Unmet need for contraception among women in Burkina Faso and their Reasons for not using a method: new evidence from the PMA2020 research plateform

Guiella Georges[1]

[1]Institut Supérieur des Sciences de la Population (ISSP), University of Ouagadougou, Burkina Faso

Background

With an estimated 17.5 million people (45% are under age 15), Burkina Faso's population growth (3.1 percent a year according to Ministry of Economy, 2014) coupled with a weakened economy have sparked calls for a new population control policy. This rapid growing population leads to important development challenges as Burkina Faso is one of the poorest countries in the world.

Through major policies and numerous strategic plans supporting Family planning and reproductive health, important efforts have been made in the last decade in order to reach a balance between this rapid population growth and available resources. But, despite these efforts many barriers to FP access still exist, including geographical access mainly in rural areas, the cost of FP services and negative sociocultural beliefs towards modern contraceptive methods. In addition, cost and negative attitudes among some health providers are barriers for adolescents, youth, and poor women, especially in peri-urban and rural areas (Futures Group, 2013).

In order to overcome all these barriers and to significantly increase the modern contraceptive prevalence rate, Burkina Faso launched the Consolidated Action Plan for Family Planning (2013–2015). This plan focuses on eight priority actions to extend and improve FP services in order to increase modern contraceptive prevalence rate from 15% in 2010 to 25% in 2015, which means 400,000 additional women using modern contraceptive methods. This objective is based on the fact that the potential to slow population growth exists because many couples are having more children than they would like (Future Group, 2013). Thus, about one in four (24%) married women ages 15–49 want to space or limit future births but are not using any method of family planning (DHS, 2010) for different reasons that need to be addressed in order to ensure the achievement of the Consolidated Action Plan goals.

Indeed, while it is important to know which women are likely to have unmet need and which ones are also likely to use FP, in terms of sensitization and unwanted pregnancies prevention strategies it maybe more important to simultaneously know which women are likely to have unmet need but do not intend to use FP in the future and their reasons for not using or not intending to use.

Using new data collected in 2015 from the PMA2020 platform, this study aims to assess unmet need for contraception among women in Burkina Faso and their Reasons for not using a method. More specifically, the objectives of this study are:

- to provide current estimates and trends of the level of unmet need at the national level in Burkina Faso, and for key population subgroups, including adolescents aged 18-24 years.
- to analyze the reasons that women who do not wish to become pregnant do not use or do not intend to use a method, nationally and among key subgroups.

Data and methods

Data source

Data come from PMA2020 **(**Performance Monitoring and Accountability, 2020**)** project in Burkina Faso. PMA2020 is a five-year project that uses innovative mobile technology to support low-cost, rapid-turnaround, nationally-representative surveys to monitor key indicators for family planning.

Study design

PMA2020-Burkina Faso used a two-stage cluster design with urban-rural strata. A sample of 53 enumeration areas (EAs) was drawn from the National Institute of Statistics master sampling frame. Each EA was listed and mapped; 35 households were systematically selected with a random start. Occupants in selected households were enumerated and eligible females of reproductive age (15-49) were contacted and consented for interviews. Data collection was conducted between November and December, 2014. The completed sample included 1,760 households and 2,067 females age 15 to 49.

Analysis approach

We use multivariate regression analysis to determine the joint probability of having unmet need and not intending to use a modern contraceptive method. Since unmet need for FP and intention to use FP are correlated and thus the probabilities of occurrence of the two events are not independent, we use a bivariate probit model in the analysis (Greene, 2005; 2008).

The first dependent variable of the bivariate probit model is “having an unmet need”. It has been coded 0 if a married woman does not have an unmet need and 1 if she has. Therefore, those who are not sexually active or were breastfeeding are excluded from the multivariate analysis. The second dependent variable is “intention to use a modern contraceptive method in the future”.

Formally, the “unmet need” equation is the following:
$Y_1^* = \beta_1' * Educ + \delta_1 * Un + \gamma_1 * Rs + \omega_1 * Z + \varepsilon_1$, if $Y_1=1$, and 0 otherwise, where Educ, Un, Rs and Z represent respectively highest level of education, type of union, residence (urban/rural) and a vector of other factors influencing unmet need while ε_1 is the disturbance term. As regards to the “intention to use” equation it is expressed as follows:
$Y_2^* = \beta_2' * Educ + \delta_2 * Un + \gamma_2 * Rs + \omega_2 * Z + \varepsilon_2$, if $Y_2=1$, and 0 otherwise.

Two main derived mean probabilities are estimated according to women's family planning practices:

$$p_{11} = \vartheta_2(x_1'\beta_1 + \gamma y_2, x_2'\beta_2, \rho)$$
$$p_{10} = \vartheta_2(x_1'\beta_1 - x_2'\beta_2, -\rho)$$

where p_{11} is the probability that a woman who has an unmet need has also intention to use a modern contraceptive in the future; p_{10} the probability that she an unmet need but does not intend to use a modern contraceptive in the future. The ρ parameter measures the correlation that women have unmet need and have simultaneously intention to use a modern method. The estimated coefficients β_1 and β_2 allow us to gauge direction and statistical significance of each variable's effects on the two dependent variables (Greene, 2005).

Preliminary results

Preliminary findings show that contraceptive prevalence rate made some progress: from 15% in 2010 to 20.1% in 2015. However, unmet need for family planning among married women is still high (33%) mainly for spacing (Table 1). Findings also show that the level of unmet need differs according to sociodemographic characteristics. Thus, while 25.4% of married women from the wealthiest tertile have an unmet need for family planning, this proportion is 34% in the middle tertile and 37.3% in the poorest tertile.

Table 1: Select Family Planning indicators (%) across recent Surveys (Women in Union and All Women, Ages 15-49)

	DHS-Burkina 2010		**PMA2020-Burkina 2015**	
	All women	Women in union	All women	Women in union
Contraceptive prevalence rate				
All Methods CPR	15.3	16.2	19.5	20.9
Modern Method Use mCPR	14.3	15.0	18.6	20.1
Long Acting CPR	3.2	3.9	7.6	8.9
Total Unmet Need*	19.6	23.8	26.8	33.0
For limiting	5.2	6.5	5.2	6.5
For Spacing	14.4	17.3	21.6	26.5
Total Demand	34.9	40.0	46.2	53.8
Demand Satisfied by Modern Method	41.0	37.5	40.1	37.4

*Indicator measurement based on different questions posed in the DHS and PMA2020

References

1. Maiga M. and Lo A., 2012: Repositioning Family Planning in Burkina Faso: A Baseline. Washington, DC: Futures Group.

2. Futures Group, 2013: Repositioning family planning in Burkina Faso: Status of Family Planning Programs in Burkina Faso, *Policy Brief*, August, 2013, Washington, DC: Futures Group.

3. Guttmacher Institute, 2007: New Evidence to Address Unmet Need for Contraception. Presentation, July 2007. New York: Guttmacher.

4. Khan S, Mishra V, Arnold F and Abderrahim N (2007) Contraceptive Trends in Developing Countries. DHS Comparative Reports No. 16. Calverton, MD: Macro International Inc.

5. Guttmacher Institute and UNFPA (2009) Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health. New York: Guttmacher.

6. Westoff CF (2006) New Estimates of Unmet Need and the Demand for Family Planning. DHS Comparative Reports No. 14. Calverton, MD: Macro International Inc.