



## **Improving Birth Registration Using the Health System: A Case Study from Somali Region of Ethiopia**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. Author OO conceived the manuscript documentation, drafted and finalized the manuscript. All the authors read, reviewed and approved the final draft of the manuscript.*

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**Case Study**

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### **ABSTRACT**

Birth registration is the process by which the event and characteristics of a child's birth are recorded in a country's civil registry. Ethiopia has one of the lowest levels of civil registration in general globally, and of birth registration in particular with only 3 per cent of children under the age 5 registered with civil authorities. In Somali Region of Ethiopia, only 1% of children under 5 have their births registered. A major gap identified in the civil registration system in Ethiopia is the linkage between the health and the civil registration sectors with most children delivered at the health facilities or in the communities not appropriately registered. This case study used qualitative and quantitative methods to describe the process and outcome of a pilot project on improving birth registration using the health system (health facilities and the community health structures) in 2 project woredas (districts) in Somali region of Ethiopia where no birth had been registered more than five years prior the pilot. Within the one-year study period, all 577 births assisted by health extension workers were provided with birth notification slips and 795 (98%) newborns have their birth registered and received birth

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certificates out of 809 total births reported in the project sites. The study demonstrated the effectiveness of health workers and community structure (mentor mothers) through their community sensitization and mobilization and active reporting process in facilitating registration of births in the civil registration system.

**Keywords:** Birth notification; birth registration; health system; civil registration; linkages.

## 1. INTRODUCTION

Birth registration is the process by which the event and characteristics of a child's birth are recorded in a country's civil registry [1]. At an individual level, proof of registration, usually in the form of a birth certificate, is essential to accessing citizenship in terms of basic rights, protection and basic services including education, health care, land ownership, and formal employment [2,3]. Sustainable Development Goal (SDG) target 16.9 aims to provide legal identity for all, including birth registration, by 2030 [4].

Nevertheless, the births of nearly 230 million children under the age of five have never been registered especially in low- and middle-income countries (LMICs) which is attributed to a multiplicity of barriers [2]. These barriers include inadequate civil registration systems and laws; inaccessibility and remoteness of registration offices; direct and indirect costs; complex forms and procedures involving multiple visits; and lack of awareness of the importance and the benefits of birth registration [5]. One of the strategies adopted to improve birth registration is the use of the health system realizing that the reach of the health sector is substantial, as shown by the high coverage of interventions such as antenatal care, delivery care and childhood immunization, even in countries where birth registration rates are low [6,7].

Ethiopia has one of the lowest levels of civil registration in general globally, and of birth registration in particular with only 3 per cent of children under the age 5 registered with civil authorities [8]. In Somali Region of Ethiopia, only 1% of children under 5 have their births registered [8]. The government of Ethiopia has stepped up its effort to operationalize a conventional civil registration system by establishing legal framework and setting up coordinating agencies both at federal and regional levels and adoption of necessary registration instruments [9,10].

A major gap identified in the civil registration and vital statistics system in Ethiopia like many other countries is the linkage between the health and the civil registration sectors with most children delivered at the health facilities or in the communities not appropriately registered [9,11].

The case study described the process and outcome of a pilot project on the use of the health system to increase access to birth registration in Somali region of Ethiopia.

## 2. CASE REPORT

The pilot project was implemented in 18 rural kebeles( villages/subdistrict) in Kebribayah and Awbare woredas(districts) in Somali region of with estimated population of 116,470 where no birth had been registered more than five years prior to the pilot. The project period was between July 2021 and June 2022.

This case study used mix of both qualitative and quantitative methods. The qualitative data was collected from the project document review, in-depth interviews conducted for the kebele managers, Health Extension workers and Kebele administrators and Focus Group Discussion held with mothers and the mentor mothers. The quantitative data was based on retrospective review of the data extracted from the project health facilities and civil registration records.

It is divided into two themes: (1) Linking the health system with civil registration system, which has two subthemes- preparatory and Implementation phases (2) Programme achievement

### 2.1 Linking the Health System with Civil Registration System

**2.1.1 Preparatory phase:** This included the following activities:

- **Stakeholders' meetings and Orientation:** At the beginning of the project sensitization and orientation

meetings were held for all relevant stakeholders involved in birth registration at regional, woreda(district) and kebele(sub district) levels. This included Vital Events Registration Agency (VERA) and Health Bureau at Regional level, woreda health teams, Kebele managers and administrators and representative of the various community structures which included women's and men's groups, traditional and religious leaders from the project sites. The meetings focused on creating awareness on the benefits of birth registration/certificate and the process for birth registration and issuance of birth certificate

- **Training and Orientation of Health workers:** Training and orientation was done for all the health extension workers in 18 health posts in the project woredas on their roles and responsibilities in the birth registration process. This included providing birth notification slips for all babies delivered with the assistance of the health extension workers both at the health facilities and the communities and sensitization/awareness on the benefits and process for birth registration as part of the health education messages provided to pregnant women and caregivers who visited the health facilities for various services.
- **Provision of Birth Notification Slips:** All health facilities were provided with birth notification slips prepared in duplicate with key information items required for the birth registration process.
- **Training and Orientation of mentor mothers:** The project used community structure called the mentor mothers who were selected from each of the 18 project kebeles in consultation with the kebele administrators. The 100 mentor mothers were influential respected matured volunteer women leaders. Each of the mentor mother was assigned to between 20-30 households depending on the geographical spread of the community. They were provided orientation on the benefit and the process for birth registration for community awareness and mobilization activities.
- **Training of kebele managers:** The region does not have dedicated civil status officers in the kebeles, so the birth registration was included as part of the responsibilities of the kebele managers by

the government. The 18 kebele managers were trained on the process of birth registration, filling of the forms and were regularly provided with the birth registration booklets and birth certificates given free of charge to mothers throughout the project duration.

**2.1.2: Implementation Phase:** This included the following activities:

- **Health facility level:** The health extension workers (HEWs) provided awareness to pregnant mothers and care givers during clinic visits on the importance of birth registration /certificate and the process involved which is a three-step process: reporting/birth notification, registration, and certification. Every child delivered in the health facilities or in the communities with the assistance of the HEWs was provided with birth notification slip which the mothers/parents took to the kebele registration office for birth registration and certificates.
- **Community level:** The mentor mothers visited each household in their assigned areas on weekly basis and provided awareness to pregnant women, care givers and their husbands on the importance of birth registration/certificate and the process involved. They also provided health education and counselling to pregnant mothers and caregivers on health seeking behaviour and kept track of the number of pregnancies and deliveries.

They verified and ensured that all mothers delivered by the HEWs either at the health facilities or homes have birth notification slips given to them by the health workers and the slips taken by the mothers/parents to the kebele registration office for birth registration and certification.

In addition, for mothers who delivered at home without the assistance of the health workers and thus not provided with birth notification slips, the mentor mothers referred them, and most times accompanied them to the kebele registration office to have the children registered and obtained birth certificates. The monthly report of the mentor mothers included all deliveries in their assigned households and the status of birth

registration and certificate for each child and the reports were reviewed and verified by their supervisors.

- **Follow-up and monitoring visits:** The implementing NGO conducted monthly follow up and supportive supervision visits to the health facilities and mentor mothers. In the health facilities, duplicate copies of the birth notification were compared to the number of deliveries in the health facilities registers. The records of the mentor mothers which included the number of birth and newborn provided with birth certificate were verified during home visits and birth certificates issued were verified randomly in selected households to ensure all newborns in the communities were provided with birth certificates. The health facility and mentor mothers' monthly records of new births were used to verify the kebele registration offices' birth registration records to ensure all newborn were registered and provided with birth certificates.
- **Coordination meetings:** There was monthly coordination meeting for performance reviews at the kebele level in all the project sites which involved the health extension workers, the kebele managers, the mentor mothers and other kebele officers and community leaders. The members reviewed and discussed the challenges faced with the birth registration and agreed on ways to improve to ensure all mothers provided with notification slips or delivered in the community have their children registered and received birth certificates. However, this was not held regularly in some kebeles for various reasons.

**Challenges:** The project was only completed in 18 out of the initially planned 20 kebeles in the 2 woredas (districts) because there was no kebele manager in two of the sites during the project period to register and provide birth certificate. Also, birth registers and certificates were only provided at the regional Vital Event registration Agency (VERA) office because there was no VERA staff/offices either at the zonal or woreda level. This was addressed in the project by the implementing NGO who provided the needed logistic (transportation cost) for the kebele managers or in some instances collected the birth registers and certificates

directly and handed over to the kebele managers.

## 2.2 Programme Achievements

**2.2.1 Quantitative Analysis:** This was analysed from the data extracted from the health facilities and civil registration records.

Table 1 shows the record of birth notification and registration collected over a period of 9 months with 577 birth notification slips provided to all the newborn assisted by the health extension workers(HEWs) at home and health facilities in 18 kebeles across the 2 woredas. A total of 795 (98%) newborns have their birth registered and received birth certificates out of 809 total births reported in the project sites.

### 2.2.2 Qualitative analysis

This was extracted from the transcripts of narrative text on the outcome of the project from the in-depth interviews and Focused Group Discussions.

'The last time we registered birth or provided birth certificate in this kebele was over five years ago. However, in the last 9 months we have started again to register and provide birth certificates for newborns when they bring birth notification slips from the health extension workers or when those who deliver at home are referred by the mentor mothers'.

#### [Kebele manager 1]

'My role initially as health extension worker was only to provide birth notification slips to mothers after delivery and include it in my monthly report. However, since the project started, I now ask and follow up directly or using the mentor mothers to ensure mothers take the birth notification slips to the kebele manager's office so that they can be registered and given birth certificates'.

#### [Health Extension Worker]

'Since I was employed in this Kebele, I have never provided birth certificate because I was not given. However, with the implementation of the project, the NGO helped us to be trained and I was given birth registers and certificates that I now provide for all newborns who come to my office'.

#### [Kebele manager 2]

**Table 1. Analysis of Birth registration in the 2 project woredas (October 2021- June 2022)**

<b>Woreda</b>	<b>Kebele</b>	<b>Health Facility</b>	<b>Total birth assisted by HEWs at health facility or home</b>	<b>Total birth notification slips given by HEWs</b>	<b>Total Home birth without the assistance of HEWs</b>	<b>Total births registered, and certificate given</b>
Kebribayah	Garbi kebele	Garbi Health Post(HP)	26	26	13	37
	Farda	Farda HP	9	9	15	24
	Dhurwale	Dhurwale HP	40	40	12	49
	Gilo	Gilo HP	34	34	14	48
	Risle	Risle HP	28	28	11	39
	Warabojiro	Warabojiro HP	30	30	16	46
<b>Sub-Total</b>			<b>167</b>	<b>167</b>	<b>81</b>	<b>243</b>
Awbare	Sheikh Dawale	Sheikh Dawale HP	47	47	21	68
	Kalarog	Kalarog HP	46	46	16	57
	Libah-Ful	Libah-Ful HP	22	22	12	34
	Garwadile	Garwadile HP	27	27	9	36
	Guncade	Guncade HP	43	43	13	56
	Laftakadiga	Laftakadiga HP	33	33	11	44
	Udugwayne	Udugwayne HP	38	38	12	47
	Jamco	Jamco HP	34	34	11	45
	Hilingab	Hlingab HP	63	63	21	84
	Sadiqale	Sadiqale HP	22	22	8	30
	Qabri moalim	Qabri moalim HP	18	18	12	30
	Ruka	Ruka HP	16	16	6	21
<b>Sub-Total</b>			<b>409</b>	<b>409</b>	<b>152</b>	<b>552</b>
<b>Overall Total</b>			<b>576</b>	<b>576</b>	<b>233</b>	<b>795</b>

'In my Kebele, a lot of children are now receiving their birth certificates because of the awareness and mobilization by the mentor mothers and the health extension workers since the project started who also provide them with birth notification slips that they take to the kebele manager for registration'.

**[Kebele administrator]**

'I didn't want to collect the birth certificate because I thought my child will not need it since I didn't collect for my other children, but the mentor mother and health worker told me it is important to collect for him. Now I have collected birth certificate for my baby.'

**[Participant during Focus Group Discussion]**

'This is the first-time birth certificate will be given to our children in this kebele and I am happy my baby has also received'

**[Participant during Focus Group Discussion]**

### 3. DISCUSSION

The case study demonstrated the effectiveness of using the health sector to increase access to birth registration. The number of children who were registered and received birth certificates over a short period of time of the pilot in the kebeles where no birth was registered more than five years prior to the pilot shows the linkage between the health system and civil registration system is an effective strategy to be scaled up to ensure more births are registered in the study area.

The study was consistent with findings from other studies on the use of health sector to improve birth registration in Ghana, Gambia, Bangladesh, Uganda, Ethiopia which reported between 50 percent and 89 percent increase in the number of births registered [12,13]. However, unlike most of these studies where the birth registration was for children under five, this case study focused only on birth registration for newborns. This is to ensure all newborns in the project sites are registered and provided birth certificate timely in line with the national guideline which stipulate that all children are to be registered within 90 days of birth [9,10].

Studies on the use of the health sector to increase birth registration used different strategies [7,11,12]. In this study both health

facility and community health structures were used similar to previous study in Ethiopia [9]. Studies in Uganda and Liberia used the health facility alone [7], while a study in South Sudan used the community health structures alone [14]. A study in Ghana incorporated birth registration into community health care and health campaigns [13] while the studies in Bangladesh and India used immunization outreaches to register children [12].

In this study, birth notification slips were provided to only newborns delivered in the health facilities and in the communities by the health extension workers unlike the previous study in Ethiopia where health extension workers in addition to newborns provided birth notification forms to children who presented during their first contact for immunization services within 90 days of birth after confirming that such children have not received birth certificates [9]. In view of the pastoral nature of the study population, all newborns were tracked to ensure they received birth certificates as soon as possible after birth instead of waiting till they presented for immunization services during which some could have left the community.

In this study, the birth notification slips were given to the mothers to take to the kebele registration office for their newborns to be registered unlike the previous study in Ethiopia where birth notification forms were given directly to the civil status officers to register the birth of the children [9]. The previous study in Ethiopia had full time civil status officers employed by the government who in addition to registering birth when the mothers go to their offices (passive registration), they also made weekly visits to the health facilities and community to trace the occurrence of birth and complete the registration process [9]. This is unlike this case study where there were no full-term civil status officers and civil registration work was added to the functions of the kebele managers who only registered birth when visited at their offices.

In the studies in Liberia, Gambia and Pakistan, the function of birth registration was delegated to health workers within the health facilities [7,12]. However, in Ethiopia, only the civil registration officers or kebele managers (in areas where there are no civil registration officers) are permitted by law to register and provide birth certificate [9,15].

In this study, all the newborn delivered by the health extension workers either in the health facilities or communities received birth notification forms, unlike a study in Tanzania which reported that only 33.0% of new births received any documentation confirming their birth [16]. This could have been attributed to the orientation and supervision provided for the health workers on their roles and responsibilities on birth notification which leveraged on the requirement of the health facilities to report birth notification as part of the health services indicators being reported monthly through the District Health Information System(DHIS). This is unlike findings in studies in Tanzania and Indonesia where health workers involved in the birth notification/registration process were reluctant to support the process because of concerns about their high clinical workloads and how birth notification and registration was adding to their general administrative burden [16,17].

Almost all mothers who received birth notification slips registered their children and collected their birth certificates in the study. This is unlike study in Tanzania which reported that among 96% mothers who received birth notification forms nearly half of them misunderstood it to be birth certificate [15]. This could be attributed to the community awareness and sensitization provided in this study which prevented confusion about the process of birth registration and differences between birth notification slips and birth certificate unlike the findings in studies in Tanzania and South Africa [16,18].

The engagement of the mentor mothers contributed to improve birth registration in the study through their community mobilization and sensitization and tracking of all new births that facilitated their registration and birth certificates. This is similar to finding in studies in Ethiopia and South Sudan which reported that the inclusion of birth registration into the routine activities of the various community structures helped in increasing the number of births registered through their community mobilization and sensitization, passive, and active screening of children for birth registration during their household visits and linkage to the vital registration officers [9,13]. However, the community volunteers in these studies in Ethiopia and South Sudan [9,13] were existing community health structures unlike the mentor mothers in this study who were volunteers established for the project in partnership with

the community leadership because there were no functional existing community structures in the project sites.

#### **4. CONCLUSION**

The study demonstrated the effectiveness of using the health sector to increase access to birth registration with a number of newborns successfully registered and provided with birth certificates. The health workers and mentor mothers through their community sensitization and mobilization and active reporting process facilitated registration of births in the civil registration system.

#### **5. RECOMMENDATION**

The issuance of birth registers and certificates by Vital Event Registration Agency regional office to be decentralized to the zone or woreda so it will be easier for kebele managers to access instead of traveling to the regional level with associated logistic challenges and cost which may delay the birth registration process.

#### **6. LIMITATIONS OF THE STUDY**

The study was based on a pilot project implemented in only two woredas (districts) in the region. Whilst this was limited in its geographical coverage it provided opportunity for better understanding of the process to effectively use the health system to improve birth registration and the guidance in scaling up into all the woredas in the region. Despite the short duration of the project which is the first project to pilot the linkage between the health sector and the civil registration sector in the region, it was successful in ensuring a number of newborns were registered. It also facilitated bringing health and civil registration sectors especially at the kebele (subdistrict) level closer together for synergy and cooperation. It built the capacity of the health workers, kebele managers and mentor mothers, community leaders for sustainable birth registration process to ensure community ownership with potential for communities to sustain awareness raising activities and active birth registration after the end of the project.

#### **CONSENT**

Verbal consent was provided by all the individual involved in the in-depth interview and Focus Group Discussion.

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## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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