International Institute for Primary Health Care-Ethiopia

Welcome to the first issue of the International Institute for Primary Health Care-Ethiopia's (IIfPHC-E) Primary Health Care Digest! The purpose of the Digest is to share the latest news and research on primary health care from Ethiopia.

In our inaugural issue, we start with an editorial from senior IIfPHC-E staff on the Ethiopia's response to the novel coronavirus. Following that are six abstracts of original research investigating the delivery, utilization, financing and management of primary health care services in Ethiopia. The abstracts cover effective vaccine management, childbirth care indictors, exclusive breastfeeding, maternal health service utilization, community-based health insurance and leadership, management and governance practices. We also included abstracts from previously published articles on Ethiopia's Health Extension Program and the Alma-Ata Declaration at 40. Each abstract is followed by a link to the full paper, except the abstracts on exclusive breastfeeding and maternal health service utilization, which are in the process of being finalized. We end the digest with a brief update on the Health Extension Program and excerpts from a national assessment of the Program.

Thank you for your interest in and support for primary health care.
We hope you enjoy the Digest!

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NO ROOM FOR COMPLACENCY: TRACKING THE RESPONSE TO COVID-19

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In December 2019, a "pneumonia of unknown origin" was detected by health officials in Wuhan, Hubei Province, China (1-3). The epidemiological and clinical reports that followed revealed symptoms of acute respiratory infection in hospitalized patients (4). By early January 2020, Chinese authorities had identified a novel coronavirus and shared its genetic sequence with other countries (5). A few weeks later, the World Health Organization declared the virus a "public health emergency of international concern," giving the once mysterious pathogen an official name - Severe Acute Respiratory Syndrome coronavirus-2 (SARS-CoV-2) (5-6).

In just ten months, SARS-CoV-2 has ravaged the world. More than 42.97 million people have been infected globally and more than three quarter of a million people have died of COVID-19, the disease caused by the novel coronavirus (WHO, 26/10/2020). As the epicenter shifted from China to Europe and then to the United States, developed nations with advanced health systems have struggled to cope with the pandemic. Even countries with low high infection and mortality rates have been affected. The reach of the virus has been so profound and multi layered that it has destabilized economies, politics, health systems, social networks, families and communities in every corner of the globe (7-8).

Not surprisingly, COVID-19 is viewed as a grave threat to Africa (9), where health systems are weak and economies are fragile. Many governments fear that their countries will become the next epicenter of the pandemic. If not approached thoughtfully, however, this fear has the potential to overwhelm the continent's social, economic and political systems to disastrous effect (8-9).

Experts have already warned of the consequences of unfounded, poorly informed control measures (10). Fear-based messages, for instance, are likely to backfire and result in the kind of setbacks observed in the early phases of the HIV epidemic (11-12).

Therefore, a careful and in-depth understanding of the nature of the disease and its spread is critical. It will not only protect communities from the effects of unwarranted panic and fear but also help in the design and implementation of effective and efficient preventive and control measures.

The World Health Organization and members states have proposed five broad strategies to control the virus (13). These include: 1) mobilizing all sectors of society, 2) controlling outbreak clusters, 3) suppressing community transmission, 4) reducing mortality and 5) developing safe and effective vaccines and therapeutics (13, p.5). These strategies are inclusive. Every member of society - individuals, communities, governments and private companies – is encouraged to share in the task and work together to slow down the rate of transmission and reduce mortality.

Many member states of the African Union recognized the danger associated with COVID-19 at the highest level of leadership and responded quickly. In some countries, preparations were underway before the first cases were identified and reported. Currently, Africa has reported far fewer cases and deaths from COVID-19 than the United States and Europe.

While the future of COVID-19 in Africa is uncertain, experts encourage us to reflect on the factors that have contributed to the continent's success thus far: 1) quick implementation of screening, contact tracing and social/physical distancing measures, 2) application of lessons learn from epidemics such as Ebola, and 3) a sense of agency. As Solomon Zewdu writes, "Nations don't have to be wealthy to stay healthy" (14).

African countries did not wait for technical and financial support from the west; they took charge of the situation, building on existing resources and experience.

In Ethiopia, seven months after the announcement of the first case, 93,343 coronavirus cases have been identified, 12,359 patients have recovered and 1,426 people have died of COVID-19, as of 18 August 2020. The trends show that the number of cases started to increase in May and surged from June to mid-August 2020. Similarly, the number of deaths multiplied from May through August (WHO, 26/10/2020).

The Ethiopian government took swift and decisive action (15). It established structures to provide leadership and a coordinated response to the pandemic, including: 1) the National Disaster Risk Management (NDRM) Council, which is chaired by the Deputy Prime Minister's Office, 2) the Public Health Emergency Management (PHEM) Task force, chaired by the Minster of Health, 3) the PHEM Technical Task force, chaired by the Director General of the Ethiopian Public Health Institute and, 4) PHEM Technical Working Group, chaired by the national incident manager (16). In addition, the Ministry of Health established a National COVID-19 Advisory Committee which provides advisory support to the Ministry of Health.

The government also leveraged the varied and expansive health infrastructure that exits in the country, ranging from the Health Extension Program that operates community-based health promotion and disease prevention activities to the Ethiopian Public Health Institute - an arm of the Ministry of Health that runs the Public Health Emergency Management Center and is mandated with coordinating and supporting national and state level responses in times of emergency - and the Africa Centers for Disease Control and Prevention (CDC), a technical institution created to support the capacity of member states of the African Union respond to disease threats, which is located in Addis Ababa.

The Ethiopian Ministry of Health, in collaboration with the Ethiopian Public Health Institute, developed two valuable documents to guide the response. The National Comprehensive COVID-19 Management Handbook, focuses on the overall management of the epidemic, including surveillance, contact tracing, infection prevention, diagnostics, triage, case management, death care, risk assessment, facility preparedness, risk communication, monitoring and evaluation, ethical issues and the roles and responsibilities of the health work force (17). The second document, the COVID-19 Clinical Management Pocketbook, addresses the diagnosis and clinical management of cases (18).

The government also took practical measures to protect the health and economic well-being of the population. In On 8 April 2020, it issued a State of Emergency, limiting the gathering and the movement of people, closing all schools and universities and quarantining travelers who entered the country. It ordered screenings at Bole International Airport in Addis Ababa and in people's homes, both in the capital and outside regions, reaching 40 million people (15). It expanded the country's diagnostic capacity to more than 5,000 tests per day and strengthened contract tracing (15). It converted dormitories at public universities to 50,000-bed quarantine centers, created space for 15,000-bed isolation centers.

In economic terms, the government prevented mass worker layoffs by entering into a tripartite agreement with the Confederation of Ethiopian Labor Unions and the Ethiopian Employers' Confederation. It extended subsidies to exporting manufacturers and offered tax reductions to prevent the collapse of private companies and small businesses (15). The government also engaged the newly established Industrial Parks to produce personal protective equipment for internal consumption as well as export.

The media has also played a critical role in the pandemic response including educating the public.▸

Communities have been mobilized to create awareness and reach out to poor and vulnerable communities. The Prime Minister and the Minister of Health regularly appear on media and provide directions and status updates, a good sign of accountability and transparency (15).

While the government's efforts are laudable, their long-term sustainability is in question. It remains to be seen how long the private sector can shoulder the financial burden of the tripartite agreement in the midst of a complex pandemic. And operating the quarantine and isolation centers, while providing quality care, has been a challenge.

In Ethiopia, publications on COVID-19 are scarce. One of the earliest papers, an editorial, explored and reiterated the lessons learned from epidemics stretching back to the Spanish Flu (19). The authors suggested that a critical look at the past would help governments make better policy decisions. Effective policy choices gleaned from the past include multi sectoral engagement, transparency, strengthening of surveillance and detection measures, provision of resources for improved hygiene, building the capacity of health facilities, strengthening public awareness and creating meaningful collaborations (19). Others writers have pointed to the present and encouraged policy makers to learn from countries that have been able to stop the progress of the coronavirus (20-21).

In conclusion, although we have made notable progress, much remains to be done to break the cycle of transmission of the novel coronavirus. We recommend building resilient systems, developing effective coordination and decision-making strategies, sustaining global coalitions, engaging communities, generating and using evidence, ensuring effective and efficient use of resources and providing quality care for patients.

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ASSESSING EFFECTIVE VACCINE MANAGEMENT IN WEST SHEWA ZONE, ETHIOPIA

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Background: Immunization is a high-impact, low-cost intervention, responsible for averting an estimated two to three million deaths each year. Despite improvements in immunization rates, children in Ethiopia do not have equal access to these services. A well-functioning immunization supply chain is crucial to reducing disparities and improving vaccination coverage.

Objective: To assess the performance of the immunization supply chain in West Shewa zone, Ethiopia.

Methods: We conducted a mixed-method, cross-sectional study using assessment tools designed by the World Health Organization (WHO). A total of 43 stores (1 sub-national store, 14 district stores and 28 health facilities) were randomly selected and assessed on eight performance criteria for effective vaccine management (EVM). Data were analyzed using a software developed by the WHO and EVM scores were consolidated for each store level and the entire zone. Each criterion was compared against the WHO's recommended minimum score of 80% to evaluate the strength of the immunization supply chain.

Forty-three key informants were purposively chosen to participant in the qualitative portion of the study. Interviews were transcribed, translated into English and analyzed using Open Code software.

Results: The average scores for the zone across all performance criteria ranged from 43% to 75% - below the WHO-recommended minimum standard. The West Shewa sub-national store achieved the minimum score for temperature monitoring (90%) and building, cold chain equipment and transport (82%), and the district stores achieved the minimum score for storage capacity (80%). Health facilities scored poorly in five out of the eight measures of performance compared with higher-level stores. Overall, the zonal average was highest for storage capacity (75%), temperature monitoring (74%) and vaccine management (73%), and lowest for stock management (55%), information systems and management (48%) and maintenance of building, cold chain equipment and transport (43%).

Conclusion: Our study found that the immunization supply chain in West Shewa zone was poor. In-service training, computerized vaccine stock management systems and the installation of solar refrigerators may improve the immunization supply chain in this region.

COMMUNITY-BASED HEALTH INSURANCE COVERAGE, DROP-OUT RATES AND ASSOCIATED FACTORS AMONG HOUSEHOLDS IN SELECTED DISTRICTS OF WEST SHEWA ZONE, ETHIOPIA

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Background: In countries where governments are unable to subsidize health care coverage and large segments of the population cannot afford to purchase formal health insurance, Community based health insurance (CBHI) has been advanced as an alternative means of financial protection and a way to increase health care access for the poor.

Objective: To examine community-based health insurance coverage, drop-out rates and associated factors among households in West Shewa zone, Ethiopia.

Methods: We conducted a community-based, cross-sectional study. A multi-stage sampling technique was used to select 610 households. Data were collected using a structured questionnaire and bivariate and multivariate logistic regression analyses were employed to determine the associations between demand-side characteristics of study participants and outcome indicators of interest.

Results: Thirty-three percent of the study participants had ever joined a community-based health insurance scheme, 22.1% were currently enrolled and 38% had dropped out. Sixty-nine percent of participants were willing to join a community-based health insurance scheme in the future. The main reason for dropping out was the limited benefits offered by the program. Coverage was positively associated with older age (AOR = 1.931, 95% CI = 1.225-3.044) and larger household size (AOR = 1.910, 95% CI = 1.212-3.011) and negatively associated with the absence of chronic illness in the household (AOR = 0.159, 95% CI = 0.100-0.252) and poor perceived health status of a household member with a chronic illness (AOR = 0.534, 95% CI = 0.312-0.914). Dropping out was negatively associated with the absence of chronic illness in the household (AOR = 0.266, 95% CI = 0.106-0.478).

Conclusion: Our study showed that household coverage for community-based health insurance in West Shewa zone was low, with over a third of participants dropping out. We recommend that the Ethiopian Health Insurance Agency, the Federal Ministry of Health and regional and local health insurance agencies improve the benefits package to encourage greater participation.

LEADERSHIP, MANAGEMENT AND GOVERNANCE PRACTICES AND ASSOCIATED FACTORS AMONG PRIMARY HEALTH CARE UNIT MANAGERS IN SELECTED AREAS OF EASTERN ETHIOPIA

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Background: Primary health care managers operate in an increasingly complex environment that requires updated skills and competencies. However, little is known about the strength of leadership, management and governance practices of front-line health care managers in low-income countries like Ethiopia. Identifying such practices could help strengthen health systems and improve health outcomes.

Objective: To assess the strength of leadership, management and governance (LMG) practices and associated factors among primary health care managers in eastern Ethiopia.

Methods: We conducted a mixed-method, cross-sectional study in four areas of eastern Ethiopia from August through September 2018. Using a multi-stage sampling technique, we selected 555 participants for the quantitative portion of the study. Twenty senior health care providers were purposively sampled for in-depth interviews. A structured pre-tested, self-administered questionnaire was used to collect quantitative data and structure interviews informed the qualitative study. Frequencies and percentages were used to summarize quantitative data. Bivariate and multivariate logistic regression analyses were conducted to assess the associations between LMG practices and predictor variables, controlling for potential confounders. Qualitative data were transcribed verbatim and analyzed thematically.

Results: Slightly over half of the participants were found to engage in good management and governance practices (55% and 54.6%, respectively) and less than half demonstrated good leadership practice (48%). In multivariate logistic regression analysis, the odds of good leadership practice increased with nurses, midwives and other professionals compared with health officers. The odds of good leadership practice also increased with experience sharing with peers working at other health facilities. Experience working at another organization and sharing with peers from other facilities were significantly associated with good management practice, and having a job description was significantly associated with good governance practice. Senior health care providers perceived that managers lacked innovation and key management skills such as decision-making, time management and financial management. Although senior care providers acknowledged that there were mechanisms for holding officials accountable, they expressed concern about the potential for corruption at health facilities.

Conclusion: We found that the strength of leadership, management and governance practices among the study participants was moderate. Most health care providers observed that managers lacked crucial skills that impacted organizational performance. We recommend in-service trainings, performance-oriented job descriptions and increased opportunities for managers to share with peers as strategies to improve leadership, management and governance practices in the study area, and Ethiopia more broadly.

EFFECT OF POSITIVE DEVIANCE APPROACH ON EXCLUSIVE BREASTFEEDING PRACTICE IN JIMMA TOWN, ETHIOPIA: A CLUSTER RANDOMIZED CONTROLLED TRIAL

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Background: Breastfeeding contributes to the health and development of young children. In Ethiopia, suboptimal breastfeeding is responsible for 24% of infant deaths each year. Positive deviance (PD) is a strengths-based approach to behavioral and social change that builds on uncommon but successful solutions to problems developed by community members.

Objective: To determine the effectiveness of the positive deviance approach on exclusive breastfeeding practice for infants aged 0-6 months in Jimma town, Ethiopia.

Methods: A cluster randomized controlled trial was conducted in the study area. Six kebeles were randomly selected and assigned to either the intervention or control group. A total of 260 participants (130 women in each group) who met the eligibility criteria were randomly selected and assigned to an arm of the study depending on their residence. Women in the intervention group received counseling on newborn and infant care practices, including exclusive breastfeeding, from women identified and trained as positive deviants in their communities. Data on primary and secondary outcome variables were collected at three points in time and summarized with descriptive statistics.

Results: A higher proportion of mothers in the intervention group reported exclusive breastfeeding compared with mothers in the control group at midline and endline. The net exclusive breastfeeding rate increased by 18.47% in the intervention group. In contrast, the net exclusive breastfeeding rate increased by only 0.24% in the control group. The greatest behavioral change observed in the intervention group was in the timely initiation of breastfeeding, which increased by nearly 32 points from baseline.

Conclusion: The study showed that the intervention had a positive impact on exclusive breastfeeding as well as breastfeeding initiation, frequency, duration, technique, and initiation of timely complementary feeding.

We recommend the promotion and use of the positive deviance approach as a strategy to improve child health.

BEYOND HEALTH SYSTEM CONTACT: MEASURING AND VALIDATING QUALITY OF CHILDBIRTH CARE INDICATORS IN PRIMARY CARE OF NORTHERN ETHIOPIA

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Source: Reprod Health 17, 73 (2020).

Background: Measurement of quality of health care has been largely overlooked and continues to be a major health system bottleneck in monitoring performance and quality to evaluate progress against defined targets for better decision making. Hence, metrics of maternity care are needed to advance from health service contact alone to content of care. We assessed the accuracy of indicators that describe the quality of basic care for childbirth functions both at the individual level as well as at the population level in Northern Ethiopia.

Methods: A validation study was conducted by comparing women's self-reported coverage of maternal and newborn health interventions during intra-partum and immediate postpartum care received in primary level care facilities of Northern Ethiopia against a gold standard of direct observation by a trained third party (n = 478). Sensitivity, specificity and individual-level reporting accuracy via the area under the receiver operating curve (AUC) and inflation factor (IF) to estimate population-level accuracy for each indicator was applied for validity analysis.

Findings: 455(97.5%) of women completed the survey describing health interventions. Thirty-two (43.2%) of the 93-basic quality child birth care indicators that were assessed

could be accurately measure at the facility and population level (AUC > 0.60 and 0.75 < IF< 1.25). Few of the valid indicators were: whether women and their companion were greeted respectfully, whether an HIV test was offered, and whether severe bleeding (hemorrhage) was experienced by the woman. An additional 21(28.4%) indicators accurately measure at the facility or individual level, but the indicators under or over estimate at population level. Thirteen other indicators could accurately measure at population level. Eight (8.6%) indicators didn't meet either of the validity criteria.

Conclusion: Women were able to accurately report on several indicators of quality for basic child birth care. For those few indicators that required a technical understanding tended to have higher don't know response from the women. Therefore, valid indicators should be included as a potential measurement of quality for the childbirth care process to ensure that essential interventions are delivered.

DETERMINANTS OF MATERNAL HEALTH SERVICE UTILIZATION IN ETHIOPIA: A SYSTEMATIC REVIEW

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Background: The health system in Ethiopia has substantially improved in the last two decades. More than 95% of the population, for example, now has access to primary health care services. However, utilization of certain services, notably maternal health services, remains low and the factors that influence utilization are not uniform across the population.

Understanding the factors that shape health service utilization is a crucial step to designing appropriate interventions that increase coverage of essential services and promote equity.

Objective: To explore and synthesize the determinants of maternal health service utilization at the primary health care level in Ethiopia.

Methods: We conducted a systematic review of quantitative studies on maternal health service utilization at the primary health care level in Ethiopia. We searched for literature published since 2000 in English, using Google Scholar, Web of Science, Scopus and PubMed, and found 76 articles that met our inclusion criteria. We applied the Andersen-Newman model of predisposing, enabling and need factors that influence health service utilization to guide our analysis.

Results: The educational status of both the mother and her partner, exposure to media, knowledge about maternal health complications and health services, positive perception of maternal health services and previous experience with the health system were predisposing factors associated with greater use of maternal health services. Greater income, access to services and female autonomy were enabling factors linked to increased use of maternal health services. And, a history of complications during pregnancy and childbirth, having a planned pregnancy and an obstetric history of fewer births and living children and a lower birth order were the need factors positively associated with the use of maternal health services in Ethiopia.

Conclusion: Factors affecting maternal service utilization are multifaceted and require a multi-sectoral response. Refocusing demand creation activities around groups of mothers with shared socio-economic characteristics could be a step toward addressing barriers to service utilization. Investing in health literacy and using local media to create awareness about maternal health services could also have added benefits.

COMMUNITY HEALTH EXTENSION PROGRAM OF ETHIOPIA, 2003–2018: SUCCESSES AND CHALLENGES TOWARD UNIVERSAL COVERAGE FOR PRIMARY HEALTHCARE SERVICES

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Source: BMC, Globalization and Health(2019) 15:24

Background: Ethiopia has been implementing a community health extension program (HEP) since 2003. We aimed to assess the successes and challenges of the HEP over time, and develop a framework that may assist the implementation of the program toward universal primary healthcare services.

Methods: We conducted a systematic review and synthesis of the literature on the HEP in Ethiopia between 2003 and 2018. Literature search was accomplished in PubMed, Embase and Google scholar databases. Literature search strategies were developed using medical subject headings (MeSH) and text words related to the aim of the review. We used a three-stage screening process to select the publications. Data extraction was conducted by three reviewers using pre-prepared data extraction form. We conducted an interpretive (not aggregative) synthesis of studies.

Findings: The HEP enabled Ethiopia to achieve significant improvements in maternal and child health, communicable diseases, hygiene and sanitation, knowledge and health care seeking. The HEP has been a learning organization that adapts itself to community demands. The program is also dynamic enough to shift tasks between health centers and community. The community has been a key player in the successful implementation of the HEP.

In spite of these successes, the program is currently facing challenges that remain to be addressed. These challenges are related to productivity and efficiency of health extension workers (HEWs); working and living conditions of HEWs; capacity of health posts; and, social determinants of health. These require a systemic approach that involves the wider health system, community, and sectors responsible for social determinants of health. We developed a framework that may assist in the implementation of the HEP.

Conclusion: The HEP has enabled Ethiopia to achieve significant improvements. However, several challenges remain to be addressed. The framework can be utilized to improve community health programs toward universal coverage for primary healthcare services.

ALMA-ATA AT 40 YEARS: REFLECTIONS FROM THE LANCET COMMISSION ON INVESTING IN HEALTH

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Source: Lancet 2018; 392:1434-60

EXCERPTS FROM EXECUTIVE SUMMARY

"In 2013, the Lancet Commission on Investing in Health published its report, "Global health 2035: a world converging within a generation" (GH2035). The report concluded that a grand convergence in health—a reduction in infectious, child, and maternal mortality to rates seen in the best-performing middle-income countries—is technically and financially feasible for all but the poorest countries by 2035. …

The 40th anniversary of the Alma-Ata Declaration gave the Lancet Commission on Investing in Health an opportunity to assess progress towards grand convergence, and to reflect on the future of primary health care in the context of the modern universal health coverage movement. …

Based on our projections of available domestic resources for health and cost estimates of essential universal health coverage, by 2035 most middle-income countries will be able to afford primary health-care platforms for delivery of essential universal health coverage. However, for many middle-income countries achieving the mortality reduction target for noncommunicable diseases from the third Sustainable Development Goal will remain out of reach in the 2030 time frame.

For many low-income countries, domestic health financing systems lack the capacity to complete even the unfinished agenda of grand convergence. …

This report develops and sharpens the case made by GH2035 for reorienting health official development assistance to areas where governments have natural incentives to under invest. Although direct support of high priority health interventions in the poorest countries will still be needed, international collective action for health to support global functions needs to be emphasized. …

From a long list of potential high return investments in international collective action for health, five priorities emerge:

- Development of improved drugs and vaccines against tuberculosis;
- Preparedness for pandemics, especially a severe influenza pandemic (eg, accelerating efforts to develop a universal influenza vaccine, building reserve vaccine manufacturing capacity, and financing national preparedness and international response efforts);
- Providing international support to national noncommunicable disease control programmes (eg, through distribution of best practice guidelines and collective purchase of drugs and other key commodities);
- Development of measurement tools and an evidence base to improve the quality of health systems and their resilience to heterogeneous health threats;
- Providing the resources for WHO and other UN agencies to strengthen their financial and legal capacity to reduce cross-border transmission of drug resistance (eg, to tuberculosis), pollution, harmful substances (eg, tobacco, alcohol, and highly processed foods), and counterfeit drugs and vaccines."

EXTRACT OF THE NATIONAL ASSESSMENT OF THE ETHIOPIAN HEALTH EXTENSION PROGRAM (HEP)

Introduction: The Health Extension Program (HEP) is a platform for delivering primary health care services to poor and vulnerable communities in Ethiopia. Experts agree that the HEP has played a significant role in improving the health status of Ethiopians, but questions remain about the performance, determinants and prospects of the program. Among studies about the HEP conducted since its inception, the national assessment is unique in its breadth of coverage and depth of purpose.

Objective: The aim of the study was to: 1) assess the relevance of the HEP package of services to health needs of Ethiopians, 2) assess the implementation status of the HEP, 3) assess the population coverage of essential HEP services, 4) assess the adequacy of resources for the implementation of the HEP, 5) explore the contribution of the HEP to recent gains in health status, 6) identify determinants of HEP implementation at different levels of the health system and 7) identify key areas for improvement.

Methods: A national assessment was conducted from October 2018 through October 2019 by MERQ Consultancy, under the leadership of the Ministry of Health, and in collaboration with the International Institute for Primary Health Care-Ethiopia (an affiliate of the Ministry of Health) and the Bill and Melinda Gates Foundation, which provided funding for the project. The study employed a mixed methods approach, including a systematic review, household surveys, facility assessments, key informant interviews and focus group discussions. We identified and screened 3822 published and gray papers for the systematic review, 67 of which met the inclusion criteria for review. The assessment covered 353 kebeles (communities) from 62 woredas (districts) in agrarian, pastoralist and urban areas across all regions of the country. A total of 12868 respondents from 7122 rural households participated in the survey. The facility assessments included 343 health posts, 132 urban health centers and 179 rural health centers. We also conducted 85 focus group discussions, 122 key informant interviews with personnel from all levels of the health care system and interviews with 584 health extension workers. We employed a participatory process to synthesize the findings and formulate recommendations.

Key Findings:

The key findings were extracted from the abridged report of the national assessment of the Health Extension Program.

Package of services

- Despite substantial improvements in health indicators since the launch of the HEP, Ethiopia faces a double burden of disease: communicable, maternal, neonatal and nutritional disorders, which still constitute 60% of the total Disability Adjusted Life Years lost, and an increase in the burden of non-communicable diseases (NCDs).
- The original package of services offered by the HEP addresses the major causes of morbidity and mortality in rural communities. The addition of NCD and mental health packages are appropriate responses to more recent health challenges.
- Health extension workers (HEW) provide clinical services, including maternal and child health services, at health posts (HP). However, the existing capacities of HEWs and the material scarcities that they face may compromise the quality of care offered at the community level.

Communities demand more comprehensive services at health posts. Yet this demand has not adequately been met. One reason is that clinical services are offered separately from disease prevention/health promotion activities.
- The HEP package of services is not adequately implemented such that communities can sustain changes in behavior.

Service delivery modalities

- The involvement of male HEWs has been met with approval by large segments of the population.
- Approaches involving coercion/punishment have not achieved sustainable behavior change in relation to the construction and utilization of latrines or the utilization of maternal health services.
- The health seeking behavior of rural communities is sub-optimal. Static services alone will not lead to expanded coverage of essential health services.
- Despite the emphasis on home visits and outreach sessions to bring about behavior change at the household level, service delivery is shifting from household and community-based health promotion and disease prevention activities to services provided at health posts.

Implementation of HEP

- Although health posts are located at nearly every kebele and are physically accessible to the vast majority of the population, proximity has not facilitated access.
- Implementation of HEP has been very low in pastoralist communities compared to agrarian ones.
- The quality of HEP implementation is associated with the professional training and education of HEWs, rather than the number of HEWs at a health post.

Human resource for HEP

- HEWs are not sufficiently competent or motivated.
- Gaps in competency are primarily linked to sub-optimal pre-service training that encompasses: 1) the recruitment of trainees, 2) the medium of instruction, 3) the capacity of training institutions and 4) limited compliance with training curricula.
- Health posts staffed by midwives/nurses or level 4 HEWs have better outcomes in terms of both home and health post visits.
- Most HPs are staffed with at least two HEWs. The introduction of additional interventions has increased the workload of already strained HEWs. Full implementation of the current HEP package requires more health workers at each health post and a more diverse work force trained in midwifery, clinical care and environmental health.

Physical facilities, infrastructure and basic utilities

- Only 37% of health posts meet building standards.
- The majority of health posts do not have access to basic utilities such as water and electricity.

Equipment, drugs and medical supplies

- Essential equipment required for the provision of the current package of services are often either not available or not functional at health posts.
- The availability of tracer drugs varied. Stockout of tracer drugs and other medical supplies was due to supply shortages and inadequate supply management systems.

Financing HEP

- The primary sources of financing for the HEP are donors and the government. Community members voluntarily contribute time and labor.
- The government's share of spending has increased over the years, but 73% of expenditure on the HEP still comes from donors.
- Investment on HEP has been increasing in nominal terms. However, the share of spending on health centers and health posts has been declining continuously since 2010.

Community engagement

- Model family training is an effective strategy to increase household implementation of the HEP package of services. However, only a very small portion of the population is aware of, enrolled in, or has completed the training.
- Women Development Army (WDA) leaders and Social Mobilization Committee members do not often model appropriate health behaviors.
- The overreliance on WDA leaders results in the underutilization of other community assets, particularly religious and traditional leaders.
- The roles and responsibilities of WDA leaders sometimes overestimates their capacities and ignores their participation as volunteers.

Information system and monitoring and evaluation (M&E)

- The current health information/M&E system primarily focuses on outputs of specific HEP programs, with limited attention paid to process indicators at lower levels.
- Kebele-level indicators involve unrealistic targets (e.g. 100% enrollment in community-based health insurance), resulting in lack of sensitivity to intermediate progress at health posts.
- Information use is limited at health posts and higher levels.

Governance and leadership

- Planning is usually top down and some HPs do not have a documented annual plan.
- Dual accountability of HEWs and parallel reporting are common at health posts.
- Health posts do not have adequate supervisory support from health centers. When available, team-based supervision of health posts has had a greater impact on HEP implementation than one-on-one supervision.
- Restrictions in the rights of HEWs as civil servants have frequently been reported. This has been a major source of dissatisfaction among HEWs.
- Accountability is limited at health posts, leading to high rates of absenteeism and closure of health posts.

Source: National Assessment of the Ethiopian Health Extension Program : Abridged report dissemination workshop.

OPTIMIZATION OF HEALTH EXTENSION PROGRAM

Eskinder Wolka, MPH,PhD

Health care delivery in Ethiopia is organized into a three-tier system comprised of primary health care units (PHCU), general hospitals and specialized hospitals that are responsible for the delivery of primary, secondary and tertiary level care, respectively. The Health Extension Program (HEP), a package of essential community-based preventive, curative and promotive health services, is an integral component of PHCUs.

Since its introduction in 2003, the Ethiopian Health Extension Program has undergone a number of changes. Initially focused on agrarian communities, it has been expanded and adapted to meet the needs of pastoral (2006) and urban communities (2009). The program has also shifted from a model family approach based on diffusion of innovation theory to one that emphasizes large scale community engagement through the Women's Development Army. Finally, two additional services have been added to the initial package of 16 to address the increasing burdens of non-communicable diseases and mental health issues in Ethiopia.

The confluence of demographic, epidemiological and economic changes combined with increased community expectations and shifts in global and national priorities suggest that the moment has come to re-imagine the HEP once again. This time, to serve as a catalyst for Universal Health Coverage.

To that end, Optimization of Health Extension Program (OHEP) envisions quality health services for all Ethiopians, without the potentially catastrophic burdens of out-of-pocket spending on health care. OHEP aims to:

- ensure equitable access to and utilization of essential health services,
- improve the quality of health services provided through HEP
- ensure sustainable financing and eliminate financial hardship from HEP services
- strengthen community engagement and empowerment, and
- ensure resilience of communities to natural and manmade disasters.

Disclaimer: The investigators' conclusions and recommendations do not necessarily reflect the views of the International Institute for Primary Health Care-Ethiopia or the Bill and Melinda Gates Foundation.

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