

Skilled Birth Attendance Rates in Burkina Faso Rose After Debut of Policy Subsidizing User Fees

After the 2007 introduction of a policy to subsidize maternal health user fees in Burkina Faso, the rate of skilled birth attendance increased among women across all socioeconomic status strata. According to a quasi-experimental study conducted in 2008–2010, the increase was sustained for two years and was most pronounced among the poorest women.¹ For example, among women in the lowest socioeconomic stratum, the rate of skilled birth attendance was an estimated 45% higher immediately after program implementation than it would have been had the subsidy policy not been introduced (rate ratio, 1.5); the rates 6–24 months after implementation were an estimated 46–48% higher than they would have been in the absence of the subsidy (1.5 each). Among women in the highest socioeconomic stratum, the rates of skilled birth attendance were an estimated 19–21% higher 0–24 months after program implementation (1.2 each).

In 2007, in an effort to promote facility-based skilled birth attendance, the government of Burkina Faso began to subsidize 80–100% of the direct costs related to delivering in a health facility. Given, however, that the literature on the effects of such subsidies is both limited and contradictory, researchers sought to examine the effects of user-fee subsidies on skilled birth attendance across socioeconomic strata. For their study, they used data from two population-based surveys conducted in the Houndé and Ziniaré health districts in 2008 and 2010, and from a 2010 survey of the 27 primary health centers in the study area. Women were eligible for the population surveys if they were aged 15–49 and had given birth in the previous five years for the 2008 survey or in the previous two years for the 2010 survey; the period of observation covered 50 months before the introduction of the subsidy through 41 months postintroduction. In all, 1,408 women participated in the 2008 survey and 1,403 participated in 2010; 74% of all women participated in both.

The population surveys collected data on the social, demographic and economic characteristics of the women and their households, their health-seeking behavior during pregnancy and delivery, and the timing and conditions of delivery. The facilities survey assessed the quality of care at the primary health centers in the study area by examining their number and mix of staff, medical equipment and infrastructures, including access to water. The researchers calculated descriptive statistics for the women, and used modified Poisson regression analyses to determine the rate ratios and rate differences for the associations between the introduction of the subsidy and skilled birth attendance over time, across socioeconomic status. Also, they estimated expected rates of skilled birth attendance for 2007 and beyond under the counterfactual scenario of no subsidy introduction to enable causal interpretation of the estimated rate changes.

Overall, 59% of the births were to women aged 20–29, and 75% were to women with no education. Some 74% of births were to women living within five kilometers of a health center. Of the health centers, 81% had three or four professionals on staff, and 59% had access to a functional source of water. The descriptive statistics were generally similar before and after subsidy implementation, with a few exceptions: After the subsidy program began, a greater proportion of births were to women from rural areas (61% vs. 49%), and greater proportions of health centers had four professionals on staff and access to a functional source of water (25% vs. 15% and 66% vs. 52%, respectively).

Multivariate analysis revealed that compared with the estimated rate of skilled birth attendance in the absence of the subsidy, the rate immediately after implementation was 45% higher among women in the lowest socioeconomic status stratum (rate ratio, 1.5); the rate was 46–48% between six and 24 months after implementation (1.5 for each). The rate difference was consistently 14% at each time point. Results for women in the middle and highest socioeconomic status

strata were similar to those in the lowest, although of a lower magnitude: For women in the middle stratum, the rate was 28–30% higher (1.3) and the rate difference was 7% at each time point; for women in the highest socioeconomic stratum, the rate was 19–21% higher (1.2) and the rate difference was 1% at each time point.

The researchers cite several limitations of their study, including that childbirth characteristics may have been subject to recall bias and that there may have been some misclassification of the structural quality of care components (which, in turn, may have content validity limitations because they do not estimate perceived quality of care). Furthermore, they note that the validity of their results and the causal interpretation of the estimated changes in the rates of skilled birth attendance “depend on the presumption that extrapolation of the preexisting trend in [the skilled birth attendance] rate into the postintervention segment of time was warranted.” Despite these limitations, the researchers suggest that their “findings support the effectiveness of subsidizing maternal health services,” and conclude that “the effect of subsidy policy in increasing [skilled birth attendance] yields the potential to significantly reduce maternal morbidity and mortality.”—*L. Melhado*

REFERENCE

1. Langlois EV et al., Effect of a policy to reduce user fees on the rate of skilled birth attendance across socioeconomic strata in Burkina Faso, *Health Policy and Planning*, 2016, doi: 10.1093/heapol/czv088.