ABSTRACT

Introduction: To urgently reduce child mortality in Ethiopia, the Federal Ministry of Health has implemented a community-based newborn care program, building on the foundations of Integrated Community Case Management of Child Illness and the Health Extension Program. From the outset of the program, the Federal Ministry of Health goal has been to ensure that the program is rapidly scaled nationwide and its benefits sustained into the future.

Objective: To assess the sustainability of the Community Based Newborn Care program to date and recommend a way forward.

Methods: Applying a program sustainability framework suggested, we conducted a desk review of available documents. These included program guidelines, plans, tools, studies and evaluations, meeting reports, annual reports and program data. Collaborating partners were engaged throughout and provided additional insights through group meetings.

Findings: The community based newborn care program has had robust leadership from the Federal Ministry of Health throughout the program design and implementation process. The program builds on the foundation of the Health extension program, which provides services through government supported Health Extension Worker. Community based newborn care was designed to fit into the existing primary care health system as an integrated component of maternal, newborn and child health care rather than as a vertical initiative. The program has a communication strategy that includes the Health Development Army. Community based newborn care has resulted in improving access to services that were not available at the community level and has also enhanced preventive interventions during antenatal, delivery, and the postpartum period. However, supplies of drugs and other medical equipment required for the execution of the program have not been assured sustained funding. In addition, demand creation activities have been fragmented and need strengthening in order to improve low service utilization.

Conclusion: In order to sustain gains in community based newborn care service availability and improve use, the Federal ministry of health, Pharmaceuticals Fund and Supplies Agency and partners urgently need clear supplies financing strategy and resources. Demand creation work needs to strengthen and motivate health development army leaders, so that uptake of newborn services is increased. This will involve focusing on the ability of Health development armies and families to recognize danger signs for young child illness and to take action rapidly. Program related support systems have shown promise but need to be institutionalized and incentivized. The most important systems are related to supportive supervision, performance review and clinical mentoring, and quality improvement. One approach would be to add appropriate indicators to health workers and managers’ official performance reviews.

Key words: Sustainability, partnership, community based newborn care

INTRODUCTION

From the outset of the Community Based Newborn Care (CBNC) program, the Federal Ministry of Health (FMoH) goal has been to ensure that the program is rapidly scaled nation-wide and its benefits sustained into the future (1,2). After three years, blanket coverage has been achieved in agrarian regions while additional efforts are needed to reach newborns in pastoralist areas. Program sustainability is defined as ‘the ability to maintain programming and its benefits over time’ (3). This study was conducted to assess the sustainability of CBNC program in Ethiopia and recommend the way forward.
METHODOLOGY

To assess the sustainability of the program, we have applied Schell et al’s framework (4). This framework identifies factors that promote long-term program sustainability derived from a concept mapping process (Table 1).

Table 1: Program Sustainability Framework

<table>
<thead>
<tr>
<th>Domain</th>
<th>Definition</th>
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<tr>
<td>Political Support</td>
<td>Internal and external political environment which influences program funding, initiatives, and acceptance</td>
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<tr>
<td>Funding Stability</td>
<td>Making long-term plans based on a stable funding environment</td>
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<tr>
<td>Partnerships</td>
<td>The connection between program and community stakeholders</td>
</tr>
<tr>
<td>Organizational Capacity</td>
<td>The resources needed to effectively manage the program and its activities</td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>Monitoring and evaluation of process and outcome data associated with program activities</td>
</tr>
<tr>
<td>Program Adaptation</td>
<td>The ability to adapt and improve in order to ensure effectiveness</td>
</tr>
<tr>
<td>Communications</td>
<td>The strategic dissemination of program outcomes and activities with stakeholders, decision-makers, and the public</td>
</tr>
<tr>
<td>Public Health Impacts</td>
<td>The program’s effect on the health attitudes, perceptions, and behaviors in the area it serves</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>The process that defines program direction, goals, and strategies</td>
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CBNC documents such as program guidelines, plans, tools, studies and evaluations, meeting reports, annual reports and monitoring data assembled from the FMOH, partners and professional associations were reviewed. Content was classified and summarized based on the framework.

Ethical consideration

This paper used secondary data from existing national and project documents, including guidelines, plans, monitoring tools, periodic reports and program review documents. Consent and authorization to use these documents was obtained from the Maternal and child health directorate of the Ministry of Health.

RESULTS

Political Support: The Program has robust leadership support from the Federal Ministry of Health that led the program design and roll out process. The program implementation manual explicitly states that the government will lead and own the program at all levels including the Minister of Health. There are clear roles and responsibilities specified for the community, including local decision makers such as the kebele command post, kebele staff and the Health Development Army (HDA) (1,5).

Roles for Primary Health Care Unit staff (PHCU), woreda and zonal managers, and Regional Health Bureau (RHB) directors and managers are similarly defined.

Expansion of the Community Based Newborn Care program is highlighted in the Health Sector Transformation Plan (HSTP) that includes targets to improve coverage of sepsis management (5). Strong champions at different levels in the FMOH, professional societies and development partners with proven ability to garner resources for the program contributes to sustained support. FMOH leaders have mobilized resources for national scale up.

Funding Stability: The program builds on the existing Health Extension Program (HEP) platform, with stable government funding for hiring and retaining health extension workers (HEWs). Domestic resources are also used to pay facility health workers and management staff. However, initial roll out costs such as for training, supplies, supervision, and evaluation were largely externally financed through sources such as UNICEF, the United States Agency for International Development (USAID), the Children’s Investment Fund Foundation (CIFF), and others (6).
Drugs and other medical equipment required for the execution of the program have been externally supported and more sustainable funding sources are being sought. Looking forward, the program may face competition for domestic resources as health priorities are broadened in scope and reach.

**Partnerships:** At the national level, the program was integrated into the successful partnership approach of the Integrated Community Case Management (iCCM) of childhood illnesses program. CBNC used the coordination and partnership forum of the National Child Survival Technical Working Group (CSTWG), which brings together key implementing partners, multilateral partners, and others under the leadership of FMOH (1). This established coordination group met regularly to design, mobilizes resources, harmonize, implement, and resolve problems. This has led to strong roll out in agrarian regions with partners working together on training, supply distribution, supportive supervision, and performance review meetings.

At the community level, the program engaged existing community resources such as HEWs, kebele command posts and the HDA to plan and implement CBNC, creating widespread linkages at the lowest levels.

**Organizational Capacity:** CBNC was integrated into the health system in maternal, newborn and child health programs at the primary health care level, largely within the HEP. The existing organizational capacity of the HEP is fairly robust (6). About 98% of the 28,923 HEWs in agrarian areas were trained, supervised, and supplied for CBNC services. Moreover, there are 2,956 supporting health centers providing technical and administrative supports to HPs under the PHCUs.

The decentralized governance system and the availability of other child health programs such as Integrated Management of Neonatal and Child Illness and neonatal intensive care units at facility level have provided supervisory support and referral care. However, some activities such as post training follow up and performance review and clinical mentoring meetings have not yet been institutionalized. More capacity building is needed in supply chain management and use of data for decision making. In addition, service delivery problems such as HPs closed during working hours and low postnatal home visit coverage must be addressed to ensure sustainable and effective coverage for CBNC (7).

**Program Evaluation:** Standard baseline and midline evaluations of the CBNC program have been done, and the results shared with funders and other key stakeholders (7). Midline evaluation results have been used to help craft quality improvement and implementation plans to address gaps. However, the current health management information system of the country does not fully capture monitoring data or intermediate outcomes of the program and most studies have been externally funded.

**Program Adaptation:** There is a system in place to identify problems, make necessary changes, and incorporate improvements into CBNC. The program proactively addressed service provision by health workers in the absence of HEWs at HP level and has incorporated simplified treatment regimens for PSBI. Safe and clean delivery by HEWs, which was part of maternal health services and linked to the initial CBNC package, was abandoned due to ineffectiveness and new guidelines were adopted, further demonstrating flexibility.

**Communications:** CBNC has a communication strategy that raises awareness and seeks to change behaviors through the HDA program, program leaders, HEWs, and health workers. Similarly, the demand-creation strategy aims to increase community understanding of newborn health issues and recommended behaviors. However, lower than expected utilization of services indicates the need to more actively engage communities and families.

**Public Health Impacts:** The program resulted in improving access to services that were not available at community level previously and also offered an opportunity to enhance preventive interventions during antenatal, delivery and postnatal periods. This brought critical services and information to caretakers who would not accept referral to higher level health facilities. However, although utilization of services has increased, they have not reached expected levels and some newborns are going without needed care.

**Strategic planning:** The CBNC program is highlighted in the HSTP and is one of the priority packages in the National Newborn and Child Survival strategy. It is also included in woreda based health sector plans ensuring regular review of performance and sustained services. However, the program has not yet developed a long-term financial or sustainability plan (5).
DISCUSSION

The CBNC program is government led, owned by the FMOH and implemented through the existing public health system. As such, it is financed through the government with external financial support mainly limited to initial roll out, supplies, and supervision. Even though there was little clarity on long-term financing or sustainability at the beginning of the program, there are some prerequisite for sustainably funding being addressed. First, essential CBNC drugs and supplies are being integrated into the government’s Pharmaceuticals Fund and Supplies Agency (PFSA) system. Second, program priorities and performance expectations have been integrated into the National Newborn and Child Survival Strategy (2016-2020) and into the HSTP (5,6,8).

The program has had strong political support from the outset because it addresses a critical portion of Ethiopia’s child mortality. In addition to potentially reducing NMR, the program has strengthened related services in the antenatal, delivery and postnatal periods. It has also continued to deepen the linkages between communities, health posts and health centers. Since CBNC was layered onto the iCCM platform with integrated monitoring, supervision and review mechanisms, the program has contributed to iCCM institutionalization. Moreover, program design and implementation with the same set of donors and implementing partners contributed to the grown of partnership based on mutual trust and transparency. However, while the program has enjoyed strong partnership among those working in newborn and child health, it has not been as successful in establishing linkages with maternal health partners.

Although CBNC will continue to be funded through public health financing, stable and long-term financing for the specific commodities and supplies needed doesn’t appear to be assured. Developing clear financing commitments for the medium term is critical in order to benefit from past investment.

Up until now, the CBNC program has been buffered from less tractable weaknesses in the overall health system by collaborative work with partners at regional and woreda levels. These include weak supportive supervision, poor use of data to improve service delivery, unreliable supply logistics, poor motivation of health workers and variable quality of services. As partners have phased out support, the program has felt the effects in implementation. This is compounded by weak leadership and ownership at sub-national levels.

To the extent possible, transition plans should outline practical strategies to address such systemic issues in order to sustain the gains and further institutionalize the program within the health system.

In addition to ensuring availability of services for sick young infants closer to communities, the CBNC program aimed for a strong demand generation intervention designed to address key barriers to care seeking. While the importance of demand generation is well understood by health managers and service providers, it is not active or well incorporated in the local health system.

Given that socio-cultural and traditional barriers affect many maternal and newborn care seeking behaviors and practices, continued investment in demand generation activities that empower communities for positive action is critical.

Recommendations

- Ensure continued political support for CBNC at all levels in the context of the HSTP and Ethiopia’s Sustainable Development Goals.
- Develop a clear commodities and supplies financing strategy for the medium term.
- Strengthen HDA leaders’ capacity for demand creation to increase uptake of newborn services, focusing on their ability to recognize danger signs for young child illness and effective use of the family health card.
- Strengthen pre-service training for HEWs for CBNC.
- Improve the supply chain system for CBNC related drugs, ensuring that the drugs are fully incorporated into PFSA and the Integrated Pharmaceutical Logistics System.
- Institutionalize supportive supervision and PRCMM meetings as key responsibilities of health center staff by including them as indicators for their performance review.
- Strengthen implementation of the quality improvement and transition plan with respect to iCCM/CBNC.
- Incorporating child health indicators in the revised version of the routine health information management system.
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Conflict of interest:
The authors have no conflicts of interest to declare.

REFERENCES