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Effects of free maternity service policy in Kenya: an interrupted time series analysis

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Abstract

Background In Kenya, more than 6000 maternal deaths, and 35000 stillbirths occur each year. In June, 2013, the Government of Kenya abolished user fees for maternity care in all public health facilities under the Free Maternity Service (FMS) policy, to make maternity services accessible and affordable, and to reduce maternal and perinatal deaths. This study aims to establish whether the FMS policy has influenced use of, access to, and quality of maternity care in Kenya.

Methods We did an observational retrospective study in three counties in Kenya. We used daily maternity registers in 90 public health facilities to extract monthly observations for six maternal health indicators in the time period 2 years before and 2 years after the introduction of the FMS policy. We used interrupted time series analysis with a single group to assess the effects of the FMS policy. Standard linear regression using generalised least squares model was used to run the final results for each of the six variables. We calculated absolute and relative changes using model coefficients.

Findings A total of 82962 women from Kilifi, Turkana, and Wajir counties were included in the study. Data were collected between June, 2011, and July, 2015. After policy implementation, there was an increase in antenatal care visits, health facility deliveries, and livebirths of 98% ($p=0.0008$), 97% ($p<0.0001$), and 89% ($p<0.0001$), respectively. The six maternal health output indicators were observed 24 months before implementation of the free maternity service policy (June, 2011, to May, 2013) and 25 months after implementation (June, 2013, to June, 2015), giving 49 observations. We noted an immediate and significant increase of 27% in women who received emergency obstetric care in the first month after policy implementation ($p=0.0149$). No significant change was observed in rates of stillbirth ($p=0.4985$) or caesarean section ($p=0.4361$).

Interpretation The 2013 introduction of free maternity services in Kenya saw an immediate, and then sustained, increase in the use of skilled care during pregnancy and childbirth. This sharp rise in the uptake of services suggest that the hospital cost is the main expense incurred by most women and their families when seeking maternity care services and that this cost is, therefore, a barrier to uptake of maternity care.

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Declaration of interests

We declare no competing interests.

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