



## Choice of Delivery Care in Kenya

### Introduction

Appropriate delivery care is important for both maternal and newborn health. Although most women do not experience major problems during childbirth, complications that do occur can be sudden and unpredictable, requiring immediate attention. Maternal and perinatal outcomes in such instances are greatly improved when such complications occur in the presence of a trained attendant and in a facility well equipped to handle such emergencies.

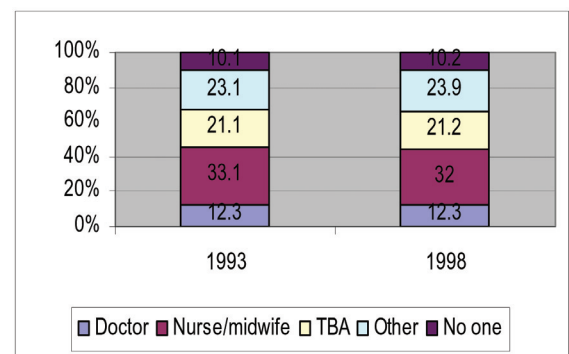
Despite the fact that almost all (more than 90 percent) of Kenyan women receive some form of antenatal care, less than half of deliveries take place within a health facility. The institutional delivery rate in Kenya compares favourably with other regional countries, but maternal mortality remains high at 590/ 100,000..

Understanding the determinants of delivery care requires an assessment of the individual, family and community level influences on care seeking.

### Research Aims and Methods

This study applies multilevel regression analysis to Kenya Demographic and health survey (KDHS) data to identify determinants of place of delivery and delivery attendant. Initial bivariate analyses identified variables likely to be of interest from which multilevel logistic regression models were constructed to identify correlates of the circumstances of delivery. The regression analysis is based on 5290 births which occurred during the five years preceding the 1993 KDHS

### Delivery attendant according to 1993 and 1998 KDHS



Delivery care in Kenya has remained virtually unchanged in the 1990s, with less than 50 percent of deliveries taking place in a health facility or attended by a medical personnel

### Findings

#### Individual associations with place of delivery

Socioeconomic and cultural characteristics of the woman and her household were significant in predicting delivery care. Increasing maternal educational status was associated with a consistent and significant decrease in the chance of home delivery: compared to those with secondary education and above, the chance of home delivery were around six times greater for those with no education. A similar effect was seen in relation to household assets.

Regional variations were seen, as were variable patterns between different ethnic groups. Among the major ethnic groups, Kikuyu women were the least likely while the Kamba were the most likely to deliver at home.

The chance of a home delivery was four times greater for births of order 8 and above compared to first order births. Mistimed pregnancies were more likely to deliver at home compared to desired pregnancies (see Fact Sheet 24 for further discussion of unintended childbearing). Women who used modern family planning methods had about 60% lower chance of home birth compared to those who had never used a method.

Antenatal care utilisation was strongly associated with delivery care: the chance of a home delivery was 9.2 times for those who received no antenatal care compared to those who had at least seven or more antenatal consultations.

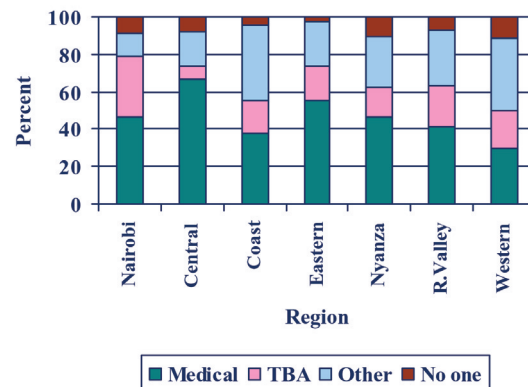
Distance was an important factor influencing delivery care: residence more than two hours from a facility was associated with double the chance of home birth compared to residence within one hour of a facility.

Similar variations were seen in relationships between individual factors and the probability of delivering with the assistance of a trained person, a traditional attendant, a relative or alone. The analysis showed that traditional birth attendants did not compete for delivery care with medical provision.

### Community level influences

There was a limited but significant statistical influence of community level factors once individual factors were controlled for:

### Regional differences in delivery attendant



### Conclusions

There are significant socio-economic and cultural differences in choice of delivery care. Regional variation in the likelihood of attendance by health professionals reflects both cultural factors and availability of services (as in Central region).

Policy implications are that access to available maternity services needs to be enhanced for the poor and less educated sections of the community; transport costs would impact disproportionately on access to facilities by poor people.

Full report: Magadi M., I Diamond and R Rodrigues (in press). "The Determinants of Delivery Care in Kenya" *Social Biology* 47 (3-4):164-188

For details about this report contact: Rosemary Lawrence, Opportunities and Choices Programme, Social Statistics, University of Southampton, Southampton, SO17 1BJ, UK.

Tel: +44 (0)23 8059 5763, Fax: +44 (0)23 8059 3846, E-mail: rl@socsci.soton.ac.uk