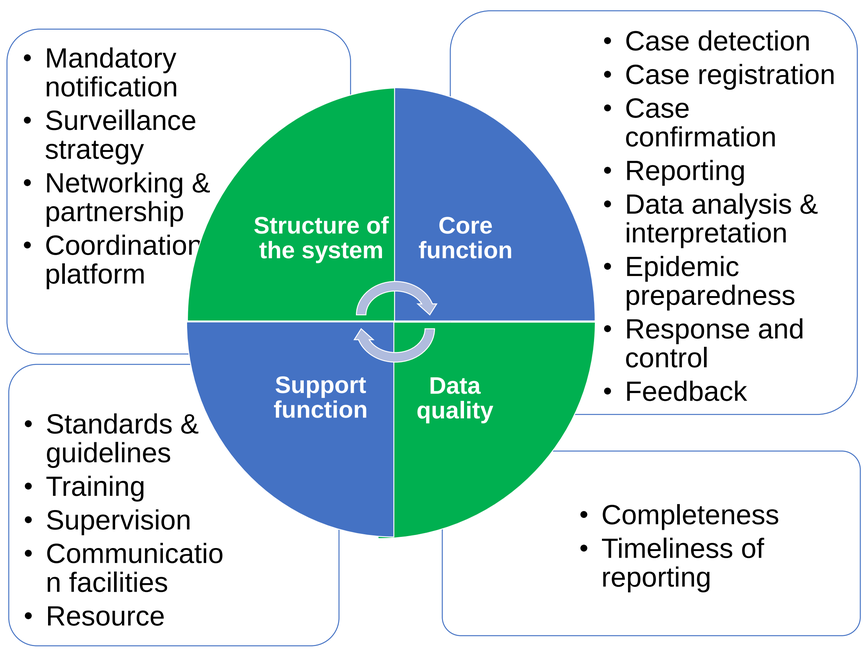
Methods

- Mixed method (qualitative and quantitative)

Nine regions and one city administration				
HP	HC	WoHO	ZHD	HEWs
96	52	54	43	141

Four components of surveillance

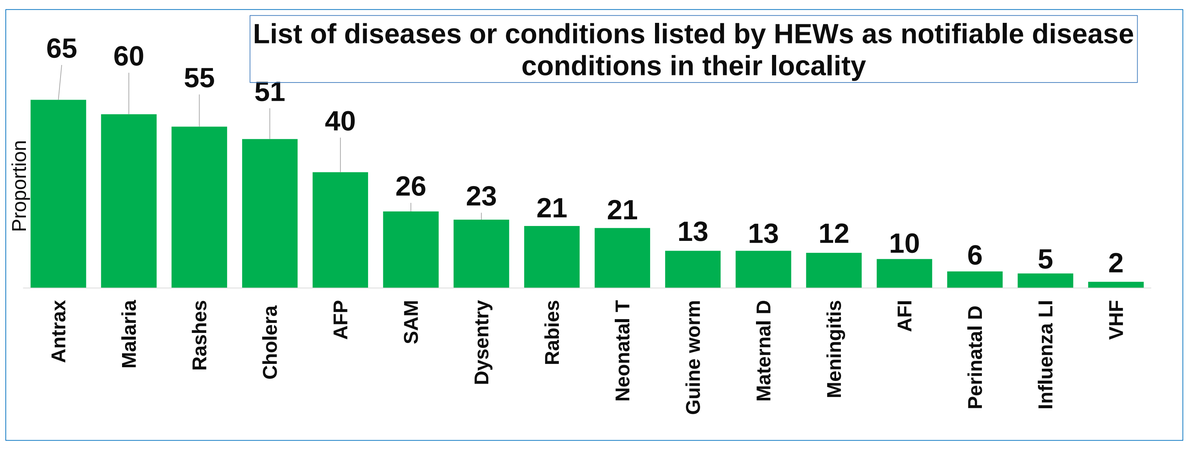
- Structure of the system
- Core components
- Support functions
- Data quality attributes



Results

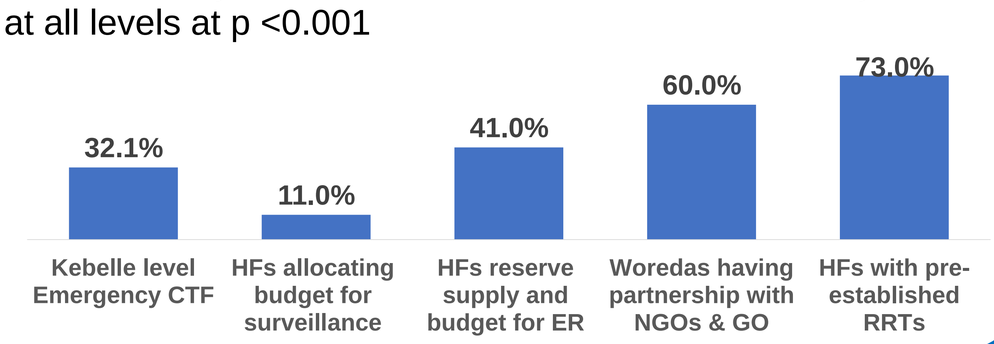
HEWs have Low Knowledge on PHEM

- 44% of woreda level PHEM experts and/or HEP coordinators mentioned only 1 to 5 reportable disease conditions
- Proportion of HEWs who know the existence of reportable events is not very high
  - Knowing immediately notifiable events – 65.9%
  - Knowing weekly reportable events – 78.7%
- Average knowledge score of HEWs significantly vary across woredas as well as across regions



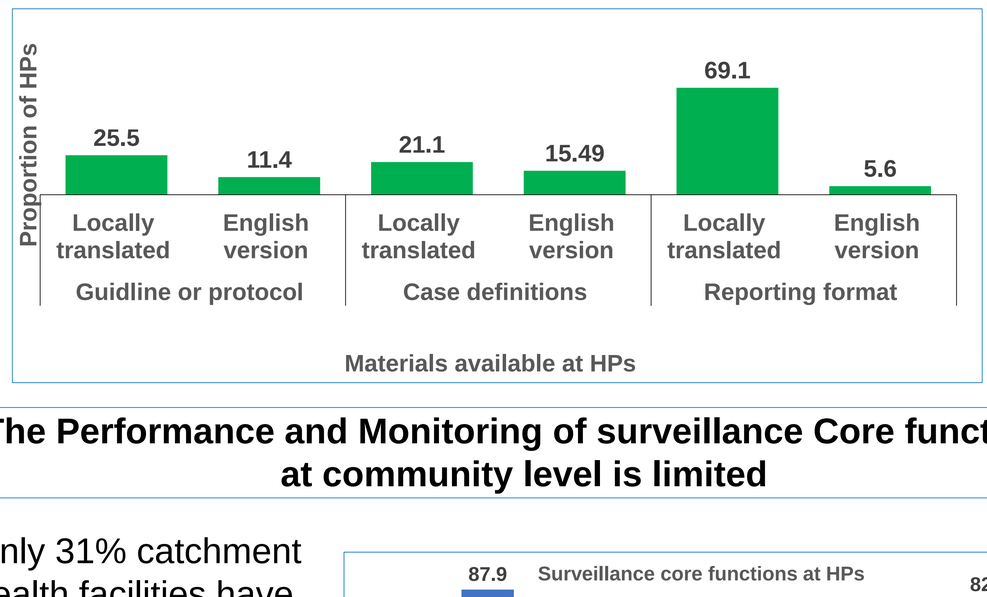
Kebele Level PHC Surveillance is poorly structured

- Community networks are universally available, but with low functionality.
- Mixed surveillance strategy is practiced at 70.9% of HPs
- Only half of facility RRTs conduct regular meeting
- Significant variability seen on structure of the surveillance system mean score at all levels at p <0.001



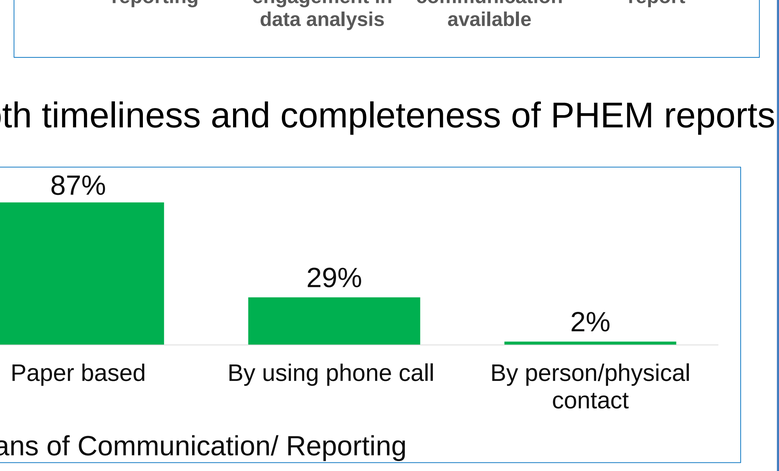
Availability of limited supporting functions for PHEM

- Only 40.4% of HEWs are trained on community surveillance
- Core functions at all levels showed improvement as the supporting functions improve.
- Only 42% health centers have case definition for surveillance targeted diseases
- At catchment health center level, 90% facilities have weekly reporting formats for weekly summary reports



The Performance and Monitoring of surveillance Core functions at community level is limited

- Only 31% catchment health facilities have rumor log book
  - Past 12 months, 88% of facilities registered rumors on the registration book

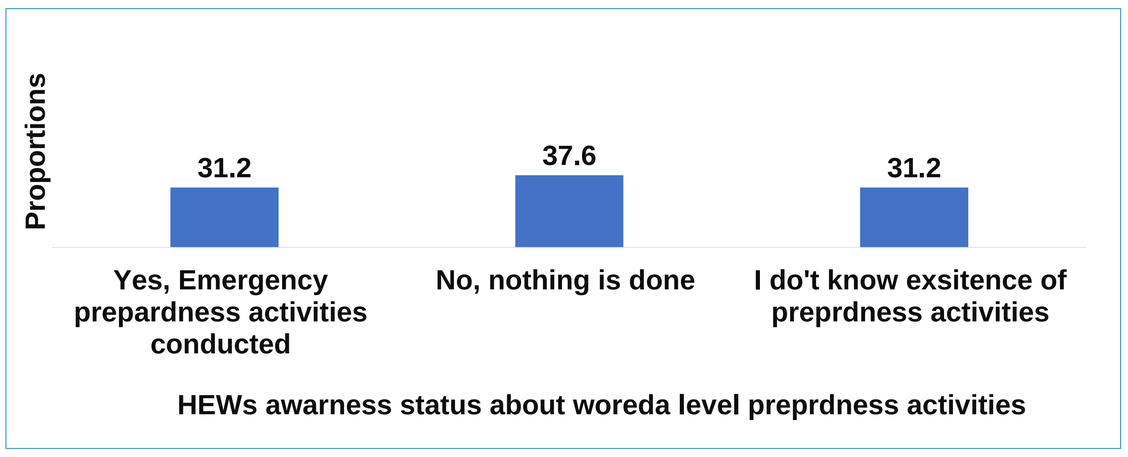


- 79% of HCs monitor both timeliness and completeness of PHEM reports

Gaps in engagement of HEWs and community networks in PHE preparedness and response activities

Woredas that

- Have community education materials for nationally notifiable disease conditions =70%
- Involved HEWs and community volunteers in risk assessment =72%



Surveillance components relationship

- Supporting function and core function of surveillance system has direct relationship at p <0.001
- Structure of the system and core function of the system has also positive relation but not significant relation ship

Recommendation

- Preservice and in-service training packages of HEWs should address PHEM system
- Standardizing national level community level surveillance implementation by designing uniform implementation guidance's, standards and strategies
- Local translation of materials should be considered
- Allocating sustainable budget for PHC level surveillance activities, monitoring and evaluation of the system
- Integrating PHEM reporting system with CHIS is crucial to avail real time data and information
- Reserving budget, supplies and logistics for timely emergency response

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Assessment of Clinicians' Knowledge and Attitude towards HEP in Ethiopia

MERQ Consultancy PLC

Background

- ✓ HEP is primarily implemented by HEWs. However, involvement of clinicians also plays critical role for the success of the program.
- ✓ Clinicians are expected to support the implementation of HEP by providing training for HEW, helping in outreach activities, and establishing strong referral linkage.
- ✓ Addition of clinical services to HEP packages in recent years demands increasing referral linkage between HPs and HCs including consistent feedback to HEWs
- ✓ The objective of this study was to assess clinicians' knowledge and attitude towards the HEP and HEWs.

Methods

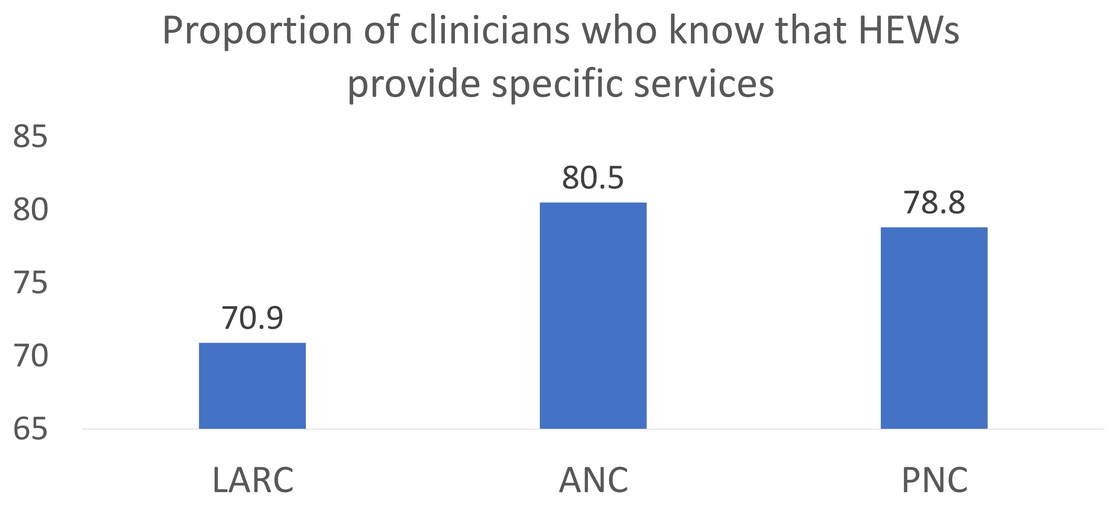
- ✓ Facility-based cross-sectional study was conducted
- ✓ A total of 1239 clinicians were interviewed from health centers and hospitals.
- ✓ Study participants included health officers, nurses, midwives and medical doctors.
- ✓ 70% was used as an agreed upon cut point to consider respondents as knowledgeable on HEP and having favourable attitude towards HEP.

Results

- ❑ Response rate: 97.6%
- ❑ Nurses: 42.8%, midwives:32.64%
- ❑ 612 (50.6) were first degree holders
- ❑ Majority, 941 (77.8) working at HC.

Exposure & support on HEP:

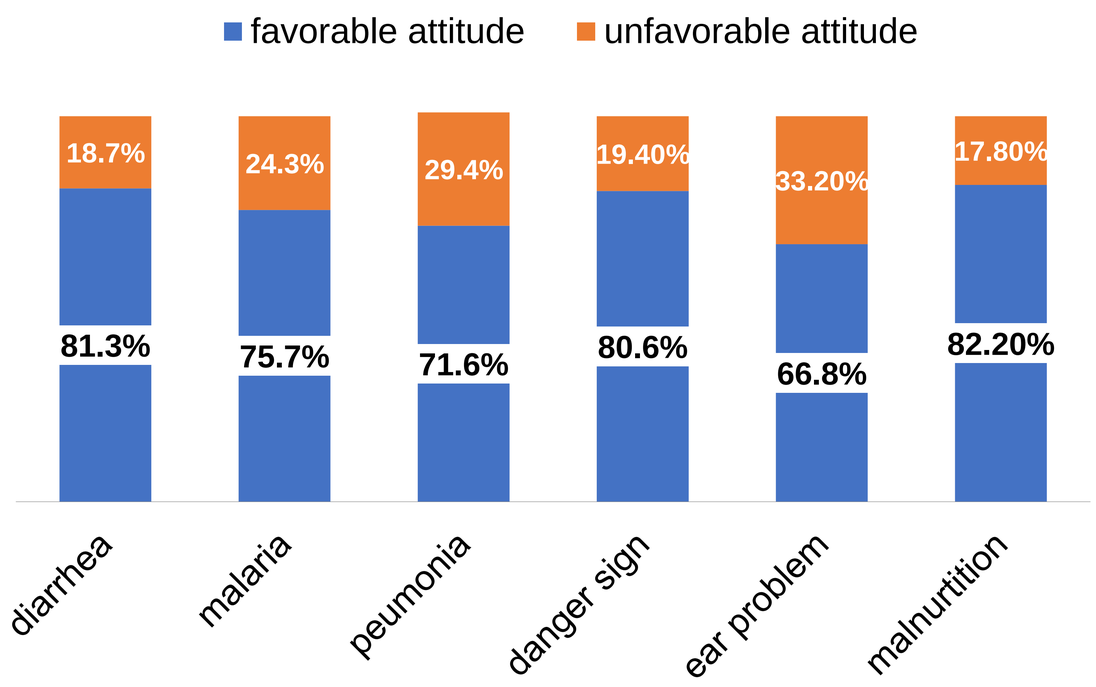
- ✓ 30% have got sensitization on HEP
- ✓ 83.8% treated patients referred by HEW, of whom 88.8% send referral feedback to HEWs.
- ✓ 56.9% ever referred patient back to HEW/HP
- ✓ 88.4% are willing to work with HEW.
- ✓ 46.5% agreed clinicians are not supporting HEP well
- ✓ 71.8% agreed involvement of male HEW



Attitude of clinician on HEW & HEP:

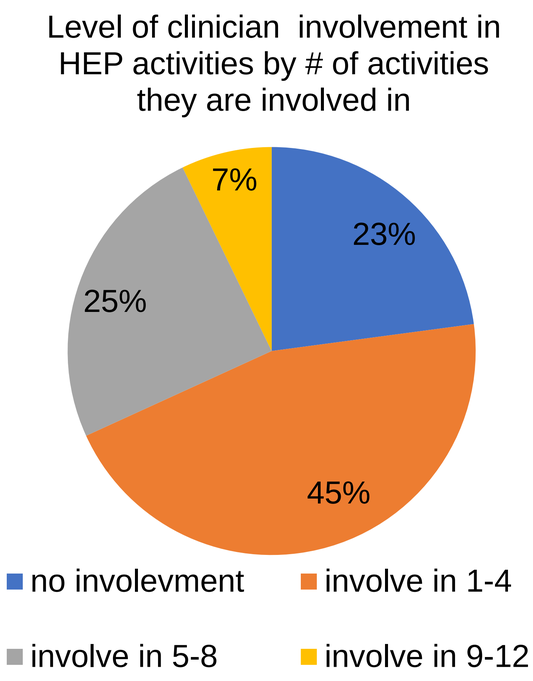
- ❑ 51% and 74% of clinicians have favorable attitude towards HEWs and HEP, respectively
- ❑ 70.6% of clinicians have favorable attitude on ICCM services
- ❑ 62.3% and 47% clinicians have favorable attitude towards LARC and labor provision at HP, respectively
- ❑ 87.8% of clinicians agreed to continue with HEW in the program.
- ❑ 90.6% agreed on existence and continuity of rural HEP.

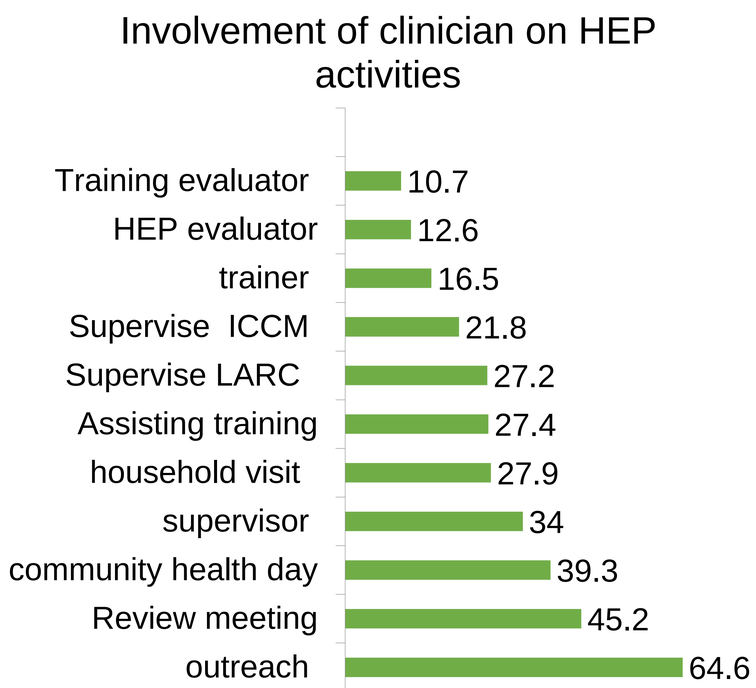
Clinicians' attitude on ICCM services at HP



Involvement of clinicians in HEP activities

- ❑ Most of the clinicians are involved in different HEP activities.
- ❑ The most common activity is outreach services.
- ❑ 77% of clinicians involved in at least in one type of HEP activity.





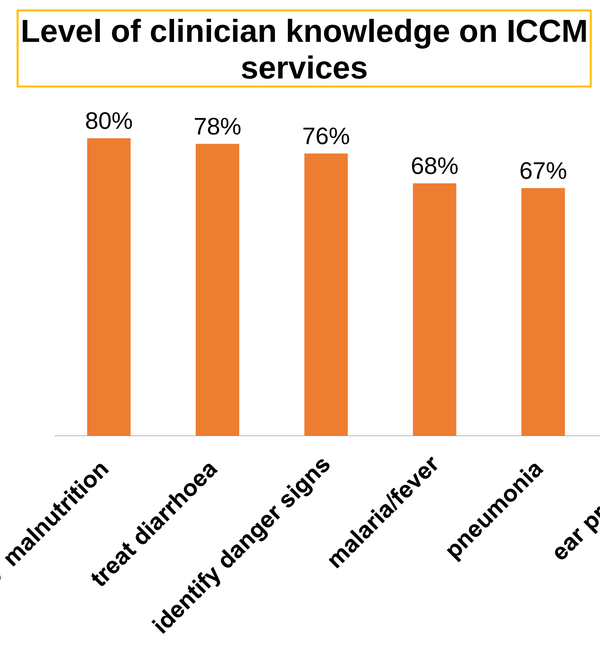
HEW contribution from the perspective of clinician

"*Because of the introduction of HEP, ... women who were not using services started using services in the areas of ANC, child vaccination, and family planning … The number of vaccination service, family planning, ANC and delivery service users has increased because of the work of HEWs. This improvement is a result of HEWs' capacity to mobilize the community by teaching about the importance of services.*"

Clinicians' FGD from a Health Center

Knowledge of clinicians towards HEP

- ❑ Majority (74.5%) have good level of knowledge on HEP
- ❑ 72.8% have good knowledge on maternal health service packages of HEP
- ❑ Only 59.3% have good knowledge on ICCM



Conclusion

- ❑ Clinicians generally have high willingness to work with HEW but actual involvement is limited.
- ❑ Majority of clinicians have good knowledge and favorable attitude towards HEP but with limited trust on HEWs.

Recommendations

- ❑ Provide awareness for clinicians on HEP services
- ❑ Increase engagement of clinicians in HEP
- ❑ Strengthen integration of PHCU

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Suicidality among Women in Rural Ethiopia

MERQ consultancy PLC

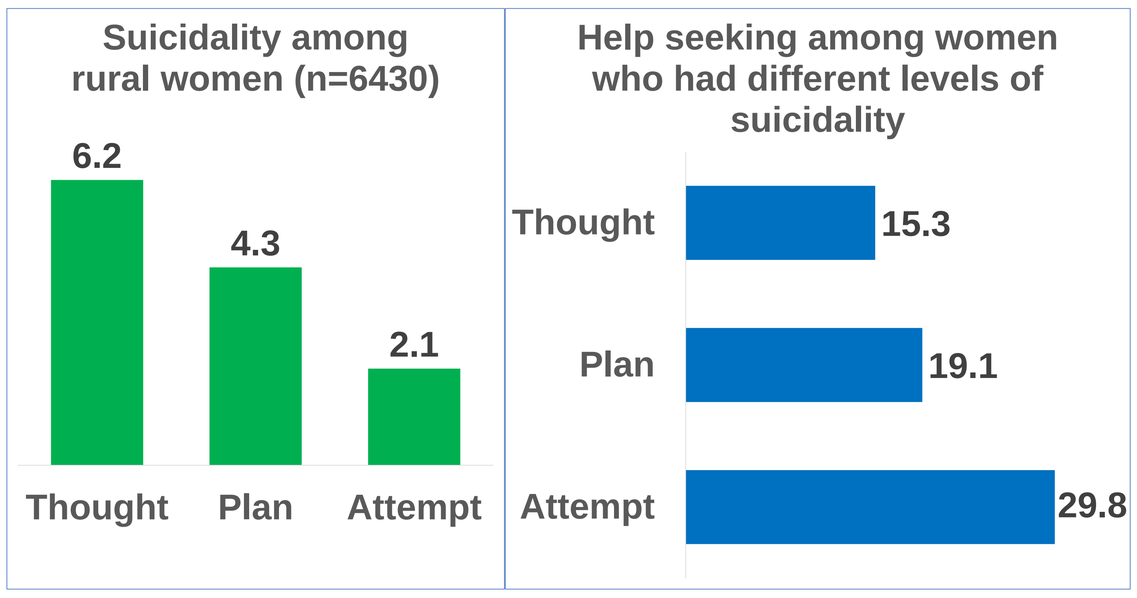
Background

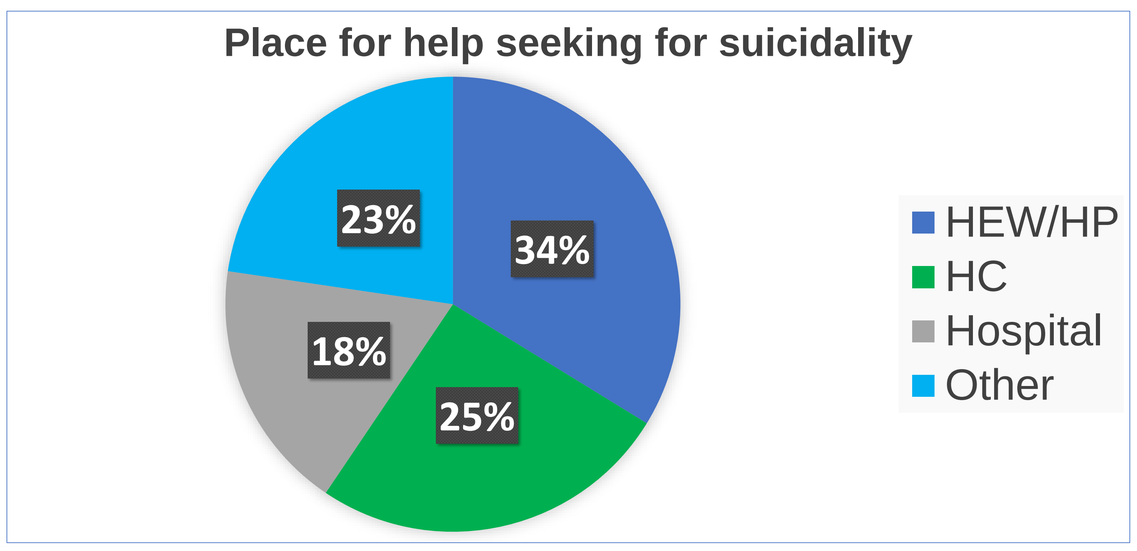
- Suicidality has become burden of many countries, and Ethiopia is not an exception.
- According to WHO (2019), one person dies every 40 seconds due to suicidality.
- Early identification of vulnerable groups to suicide and improving access to services reduce burden of suicidality in many countries.
- Even though the original rural HEP did not have mental health package, it is included among the current packages and in level IV HEWs training curriculum.
- HEWs have frequent contact with rural women through home visit and they are well trusted in their communities. Hence, they are well situated to identify abnormal behaviors and serve as intervention entry points.
- This study aimed to estimate the magnitude of suicidality among rural Ethiopian women and their help seeking behavior.

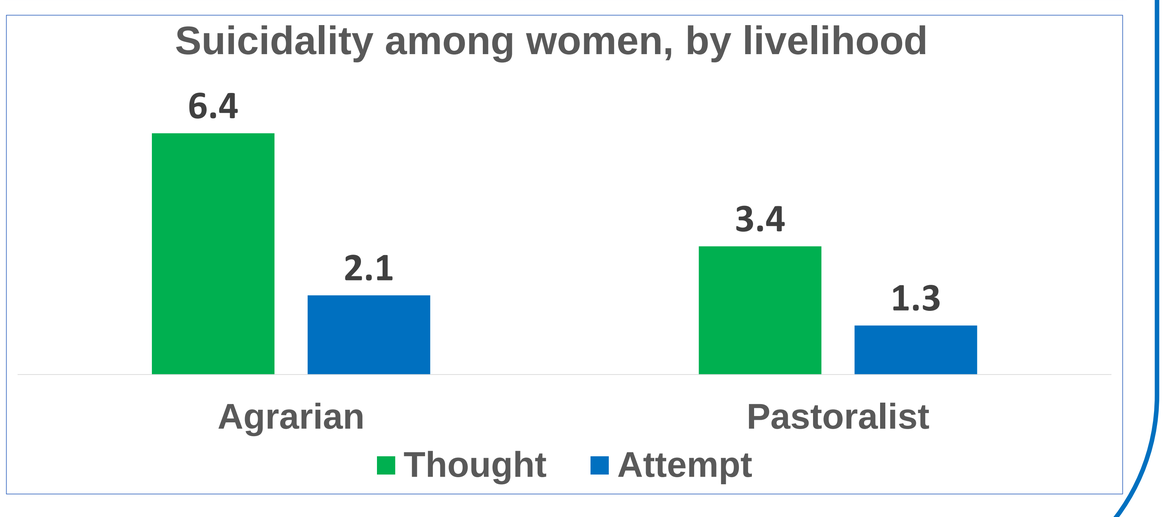
Methods

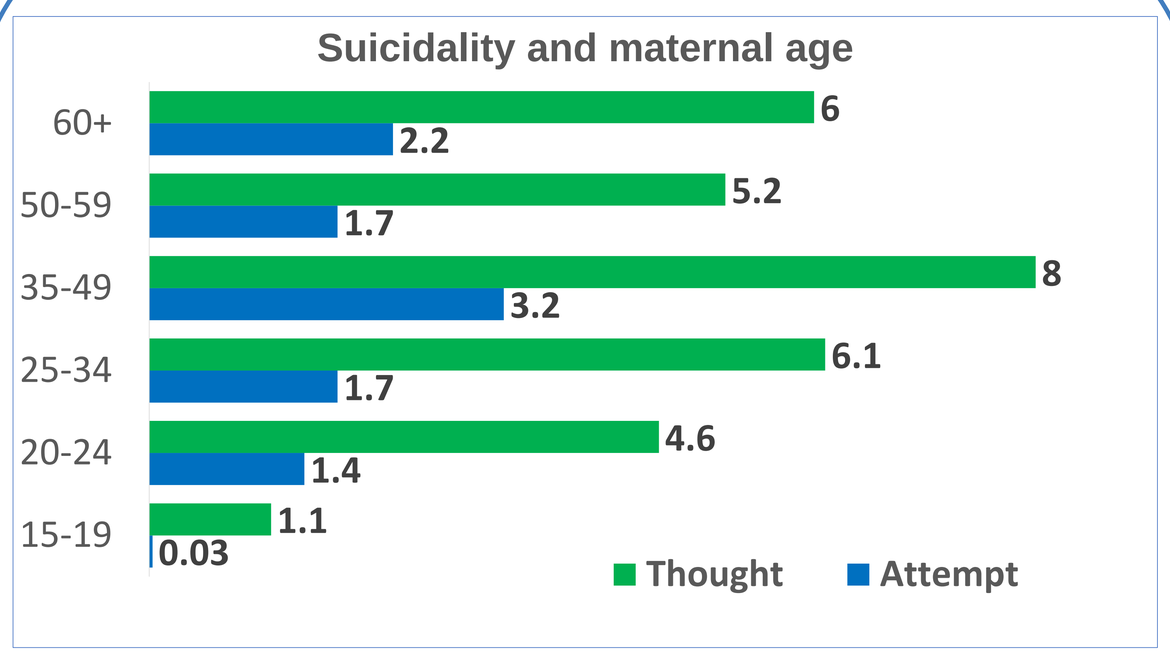
- Suicidality among women was assessed by asking three key questions, in reference to the last 12 months:
  - "if they had a thought of taking their life",
  - "if they planned to take their life" or
  - "if they attempted to end their life".
- Following these three questions, women were also asked if they sought medical help for their thoughts, plan or attempt. And, for those who sought help, the place where they got medical help was assessed.

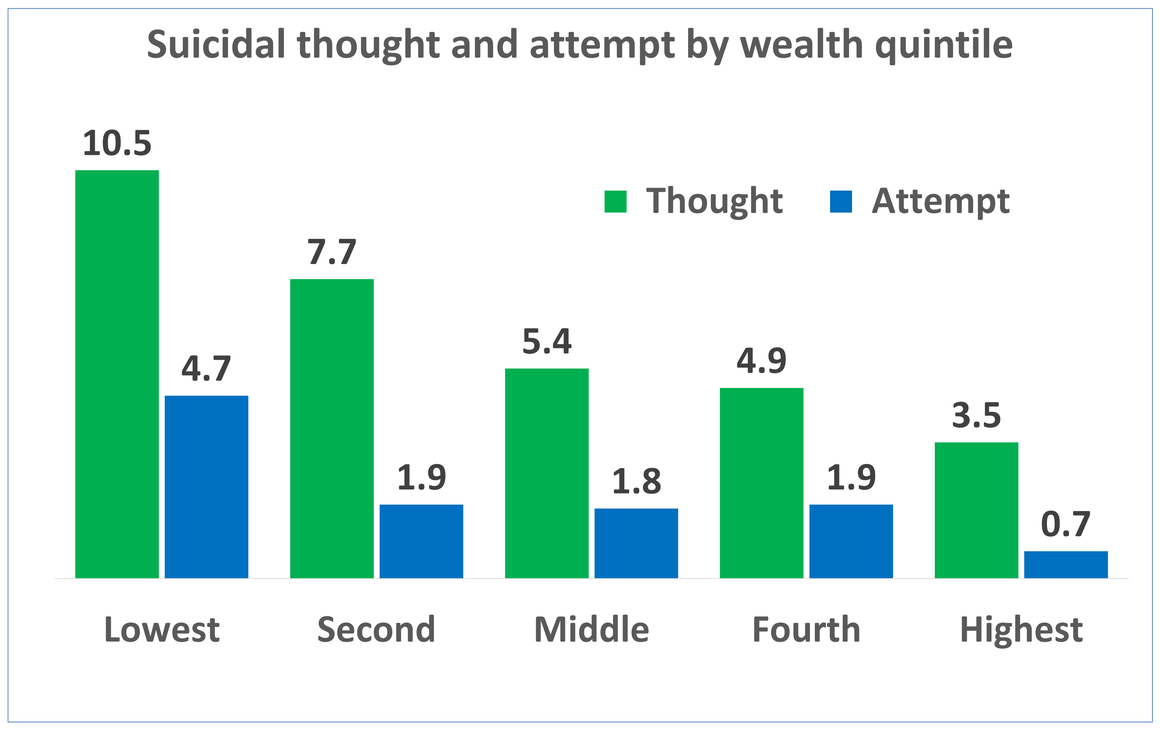
Results

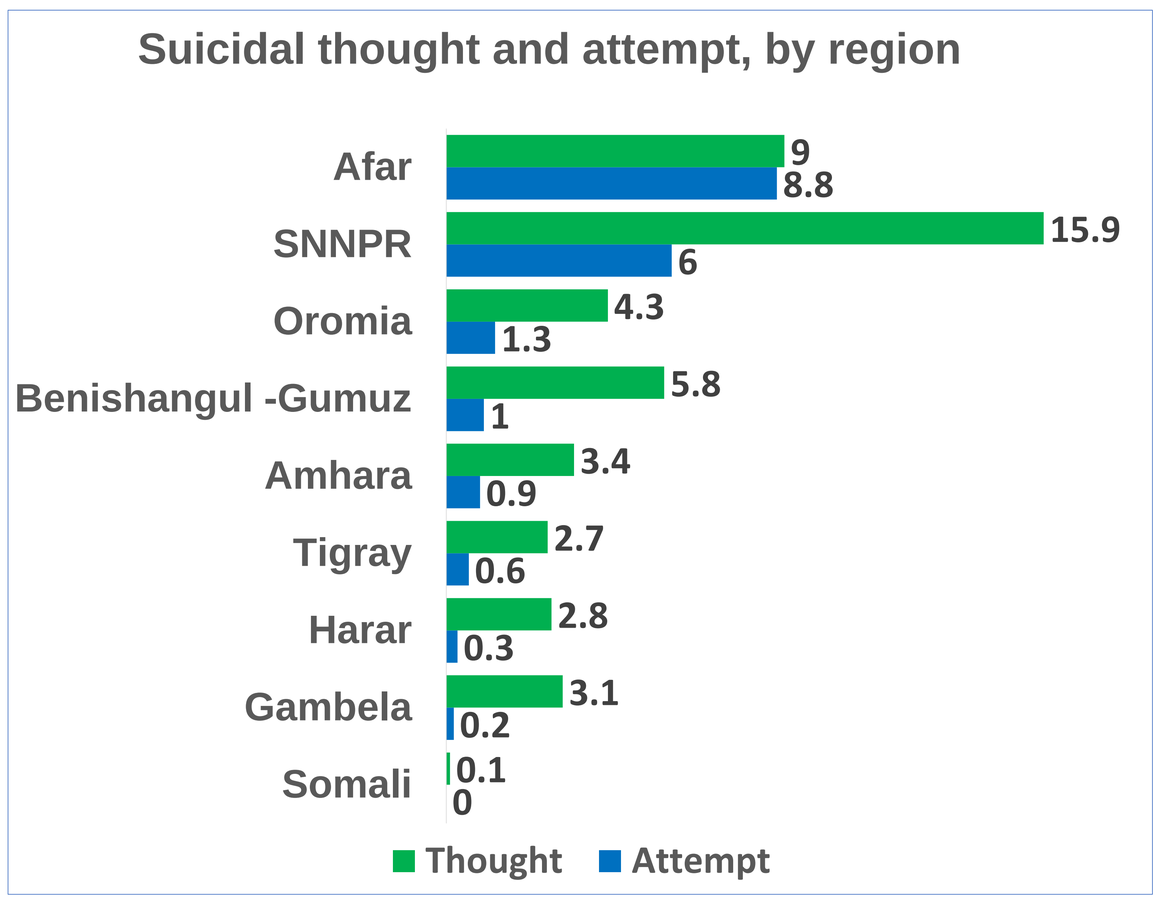












Conclusion

- There is high risk of suicidal behavior among rural women that varies across regions and wealth quintile
- HEWs are playing a role in providing support for suicidal women

Recommendation

- Strengthen prevention of suicidality and reduction of its negative consequences using HEP as a platform by building the capacity of HEWs.
- Improve the delivery of integrated mental health service at a primary health care unit level including referral linkage between HPs and HCs.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

Category 9

Urban Health Extension Program

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Availability and Adequacy of Inputs for Urban Health Extension Program

MERQ Consultancy PLC.

Background

- Urban Health Extension Program (UHEP) involves the provision of health promotion and disease prevention services through home visits, outreach sessions, and referral to health centers.
- Adequate staffing, a minimum set of equipment, and basic drugs and other medical supplies are required to effectively run the program.
- This study assessed availability and adequacy of resources for urban HEP in different urban settings.

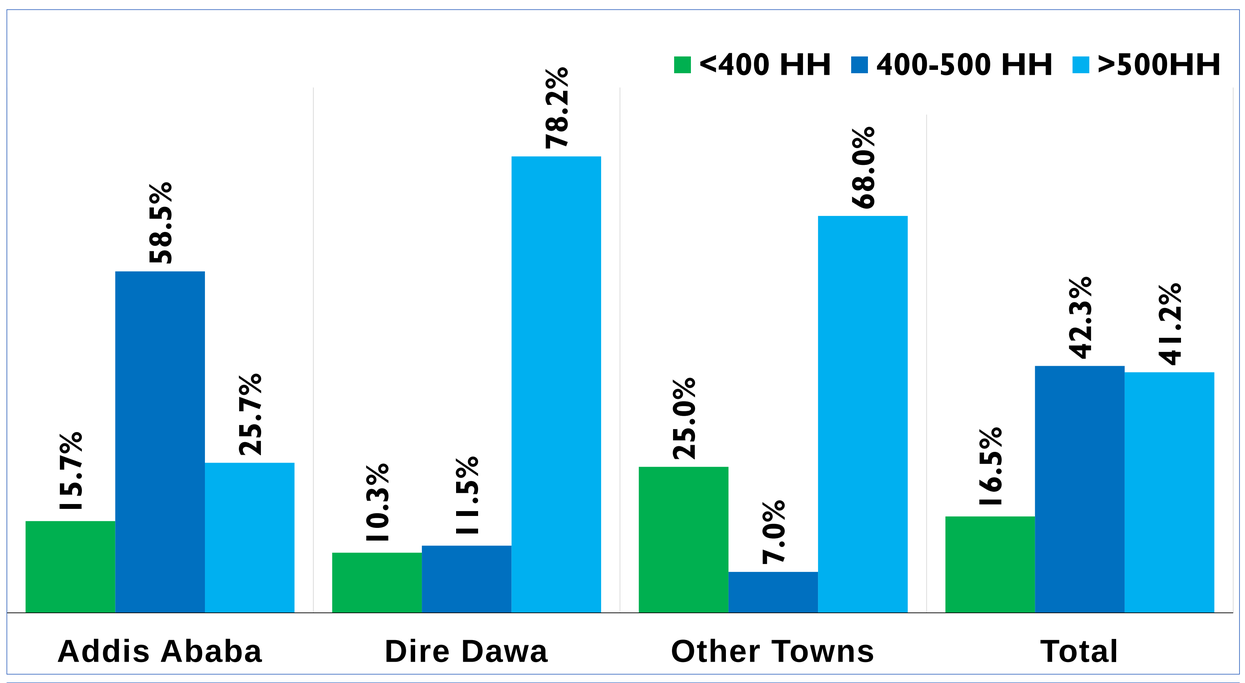
Methods and Materials

- A mixed method study design employing qualitative and quantitative study was conducted to assess status of the Ethiopian UHEP.
- Availability and adequacy of inputs for the implementation of the UHEP was determined using cross-sectional survey which included a total of 581 Urban Health Extension Professionals (UHE-ps) and 134 health centers from Addis Ababa, Dire Dawa, and other towns.
- KIIs were conducted with heads of health Centers, town health offices, regional/city health bureaus, and FMoH.

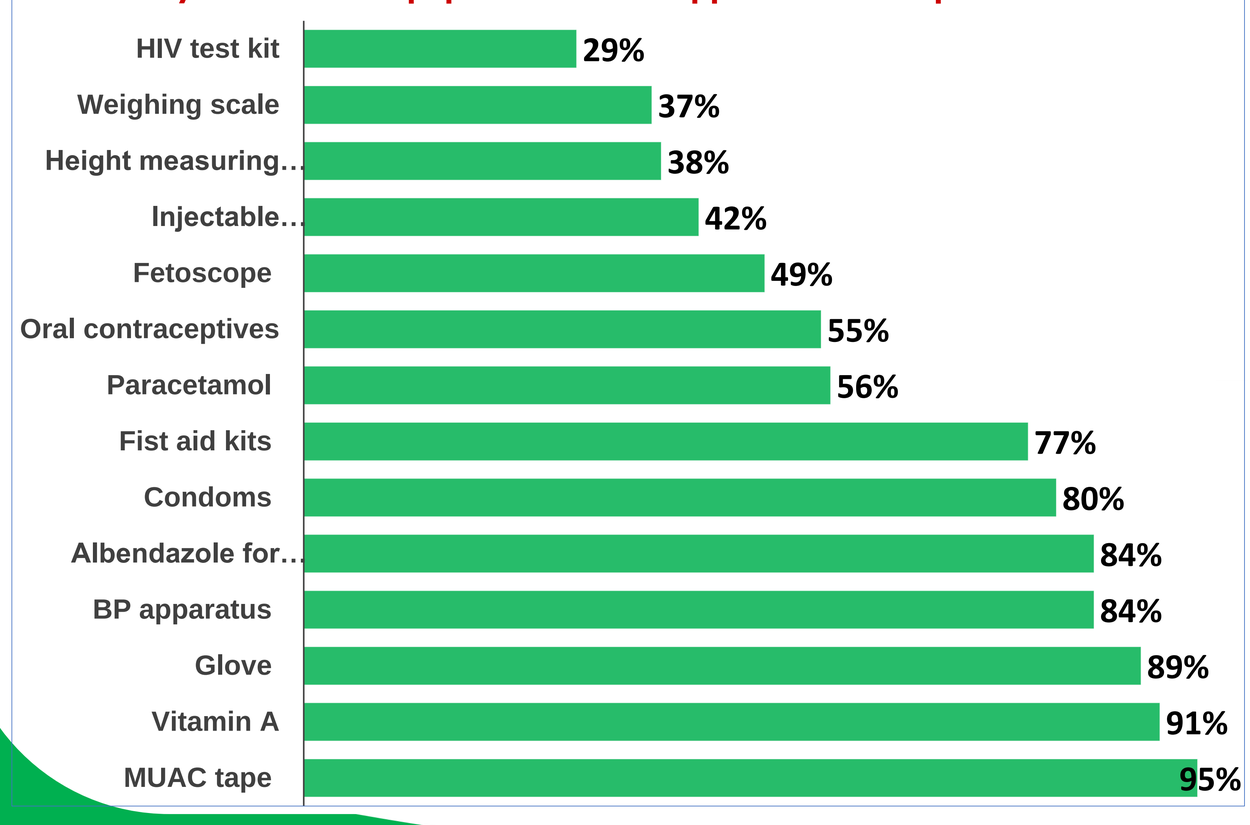
Result

- One UHE-p is expected to serve 400 to 500 households, but 41.2% were forced to serve more than 500 households.
- Education and career development opportunities were inadequate and key informants reflected that it takes more than a decade for UHE-ps to get an educational opportunity. This resulted in frustration, demotivation and intention to leave among UHE-ps.
- Medical equipment's and supplies were not adequately available for UHE-ps. For instance, only 37% and 38% of UHE-ps had weight and height measuring scale, respectively.

Adequacy of Human Resource (UHE-p to Household Ratio)

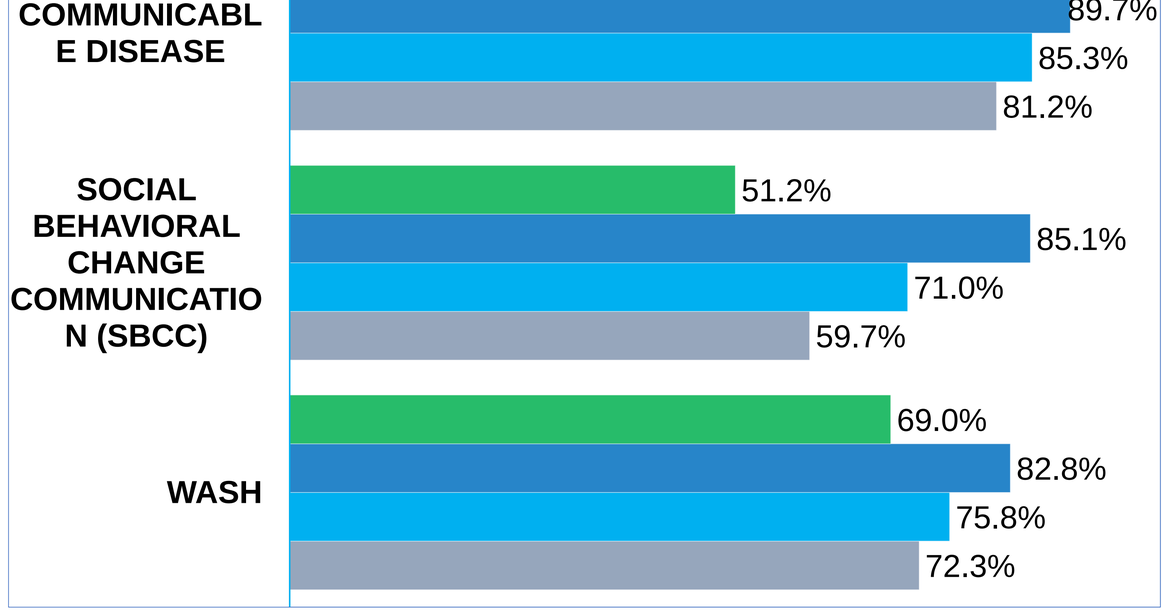


Availability of Medical Equipment`s and Supplies for UHE-ps



- The proportion of UHE-ps who took Integrated refresher training (IRT) were low for most of the packages, only 59.7% of UHE-ps received refresher training on SBCC module, the proportion of HEWs who were trained for first aid, MCH, and WASH modules were 67.4%, 71.9% and 72.3%, respectively.

IRT Module Training Status of UHE-ps



Conclusion

- Urban HEP is under resources in the areas of both human and material resources. These limitations in resources partly explain the low level of implementation of Urban HEP observed in different urban settings.
- Limited education and career development opportunity for UHE-ps is a major source of dissatisfaction and demotivation.

Recommendation

- Strengthen the supply chain management system to ensure availability and adequacy of medical supplies and equipment for UHEP.
- Ensure deployment of adequate UHE-ps in line with pre-determined standards (UHE-p to Household ratio)
- Improve opportunity of UHE-ps to advance their education and career.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Family Health Team Approach as Urban Health Extension Program Service Delivery Modality

MERQ Consultancy PLC.

Background

- Family health team (FHT) is one of Urban Health Extension Program (UHEP) implementation approaches designed to improve access and equity of primary health care through a multi-disciplinary team.
- The FHT is implemented with the aim of reaching the neediest segment of the population, the urban poor, with high impact interventions alongside health promotion and diseases prevention efforts to the general public.
- The aim of this study is to assess the implementation status of FHT in Addis Ababa and Dire Dawa.

Methods and Materials

- A mixed method study design employing qualitative and quantitative study was conducted to assess implementation of FHT. A cross-sectional study was conducted on 581 UHE-ps and 102 health centers from Addis Ababa, and Dire Dawa.
- Qualitative data were collected using KII with officials from health centers, sub-city/woreda health offices and city administration health bureaus and FMoH.

Results

- About 80% of UHE-ps reported that they are currently working with assigned FHT members.
- Only 60.9% of the UHE-ps reported that their respective FHT have collected population profile at baseline.
- Different points at which the FHTs provide health services to the community.
- UHE-ps reported that FHT provides health services trough home visits (99.5%), school (80.8%) and workplace visits (55.4%).
- Qualitative data indicated that the FHT approach had improved integration among HC staff and UHE-ps, and created suitable working environment which resulted in improved motivation and performance of UHE-ps.
- The approach was also reported to contribute in improving accessibility of health services to the poorest segment of the population including individuals with mental illness, elders, and bed-ridden patients.

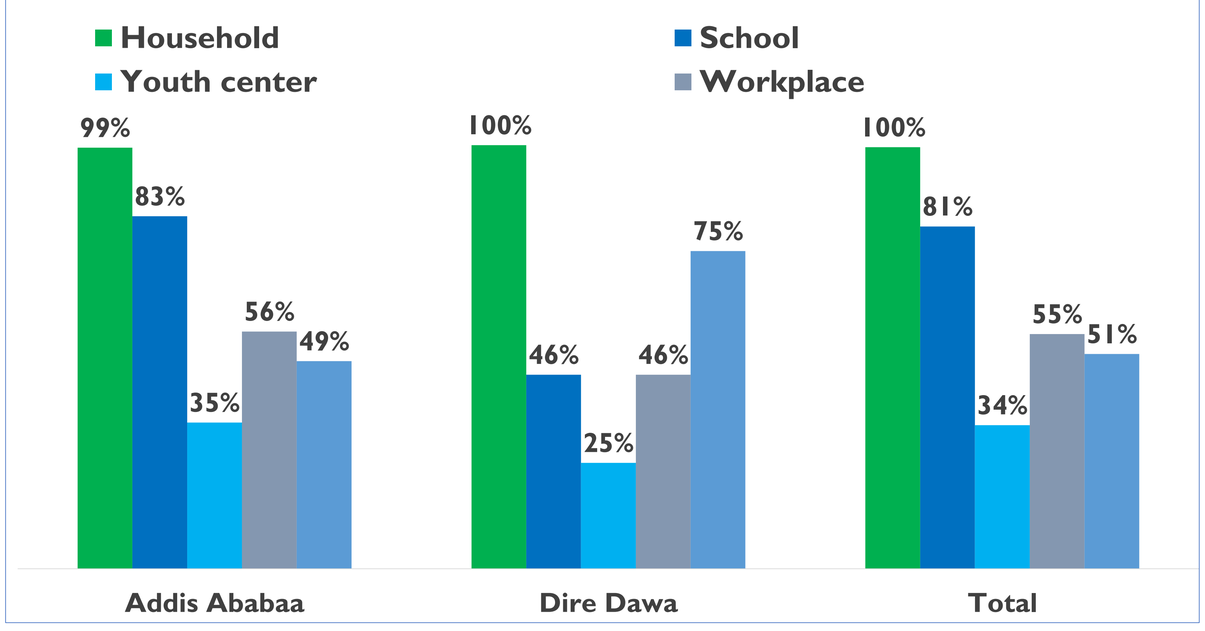
Facilitators of FHT

- Community based health insurance (CBHI)
- Establishment of steering and technical committees
- Weekly performance appraisal
- Better community acceptance

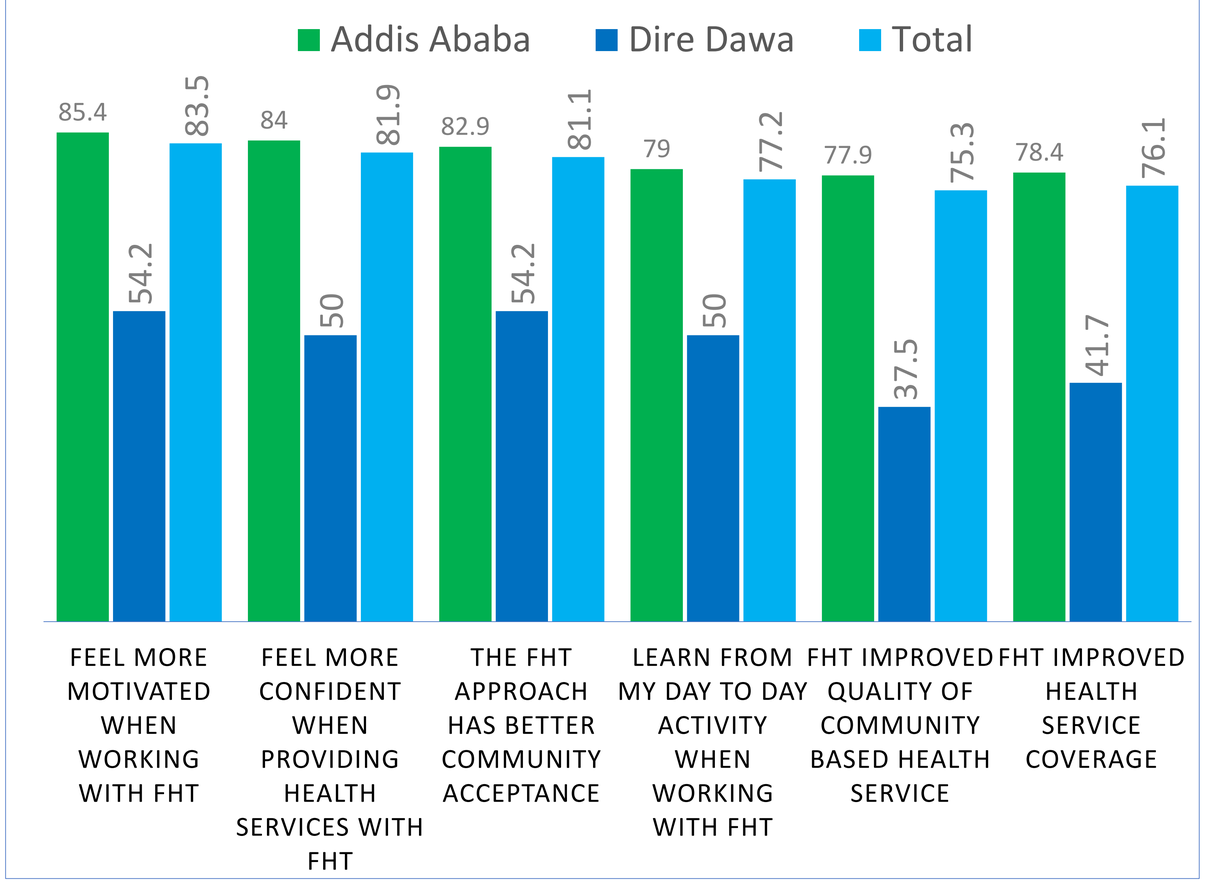
Challenges

- Shortage of basic equipment and supplies
- Large population size per UHE-p
- Limited motivation of UHE-ps
- Limited involvement of other government sectors (eg. Municipality)

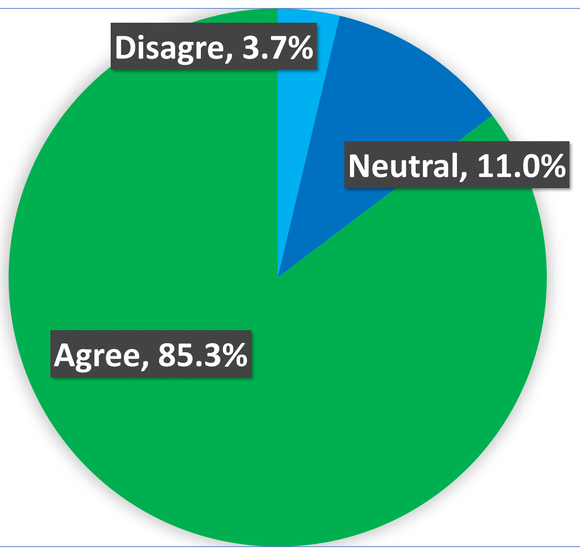
Service delivery points used by FHT



UHE-p feeling/impression about the FHT approach



Recommendation of UHE-ps on scale-up of the FHT Approach to other settings



Conclusion

- The family health team approach has brought positive impact on motivation of UHE-ps, comprehensiveness of services provided to the urban poor, and acceptability of UHEP by community members.

Recommendation

- Consider scaling-up the family health team approach in the implementation of UHEP after appropriate investigation of efficiency in using scarce resources.
- Fulfill human and material resources for FHTs
- Strengthen multi-sectoral approach.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Implementation Status and Challenges of the Urban Health Extension Program

MERQ Consultancy PLC.

Background

- The urban health extension program (UHEP) is an extension of primary health care service designed to improve access and equity of public health interventions at households, schools and youth centers with a focus on sustained preventive and promotive health actions.
- The UHEP has 15 sub-package under 4 major categories (hygiene and sanitation, family health, disease prevention and control, and prevention of injury and accident and mental health).
- Home to home visit, model family training, women development army and family health team approach are the major service delivery mechanisms in which the program is implemented.

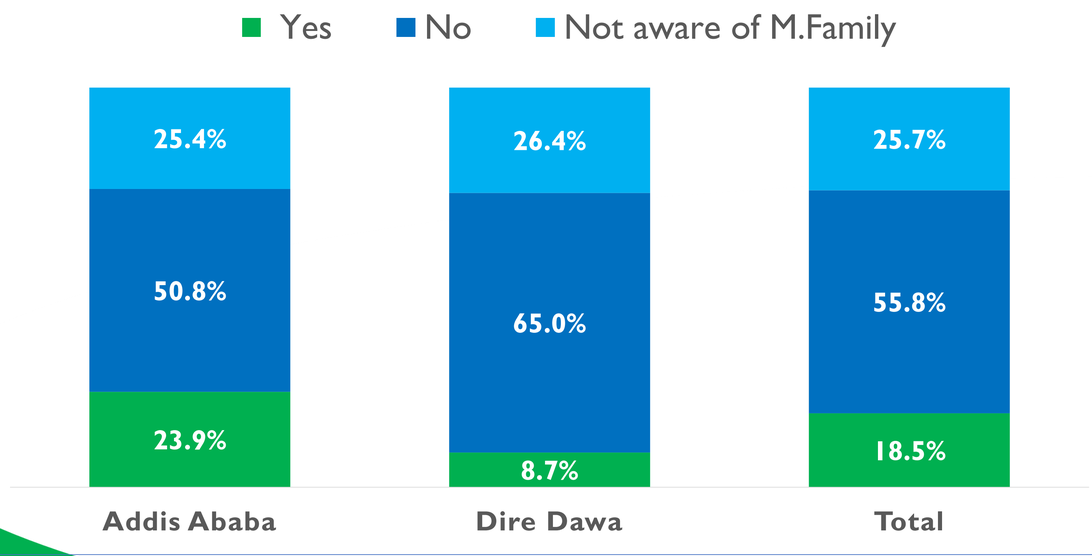
Methods and Materials

- A household survey was conducted with 1734 randomly selected households from a sampling frame of the poorest of the poor identified for urban food security program in Addis Ababa and Dire Dawa.
- A cross sectional survey of 581 UHE-ps and 134 health centers was also conducted to determine implementation status of UHEP from providers perspective.
- Qualitative data were collected using KIIs with officials from health centers, sub-city/woreda health offices and regional health bureau, FMoH, and focus group discussions with community members.

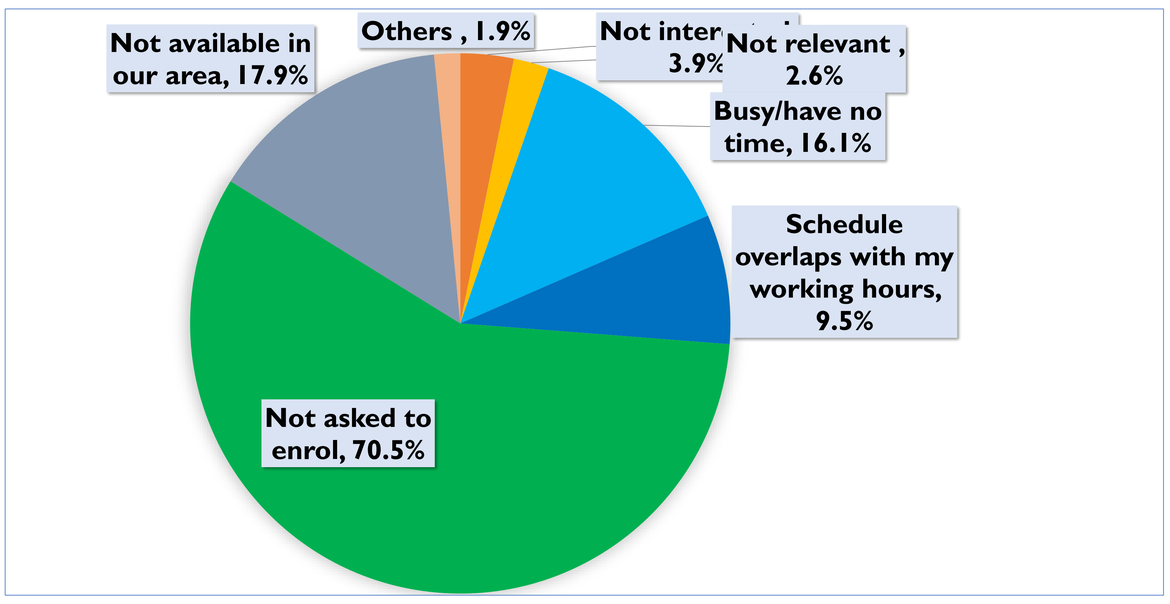
Result

- 36% of households included in the survey were never visited by UHE-ps and more than 18% were not visited within the past one year.
- Only 18.5% of households completed and graduated as a model family.
- Among 967 households, who had no model family training, majority (58%) were not asked to take the training; 15% had no access for training; and 13% had busy schedule.
- Inadequacy of human resource and supplies, low community engagement, and poor stakeholder collaboration were among the major challenges that hindered implementation of UHEP.

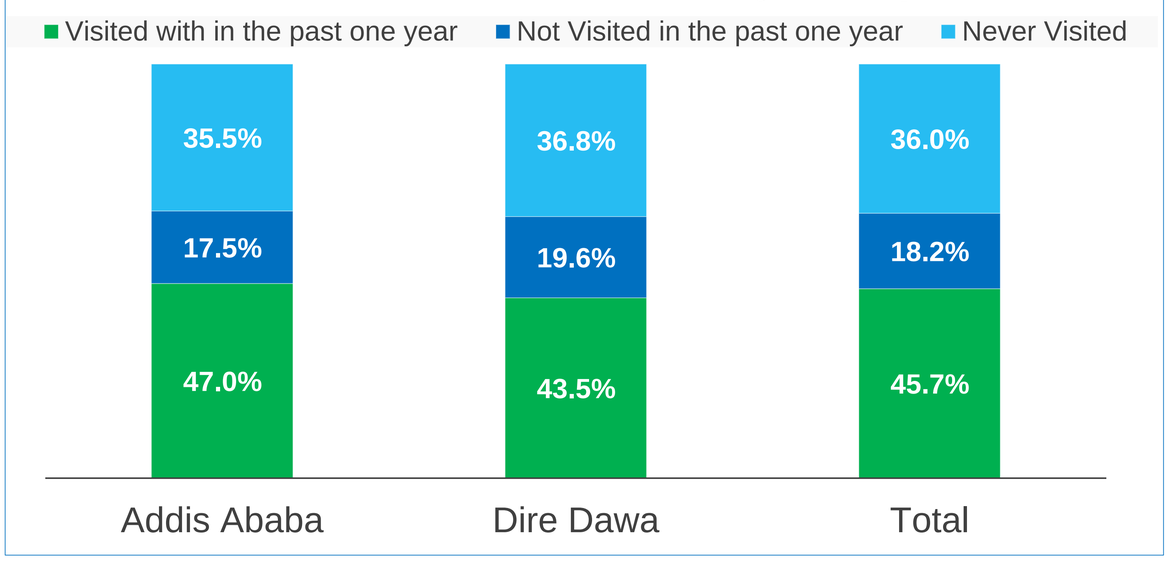
Model Family Training Completion/Graduation Status of Households



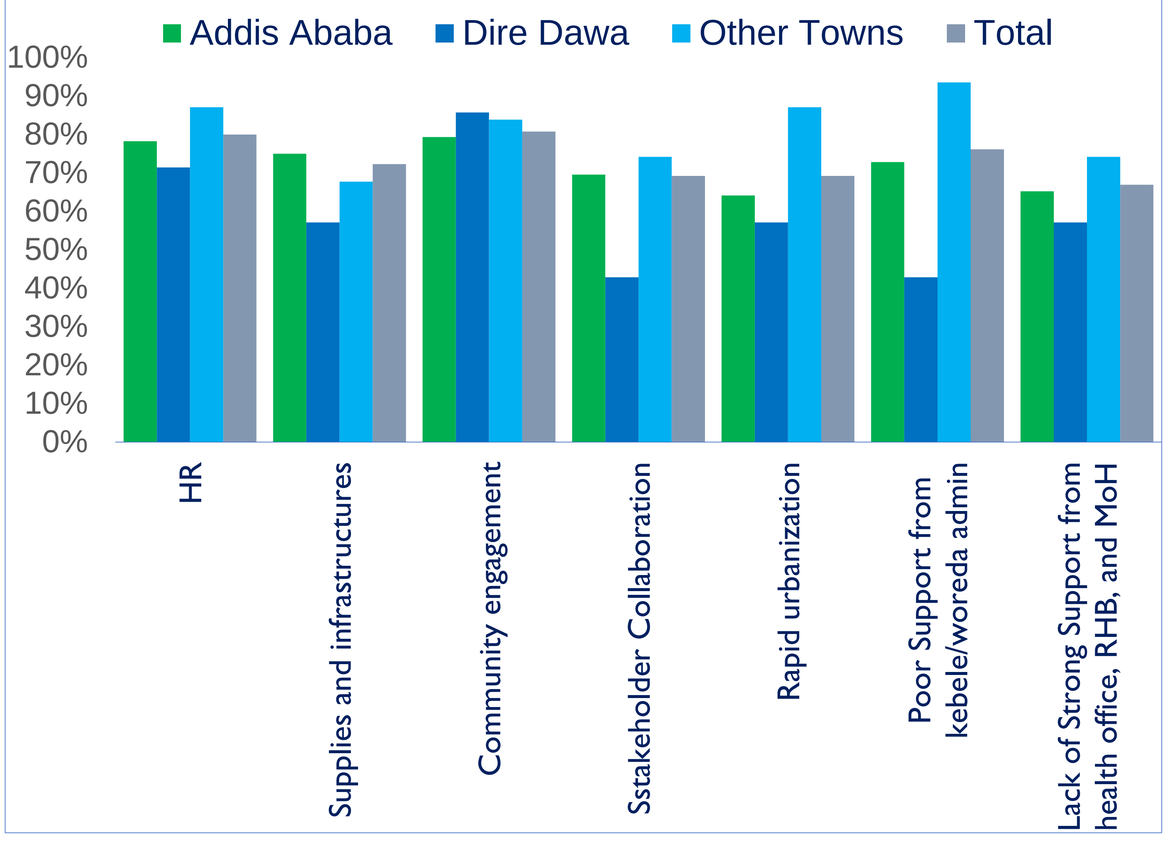
Respondents` reasons for not taking model family training



Status of Household Visit by UHE-ps



Major Challenges of UHEP Implementation, response from HC heads



Conclusion

- Only few proportion of households completed the model family training, where greater proportion of respondents were not aware of availability of the training or not asked to attend.
- There was low coverage of household visit, even for the priority targets of the program (i.e. household with lower economic status).

Recommendation

- Identify and implement alternatives to home visit for the delivery of health messages to urban populations.
- Address implementation challenges including HR and community engagement issues by designing alternative strategies in addition to strengthening current approaches.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

Level of Motivation, Satisfaction and Attrition among Urban Health Extension Professionals

MERQ Consultancy PLC.

Background

- UHEP requires motivated, satisfied and competent workforce that can provide effective and quality service meeting the needs of complex urban settings.
- The purpose of this assessment was to examine the level of motivation and related indicators among UHE-ps in Addis Ababa and Dire Dawa. The study also assessed attrition and intention to leave among UHE-ps

Methods and Materials

- A cross sectional survey was conducted in Addis Ababa, Dire Dawa, and other towns of Ethiopia. A total of 581 UHE-ps were included in the survey.
- The survey assessed the UHEP workforce to determine level of satisfaction, intention to leave, burnout and mental health status of UHE-ps. The attrition rate was assessed by reviewing document for a total of 648 UHE-ps found in Addis Ababa, Dire Dawa and Harari.

Satisfaction Survey

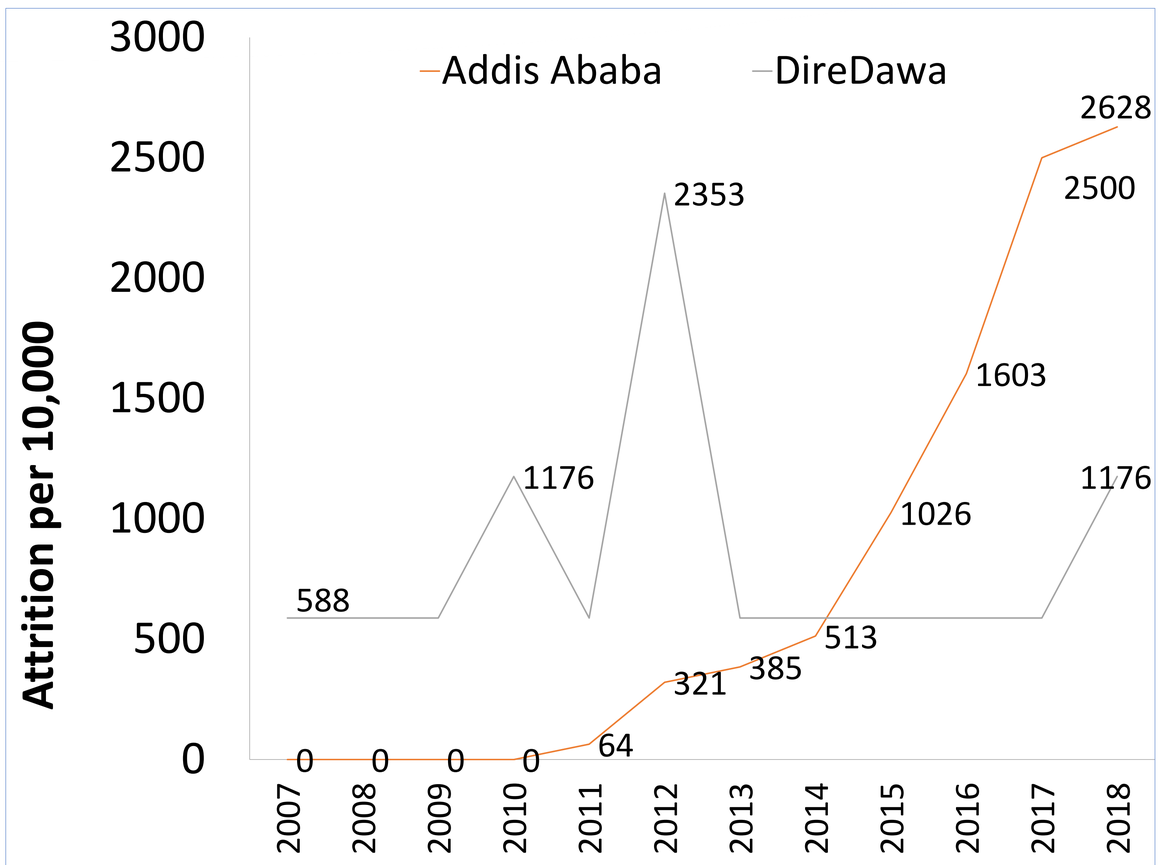
- UHE-ps job satisfaction was assessed using 27 items with a 5-point Likert scale ranging from one (strongly dissatisfied) to five (Strongly satisfied).
- Overall satisfaction was calculated by using the mean value of the scale as a cut-off point to categorize respondents as satisfied and dissatisfied.
- Reliability test of the instrument indicated good internal consistency as shown by Cronbach's alpha value of 0.88.

Assessment of Burnout

- Burnout was assessed using a tool containing 15 items with a scale: 1 "Rarely", 2 "Sometimes", 3 "Often" and 4 "Very often".
- Risk of burnout was analyzed by categorizing the scores as:
  - 15 to 18 "no risk of burnout"
  - 19 to 22 "little sign of burnout"
  - 33 to 49 "risk of burnout",
  - 50 to 79 "severe risk of burnout".

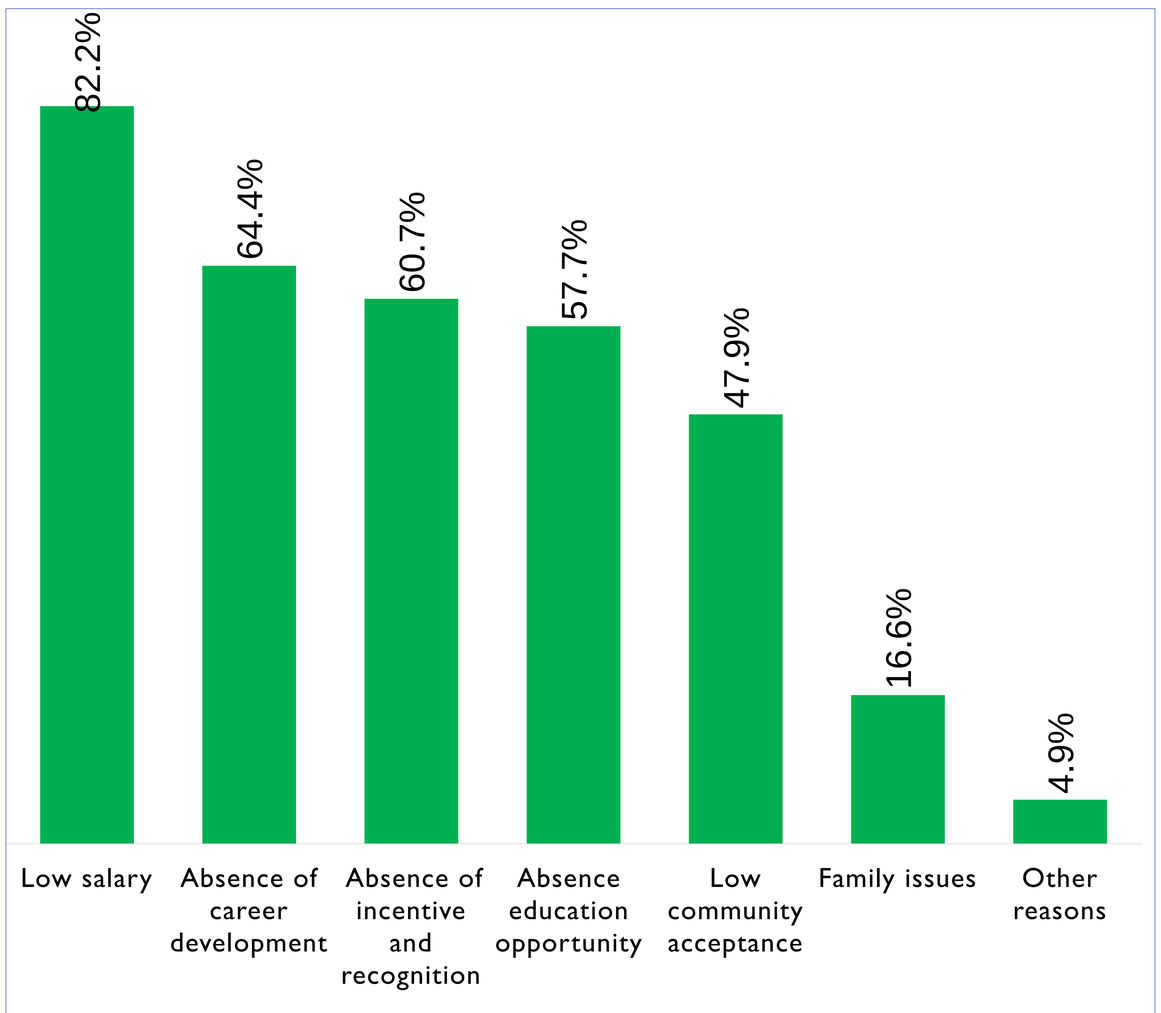
Result

- Attrition among UHE-ps was 21.1% with highest rate (38.5%) in Addis Ababa
- About 60% of UHE-ps do not recommend other nurses, to be hired and to work as UHE-ps.
- There is high prevalence or risk of burnout among UHE-ps, where 4% of the respondents had sever burnout.



Trends in UHE-ps attrition

Major Reasons for Intention to leave/attrition

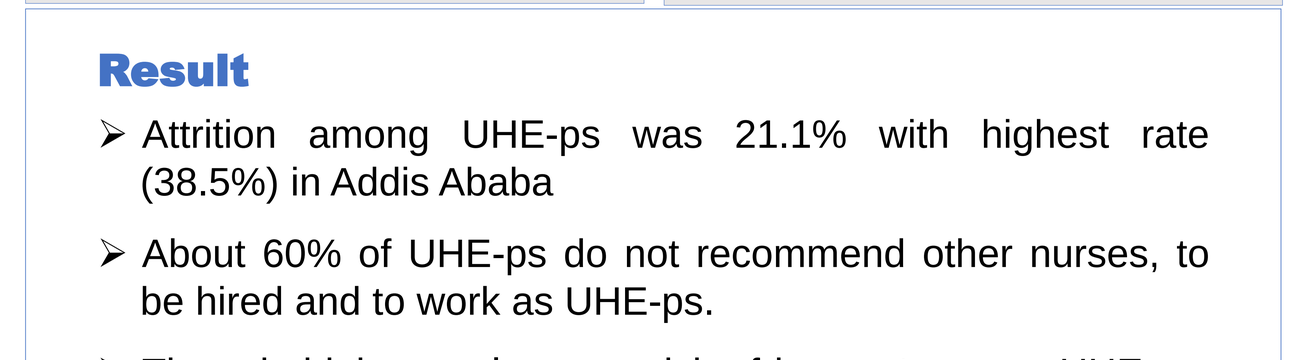


Level of UHE-ps Satisfaction

- Majority of UHE-ps (68%) perceived decrement in their satisfaction over time
- Satisfaction was statistically associated with level of education
- Level of satisfaction has significant variation between Addis Ababa (58%), Dire Dawa (79%) and Other towns (48%)

Level of Burnout among UHE-ps

- Un acceptably higher level of burnout was recorded
- The UHE-ps from other towns had relatively higher risk of burnout than Addis Ababa and Dire Dawa
- Risk of burnout had no statistically significant association with years of experience.



Intention to Leave and Attrition

- Considerable proportion of UHE-ps (29%) are looking for another job.
- Median time of attrition was 4 years (IQR: 1.5, 6.6)

Conclusion

- UHE-ps have high level of job dissatisfaction, demotivation, and intention to leave.
- Considerable proportion of UHE-ps have risk of burnout. Burnout is mostly associated with turnover, low morale, poor quality of care, low productivity, absenteeism and compromised social interaction due to poor interpersonal relationship.

Recommendations

- Consider incentive packages to ensure UHE-ps are compensated and recognized basedon their effort and performance.
- Develop appropriate career structure for UHE-ps.
- Consider care for UHE-ps themselves to prevent burnout and its possible consequences on their mental health status and job performance.

Acknowledgement: We would like to express our gratitude to the Federal Ministry of Health and The Bill & Melinda Gates Foundation for the trust they bestowed on us. We would also like to express our heartfelt thanks to all the respondents.

National HEP Assessment 2019

The National Assessment of the Ethiopian Health Extension Program

A Comprehensive Study

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