Opportunities for Scaling-up Family Planning Programs in Urban Areas: An analysis of Family Planning Attitudes and Behaviors among Women in Four Cities of the Kenya Urban Reproductive Health Program

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1. Background

Kenya has in the past decade presented maternal and child health outcomes that send mixed signals about the country's progress towards the attainment of the Millennium Development Goals Four and Five (UNDAF, 2008). The Maternal Mortality Ratio (MMR) declined from 590 per 100,000 live births for the ten-year period prior to 1998 to 414 in 2003 before increasing marginally to 488 during the ten-year period before 2008 (CBS, MOH and ORC Macro, 2003; KNBS and ICF Macro, 2010). The estimates of maternal deaths are higher among the urban poor. Between 2003 and 2005, MMR in two slums of Nairobi were estimated as 706 maternal deaths per 100,000 live births (Ziraba et.al., 2009).

Though the contraception prevalence rates among married women increased significantly from a stall of 39% between 1998 and 2003 to 46% in 2008, the unmet need for family planning remained unchanged since then at 25%. Routine health assessment surveys in Kenya have shown that the availability of maternal delivery services have declined in the past six years. The number facilities offering normal delivery services, for instance, declined from 40% in 2004 to 30% in 2010 (NCAPD, 2011). The number of births occurring at health facilities has remained low and unchanged over the past decade, at 40%. However, significant gains have been realized at the same period. The infant and under-five mortality rates declined by almost one third in the five-year period prior to 2008. At the same period, the number of children fully immunized increased remarkably from 65% to 77%, despite the reduction in the proportion of health facilities offering child immunization services from 83% in 2004 to 68% in 2010 (NCAPD, 2011). These results masks large regional differentials in maternal and child health outcomes, with Central and Nairobi region recording better performances compared to other regions and informal settlements.

In 2010, Kenya was considered for the Urban Reproductive Health Initiative (URHI), a five-year multi-country project under the Global Urban Reproductive Health Strategy to accelerate the attainment of the Millennium Development Goal Five. The project whose slogan is *Tupange*, literally meaning 'Lets Plan', aims at reducing maternal mortality rates by increasing and sustaining women's access to and use of RH services. The initiative seeks to develop cost effective integrated family planning interventions in strategic health facilities targeting largely the poor from three large and two smaller cities in Kenya. Other similar initiatives are taking place in Senegal, Nigeria and India (JHU-CCP, 2011, *Tupange* 2010). The impact evaluation of the URHI will be done by an independent entity, Measurement Learning and Evaluation (MLE) Project (Guilkey et al., 2009). In Kenya, URHI plans to implement activities in three large cities (Nairobi, Mombasa and Kisumu), during the first three years. In this phase, the program expects that the communities in rural and other urban areas would show desired health outcomes through indirect exposure to the project activities (diffusion). The last two years of project will be used to scale-up the activities to two smaller urban centers (Kakamega and Kisumu) in addition to the anticipated diffusion effects. Global literature on scaling-up of best practices shows that innovations are easier to replicate or scale up when a) they do not require a significant change in behavior or practices of the new target population, and, b) explicitly address motivations of clients and service providers which are consistent with the pilot phase (Management Systems International, 2007).

1.1 Objectives

This paper seeks to a) understand and compare the attitudes and contraception behaviors of women ages 15-49 years in the two cities and two urban centers in Kenya where the URHI program will be implemented; b) examine how the differences and similarities are linked to two categories of sites (delayed and early intervention sites). Kakamega is located closer to Kisumu and the two cities have much similar socio-economic, cultural, and political landscape. Machakos is located some 70 kilometers away from Nairobi and the two cities share similar economic, political, population and socio-cultural characteristics.

2. Data and Methods

This study uses the baseline quasi-experimental household survey data gathered between October and November 2010 from the five urban cities. The survey was designed to provide baseline data for evaluation of the impact of URHI program in Kenya, and indeed URHI in the four countries. In each city, a representative sample of enumeration areas were sampled, and household surveyed per EA. All consenting women ages 15-49 interviewed using a paper and pencil, structured questionnaire. The survey assessed the individual's demographics characteristics, reproduction, and contraception behavior, exposure to media, fertility preferences, and movement from and within cities. Women interviewed at baseline will form a sample for the longitudinal study to be conducted two years and four years latter. The heads of the sampled households were also interviewed to assess household assets and environmental circumstances (sanitation, housing materials, and possessions of durables), and obtain a listing of usual residents of the household. For purposes of this paper, only data for women 15-49 years from the four cities (Nairobi 2706, Kisumu 1603, Machakos 1834, and Kakamega 1324), will be analyzed.

The key variables of interest in this paper are 1) use of modern contraception; 2) type of method used; and 3) selected determinants of contraception, classified into beliefs, women self efficacy to negotiate use of a contraceptive, treatment of clients by FP providers, access of contraceptives, and couple discussions on FP and family size.

In addition the analysis will compare, across cities, respondents age, marriage, highest level of education attained, wealth index, religion, parity, and exposure to media.

3. Initial Results

This section presents results from descriptive analysis. For purposes of this paper, Machakos and Kakamega are categorized as 'smaller cities', while Nairobi and Kisumu are categorized as 'large cities'.

A significantly higher proportion of women in Machakos 89% and Nairobi 87% have completed primary or higher levels of education compared to women from Kisumu 78% and Kakamega 75%. Women in Nairobi 48% and Kakamega 45% are more likely to be involved in gainful employment in the past seven days prior to the survey compared to women in Machakos 39% and Kisumu 41%. Kakamega and Kisumu have the higher concentration of the urban poor[1] 63%, compared to Nairobi 56% and Machakos 60%. The overall unmeet need for spacing is lowest among women in Machakos 9% and highest in Kakamega and Kisumu 15% and is about 13% in Nairobi. However, unmeet need for limiting is almost the same across all the four cities.

Use of modern contraception is higher among women in the two smaller cities (Kakamega 46%, Machakos 45%) compared to women from larger cities (Nairobi and Kisumu 44%). Among women in the lowest wealth quintile, contraception is lowest in Nairobi 36% and highest in Kakamega 47% and same in Machakos and Kisumu 44%. Women from the smaller cities are least likely to source contraception from private facilities (Machakos 15%, Kakamega 11%) compared to women from larger cities (Nairobi 33% and Kisumu 22%). Three quarters of women in Kakamega and Nairobi report to have discussed with their spouses/regular partner about family planning in the past six months prior to the survey compared to slightly over two thirds of women in Machakos and Kisumu. Almost one half of women in Machakos 52% and Kisumu 40%, would need permission from some else to use contraception compared to those from Nairobi 26% and Kakamega 23%. Women from Kisumu 48% are least likely to recommend contraception to friends compared women from Kakamega 39%, Nairobi 40%, and Machakos 43%.

Women in Kisumu 53% are least likely to believe that contraceptives causes harm to womb compared to women from Kakamega 70%, Machakos and Nairobi 63%. Among the non users of contraception, one third of women in the four cities intend to use a method in the next 12 months.

Discussions

Women from the smaller cities are more similar to women from their neighboring large cities. Women from Machakos and Nairobi have similar background characteristics in terms of levels of education attained, poverty levels and levels of unmet need for family planning. Similar patterns are observed among women from Kisumu and Kakamega. These results are expected partly because the large cities are geographically located closer to their respective small cities.

Compared to women from the larger cities, women from smaller cities also have higher contraceptive prevalence and are more likely to source contraceptive services from the private sector. The initial analysis further show some mixed results. A higher proportion of women from Machakos and Kisumu for example would need some else permission before using contraception. Results from multivariate regression models will help identify most important factors that explain the similarities and differences in key behavioral outcomes among women in the four cities while controlling for selected population factors.

[1] Defined as population falling in the lowest three wealth quintiles.

The initial analysis show that a critical review and understanding of the population and behavioral characteristics of the project target groups for both exposed and proposed scale-up sites is important to the process of scaling up interventions

Knowledge Contribution

This paper will contribute to lessons learned and factors to consider when scaling up interventions beyond the exposed communities. The analysis will provide the program with a better understanding of the population characteristics and their behavioral motivations to contraception particularly how women from the scale up sites differ or are similar to women from their closest early intervention cities, and therefore determine whether or not activities of the project from the large cities can be replicated to the smaller cities.

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