

Promoting Antenatal Care to reduce Unfavourable Birth Outcomes in Kenya

Introduction

Kenya is characterized by huge internal differences, and many women endure a lifetime of poor health as a direct consequence of societal, cultural, political, and economic factors. The risks that women throughout the world face during pregnancy and childbirth are seriously exacerbated by these factors in Kenya, making Kenyan women particularly vulnerable to adverse outcomes, both for themselves as well as their infants. Poor accessibility of services has been identified as an impediment to good maternal health, leading to poor birth outcomes for both the mother and the baby.

According to the 1993 Kenya Demographic and Health Survey (DHS), about one quarter of all births were either premature, small-for-age, or delivered by Caesarean section. No change in the level of these unfavourable birth outcomes was reported in the 1998 DHS.

The use of maternal health services is low. More than 30% of births are delivered without the mother having attended antenatal care. A high proportion of those who attend antenatal care do so rather late; 40% attend antenatal care for the first time in the 6th month of pregnancy. Nearly 60% of births are delivered in the home.

Research Aims

This study had two aims:

- to identify characteristics of women with unfavourable birth outcomes;
- to find out how these characteristics work to influence birth outcomes.

Data and Methods

The data used in the study were from the 1993 Kenya Demographic and Health Survey. Information relating to more than 6,000 births that occurred during the 5 years preceding the survey is analysed using statistical methods. The characteristics of the mother such as her educational level, the socioeconomic status, and her use of maternal health services were examined.



Findings

Characteristics of women having unfavourable birth outcomes

Premature birth

- A higher proportion of women who had fewer than 3 antenatal visits had premature births.
- Similarly, registering for antenatal care late was associated with higher levels of premature births.

Small baby sizes

- Undernourished women were more likely to produce babies that were small-for-age.
- Male babies, first births, multiple births were more likely than others to be small at birth.

Caesarean Sections

- Caesarean sections (C-sections) were more common among women of shorter stature (height < 150 cm), those aged 30-34 years and women of high socioeconomic status. C-sections are an indication of adverse conditions leading to complications at birth. However, the availability of C-sections is also viewed positively since the lack of access could lead to maternal and child mortality.
- Women who had unfavourable birth outcomes had higher chances of having another unfavourable birth outcome.

Pathways to unfavourable birth outcomes

How do the characteristics identified above operate to influence birth outcomes? For example, how does the socioeconomic status of a woman influence her birth outcomes?

- Demographic factors such as birth order and sex of a child have a direct link with unfavourable outcomes such as smallness and premature births. This link is thought to be biological; male children have higher mortality at birth, and higher-order births often experience complications at birth.
- There are ethnic variations in the proportions of premature births and C-section deliveries. This may be related to stature and the nutritional status of the mother.
- Other demographic factors such as marital status and the desirability of a pregnancy influence birth outcomes through the use of antenatal care. The study found that unmarried women use antenatal care less often than married women. Also, women tended to delay going for antenatal care if the pregnancy was unplanned.

- Socioeconomic factors operate through the use of antenatal care to influence birth outcomes. Generally, women with higher education and from affluent families use antenatal services more often and on time than other women. This has a positive effect on their birth outcomes.

Policy Implications

- Antenatal care constitutes the central pathway through which the socioeconomic status and the reproductive behaviour of women operate to influence birth outcomes.
- All women must be encouraged to attend antenatal services when pregnant.

Antenatal care is important for monitoring the health of a woman and her unborn child. It is also useful for delivering care such as tetanus toxoid injections and health education.

- Unmarried women, those of low socioeconomic backgrounds, those with many children, should be targeted to use antenatal care when pregnant since these women appear most at risk of having an unfavourable birth outcome.
- Maternal nutritional status is associated with low birth weight or small-for-age babies. Improving the nutritional status of women will improve not only their health but that of their babies also.
- Identifying women with an unfavourable outcome and encouraging them to seek maternal health care will reduce the tendency for women to have another unfavourable birth outcome.

Full reports:

Magadi, M., Madise, N. and Diamond, I. 2001. "Factors associated with unfavourable birth outcomes in Kenya" *Journal of Biosocial Science*, 33: 199-225.

Magadi, M., Diamond, I., Madise, N. and Smith, P. 2003. "Pathways of the determinants of unfavourable birth outcomes in Kenya", *Journal of Biosocial Science*, 35.