African Population and Health Research Center

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Promoting the well-being of Africans through policy-relevant research on population and health

The Maternal Health Challenge in Poor Urban Communities in Kenya

Introduction

Maternal health remains a big challenge in much of sub-Saharan Africa, with maternal deaths estimates still as high as 1000 deaths in 100,000 live births in some countries. In Kenya, maternal deaths are currently estimated at an average of 560 per 100,000 live births. In urban Kenya, one would expect the number of maternal deaths to be lower given the existence of many well-equipped health facilities, but this is not necessarily the case. Research by APHRC in informal settlements (slums) in Nairobi, Kenya's capital city, has shown that these areas have a maternal mortality of 706 deaths per 100,000 live births, which is higher than the country's average. The research has further revealed that nearly half of expectant women in slums deliver either at home, with the assistance of traditional birth attendants or in unlicensed and unregulated health facilities that lack capacity to handle even minor obstetric complications.

The Status of Maternal Health in Informal Settlements in Nairobi

Provision of maternal healthcare services to slum residents is wanting

In nearly all informal settlements in urban areas in Kenya, there are no public facilities, including health care facilities. This void has resulted in many private providers setting up poor quality health care facilities lacking qualified personnel, equipment and supplies to offer services to people living in these settlements. APHRC's research in two slums of Nairobi shows that most of the facilities where poor women residing in slums seek delivery services lack the capacity in terms of qualified personnel, equipment and supplies to handle even minor obstetric complications. The private healthcare providers located within the slums are not regulated by the government and many are illegal as they are not licensed.

While eclampsia (pregnancy-induced hypertension) is a life-threatening condition, a mere 14.3% of the health facilities were equipped to manage this complication at the time of the study. A functioning referral system, which is vital in saving lives in cases of emergencies that require higher levels of care, is lacking in most facilities.

APHRC research shows that about 10% of births in the slums are handled by traditional birth attendants (TBAs). These attendants lack skills to handle delivery and Kenya's National Reproductive Health Policy has banned them

Methodology

The data used in this policy brief is from a maternal health research project carried out in 2006 by the African Population and Health Research Center (APHRC) in two informal settlements (slums) of Nairobi, Kenya. In these two areas, APHRC conducts a demographic surveillance system (DSS) covering about 60,000 inhabitants. The project collected data through household interviews and a health facility survey. From the DSS database, all women who had a pregnancy outcome in 2004–2005 were selected and interviewed (1,927 women). All health facilities (both within and outside the slum settlements) where women in the two communities go to deliver were assessed. A total of 25 facilities were surveyed. Verbal autopsy interviews were conducted on nearly all female deaths aged 15-49 years between January 2003 to December 2005 in the two communities.

A private facility offering various health services in one of Nairobi's numerous slums

from delivering women. The TBAs however feel that they are offering useful services especially to poor women who are unable to afford high hospital charges. The TBAs also argue that many women prefer them to nurses in public health facilities because the nurses have a bad attitude and are abusive towards the women. The mere fact that TBAs continue to have clients means that access to quality public health care, especially by the poor, is still a challenge.

Maternal health services are costly for the urban poor

Cost of accessing maternal health services is a critical factor in health seeking behaviors. This is even more critical for poor communities, such as informal settlements, that live in abject poverty. Research shows that overall, antenatal care services are paid for in nearly all the facilities where slum women seek services, with only 16% of the facilities not charging. On average, a single antenatal visit costs about Ksh 145 (US$2) and laboratory charges for antenatal visit costs about Ksh 325 (US$4). All facilities charge for deliveries. The average cost of a normal delivery is over Ksh 1,700 (US$22) and for the few facilities that offer caesarean section operations, the fees ranges from Ksh 3,000 (US$39) in government facilities to Ksh 30,000 (US$390) in private facilities.

Usage of proper maternal health services is low

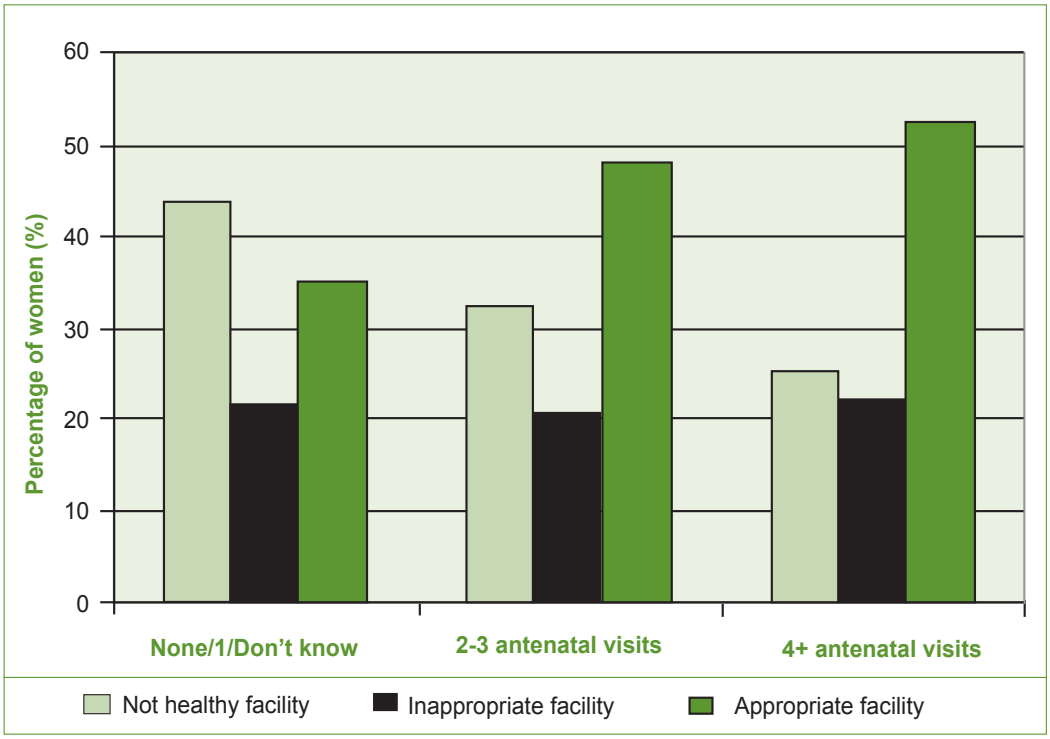
Antenatal care - Research shows that despite many women in slums getting antenatal care (97% in slums against 88% nationwide), a considerable number of women (48% same as the national average) do not make the recommended number of four visits. Further, only 7% of slum women initiate the visit in the first trimester of pregnancy as required; this is low compared to the national average of 11% of Kenyan women who make first visit in the first three months of pregnancy. Number and timing of antenatal care visits are critical in reducing pregnancy complications.

Educated women and those from wealthier households are more likely to make the recommended four antenatal visits. Women with higher parity (more children) are less likely to make the recommended four visits. There is a strong linkage between use of antenatal care and place of delivery – women who make four or more antenatal care visits are more likely to deliver in a proper health facility than women who make less than four antenatal visits.

Delivery services - Nearly 70% of women interviewed in slums reported that they delivered at health facilities. However, a closer look at the quality of the health facilities and their staffing, showed that only about 48% of the women delivered in facilities with at least the minimum standards. This means that 52% of the women delivered without professional skilled care.

“There is a strong linkage between use of antenatal care and place of delivery – women who make four or more antenatal care visits are more likely to deliver in a proper health facility than women who make less than four antenatal visits.”

Link between antenatal and delivery care among slum dwellers in Nairobi, Kenya



Maternal death rate is higher among the urban poor

From the research, the number of maternal deaths is higher in informal settlements, at 706 deaths per 100,000 live births compared to the average maternal mortality ratio for Kenya, at 560 per 100,000 live births. The major causes of maternal death are: abortion, ante/post partum haemorrhage (bleeding), postpartum sepsis (infection), eclampsia (hypertension during pregnancy), and ruptured uterus (see table below). Notably, abortion complications accounted for more than 30% of all maternal deaths. Of all the maternal deaths recorded by this study, only 21% were delivered or aborted with assistance of a health professional. There are also a substantial number of late maternal deaths (i.e. maternal deaths between 42 days and one year of pregnancy termination) most of which are due to HIV/AIDS and anemia.

Major Cause of Maternal Deaths

Cause of death	Percentage (%)
Direct maternal causes	
Abortion related	31.0
Ante/post partum haemorrhage	13.8
Postpartum sepsis	10.3
Eclampsia	6.9
Ruptured uterus	3.5
Indirect maternal causes	
HIV/AIDS/TB	13.8
Anemia	6.9
Other specified causes	13.8

The delays – This study revealed that while most deliveries and abortions that resulted into a maternal death took place outside of a healthcare facility, the actual death happened at a healthcare facility. This is a pointer to delays in recognizing a complication, making a decision to go to a healthcare facility, and reaching it or receiving care while at the facility. The lack of emergency ambulance services in the slums where infrastructure is non-existent and insecurity deters movement at night further complicates referral. It is also a pointer to poor quality emergency obstetric care available to women living in slums, and lack of preparedness on the side of slum residents in handling emergencies.

> The lack of emergency ambulance services in the slums where infrastructure is non-existent and insecurity deters movement at night further complicates referral.

Policy and Program Recommendations

The number of women dying from pregnancy related causes is higher in the slums of Nairobi compared to the average for the whole of Kenya. The leading causes of maternal death are: abortion, ante/post partum haemorrhage (bleeding), postpartum sepsis (infection), eclampsia (hypertension during pregnancy), and ruptured uterus. Because most maternal deaths occur to women who deliver outside of a health facility and with the help of unskilled personnel, there is need for increased availability and use of quality emergency obstetric care services for the growing number of slum populations. This points to the need to regulate and supervise lower-level public and private providers offering services to slum residents to ensure that they are able to provide a minimum package of quality emergency obstetric services. This also calls for innovative ways to waive or remove delivery costs for poor women.

Since unsafe abortion is among the major causes of death, the need to promote programs that facilitate access to contraceptives to mitigate the occurrence of unwanted pregnancies and unsafe abortions is urgent. HIV/AIDS is becoming a major indirect cause of maternal death and often occur after the traditional 42-day cut-off period used to define maternal death. There is therefore need to strengthen access to HIV services alongside maternal health services.

The need to provide focused and sustained health education geared towards promoting use of antenatal and obstetric services. This is critical in ensuring that more women appreciate the importance of starting antenatal care visits in their first trimester, making at least four antenatal care visits, and delivering in a proper health facility with skilled care, equipment and life-saving drugs.

The second Kenya National Health Sector Strategic Plan (NHSSP-II) for the period 2005–2010 identifies equitable access to care and improved quality of services as key policy objectives. The document also recognizes that the public sector alone will not be able to provide the necessary services to all population groups; it values partnerships with the private sector and communities as a vehicle to achieving the NHSSP goals. In light of these commitments and principles, Kenya's two ministries of health should design and implement a two-pronged strategy of partnership with the private sector and the communities aimed at bringing quality health services closer to slum populations. For instance, the continuous training opportunities offered to medical personnel working in the public sector should be extended to staff in the private facilities in the slums. The ministries of health could

also extend its emergency backup referral services to private health facilities operating in slums to ensure quick transfers in emergency cases considering that many women die due to delays in accessing specialized care following complications.

The maternal health challenge in poor urban communities in Kenya needs to be prioritized in national planning because failing to reach this rapidly growing sub-population with health services may result in lack of progress towards the health Millennium Development Goals.

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This Policy Brief is written by Rose N. Oronje and is based on APHRC research findings contained in the Research report and four journal articles listed in the *References* section.

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