



Home births in the context of free health care: The case of Kaya health district in Burkina Faso



Seni Kouanda^{a,b,c,*}, Aristide Bado^{a,b}, Ivlabèhiré Bertrand Meda^{a,b,c}, Gisèle S. Yameogo^{a,b},
Abou Coulibaly^{a,b}, Slim Haddad^d

^a Kaya Health and Demographic Surveillance System, Kaya, Burkina Faso

^b Research Institute of Health Sciences, Ouagadougou, Burkina Faso

^c African Institute of Public Health, Ouagadougou, Burkina Faso

^d Centre de Recherche du Centre Hospitalier Universitaire du Québec, Canada

ARTICLE INFO

Keywords:

Burkina Faso
Free health care
Home

ABSTRACT

Objective: To identify the factors associated with home births in the Kaya health district in Burkina Faso, where child delivery was free of charge between 2007 and 2011. **Methods:** Both qualitative and quantitative data were collected from the Kaya Health and Demographic Surveillance System (Kaya HDSS) among women who delivered at home or in a health facility between January 2008 and December 2010. Multilevel logistic regression was applied to quantitative data, while the qualitative data were analyzed thematically based on emerging themes, subthemes, and patterns across group and individual cases. **Results:** The findings indicate that 12% (n = 311) of childbirths occurred at home (n = 2560). Key factors associated with home birth were age, distance from the household to the primary health center, and prenatal visits. The qualitative analysis showed that immediate child delivery, previous experience of giving birth at home, negative experiences with health centers, fear of cesarean delivery, and lack of transport are key predictors of home births. **Conclusion:** Though relevant, addressing the financial barrier to health care is not enough. Additional measures are necessary to further reduce the rate of home births.

© 2016 Published by Elsevier Ireland Ltd. on behalf of International Federation of Gynecology and Obstetrics.

1. Introduction

Maternal mortality is still high in low-resource countries, including those in Sub-Saharan Africa [1]. Estimates provide that, worldwide, some 287 000 mothers died in 2010, most of whom (approximately 99%) were from low-resource countries and Sub-Saharan Africa in particular (56%). The global maternal mortality rate was reported to be 210 per 100 000 live births, with a rate far higher in Sub-Saharan Africa at 480 deaths per 100 000 live births [2].

The WHO reported that in 2010, less than 50% of childbirths in Sub-Saharan Africa were assisted by a skilled birth attendant. It is a fact that quality assistance during childbirth is an effective strategy against maternal and neonatal mortality [3]. In countries applying policies that require the payment of fees directly where the health care is delivered, a lack of financial resources is the major barrier to accessing maternal health services [4,5]. To achieve the Millennium Development Goals (MDGs), in particular goal 5, several countries have developed and adopted subsidized or free care policies to promote and facilitate

access of mothers and children to health care [6]. Since 2006, Burkina Faso has been implementing a national subsidy policy for childbirth. In line with the health ministry provisions, this policy aims to reduce child delivery costs by 80% [7,8].

Several studies have indicated that the number of births in health centers has increased as a result of this national policy. However, many women continue to give birth at home without skilled birth attendance. In Ghana, 36.4% and 49.4% of childbirths in the Central region and Volta, respectively, still occur at home despite the exemption policy in place [9]. The subsidy approach has increased the use of health services by women from 32.9% in 2003 to 73.4% in 2009 in Burkina Faso [7]. Few studies have focused on the factors accounting for these home births in a context where the financial barriers have been addressed. Prior to the subsidy approach, a study on home births was conducted in two rural health districts of Burkina Faso [10]. Two other studies have examined the determinants of home delivery in the context of reducing the costs of care for women delivering in Burkina Faso [10–12]. To the best of our knowledge, no studies have been carried out on determinants of home birth in the context of free health care in West Africa.

The aim of the present study was to identify the key factors associated with home births in the context of free care in a health district of Burkina Faso.

* Corresponding author at: Research Institute of Health Sciences, 03 BP 7192 Ouagadougou, Burkina Faso.

E-mail address: sekouanda@yahoo.fr (S. Kouanda).

2. Materials and methods

2.1. Context

This research was conducted at the Kaya Health and Demographic Surveillance System (Kaya HDSS) in Burkina Faso. The Kaya HDSS is a surveillance system of the population and has been effective since 2007. It is located in the health district of Kaya (Central North region) and covers seven areas of Kaya city—17 communities within a range of 20 km. In late 2011, 60 587 people were under this surveillance system in Kaya, including 8825 households with 6.5 ± 4.3 people each [13]. The Kaya HDSS covers seven primary health centers, a faith-based medical center, and a regional hospital, which is the second referral level of care in the country health system.

2.2. The initiative

Aware of its limited resources and the high child mortality rate of 484 deaths for every 100 000 live births, Burkina Faso implemented a policy in 2006 that focused on subsidizing the emergency neonatal and obstetric care services [7]. This policy aims to reduce by 80% the costs related to childbirth and cesarean delivery. Through this subsidy, women pay US \$1.875 for a vaginal delivery and US \$22.91 for a cesarean delivery [7,8].

In June 2007, three months after the national subsidy was introduced, the Kaya Health district launched a local free-of-charge policy that aimed to remove the 20% that pregnant women had to pay. This local free-of-charge policy was suspended in 2011, and now women pay the 20% that is not supported by the national subsidy arrangement. The 20% represents 900 XOF (West African CFA franc) or US \$1.8 [14].

2.3. Type of study

The study used a mix of both quantitative and qualitative approaches. The quantitative study was cross-sectional, and data were drawn from the Kaya HDSS panel's surveys on births. The qualitative research was carried out with women who delivered at home and at health facilities, and with health workers and men.

2.4. Data collection

Household surveys took place during different visits conducted within six months (January 2008 to December 2010). We used a questionnaire for every woman who had delivered in the past six months. Data were directly collected using handheld PCs and CSProX 3.3 software (US Census Bureau) and were then transferred to Stata version 14 (StataCorp LP, College Station, TX, USA) for analysis. Quantitative data were completed with references to households, health centers, villages, and natural landmarks located between the health centers and villages. These data were quantified using tools fitted with GPS.

For the qualitative data, we organized individual semi-structured interviews and focus group discussions with women who delivered at home and in health centers as well as the men whose partners had already given birth. The interviews also involved staff at the health district as well as the members of the committee of health facility management (CoGes). The interviews covered a total of 16 individual respondents.

For all four primary healthcare centers, we held a total of 12 focus groups of 8–12 people each. These groups were divided as follows: 4 for first-time mothers; 4 for multiple-time mothers; 4 for men; and 12 individual discussions. The qualitative data were recorded with a dictaphone and was then later transcribed into French.

The qualitative data collection process took place from February 9–26, 2011.

Information about the study was given and a consent form was signed by each participant prior to starting the interview.

The study received approval from the National Ethics Committee.

2.5. Data analysis

For the quantitative data, descriptive statistics were used to describe the characteristics of the sample. Then, we used a multilevel logistic regression with Stata 14 to identify the factors accounting for home births. We specified three levels, namely, delivery (level 1), households (level 2), and village or ward (level 3). The first model, an empty model with a random intercept, lacked explanatory variables and aimed to estimate the inter-class correlation (ICC) coefficients of each level based on the study sample. Then, using a full model with a random intercept that included all the explanatory variables, we identified a parsimonious model based on the likelihood ratio (LR) test. While nonsignificant, the variable “place of residence” was retained in the final model, as its effect in the model narrowed the range of confidence intervals of the estimates of other variables. The ICCs were calculated, and the statistical significance level was set at 0.05.

The adaptive quadrature process with a default number of points (8) was used in this analysis. In the final model, we increased the number of points to 12 and to 15 without observing any difference between 12 and 15 points.

GPS data were integrated into a Geographic Information System and then analyzed using ArcGIS 9.2 (Esri, Redlands, CA, USA), Xphil V1.7, Philcarto (Philippe Waniez), and Adobe Illustrator 10 (Adobe, San Francisco, USA). We used ArcGIS 9.3 to assess the short distance between pregnant women's houses and the primary healthcare centers where they could be transferred. The distances were divided into three categories: under 5 km, 5–9 km, and 10 km and above.

The qualitative data were analyzed using an analytical method designed according to the study objectives. The analysis included a full transcription of all recorded interviews and the classification of the various responses into themes and subthemes. Then, the verbatim transcripts were analyzed to identify common themes and subthemes. Manual review of the broad themes and subthemes as well as the patterns emerging from the data was carried out to make sure that the observed linkages are relevant and accurate. The data were analyzed thematically, identifying key areas that emerged within and across individual cases. To assure anonymity, unique codes were assigned to individual interviewees.

3. Results

In total, 2495 women from 25 villages in the Kaya HDSS gave birth to 2560 children between January 2008 and December 2010. Of the 2560 births, 311 (12%) occurred at home without a skilled birth attendant.

3.1. Sociodemographic characteristics of participants

Table 1 provides the sociodemographic characteristics of the study sample. Most women (75.4%) were between 20 and 34 years old, were married (86.5%), and had not attended school (82.1%). The majority (82.1%) were housewives, Muslim (83.6%), and Mossi (85.7%).

Additionally, 95.5% had been visited at least once as part of their prenatal consultation. Most households (83.8%) were less than 5 km away from the health center.

3.2. Sociodemographic factors associated with home births

The univariate analysis shows that home births were associated with the age of the mother and prenatal visits (Table 2). Distance to the health center was also associated with the occurrence of home births (Table 2).

Compared with the results of the univariate analysis, the odds ratios (OR) of the multilevel regression analysis did not differ substantially.

Download English Version:

<https://daneshyari.com/en/article/5695642>

Download Persian Version:

<https://daneshyari.com/article/5695642>

[Daneshyari.com](https://daneshyari.com)