Birth registration and access to health care: an assessment of Ghana’s campaign success
Sonja Fagernäs a & Joyce Odame b

Problem
Birth registration remains far from complete in many developing countries. This was true of Ghana before a major registration campaign was undertaken.

Approach
This study, based on survey data, assesses the results of a registration campaign initiated in 2004–2005 in Ghana. Key strategies included: extending the legal period for free registration of infants; incorporating registration in child health promotion weeks; training community health workers to register births; using community registration volunteers; registering children during celebrations, and piloting community population registers. This paper discusses the contribution of these strategies to the increase in registration rates and shows the degree of association between birth registration and various health-care access indicators and family characteristics.

Local setting
The Ghana Births and Deaths Registry worked together with international organizations, mainly Plan International and the United Nations Children’s Fund, to implement the birth registration campaign.

Relevant changes
Unlike many other sub-Saharan African countries, Ghana saw a substantial rise in registration rates over the campaign period. Campaign strategies improved accessibility and shortened distance to registration centres. Survey data show that the registration rate for children younger than 5 years rose from 44% in 2003 to 71% in 2008.

Lessons learnt
Incorporation of birth registration into community health care, health campaigns and mobile registration activities can reduce the indirect costs of birth registration, especially in poorer communities, and yield substantial increases in registration rates. The link between the health sector and registration activities should be strengthened further and the use of community population registers expanded.

Background
In many developing countries today, the births of a substantial share of children go unregistered. According to survey-based estimates, between 2005 and 2008, the share of children younger than 5 years whose births were registered was 78%, 41%, 60% and 88% in Ethiopia, India, Kenya and Viet Nam, respectively. Registration of vital events is essential for accurately calculating birth and death rates and for assessing the level of infant mortality. It has other advantages. For example, when linked with medical records, birth registration systems can alert health-care providers to the presence of children needing vaccination. Accurate information on births and deaths has been stressed as important for tracking progress towards the health-related Millennium Development Goals. The importance of birth registration has also been emphasized from a child rights perspective.

For slightly over a decade, children’s organizations, in particular the United Nations Children’s Fund (UNICEF) and Plan International, have been involved in campaigns promoting the registration of births in developing countries. In the context of sub-Saharan Africa, national action plans for registration were developed in 24 countries in central and western Africa in 2004. This article reports on the experience of Ghana in raising birth registration rates from 2004 to 2008. Survey data, namely from the Demographic and Health Surveys (DHS), and the Multiple Indicator Cluster Surveys (MICS), are combined with observations from the field.

According to DHS data, registration rates for children younger than 5 years in Ghana increased from 44 to 71% between 2003 and 2008. In 30 other sub-Saharan African countries with survey data for a similar period, progress in the registration of children younger than 5 years was slow. In these countries, the average registration rate was 53% in 1999–2003 and 49% in 2004–2010, with only a few countries making notable progress. Therefore, Ghana stands out as a success story. This article discusses the different approaches taken to increase registration rates and focuses on the role played by the health system.

Birth registration and campaign strategies
In Ghana, Birth registration is compulsory under the Registration of Births and Deaths Act (1965). Ghana has 10 administrative regions and each of the country’s 170 registration districts has at least one registry office. However, the absence of registration offices in rural areas and a shortage of registration staff have hampered registration. The registration of births that occur in health facilities begins with the issuance of a medical certificate or a health card. Formally, parents are required to present the health card when they visit a registry to register a birth. Birth registration offices are often located within the premises or in the proximity of public health facilities, although not all health facilities have a registration office. There has also been an expectation that births take place in health facilities, but according to DHS data, only approximately half do.

Registering a child generally involves both direct costs (fees) and indirect costs (time off from work, travel expenses). The indirect costs in particular affect poorer areas disproportionately. According to the 2006 MICS, the most common

a University of Sussex, Department of Economics, Jubilee Building, Brighton BN1 9QL, England.
b International Needs Ghana, Accra, Ghana.

Correspondence to Sonja Fagernäs (e-mail: s.a.fagernas@sussex.ac.uk)

(Submitted: 14 August 2012 – Revised version received: 28 February 2013 – Accepted: 7 March 2013 – Published online: 25 April 2013)
reasons for not registering a child were the high cost of registration (31.9%), distance to registration locations (21%) and a lack of awareness that children should be registered (20%). Birth registration campaign activity in Ghana has focused on such factors.

To incentivize people to register a child, beginning in mid-2003 the legal period for free registration of infants was extended from 21 days to 1 year.12,13 Late registration carries a fee (equivalent to about 1.1 United States dollars).14

In 2004–2005 other campaign activities began, including intensive public education. The first annual Birth Registration Day was held in September 2004 and 10 000 children were registered across the country. Since 2004, the Births and Deaths Registry has participated in annual child health promotion weeks, organized by the Ghana Health Service in May and November of each year. Community health workers were trained to register births.15,16 These workers offer services in community health clinics and also on a mobile basis.17 Mobile community registration volunteers were introduced to register births, especially in remote areas.15,16,17 Community population registers, which in the long term are considered key to raising registration coverage and reducing the hidden costs of registration, were piloted in 21 remote communities in four regions.12

Table 1 shows the trend in the rate of birth registration among children younger than 5 years in Ghana based on data from the DHS for 2003 and 2008 and from the MICS for 2006. These surveys show different registration rates for children born in the same year perhaps because of age differences and overlaps. Differences in the precise questions posed may also explain some of the differences. Nevertheless, it is clear that birth registration rates increased significantly for children born in, or after 2003–2004, in tandem with the intensification of the campaign activities. The figures also suggest that campaign activities became more effective from 2006 to 2008 and that delayed registration took place over that period.

Role of the health system

One campaign strategy has been to tie registration more closely to the provision of health care. For instance, midwives and health workers were instructed to register children during child health campaigns.17 According to UNICEF,18 “immunization efforts provide an opportunity for health-care workers to be alerted to the absence of a health card or birth certificate, leading vaccination to be viewed as a potential point of entry to registration for a child”. Another study suggests19 that in Ghana “the collaboration between the civil registration office and Ghana Health Service, where volunteers and registration officers accompanied community health nurses to the maternal and child welfare clinics in the communities to register infants, has the most direct impact on birth registration coverage”. The fact that registration offices are often located within health facilities or close to them implies a direct connection between health care and registration.

As discussed by Addo,13 a functioning interface from registration offices to health-care providers was still a task for the future in Ghana in 2009. Therefore, the registration system may not have been used yet for the planning of health services between 2004 and 2008. Fig. 1 plots the association between different indicators of access to health-care and birth registration, as well as between registration and household wealth quintile and urban residence. Through a logistic regression model we tried to isolate the effect of specific factors by controlling for each health-care access indicator and a range of family characteristics. We conducted separate estimates using DHS data for all children who were younger than 5 years in 2003 (those born in the pre-campaign period) and in 2008 (those born during the campaign). The health access variables we employed depict access to health care at birth, access to institutionalized health care, access to immunizations and participation in vaccination campaigns.

The analysis indicates that between 2003 and 2008, access to health care at birth (i.e. birth in a health facility) became less important as a determinant for registration. In 2003, the likelihood of having been registered was 12 percentage points lower for a child born at home than for one born in a health facility; in 2008, this likelihood was only 5 percentage points lower. In 2003, children who received polio vaccine at birth

Table 1. Fraction of children younger than 5 years whose births were registered, by year of birth, Ghana, 2003, 2006 and 2008

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>DHS 2003* (n = 3442)</th>
<th>MICS 2006† (n = 3431)</th>
<th>DHS 2008‡ (n = 2555)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Born in</td>
<td>Births registered (%)</td>
<td>Born in</td>
</tr>
<tr>
<td>0</td>
<td>2002/03</td>
<td>37</td>
<td>2005/06</td>
</tr>
<tr>
<td>1</td>
<td>2001/02</td>
<td>47</td>
<td>2004/05</td>
</tr>
<tr>
<td>2</td>
<td>2000/01</td>
<td>48</td>
<td>2003/04</td>
</tr>
<tr>
<td>3</td>
<td>1999/00</td>
<td>51</td>
<td>2002/03</td>
</tr>
<tr>
<td>4</td>
<td>1998/99</td>
<td>50</td>
<td>2001/02</td>
</tr>
</tbody>
</table>

DHS, Demographic and Health Survey; MICS, Multiple Indicator Cluster Survey.
* Conducted between July and October.
† Conducted in July.
‡ Conducted between September and November.
§ Sample weighted by weights for mothers.

Note: Information on whether the birth of a child has been registered is only available for children younger than 5 years. In 2003 (DHS) and 2006 (MICS), individuals were asked whether the birth of the child was registered with the government or a local authority. In 2006, for children whose births were reported to have been registered, this was followed up with a question on whether the child had a birth certificate (options: “yes, seen” and “yes, not seen”). In 2008 (DHS), individuals were asked whether the birth was registered and the person had a certificate (55% of children aged less than 5 years), or whether the birth was registered but the person did not hold a certificate (16% of children aged less than 5 years), or whether the person had neither a certificate nor birth registration (24% of children aged less than 5 years). The figures in the table capture a binary variable for whether the birth was registered or not, regardless of the presence of a certificate. This is consistent with how the United Nations Children’s Fund reports statistics on birth registration.
were 6 percentage points more likely to have been registered than those who did not, a difference that was statistically significant; in 2008, the difference was no longer significant. Regarding institutionalized care, in 2003 children whose mothers had visited a health facility within the last year were 7 percentage points more likely to have been registered. On the other hand, having been vaccinated showed an association with registration in both years, and this association was even stronger in 2008. A significant positive association between registration and the receipt of all doses of the diphtheria, tetanus and pertussis (DTP) vaccine and vitamin A was present both in 2003 and 2008. The connection with vitamin A became stronger in 2008 and even stronger in 2008. A significant positive association between birth registration and access to health care at birth or subsequent access to health centres. However, vaccinated children were more likely to have been registered both before and during the campaign period. Vaccination in turn could take place not only during health centre visits, but also through community health workers and through mobile services and outreach health activities.

The key policy lessons are summarized in Box 1. The findings of this study show that the incorporation of birth registration into community health care and child health campaigns, together with mobile registration activities in remote areas, succeeded in raising registration rates. However, full registration coverage has not been reached and progress has slowed down, with an estimated 65% of births registered in 2011, a rate similar to the 2008 rate for children younger than one year. Hence, efforts should be made to target the poorest households, which are less likely than more prosperous households to have access to vaccination and health centres. It may not be possible to rely on mobile strategies and outreach activities as permanent, long-term solutions. In more remote areas, the promotion of community population registers is seen as a key strategy. Additionally, health facilities could be even more strongly connected to birth registration by including regis-

Discussion

This study shows that the birth registration campaign initiated in Ghana in 2004 substantially increased registration rates among children younger than 5 years. It reduced inequalities in registration as a function of socioeconomic status and place of residence (urban versus rural) and weakened the association between birth registration and access to health care at birth or subsequent access to health centres. However, vaccinated children were more likely to have been registered both before and during the campaign period. Vaccination in turn could take place not only during health centre visits, but also through community health workers and through mobile services and outreach health activities.

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Abstract

Birth registration and access to health care: a study of the success of a campaign in Ghana

Problems

In many developing countries, birth registration is far from being systematic. This was also the case in Ghana before a major registration campaign was launched.

Approach

This study, based on data from an enquiry, evaluated the impact of the following strategies on increasing the rate of registration:

- extending the period during which newborn registration is free;
- integrating registration into health promotion campaigns;
- training community health workers to carry out registration;
- using community registration volunteers;
- registering children during celebratory activities;
- conducting trials of community registration.

The study discusses the contribution of these strategies in increasing the registration rate and relates it to various health and family characteristics.

Local context

Ghana Birth and Death Registration offices work in collaboration with local and international organizations (mainly UNICEF and UNDP) to implement birth registration campaigns.

Relevant changes

Unlike most other countries in sub-Saharan Africa, Ghana saw a significant increase in the registration rate during the campaign period. The campaign strategies improved access and reduced the distance to registration centers. Survey data showed that the registration rate for children aged 5 years increased from 44% in 2003 to 71% in 2008.

Lessons learnt

Registering births within community health care, health campaigns, and mobile registration activities has increased birth registration in Ghana by reducing the indirect costs of birth registration, especially in poorer communities.

The links between the health sector and birth registration should be strengthened further, ideally by locating registration facilities within all health facilities.

In more remote areas, local community population registers should be actively encouraged to expand registration coverage.

Acknowledgements

The authors thank Emelia Allen from UNICEF Ghana and Simon Heap (formerly at Plan International) for helpful background information and discussion.

Competing interests: None declared.
Registro de los nacimientos y acceso a la atención sanitaria: una evaluación del éxito de la campaña en Ghana

Situación El registro de los nacimientos sigue siendo una carencia en muchos países en vías de desarrollo. Dicha afirmación es cierta en Ghana antes de acometer una importante campaña de registro.

Enfoque Este estudio, basado en datos de una encuesta, evalúa los resultados de una campaña de inscripciones iniciada en Ghana en 2004–2005. Las estrategias clave comprendieron: ampliar el período de registro; hacer uso de técnicas itinerantes de registro; y registrar a los niños durante celebraciones y eventos y el pilotaje de registros de estado civil.

Marco regional El Registro de Nacimientos y Defunciones de Ghana trabajó junto con organizaciones internacionales, especialmente Plan International y UNICEF, para desplegar la campaña de registro de nacimientos.

Cambios importantes A diferencia de muchos otros países sub-Saharanos, Ghana experimentó un alza sustancial en las tasas de registro durante el periodo de la campaña. Las estrategias de la campaña mejoraron la accesibilidad y acortaron la distancia hasta los centros de registro. Los datos de la encuesta muestran que la tasa de registro de niños menores de 5 años aumentó del 44% en 2003 al 71% en 2008.

Lecciones aprendidas La incorporación del registro de nacimientos en la atención sanitaria local, en campañas sanitarias y en actividades de registro, es relevante ya que el registro estatístico mejora la relación con la comunidad. No se ha de generalizar el uso de los registros de población locales.
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References


